National Income Accounting

CHAPTER 16

INTRODUCTION

National income accounting is concerned with the estimation of the size and composition of the flow of goods and services in a country during a given period of time. It makes use of some approaches like expenditure approach, income approach and output approaches. This chapter examines the meaning of national income, concepts of national income and their uses, measurement of national income, limitations of national income, trend and structure of national income.

OBJECTIVES

At the end of this chapter, students should be able to

◆ Explain the meaning of national income;
◆ Explain the concepts of national income and their uses;
◆ List and explain measurement of national income;
◆ Highlight the limitations of national income;
◆ Explain the trend and structure of national income in Nigeria.

16.1 Meaning of National Income

This is the sum of all incomes received by residents of a country engaged in productive activities, over a given period usually a year.

16.2 Concepts of National Income (NI)

The main national income accounting concepts are:

■ **Gross National Product (GNP):** This is the total market value of the final goods and services produced by the citizens of a country in a year, regardless of their country of residence.
■ **Gross Domestic Product (GDP):** This is the total market value of the final goods and services produced in a year within the domestic economy.
■ **Net National Product (NNP):** This is GNP minus Depreciation (capital consumption allowances).
■ **Net Domestic Product (NDP):** This is GDP minus Depreciation (capital consumption allowances).
■ **National Income (NI):** This is the total monetary value generated in a country within a period of time, usually one year.
■ **Personal Income (PI):** Total earnings of an individual that engages in productive activity in an economy within a given period of time, usually one year.
■ **Disposable Income (DI):** This is personal income minus taxation. It is the income available to individuals after all taxes have been deducted.
■ **Personal Savings (PS):** This is disposable income minus personal consumption expenditures.

16.3 Measurement of National Income

There are three (3) methods of measuring national income which are:
(a) Output (Product) Method, (b) Income method and (c) Expenditure method.
a. Output (Product) Approach: This measures the monetary value of goods

and services produced by the various economic units (individual, business and government) in a particular period of time, usually a year. In calculating the national output, no item should be counted more than once. Value added equals gross value of production minus the cost of raw materials and other inputs used in production. Symbolically, output approach is represented as shown below:

$Y = C + I + G$

where, Y = National income

C = Consumption

I = Investment

G = Government expenditure.

b. Income Approach: This measures the sum of all incomes earned by factors of production excluding transfer payment in a given year. It is the total earnings received by all factors of production for their productive efforts in a given year. Symbolically:

$GNP = w + i + r + pr + dp + ind$

where, w = wages and salaries

i = interest

r = rent

pr = profi t

dp = depreciation

ind = indirect business taxes.

c. The Expenditure Approach: This measures the total expenditure made in buying up the output produced. Symbolically $GNP = C + I + G + (X – M)$

where, C = Private consumption expenditure

I = Investment expenditure by the business sector

G = Government expenditure

X = Export

M = Import

$(X – M)$ = Net export earnings

16.4 Limitations of National Income

a. Uses of different concepts of income in different economic systems may create disparity in estimation.

b. Different treatment of some items such as transfer expenditure may be excluded from the estimates.

c. Different coverage of national income estimates may lead to over or under estimation.

d. Different pricing systems in different countries introduce distortions in the compilation of national income estimates.

e. The use of dollar as an exchange rate has its own limitation which makes it unreliable in some situations.

16.5 Trends and Structure of National Income in Nigeria

S. No.	Activity sectors	1988	1989	1990	1991	1992	1993
1.	Agriculture	24.83	2.07	27.21	28.43	29.00	30.45
2.	Livestock	4.97	5.07	5.17	5.27	5.32	5.43
3.	Forestry	1.46	1.11	1.20	1.23	1.2	1.29
4.	Fishing	1.00	1.59	1.70	1.77	1.80	1.87
5.	Crude petroleum	9.50	11.04	11.64	12.72	13.17	12.89
6.	Mining and quarrying	0.24	0.25	0.27	0.28	0.28	0.29
7.	Manufacturing	6.73	0.84	7.36	7.90	8.24	8.88
8.	Utilities	0.42	0.45	0.50	0.52	0.55	0.59
9.	Building and constr.	1.58	1.65	1.73	1.80	1.84	1.98
10.	Transport	2.79	2.80	3.85	2.95	3.05	3.17
11.	Communication	0.24	0.25	0.25	0.24	0.27	0.24

S. No.	Activity sectors	1988	1989	1990	1991	1992	1993
12.	Wholesales and retail trade	10.73	11.16	11.49	11.86	12.22	12.88
13.	Hotel and rest.	0.47	0.47	0.48	0.48	0.49	0.51
14.	Finance and insurance	3.72	5.19	7.88	8.20	8.52	8.90
15.	Real estate and business service.	0.25	0.26	0.26	0.2	0.27	0.28
16.	Housing	1.95	1.98	2.08	2.16	2.22	2.31
17.	Producers of Government services	6.15	6.67	7.60	7.91	8.86	9.53
18.	Community social and personal services	0.4	0.65	0.7	0.68	0.71	0.73
		77.75	83.50	90.34	94.66	98.07	102.24

Source: 1988–1992 Federal Office of Statistics, Lagos.
Notes: National Planning Commission, Estates/Projections.

As observed from the table above, the estimated value of the country's Gross Domestic Product (GDP) at 1984 constant factor cost had consistently increased in all the years from N77.75 billion in 1988 to N98.07 billion in 1992. This represented an average annual total of N88.9 billion for the period. It is expected that value added in the 1993 fiscal year would be N102.24 billion as shown in the table.
The growth rate of the value added has been rather unsteady, and had been on the decreasing trend in recent years, from the high point of 9.91% recorded in 1988 to the lowest growth rate of 3.60% recorded in the 1992 fiscal year i.e.

$$\left(\frac{98.07 - 94.66}{94.66} \times \frac{100}{1}\right)\% = \left(\frac{3.41}{94.66} \times \frac{100}{1}\right)\% = 3.6\%$$

The GDP is projected to grow by 4.2% from an absolute value of N98.07 billion in 1992 to N102.24 billion in 1993. This is an improvement over the 3.6% rate of growth in 1992. The major sources of growth are agriculture, manufacturing, transport, wholesale and retail trade, finance and insurance and producers of government services.

Summary

This chapter discussed the meaning of national income as the sum of all incomes received by residents of a country engaged in productive activities, over a given period usually a year. Some of the concepts of national income are: Gross National Product (GNP), Gross Domestic Product (GDP), Net National Product (NNP), Net Domestic Product (NDP), National Income (NI) e.t.c. National Income is measured through three approaches: output approach, income approach and expenditure approach. Some of the limitations of national income are: use of different concepts of income in different economic systems which do create disparity in estimation; different coverage of national income estimates may lead to over or under estimation; the use of dollar as an exchange rate has its own limitation which makes it unreliable in some situations. This chapter further discussed the trend and structure of national income in Nigeria

Class Activity

Students should visit the internet and retrieve the incomes of various sectors in Nigeria for the past 5 years. Students should discuss their findings in the class under the guidance of the class teacher.

Review Questions

Objective Questions

1. Which of the following is not appropriate in calculating national income figures?
(a) output method
(b) income method
(c) expenditure method
(d) value added method
(e) depreciation method **(SSCE 1989)**
2. Which of the following items is not included in measuring national income by the income approach?
(a) wages and salaries of public servant
(b) students' grants and scholarship
(c) profits of companies
(d) income earned by self employed person such as lawyer
(e) rent on property **(SSCE 1991)**
3. The magnitude of the national income of a country depends on all the following except the:
(a) quality of natural resources available
(b) level of technical know how
(c) mobility of labour
(d) level of productivity
(e) quality and quantity of factors of production **(SSCE 1994)**
4. Which of the following is a factor affecting the size of national income?
(a) size of the active population
(b) taste of the consumers
(c) number of registered trade unions
(d) credit worthiness of the neighbouring countries
(e) regularity of payment of national debt. **(SSCE 1998)**
5. It is necessary to estimate the national income of a country because it:
(a) indicates the overall performance of the economy
(b) ensures equitable distribution of wealth
(c) assists investors in identifying ventures

(d) enables government to conserve national resources **(SSCE 2003)**

Essay Questions

1. (a) What is national income?
(b) Explain the uses of national income accounting.
2. (a) Explain the methods of measuring the national income of a country. **(SSCE 1996)**
(b) State any three problems associated with measuring national income.
3. (a) Why should a country measure her national income.**(SSCE 2000)**
(b) Distinguish between personal income and national income.
4. (a) Explain how an increase in investment affects the level of national income.

Glossary

National Income: This is the sum of all incomes received by residents of a country from productive activities over a given period of time.
Gross National Product: It is the total market value of final goods and services produced by the citizens (irrespective of their country of origin) of a nation in a year.
Gross Domestic Product: This is the total market value of final goods and services produced in a year within the domestic economy.
Net National Product: This is the gross national product minus depreciation.
Net Domestic Product: It is the gross domestic product minus depreciation.