

# THE DEVELOPMENT AND PRESENT STRUCTURE OF NATIONAL ECONOMIC ACCOUNTS IN THE UNITED ARAB REPUBLIC

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THE United Arab Republic system of national economic accounting has been designed to serve as an effective tool for development planning. The use of this system dates back to 1955 when the technical staff of the National Planning Committee made its first attempt to construct the national accounts for 1953.

The system of national economic accounting performs the usual functions of measuring and recording economic transactions, summarizing their results in significant aggregates, and presenting such aggregates to display an overall, interrelated picture of the economy. In addition, the system is designed to provide several types of data of importance in development planning. These data are needed to serve the following purposes:

1. Co-ordination of economic development projects and their integration within the general frame of the development plan.
2. Follow-up of the progress achieved in carrying out the economic development projects.
3. Study of the development of available resources and their uses.
4. Analysis of the structural interdependence of the productive sectors, and the impact of the increase in demand for their products and services to meet the requirements of development projects and programmes.
5. Study of the development and growth of each of the main sectors of the economy.
6. Analysis of borrowing and lending transactions, and the flow of funds among economic sectors and financial institutions.

In order to fulfil these objectives the National Planning Committee has designed a system of national income accounting supplemented by four related techniques for the preparation of

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input-output tables, financial tables, national budgets, micro-economic accounts, and comprehensive economic tables.

### 1. *National Income Accounts*

A set of eight accounts is designed to provide for the measurement of national product and national income and to show the types and amounts of income accruing to the factors of production, together with other transfer payments. The accounts also indicate the volume of consumption, savings, and capital formation, and the results of transactions with the outside world.

Closely related to these accounts is the analysis of national accounting data, aiming at the interpretation of sector accounts, the measurement of income generated in each sector, and the implications of changes anticipated in the components of sector resources and uses in accordance with the objectives and estimates set forth in the General Plan of Economic and Social Development.

### 2. *Input-Output Tables*

The Committee prepares commodity balances showing the total available resources of each commodity and their uses for intermediate and final consumption, investment, exports, and inventory increase. These balances are used in the construction of input-output tables showing the inputs consumed by each industry and the distribution of its total output, thus demonstrating the structural interdependence of the economy and facilitating the analysis of inter-industry relationships.

### 3. *Financial Tables*

Classified in terms of functional sectors and financial institutions, these tables are designed to record borrowing and lending transactions, provide for the measurement of funds available in each sector, trace the channels of credit-flows, and indicate the changes in the financial assets and obligations of each sector.

### 4. *National Budgets*

Using the data of national income accounts, annual national budgets, together with a projected budget for the year 1964-5, are constructed in accordance with the estimates of the general development plan.

### 5. *Micro-Economic Accounting*

These accounts are part of the follow-up procedure. They

perform at the level of the firm, the same function as the national income accounts do for the economy as a whole. The measurement of production, value added, distribution of realized income, and investment is collected from business firms. Data pertaining to borrowing and lending transactions as well as employment are also provided on a quarterly basis.

#### 6. *Economic Tables*

1. Revenues and Expenditures of Main Sectors.
2. Summary Economic Table.

The first of these tables is designed to display the revenues and expenditures of the main sectors, classified in terms of commodity, income, transfer, and financial transactions. The second table presents, in addition to these transactions, the balances of national income accounts, thus displaying a comprehensive picture of the inter-relationships among all sectors of the economy.

#### NATIONAL INCOME ACCOUNTS

The design of the framework of national income accounts in the U.A.R. is based upon two<sup>1</sup> criteria of transaction classification:

1. The nature of the economic entity carrying out the transaction.
2. The nature of the economic activity motivating the transacting entity.

#### *Sectors*

With respect to the first criterion, the underlying assumption is the similarity among economic entities from legal and functional standpoints. On the basis of such similarities, economic entities are grouped into four sectors:

1. The Business Sector, comprising both private and government business organizations.
2. The Government Administration Sector.
3. The Household Sector.
4. The Outside World.

<sup>1</sup> A third criterion, based upon the economic nature of the transactions is also adopted and will be discussed on page 25.

1. The Business Sector comprises all economic entities the transactions of which are related either to production, or to investment leading to an increase in productive capacity. Classified according to their legal form, the economic entities included in this sector may be grouped as follows:

A – Private business enterprises, further sub-divided into:

- (i) Corporate enterprises, subject to the Corporation Law No. 26, 1954.
- (ii) Non-corporate enterprises: individuals and partnerships, subject only to the general rules of commercial law.

B – Government business enterprises: these are state-owned enterprises, organized on business lines to operate in various fields of economic activity. Examples are: the general organization of railways, the general organization of petroleum, the agrarian reform general organization, the general organization for the development of deserts, the insurance and savings fund, and the social insurance organization.

Classified according to the branches of productive activities, the economic units in this sector fit into the following divisions:

- 1. Agriculture.
- 2. Industry, including mines and quarries.
- 3. Construction.
- 4. Transport and communication.
- 5. Suez Canal.
- 6. Financial institutions: banks and insurance companies.
- 7. Housing services.
- 8. Trade.
- 9. Miscellaneous services: health, education, and professions.

2. The Government Administration Sector consists of the government departments performing administrative functions or furnishing social services to the public.

3. The Household Sector includes all individuals, as well as non-profit organizations such as professional, commercial and industrial associations. It also includes foreign diplomatic

organizations, consulates, and other foreigners including tourists and temporary residents.

4. The Outside World Sector comprises all individuals, organizations and establishments that exist beyond the national boundaries and have business contacts with the foregoing sectors either in the form of commercial or financial transactions.

With respect to the second criterion, the underlying assumption is the distinction between three main economic activities: production, consumption, and investment. The transactions carried out by the economic entities included in each of the four sectors are re-classified on this basis. Consequently, provision has to be made for three types of accounts corresponding to these economic functions.

The Production Account includes transactions related to production, whether it ends in the market or is consumed by the producing entity. Thus, it includes all actual and implied buying and selling transactions connected with the economic entity's productive activity. It is obvious that no such account is kept for either the Household or the Government Administration Sector.

The Appropriation Account is designed for the transactions related to the use, or distribution, of the sector's realized income. In the case of the Government Administration Sector, this account records the Government's current revenues and outlays. For the Household Sector, it presents the income and expenses of the sector.

The Capital Account presents two types of transactions:

- (a) Transactions related to capital formation (changes in the sector's fixed capital: construction, equipment, and commodity stocks).
- (b) Borrowing and lending transactions leading to changes in the sector's debit-credit position.

One account presents all transactions carried out with the outside world.

#### *The Framework of Accounts*

The following diagram describes the framework of national income accounts of the United Arab Republic:

	Business Sector	Household Sector	Government Administration Sector	Outside World Sector
Production Account	<input type="text"/>			
Appropriation Account	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Capital Account	<input type="text"/>	<input type="text"/>	<input type="text"/>	

### *Inter-relationship of Accounts*

The accounts of each sector are linked through their successive balances in the following manner:

1. Business Sector:

- (a) The balance of the Production Account represents gross production profits. This balance is carried forward to the credit side of the Appropriation Account.
- (b) The balance of the Appropriation Account represents the sector's retained profits, and is carried forward to the credit side of the Capital Account.

2. Government Administration Sector:

The balance of the Appropriation Account represents the surplus of current transactions, and is carried forward to the credit side of the sector's Capital Account.

3. Household Sector:

The balance of the Appropriation Account represents the savings of this sector, and is carried forward to the credit side of the Capital Account.

According to the double-entry method followed in the preparation of national income accounts each entry is simultaneously recorded in the 'resources' side of one account and the 'uses' side of another, thus providing for the self-balancing characteristic of the accounts. In addition, the economic tables combine all the flows recorded in the accounts to present a

comprehensive picture of the inter-relations among these entries.<sup>1</sup>

#### THE BUSINESS SECTOR ACCOUNTS

##### 1. *The Production Account*

The main item on the 'Resources' side of this account is the value added realized in this sector. It represents the gross value of locally produced goods and services less the value of production requirements, i.e. the value of raw materials, semi-manufactured goods, fuel, and spare parts for machinery, equipment, and buildings.

The remaining items are:

Interest accrued to banks and similar financial institutions included in this sector.

Insurance premiums due to life insurance companies.

Instalments of social insurance, representing the total of employers' and employees' shares of social security contribution to the Social Insurance Organization.

Production subsidies receivable from the Government Administration Sector.

Revenues from the outside world.

Conceptually, the items recorded on the 'Uses' side of this account represent the cost elements incurred by the economic units comprising this sector in connection with their production. These may be grouped into five major flows:

##### 1. Compensation of labour:

This flow is represented in the account by two items, viz.

- (i) Wages and salaries, as viewed from the standpoint of the employee. It includes basic wages, bonuses, incentive - wage payments, as well as payments in kind. This item, however, does not include the employers' share of social security contribution, the amount of which is separately recorded under the next item.

- (ii) Social insurance contributions.

##### 2. Cost of borrowed capital:

This flow is represented in the account by one item, viz.

<sup>1</sup> The elements of each of these accounts are reproduced in Tables I and II from the national income accounts prepared for 1959-60 by the National Planning Committee. (National Planning Committee, *General Frame of the Five-Year Plan for Economic and Social Development*, Tables 78-90, pp. 228-43.)

- interest payable by business firms, financial institutions and organizations.
3. Payments to Government Administration Sector:  
This flow is represented in the account by five items:
    - (i) Customs duties on imported goods;
    - (ii) indirect taxes;
    - (iii) Excise duties on domestic goods;
    - (iv) miscellaneous fees and duties; and
    - (v) various payments to public administration.
  4. Insurance compensations:  
This flow is represented in the account by three items each of which pertains to a specific type of insurance:
    - (i) Social compensations, representing payments made by the Social Insurance Organization and the State Staff Insurance Organization in accordance with the insurance provisions for workers and State employees against disability, service termination, death, unemployment, and injury.
    - (ii) General insurance compensation, representing payments by insurance companies in compensation of damage resulting from accidents, fire, burglary, and similar types of insurance.
    - (iii) Life insurance compensation representing the payments made by life insurance companies.
  5. Expenditures in the outside world.

The excess of resources over uses represents gross production profits, which is carried forward to the Appropriation Account.

#### *The Appropriation Account*

In addition to gross production profits, this account is credited with two other items:

1. Dividends accruing to business firms from their investment in the capital stock of other corporations. This item represents the sector's income from its investments in corporate stock.
2. General insurance compensation, referred to under item (4) – (ii) of the Production Account.

The total of these items represents the total income available for distribution by this sector.

The debit side of the Appropriation Account describes the



manner in which this income is used or distributed. Such distributions may be classified into four main flows.

1. Distributed profits:

This flow is represented in the account by the following items:

- (i) Dividends on corporate stock held by private business firms.
  - (ii) Profits of the Government Business Sector, transferred to the Government Administration Sector.
  - (iii) Profits of non-corporate business enterprises, transferred to the Household Sector.
  - (iv) Fees of the members of boards of directors.
2. Payments to Government Administration:

This flow comprises three elements:

- (i) Direct taxes (corporate profit taxes).
  - (ii) Various payments to Government Administration.
  - (iii) Miscellaneous duties.
3. Compensations:

This element represents indemnities, or lump sum benefits, paid by business firms and organizations to their employees on service termination. Such employees are not covered by either the Social Insurance Organization or the State Staff Insurance and Pension Fund. Hence, this item is termed 'Various Compensations' in distinction to similar designations used in the production account.

4. Donations and bad debts:

Donations refer to business grants to individuals and non-profit organizations, as well as business subscriptions to industrial and commercial associations. 'Bad Debts' refer to uncollectable sales. Conceptually, this item represents the transfer of a portion of business income to the purchasing firms or individuals.

The excess of business income over income distribution represents the profits retained in this sector which are carried forward to the capital account.

### *The Capital Account*

Two items constitute the 'Resources' of this account:

1. The balance of retained profits.
2. Capital subsidy granted by the Government Administration Sector to the Government Business Sector.

The debit side describes the use of such resources for the following purposes:

1. Capital formation (equipment, machinery, and construction).
2. Purchases of used assets.
3. Lending.

#### *Accounts of the Government Business Sector*

It has already been stated that the Business Sector comprises both private enterprises and governmental business organizations. Although the accounts of this sector represent the results of the transactions of both types of business enterprises, it has been found quite useful to present the results of the economic activities of the Government Business Sector in a separate set of Production, Appropriation, and Capital Accounts, in order to show the progress achieved by this sector.

As may be seen from the design of this account,<sup>1</sup> the resources and uses of the Government Business Sector are classified in terms of the functional activities of the organizations which are included here. In addition, another related account entitled 'Government Business Sector Revenues and Expenses Account' sets forth the aggregates of revenues and expenses of this sector.

#### THE GOVERNMENT ADMINISTRATION SECTOR

##### *The Appropriation Account*

The resources of this account are made up of two main flows:

1. Taxes, fees, duties, and other public administration revenues. This flow is classified into six components:
  - (i) Direct taxes, representing the total of corporate income taxes, direct taxes on personal income, and estate and inheritance taxes.
  - (ii) Customs duties.
  - (iii) Indirect taxes.
  - (iv) Excise duties on domestic goods.
  - (v) Other miscellaneous fees and duties.
  - (vi) Various revenues.
2. Profits of the Government Business Sector (transferred from the Business Sector).

<sup>1</sup> These accounts are reproduced in Appendix A.

The debit side of this account sets forth the flows of Government current expenditure:

1. Consumption of goods and services.
2. Interest.
3. (i) Wages and salaries.  
(ii) Social insurance contributions on behalf of Government employees.
4. Subsidies, classified into:
  - (i) Production subsidies, paid to the Business Sector.
  - (ii) Subsidies to individuals and non-profit organizations, paid to the Household Sector.
5. Pensions and indemnities.
6. Expenditures in the outside world.

The excess of resources over uses represents the Government surplus on current transactions.

#### *The Capital Account*

The resources side of this account is credited with the surplus of current transactions carried forward from the Appropriation Account, together with the Government proceeds from the sale of used assets.

The debit side displays the use of such resources for the following purposes:

1. Capital formation, representing public works and similar government construction.
2. Capital subsidy to the Government Business Sector, representing the amounts granted by the Government for capital formation in this sector.
3. Redemption of loans.

The balance represents the net borrowing or lending in this sector.

### THE HOUSEHOLD SECTOR

#### *The Appropriation Account*

The credit side of this account describes the sources of income available to the members of this sector. These may be classified as follows:

1. Employee compensation:  
This source refers to the total wages and salaries received

from both the Business and Government Sectors, as well as the wages received from this sector for domestic services and from employment in non-profit organizations.

2. Interest:

This source refers to the total interest accrued on corporate, Government and foreign bonds held by the members of this sector.

3. Profits:

This is represented in the account by three items:

(i) Dividends on corporate capital stock.

(ii) Profits transferred from the non-Corporate Business Sector, representing only part of the total profits realized by individual and partnership enterprises. It also includes part of the wages due to the owners and members of their family working in these establishments. This is, therefore, the amount that may be considered as part of the household disposable income. The remaining portion of realized profits is reinvested in the same establishments as is usually the case with farmers, building-owners and store-keepers.

(iii) Fees of the members of boards of directors.

4. Insurance compensation:

Income from this source is reported under the following items, all of which have been already discussed in connection with the Business and Government Administration Sectors:

(i) Social insurance compensation.

(ii) Various compensations.

(iii) Life insurance compensation.

5. Pensions and indemnities:

These represent retirement pensions paid to Government employees, and lump-sum benefits paid at the termination of service.

6. Other transfer payments:

The remaining items represent business donations and Government subsidies to non-profit organizations.

7. Revenues from the outside world:

These are the amounts transferred from abroad to foreign diplomatic organizations, consulates, international organizations and tourists.

The debit side of this account describes the expenditure of the Household Sector, which may be classified as follows:

1. Consumption of goods and services, representing the sector's expenditure for the satisfaction of direct wants.
2. Interest, representing the interest due on loans to the members of this sector, as well as the interest due on credit purchases.
3. Wages, representing labour compensation paid by the members of this sector to domestic servants and employees of non-profit organizations.
4. Insurance instalments:  
This flow is represented by two items:
  - (i) Social insurance instalments, which refer to the employees' share of social insurance contributions to the Social Insurance Organization and the State Staff Insurance and Pension Funds.
  - (ii) Life insurance instalments.
5. Taxes and fees:  
This flow is represented in the account by four items:
  - (i) Direct taxes on personal income.
  - (ii) Indirect taxes, representing mainly stamp taxes.
  - (iii) Miscellaneous fees and duties.
  - (iv) Various payments to the Government Administration Sector.
6. Expenditure in the outside world.

The excess of the sector's resources over uses represents the savings of this sector. This balance is carried forward to the Capital Account.

#### *The Capital Account*

Savings transferred from the Appropriation Account constitute the resources side of the Capital Account.

The debit side describes the uses of these savings, for the following purposes:

1. Capital formation, representing the amounts invested in residential building for private use.
2. Estate taxes and inheritance fees, which are viewed as capital transfers and are included in this account.

The excess of capital resources over uses represents the lending of households to other sectors.

#### THE OUTSIDE WORLD ACCOUNT

It has already been stated that only one account is used to show all types of transactions with the rest of the world. The resources side of this account sets forth the value of imports, dividends and interest due to the holders of corporate stocks and bonds, and miscellaneous expenses representing the total expenditure of the Business, Government Administration and Household Sectors abroad. The debit side shows the indebtedness of the outside world for the value of exports, dividends and interest due on foreign stocks and bonds, and miscellaneous revenues accrued to the three abovementioned sectors from abroad. The balance of this account represents the net amount of borrowing or lending.

#### ANALYSIS OF NATIONAL ACCOUNTING DATA

The system of national income accounting described in the preceding section provides adequate data for analysis covering the following aspects:

1. Interpretation of sector accounts, comprising the composition of income generated in each sector, analysis of its use or distribution and demonstration of the changes anticipated in each component, by 1964-5, in accordance with the goals and estimates of the general development plan.
2. Presentation of aggregates of national income and national product.
3. Development and uses of total available resources.

These aspects of analysis of national accounting data are briefly described below.

#### *Income Generated by Sectors*

With respect to the measurement and composition of income generated in each sector four concepts are distinguished.

1. Income generated in the Business Sector is conceived as the value added in this sector, represented by item (1.1) of the Business Sector Production Account. As already stated, both private and government business organizations are included. For the purpose of analysis, this item is broken down into its com-

ponents in order to display the progress achieved by the subdivisions of the sector.<sup>1</sup> A subsidiary schedule provides for the distribution of the total value added among the nine branches of business activities, both in absolute monetary values and percentages of the total.<sup>2</sup>

2. Income generated in the Government Administration Sector is conceived as the total wages and salaries earned by Government employees, plus an imputed value for the rent of State-owned buildings. For this purpose, wages and salaries are defined to include the Government's share of social insurance contributions of its employees. These are represented by items (4.10) and (4.11) of the Government Administration Appropriation Account. Interest on national debt is treated as a transfer payment, and, therefore, is not included as an element of the income generated in this sector.

3. Income generated in the Household Sector is conceived as the total wages and salaries earned by domestic servants and employees of non-profit organizations. This is represented by item (6.16) of the Household Sector Appropriation Account.

4. Net income from transactions with the outside world is conceived as the excess of returns accrued to the domestic factors over corresponding returns accrued to the foreign factors from domestic employment. This is represented by the algebraic sum of items (8.2), (8.3), (8.6) and (8.7) of the Outside World Account.

#### *Distribution of Income Generated in the Business Sector*

Distribution of income generated in the Business Sector is first analyzed in terms of the following uses:

Wages and salaries.

Interest and profits.

Direct and indirect taxes.<sup>3</sup>

Subsidies, compensations and various transfer payments.

Net transactions with the outside world.

Investments.

Loans.

<sup>1</sup> National Planning Committee, *General Frame of the Five-Year Plan for Economic and Social Development, July 1960-June 1965*, Cairo, 1960, p. 188.

<sup>2</sup> *Ibid.*, Table 92 - Distribution of added gross product generated in the business sector among the main activities, 1959/1960, p. 245. The classification of branches of business activities has been stated on p. 4.

<sup>3</sup> After the deduction of production subsidies.

Each of these flows is further analyzed into its component elements and the changes anticipated by the end of the Five-Year Plan (1964-5), are discussed and presented in supplementary schedules.<sup>1</sup>

*Analysis of Retained Profits*

Similarly, profits retained in the Business Sector are analyzed according to the sector-branches or divisions in which they are retained. These are:

- Social insurance reserves.
- Profits retained in Government Business Sector.
- Profits retained by joint stock companies.
- Profits retained in non-corporate sector.
- Profits retained by insurance companies.

Estimates of anticipated retained profits in 1964-5 by each of these sector-branches are shown in a supplementary schedule.<sup>2</sup>

*Analysis of Income and Expenditure of the Household Sector*

The pattern of the household expenditure and the relative importance of its elements may be seen by condensing the details of the sector's appropriation account into the following main flows:

- Consumption of goods and services.
- Wages.
- Interest.
- Direct taxes.
- Indirect taxes.
- Insurance instalments and transfer payments.

Similarly, details of the sources side of the same account are shown in the following flows:

- Wages and salaries.
- Interest and profits.
- Subsidies, compensations and transfer payments.
- Revenues from the outside world.<sup>3</sup>

Changes anticipated in each of these income and expenditure flows, together with the anticipated increase in savings, are estimated in the light of relevant changes in the flows of other sectors.

<sup>1</sup> Ibid, pp. 190-2.

<sup>2</sup> Ibid, p. 195.

<sup>3</sup> Ibid, p. 198.



*Analysis of Revenues and Outlays of Government Administration Sector*

Revenues of the Government Administration Sector are grouped into:

- Profits.<sup>1</sup>
- Direct taxes.
- Indirect taxes.
- Exchange of used assets.

Anticipated changes in both kinds of taxes are set forth in a supplementary schedule showing the shares borne by the Business and Household Sectors in terms of monetary units and as percentage of the total.<sup>2</sup>

Similarly, government outlays are grouped into:

- Wages and salaries.
- Interest.
- Subsidies, compensations and other transfer payments.
- Transactions with the outside world.
- The third flow is further analyzed into:
  - Production subsidies.
  - Government subsidies to non-profit organizations.
  - Capital subsidies to the Government Business Sector.
  - Pensions and indemnities.
  - Government expenses abroad.

As a consequence of the implementation of the Five-Year Plan, the foregoing expenditures are expected to change in varying proportions. The anticipated changes in each of these flows are indicated and explained.

*Development and Uses of Total Available Resources*

'Total available resources' are represented by the algebraic sum of value added in the Business Sector plus (or minus) the excess (or shortage) of imports over exports.

'Total uses of resources' are represented by the aggregate of consumption in the Household and Government Administration Sectors and capital formation in the Business, Government and Household Sectors.

To demonstrate the expected changes in the development of

<sup>1</sup> Receivable from Government business organizations.

<sup>2</sup> *Ibid*, pp. 202, 203.

these resources and their uses, the foregoing flows are presented in a supplementary schedule together with the changes anticipated in each, in accordance with the objectives of the development plan.<sup>1</sup>

Periodic analysis of national accounting data along the foregoing lines provides essential information for the implementation of development planning since it displays the composition, development and growth of the economic activities of each sector and indicates the trends of these developments.

#### COMMODITY BALANCE AND INPUT-OUTPUT TABLES

The National Planning Committee prepares commodity balances displaying the value of available resources and uses of each commodity.<sup>2</sup> In this capacity, commodity balances provided the basis for constructing the 1954 and 1959 input-output tables. For each commodity the balances comprise the following flows:

1. Local production.
2. Imports.
3. Final local consumption.
4. Intermediate consumption.
5. Investment.
6. Exports.
7. Increase in stocks.

The total of the first two flows represents the available resources while the total of the remaining items represents their uses. 'Final local consumption' includes the expenditure of both private and public sectors on consumers' goods and services. 'Intermediate consumption' and 'Commodity production requirements' are used interchangeably to denote inputs flowing into the production of other products. 'Investment' refers to that portion of available commodity resources used for the formation of new fixed capital as well as the renewal and maintenance of existing plant and equipment.

The basic equation underlying the construction of commodity balances is:

<sup>1</sup> Ibid, p. 204.

<sup>2</sup> National Planning Committee, *General Frame of the Five-Year Plan for Economic and Social Development*, Cairo, 1960, Section 3, pp. 53-87.

$$\begin{aligned}
 \text{Local production} + \text{Imports} &= \text{Final consumption} \\
 &+ \text{Intermediate consumption} \\
 &+ \text{Investment} \\
 &+ \text{Exports} \\
 &+ \text{Increase in stocks.}
 \end{aligned}$$

The balances are accordingly tabulated, both in the aggregate and in detail, to cover the products of the three main commodity sectors: agriculture, industry and electricity.

### *Commodity Groups*

Products of agriculture include forty-one commodities classified in the following groups:

- (a) Field products.
- (b) Animal products.
- (c) Fruit and wood trees.
- (d) Fishery products.

Products of industry include 127 commodities classified into the following main industries:

- (a) Cotton ginning and pressing.
- (b) Manufacturing industries, sub-grouped into twenty main industries.
- (c) Extractive industries, including mines and quarries.

The local production of electric power is divided into final and intermediate consumption, and the electric power consumed in new fixed capital formation.

### *Evaluation*

The elements of commodity balances are evaluated both at factor cost and at market prices.

To obtain the value of these elements at factor cost from their cost of production, with the exception of imports and exports which are evaluated on C.I.F. and F.O.B. bases respectively, trade margin is calculated and added to each element on both sides of the equation, thus producing their aggregate values at factor cost.<sup>1</sup>

To obtain the values of the same elements at market prices, net commodity taxes are calculated and added to their factor cost value, with the exception of imports and exports, for which net

<sup>1</sup> For 'Studies and Management Expenses', 'Construction and Machine Installations',  $C_2$  and  $C_1$  represent the actual expenses incurred. These are exclusively allocated to 'Investment'. See table below.

TABLE I  
*Commodity Resources and Their Uses*

Sectors	Value of available commodity resources			Uses			
	Local production	Imports	Exports	Final consumption	Commodity production requirements	Investment	Increase in stocks
Agriculture Cotton ginning and spinning Manufacturing industries - classified Electricity	$C_p$	C.I.F.	F.O.B.	$C_p$	$C_p$	$C_p$	$C_p$
Total products of commodity sectors + Studies and investment management + Construction and machine installations	$C_1$ $C_2$					$C_1$ $C_2$	
Aggregates valued at: <i>Add:</i> Trade margins	$C_p$ $C_t$	C.I.F. $C_t$	F.O.B. $C_t$	$C_p$ $C_t$	$C_p$ $C_t$	$C_p$ $C_t$	$C_p$ $C_t$
= Aggregates valued at factor cost <i>Add:</i> Net commodity taxes	$C_F$ $t_1$	$C_F$ $t_m$	$C_F$ $t_x$	$C_F$ $t_1$	$C_F$ $t_1$	$C_F$ $t_1$	$C_F$ $t_1$
= Aggregates valued at market price	M	M	M	M	M	M	M

Reproduced, in a condensed form, from Table 28 - 'Available Commodity Resources From Production and Imports and their Distribution Among Imports, Final Consumption and Production requirements in 1959/1960', *General Frame of the Five-Year Plan*, op. cit., p. 57.

Assuming that:

Value at producer's cost	$C_p$	Factor cost	$C_F$	Market value	$M$
Trade margins	$C_t$	Commodity taxes (For imports $t_m$ , for exports $t_x$ )	$t_1$	$\therefore C_F = C_p + C_t$ and $M = C_F + t_1$	

commodity taxes are customs duties and export duties respectively.

At this point an illustration of the foregoing pricing process may be appropriate.

From the data available in the foregoing commodity balances, it has been possible to tabulate, in a matrix form, the flow of intermediate commodities among commodity-producing sectors, showing the total intermediate consumption. In this matrix, each of the following sectors appears as a delivering and receiving sector:

1. Agriculture.
2. Mines and quarries.
3. Power and fuel.
4. Chemical products.
5. Basic metallic industries.
6. Metallic and engineering industries.
7. Foodstuffs, beverages and tobacco industries.
8. Ginning and pressing.
9. Spinning, weaving and cloth.
10. Products of non-metallic industries.
11. Other industries.
12. Construction.

This table is designated as 'Commodity Flow for Intermediate Consumption',<sup>1</sup> and provides a corner stone for the construction of the input-output tables.

### *Input-Output Tables*

Input-output tables provide an essential tool for economic development planning. Using the data available from commodity, income and transfer balances, the National Planning Committee has constructed an 83 × 83 table for 1954. Another table of the order of 33 × 33 has been constructed for 1959<sup>2</sup>.

Since input-output tables give a detailed description of the structure of the economy and the interdependence among its sectors, they have proved quite valuable in studying the effects of investment and export programmes and measuring the increase in the demand for the products and services of each sector

<sup>1</sup> Ibid, Table 31 - Flow of Intermediate Commodities Among Commodity Producing Sectors in 1959/1960, at Current Users' Prices, p. 77.

<sup>2</sup> Eleish, Gamal, 'An Introduction to the Input-Output Model' *L'Egypte Contemporaine*, January 1962, pp. 5-29.

to meet the requirements of the economic development plan. Consequently, they are considered complementary to the system of national income accounting.

#### FINANCIAL TABLES

Interest in monetary and financial statistics has considerably grown in recent years as a result of the increasing importance of the role of monetary and fiscal policies. The National Planning Committee prepares a set of Financial Tables in which financial statistical data are presented and interrelated to reflect the prevailing pattern of financing in a given accounting period. These tables are designed to serve several purposes:

- (i) Recording the financial transactions among the economic sectors and financial institutions;
- (ii) providing for the measurement of the funds available to each sector;
- (iii) tracing the channels through which they flow in their utilization; and
- (iv) indicating the periodic changes in financial assets and obligations.

For the preparation of these tables, economic units are classified into two main groups designated: 'Economic Sectors' and 'Financial Institutions'.

#### A. *Economic Sectors*

Following the first basis of transaction-classification adopted in the national income accounts, these sectors are classified as follows:

1. The Household Sector.
2. The Private Business Sector.
3. The Government Business Sector.
4. The Government Administration Sector.
5. The Outside World.

#### B. *Financial Institutions*

This group includes all intermediaries performing both short and long-term borrowing and lending transactions and is classified as follows:

1. The Treasury Department.
2. The Central Bank.
3. Commercial banks.
4. Specialized banks.
5. The Social Insurance and Pensions Organization.
6. Insurance companies.
7. The Social Insurance and Savings Organization.
8. The Post Savings Fund.
9. The Economic Development Organization.

### *The Framework*

The framework of the financial tables is made up of five inter-related tables or accounts. Table I reflects the financial flows from the economic sectors to the financial institutions, resulting from such transactions as those related to time and savings deposits, current accounts and loans. Table II reflects financial flows among the economic sectors, resulting from such transactions as those related to notes payable and receivable and dealings in corporate stocks and bonds. Table III reflects flows among financial institutions resulting from such transactions as those related to the balances of commercial banks with the Central Bank, Government bonds and Treasury notes. Table IV reflects flows from financial institutions to the economic sectors, resulting from such transactions as those related to short and long-term loans advanced by banks and discounted bills. Table V performs the function of a Saving and Investment Account for all sectors and provides the link between the national income accounts and the financial tables.<sup>1</sup>

### NATIONAL BUDGETING

Conceptually, the national budget is an outgrowth of the national income accounts, representing a projected set of these accounts for a given accounting period in the future, and containing the results of the expected transactions for the entire economy in that year. National budgeting is complementary to the foregoing tools of development planning, since the budget may be considered simultaneously as a means of implementation and follow-up of the plan.

Using the available data relating to investment, production,

<sup>1</sup> This subject is treated in detail in the paper entitled "Capital Formation in the U.A.R., Sources of Financing and Measurement", presented to this Conference by Dr. Ahmed Hosni.

intermediate consumption, savings, personal consumption, together with data about Government revenues and expenditures, the National Planning Committee has constructed a national budget for 1964-5, the last year of the Five-Year Plan, in accordance with the estimates stated in the plan-frame. Utilizing the data of this budget, the Committee has constructed the 'Revenues and Expenditures of the Main Sectors' and the 'Summary Economic Table' for the same year.<sup>1</sup>

#### MICRO-ECONOMIC ACCOUNTING

Micro-economic accounting has developed as a part of the periodic follow-up procedure designed to ensure that the attained level of economic activity is in conformity with the objectives set in the general development plan. The follow-up procedure is based upon the collection and analysis of information on a specially designed questionnaire in the form of accounts and subsidiary tables to present an overall picture of the economic transactions of the individual firm on a quarterly basis.<sup>2</sup>

With respect to manufacturing firms the accounts are entitled Production, Appropriation and Capital Accounts, and designed practically, along the same lines as those of the Business Sector accounts. The only difference lies in the greater number of items set forth in these accounts in order to provide adequate detail needed for the analysis of economic activity.

The Production Account provides for the measurement of the value of goods and services produced, the intermediate consumption, and the value added by the firm during the accounting period in question. The Appropriation Account shows the distribution of the gross income into dividends, income tax and transfer payments. The balance shows retained business earnings. The Capital Account is designed to present the firm's transactions pertaining to saving and investment (showing types and amounts of capital formation), together with the borrowing and lending transactions during the same accounting period.

The financial tables included in the questionnaire are designed to show the sources and uses of funds available to the firm

<sup>1</sup> Op. cit., Table - 'Revenues and Expenditures of the Main Sectors in 1964/1965', pp. 214-15, and Table 74 - 'Summary Economic Table for 1964/1965', pp. 220-3.

<sup>2</sup> National Planning Committee, *Questionnaire No. 40, Follow-up of Economic Activity in the Business Sector, for Corporations Subject to Law No. 26, 1954*, Cairo, 1961.



during the same accounting period. Details of financial transactions comprise the following:

- (i) Transactions leading to changes in paid capital, i.e. increases through new issues of corporate stock, or decreases through written down value of capital.
- (ii) Transactions leading to changes in bonded debt, i.e. increases through new bond-issues, or decreases through redemption of outstanding bonds.
- (iii) Transactions leading to changes in the value of securities held by the firm.
- (iv) Transactions leading to changes in the balances of accounts and notes receivable and payable, long-term loans and other debt-credit balances.

These tables are designed so that each of the foregoing changes can be related to the economic unit conducting, the financial transaction, or dealing with the reporting firm. For this purpose, economic units are classified in terms of functional sectors and financial institutions, along the same lines followed in the Financial Tables referred to above.

#### INCOME AND TRANSFER TRANSACTIONS

It has already been stated that the framework of national income accounts is based upon a two-fold basis of transaction-classification:

1. The economic unit carrying out the transaction.
2. The economic activity motivating the transacting unit.

In addition, the U.A.R. system of national economic accounting adopts a third type of transaction-classification, based upon the economic nature of the transaction itself. It thus distinguishes three types of transactions:

1. Commodity transactions;
2. Income and transfer transactions; and
3. Financial transactions.

Commodity transactions directly pertain to the availability and utilization of goods. The former denotes production and importation, while the latter denotes local consumption, capital formation and exportation.

Income and transfer transactions are directly related to the returns due to factors of production and to transfer payments.

Financial transactions directly pertain to borrowing and lending activities.

The results of this classification are reflected in two tables:

- I. Revenues and Expenditures of Main Sectors.
- II. Summary Economic Table.

Each of these are briefly described in this section.<sup>1</sup>

#### *Revenues and Expenditures of Main Sectors*

For clarity of presentation a condensed design of this table is produced in Appendix A. The table contains eight columns, four of which are devoted to expenditures by sectors, while the remaining columns are devoted to revenues of the same sectors, in addition to the 'total' columns.

Commodity transactions are grouped into: value added, consumption of goods, capital formation and excess of exports over imports.

Income and transfer transactions have been grouped into five main groups, each of which is subdivided into its components:

- A. Wages and similar transactions:
  - Wages and salaries.
  - Instalments of social insurance.
- B. Interest and profits:
  - Interest.
  - Net dividends of joint stock companies.
  - Fees of members of boards of directors.
  - Profits of Government Business Sector.
  - Profits of non-corporate enterprises.
- C. Taxes:
  - Direct taxes.
  - Customs duties.
  - Indirect taxes.
  - Excise duties on domestic goods.
  - Miscellaneous fees and duties.
  - Other payments to public administration.

<sup>1</sup> These tables are reproduced in Appendix A in condensed forms. They are derived from *General Frame of the Five-Year Plan*:

1. Table 72 - 'Revenues and Expenditures of the Main Sectors in 1959/1960', pp. 210-13.

2. Table 74 - 'Summary Economic Table for 1959/1960', pp. 216-19.

- D. Subsidies, compensations and various transfer payments:  
Life insurance instalments.  
Social insurance instalments.  
Compensations of general insurance.  
Life insurance compensations.  
Other miscellaneous compensations.  
Donations.  
Bad debts.  
Production subsidies.  
Government subsidies to non-profit organizations.  
Capital subsidies to Government Business Sector.  
Pensions and indemnities.  
Exchanges of used assets.
- E. Current transactions with the outside world.
- F. Net lending and borrowing transactions.

Data obtained from the national income accounts are entered in this table according to the corresponding rows and columns, thus providing an overall picture of all transactions classified on the abovementioned basis.

#### *Summary Economic Table*

It may be seen from the design of this table that it follows practically the same transaction-classification adopted in the 'Expenditures and revenues of main sectors'. However, it differs from that table in two respects:

1. The columns devoted to the expenditures and revenues of each sector are further subdivided into production, appropriation and capital accounts.
2. In addition to the classification of transactions into commodity, income, transfers and financial transactions, this table displays the balances of the sector accounts.

It is fairly obvious that the Summary Economic Table thus combines all the three bases of transaction-classification and provides a comprehensive picture of the interrelationships among all sectors of the economy.



