# 13 INTRODUCTION TO MACROECONOMICS

Macroeconomics is the study of the entire economy in terms of the total amount of goods and services produced, total income earned, the level of employment of productive resources, and the general behavior of prices. Macroeconomics can be used to analyze how best to influence policy goals such as economic growth, price stability, full employment and the attainment of a sustainable balance of payments.

Until the 1930s most economic analysis concentrated on individual firms and industries. With the Great Depression of the 1930s (see note on Great Depression at the end of this chapter), however, and the development of the concept of national income and product statistics, the field of macro economics began to expand. Particularly influential were the ideas of John Maynard Keynes, who used the concept of aggregate demand to explain fluctuations in output and unemployment.



**John Maynard Keynes** (June 5, 1883-April 21, 1946) was an English economist, whose radical ideas had a major impact on modern economic and political theory as well as Franklin D. Roosevelt's New Deal. He is particularly remembered for advocating interventionist government policy, by which the government would use fiscal and monetary measures to aim to mitigate the

adverse effects of economic recessions, depression and booms. He is considered by many to be the founder of modern macroeconomics. John Maynard Keynes was the son of John Neville Keynes, an economics lecturer at Cambridge University and Florence Ada Brown, a successful author and a social reformist. Keynes enjoyed an elite early education at Eton, where he displayed talent in nearly every field of his unusually wide-ranging interests. His abilities were remarkable for their sheer diversity. He entered King's College, Cambridge to study mathematics, but his interest in politics led him towards the field of economics, which he studied at Cambridge under A.C. Pigou and Alfred Marshall. His magnum opus, The General Theory of Employment, Interest and Money challenged the economic paradigm when published in 1936. In this book Keynes put forward a theory based upon the notion of aggregate demand to explain variations in the overall level of economic activity, such as were observed in the Great Depression.

## MEANING OF MACROECONOMICS

Modern macroeconomics mainly owes to J.M. Keynes. His book, "The General Theory of Employment, Interest and Money" published in 1936 has analytically studied what causes large and prolonged fluctuations in the level of employment.

Macroeconomics deals with the aggregates of the system. The word macro means large. Macroeconomics, thus, deals with the behaviour of various economic variables that refer to the economy as a whole. These variables are—total national income, aggregate employment, the extent to which the economy's resources are being fully employed, aggregate saving and investment, and the general price level in the economy. Thus, under macro economics we study economy as a whole. According to Kenneth. E. Boulding, "*Macroeconomics deals not with individual quantities as such, but with aggregates of these quantities, not with individual income, but with national income, not with individual prices but with price levels, not with individual outputs but with national output*."

## DISTINCTION BETWEEN MICROECONOMICS AND MACROECONOMICS

Micro and macroeconomics are the two broad branches of economic theory. These two terms are coined by Prof. Ragnar Frisch of Oslo University. As we already know that microeconomics deals with a small part of the economy. It studies the economic behaviour of individual unit—an individual, a firm or an industry. Microeconomics studies product and factor pricing and also theory of economic welfare. It is sometimes referred to as price theory, because it mainly revolves around the prices of different variable.

Macroeconomics, on the other hand, deals with the aggregates of the whole economy. In other words, it is a study of all units combined together. It is a study of economic system as a whole. It deals with aggregates such as total income and employment, general price level, total production, consumption and investment etc. Macroeconomics, therefore, studies theories related to income, output, employment, and growth. The distinction can also be explained with the help of a diagram Fig. 13.1 below.

Let us take the whole economy as a circle. When we study any aspect of the circle, we deal macroeconomics. The economy consists of, say, four firms/companies— A, B, C and D. If we are analyzing price of products sold, employment generated or output produced by firm A, we are studying microeconomics. Further, If A and B together make one industry (industry means many

firms producing similar types of products), and we study any aspect related to this industry, we are again studying microeconomics.

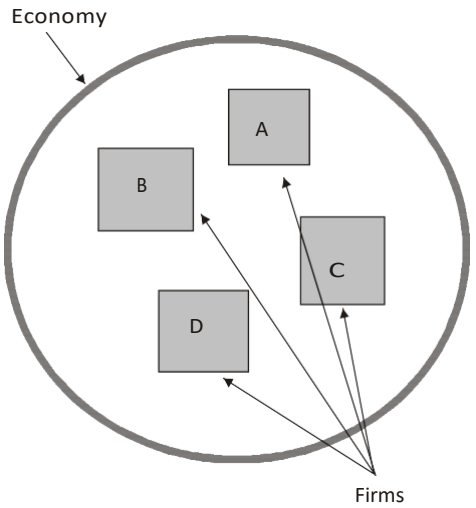


**Fig. 13.1**

## GREAT DEPRESSION

The Great Depression was a massive global economic recession (or "depression") that ran from 1929 to 1941. It led to massive bank failures, high unemployment, as well as dramatic drops in GDP, industrial production, stock market share prices and virtually every other measure of economic growth. It bottomed out in 1933, but it would be well after World War II before such indicators as industrial production, share prices and global GDP could surpass their 1929 levels.

It remains one of the most studied events of history to economic historians. Major theories proposed include the stock market crash of 1929, collapse of the gold standard, collapse of international trade due to the Smoot-Hawley Tariff Act, Federal Reserve policy, and many other influences. The question in economic theory is which effects drove the Great Depression, and therefore which policy actions may have caused or should have been taken to prevent, ameliorate, or end, the Great Depression.

Theories from mainstream capitalist economics focus on the relationship between production, consumption and credit and on personal incentives and purchasing decisions. In these theories attempts are made to order the sequence of events which imploded the industrialized world's monetary system and its trade relationships. Theories from Marxian or Marxists economics focus on the relationships of the control of production and the concentration of wealth. For Marxists, the Great Depression is the kind of crisis which capitalism is prone to, and its occurrence is not surprising.The cause of the Great Depression was in large part due to the collapse of international trade as the result of restrictive trade practices globally. Many nations experienced a decline, though the severity and timing differed from country to country. For example, Britain hit its trough in the third quarter of 1932, while France did not reach its low point until April of 1937.



## Questions for Review

1. Distinguish between microeconomics and macroeconomics.
2. What do you understand by macroeconomics?
3. Give examples of macroeconomic variables.

# 14 NATIONAL INCOME AND RELATED AGGREGATES

## MEANING OF NATIONAL INCOME

National income is generally defined as the value of final goods and services produced in a country in an accounting year. However, it can be defined in terms of– total output (as defined above), total factor income and total expenditure.

In terms of total factor income, it is the sum of factor incomes (wage, rent, interest, profit) in a country in a year. Factors of production viz., land, labour, capital and organization/entrepreneur earns reward as rent, wage, interest and profit respectively. The sum of these rewards is the national income in terms of income generated in the economy. National income, in terms of total expenditure, is the aggregate expenditure of a country in a year's time. Spending of households, private sector and government sector in a country adds up to national income by expenditure method.

## NATIONAL INCOME AT CURRENT AND CONSTANT PRICES

National income at current prices is the money value of all goods and services produced in a country estimated at the prevailing prices.

National income at constant prices is the national income estimated at a base year, which is an earlier year to the current year. National income at constant prices is used for making comparisons of national income and related data. Let us explain the concept of national income at current and at constant prices with the help of following table. The economy produces rice, cars, steel and provides some services during 2000 and 2005. The year 2000 is taken as a base year for calculating national income at constant prices. Prices in two years are given in columns-3 and 5. Quantity of goods produced and units of services provided in both years are assumed to be same. It is seen that national income at current price is Rs. 740 and that at constant prices is Rs. 600. National income at current price is more than at constant prices by Rs. 40. This is illusory and not real. This output in 2005 has not increased and rise in national income is due to increase in price. Thus, to get a true picture of the growth of an economy, national income at constant prices is more useful.

National income at current prices can be converted into national income at constant prices when comparison is required, by using the following formula:

$$N.I_{\text{constant prices}} = \frac{\text{National income at current prices}}{\text{Price Index}} \times 100$$

| | *2000* | | *2005* | | *N.I. in 2005* | |
|---|---|---|---|---|---|---|
| *Products* | *Q* | *P* | *Q* | *P* | *At constant prices* | *At current prices* |
| 1 | 2 | 3 | 4 | 5 | 4 × 3 | 4 × 5 |
| Rice | 10 | 05 | 10 | 07 | 50 | 70 |
| Car | 20 | 10 | 20 | 12 | 200 | 240 |
| Steel | 10 | 20 | 10 | 25 | 200 | 250 |
| Services | 15 | 10 | 15 | 12 | 150 | 180 |
| | | | | | 600 | 740 |

Q (quantity) in units; P (price) in Rs.

## CIRCULAR FLOW OF INCOME

As stated above, national income is the aggregate factor income (earnings of labour and property) which arises from the current production of goods and services by the factors of production; this is represented by a circular flow Fig. 14.1 as under.

Let us take an economy with two sectors only—households and firms. Households are basically consumer units and they own factors of production. Firms produce goods while households provide services of the factors of production to these firms. Factors of production receive incomes for rendering their services. The sales value of net production must equal the sum total of payments made by the firms to the factors of production in the form of wages, rents, interest and profits. These incomes are spent on various goods and services by households. Thus income flows from firms to households in exchange of productive services while products flow in return when expenditure by households takes place.



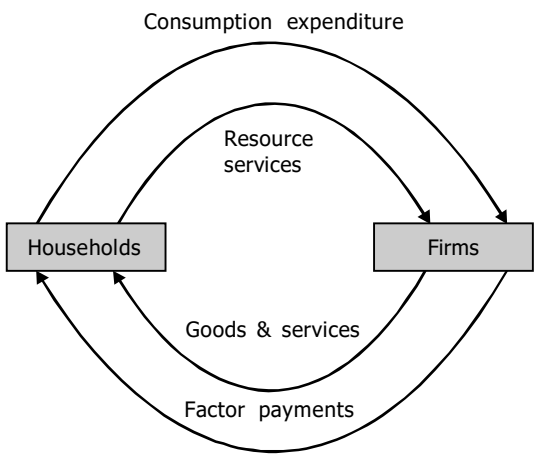


**Fig. 14.1**

In short, circular flow of income is defined as the flow of payments and receipts for goods and services and factor services between different sectors of the economy. There are two types of flows—money flows and real flows. Money flow is the flow of income/payments in terms of money. Real flow refers to the flow of goods and services. National income is both a flow of goods and services and flow of money income.

The following are the assumptions that are considered for explaining circular flow of income in two-sector model simple economy.

1. The economy is closed economy. That is, there is no foreign sector;
2. Households do not produce but provide factors of production;
3. Firms or business sector is the only producing sector;
4. Whatever is produced by firms is sold and there is no accumulation of inventories;
5. Consumers or household sector do not save their income but spend all their income;
6. There is absence of taxes, government expenditure on goods and services etc.

It is thus clear that, production in a two sector model equals sales and income equals expenditure. In real working of circular flow of income, however, there are injections and leakages in the economy. Injections are factors which increase spending flow and leakages are those factors which reduces spending. For instance, households usually save a part of their income. This savings cause leakages from the income stream or flow in the economy. Similarly, when we pay taxes to the government, our income gets reduced by the amount of tax paid. This is also an important form of leakage. On the other hand, if government spends on goods and services, it increases income which acts as a stimulant to production. This is an injection in the economy.

## CONCEPTS OF NATIONAL INCOME

It is very necessary to know the following basic concepts of national income before we know how to measure national income. The important concepts or aggregates of national income are—Gross national product, net domestic product, private income, personal income and personal disposable income.

### Gross National Product ($GNP_{mp}$)

Gross national product is the total market value of all final goods and services produced by nationals of a country during a year. It is a monetary measure of the current output of economic activity in an economy. While calculating GNP, we should only include the value of final goods and services and not of intermediate goods. The value of factor income earned from abroad by the residents of a country is included in the calculation of GNP. Final goods are those goods which are being purchased for final use and not for resale or further processing. Intermediate goods are those goods which go through one or several stages of production to become final goods. In other words, they help in the production of final goods. If we include the value of these goods and services, it would mean double counting. Double counting results in exaggerated estimate of gross national product. In brief,

$$GNP_{mp} = GDP_{mp} + \text{Net factor income from abroad}$$