

KEY INDICATORS OF MACRO ENVIRONMENT

Chapter Outline :

- Introduction
- Gross Domestic Product
- Sectoral Shares
- Agricultural Output
- Electricity Generation
- Rate of Inflation
- Money Supply
- Foreign Trade
- Foreign Exchange Reserves
- Exchange Rate
- Economic Infrastructure
- Social Indicators
- Conclusion

INTRODUCTION

In order to understand the dynamics of business environment, it is essential to understand the nature of key indicators of macroeconomic environment. These indicators are important variables through which the overall state of the economy is reflected. Most of these variables are of macroeconomic character though some of these, like agricultural and industrial production, are microeconomic but reflect upon the macroeconomic state of the economy. Some of these indicators are already mentioned in **Chapter 1** while describing the structure of business environment. Data pertaining to these indicators is collected and compiled mostly by government agencies like Central Statistical Organisation, Reserve Bank of India and Director-General of Commercial Intelligence and Statistics, as the statistical exercise is both time-consuming and expensive. Such statistics are reported in a number of government and semi/quasi-government publications and also supplied to multinational institutions like International Monetary Fund, United Nations, World Bank, World Trade Organisation and Asian Development Bank for international comparison and reporting. Such statistics are closely studied by foreign governments, international bodies and multinational corporations and the indicators constitute the basis for taking decisions on foreign trade, aid and investment. **Box 2.1** shows the list of various sources from where statistics relating to key indicators are available. For domestic enterprises, the indicators help them to take a number of managerial decisions particularly relating to new investment, scale of production and competitive strategy. The key indicators are discussed as follows.

BOX 2.1

List of various specialised statistical sources and organisations in india

- Central Statistical Organisation
- Office of Registrar General
- Directorate of Economics and Statistics (of various state govts. and union territories)
- Various ministries and departments of Govt. of India
- Export Promotion Councils and Commodity Boards
- Director General of Commercial Intelligence and Statistics
- Reserve Bank of India
- National Bank for Agriculture and Rural Development
- Planning Commission
- Director-General of Foreign Trade
- Labour Bureau, Simla
- Centre for Monitoring Indian Economy
- Economic Times Research Bureau
- National Sample Survey Organisation

GROSS DOMESTIC PRODUCT (GDP)

Gross domestic product (see, **Box 2.2**) is one of the most basic and important indicators of the overall health of an economy. It provides the measure of aggregate output and its comparison

over time enables us to calculate the rate of growth (usually in per cent) in the economy. GDP is calculated both at current and constant prices. At current prices, GDP growth is partly due to increase in output and partly due to increase in prices so that GDP at current prices can give misleading conclusions on growth. *For example, in an extreme case, if GDP at current prices records a growth (called nominal rate of growth), of 5 per cent, then there is in fact zero growth in the output of the economy if the inflation rate in the same period is also 5 per cent. And, if the inflation rate is more than 5 per cent, then fall in the physical output in the economy is indicated.*

To avoid such difficulties, GDP data is also calculated at constant prices, taking a year in the past as base year. **Central Statistical Organisation** in India, at present, computes GDP at constant prices taking the year 1993-94 as the base. Practically, it means that the value of aggregate output for a particular year is calculated at the prices of the year 1993-94. Alternatively, GDP at constant prices can also be derived from the GDP data at current prices by discounting the later by the rate of inflation in the intervening period. Such rate of inflation used as a rate of discount is called **GDP deflator**. Growth of GDP at constant prices provides the measure of real rate of growth. Thus, a GDP growth of 5 per cent at constant prices indicates that the physical output in the economy has growth at this rate. Reported growth rates of an economy are often based on constant-price GDP data so that real growth picture of the economy is presented.

BOX 2.2

What is the difference between Nominal and Real GDP? What is the Role of the GDP Deflator?

Nominal GDP is the value of the total flow of goods and services produced in an economy over a specified period of time (usually a year) at current market prices. In this calculation all the intermediate goods are excluded and only the products for final consumption, capital goods (machinery etc.) or changes in stocks are included. Intermediate goods are excluded because the value of intermediate goods are implicitly included in the prices of final products. Final products are meant for final use or consumption and are not used in final production or processing.

Real GDP is the **physical quantity** of goods and services produced. Since this physical aggregate is highly heterogeneous involving different units of measurement, it is measuring only by production or quantity index numbers. Alternatively and more popularly, real GDP is derived by applying **GDP deflator** to nominal GDP data. **GDP deflator** is a price index number which can be applied to nominal GDP figure to remove the effect of changes in the price level. The resultant estimate gives the real or physical question of goods and services product in the economy is a particular year. **GDP deflator** also gives the measure of rate of inflation in the country.

Gross domestic product, whether measured in nominal or real terms, is the sum total of the output of the various constituent sectors of an economy and as a matter of convention, all over the world is computed on an annual basis. *GDP figures are, at best, understated, as these don't include a large number of unreported and non-quantifiable transactions.* A large number of firms resort to **transfer pricing** under which the goods are under-invoiced to evade taxes or dividend payment. Similarly, in the **parallel economy** (also called black market economy) a large number of transactions remain under cover and unreported for **tax evasion** and other illegal uses of money. Every country has a substantial informal sector consisting of unregistered and highly dispersed tiny production, processing or service units in which output is very small and no formal accounts of production or income are maintained. Such units remain, by and large, outside

the reach of statistical organisations. In a number of labour-surplus developing countries, the output of the informal sector is substantial.

Many experts prefer to view GDP in relation to population, rather than GDP in isolation, as a criterion of growth. They would like to watch the movement in GDP per capita over a period of time. In a number of developing economies in South Asia, Africa and Latin America, GDP growth to a good extent is neutralised by population growth so that the economies grow slowly in per capita terms. World Bank classifies economies of the world on the basis of per capita gross national product and uses this measure for calculating rate of growth at constant prices. Table 2.1 provides the classification as contained in World Development Report, 2001.

Table 2.1: World Bank Classification of Economies on the Basis of GNP Per Capita, 2001

Economies	Cut-off Year	GNP per capita cut-off level (US\$)
1. Low-income	2001	≤ 745
2. Lower Middle-income	2001	746-2975
3. Upper Middle-income	2001	2976-9205
4. High-income	2001	≥ 9206

Source: World Development Report, 2003, p. 233.

The per capita measures simply state the average income per person and are silent on the distribution of income. However, these provide useful indication of the general level of income, demand and poverty levels as a guide to business environment.

Measures of **economic development** rather than **economic growth** are a more valuable guide to the status of business environment. Economic development refers to socio-economic rather than purely economic conditions of a society and is a comprehensive indicator of its quality of life. *Economic development is indicated by rising shares of industry and services in national income, improvement in human resources skills and productivity, technological progress, progressive institutional organisation of production, growth of social institutions and wider distribution of national income. It reflects an improvement in the average standard of living of the masses. Compared to simple output growth, economic development takes longer to materialise and requires a definite role of the state in welfare and distributive justice.* Economic development is invariably attended by social development which covers health, education, housing, nutrition, participation of women in economic activities, sanitation, water supply, empowerment of socially disadvantaged groups and social welfare. These elements of development are in qualitative terms to indicate the conditions of the macro environment.

SECTORAL SHARES

The sectoral shares of GDP indicate the type and nature of an economy. In agrarian economies, share of agriculture and allied sectors (including animal husbandry, poultry, fisheries, forestry etc) is the largest and the sector provides employment to the largest chunk of population. Such countries are generally low-income, slow developing economies. *Economies with higher rates of*

growth are generally observed to be those in which the share of industry in national output is rising and that of agriculture is falling over time. In industrialised countries, service sector makes highest contribution (generally exceeding 60 per cent) to national output and most of the sectors use advanced technology. Environment for firms in manufacturing or services is rated higher where these sectors already account for a predominant share in national output. Within the industrial sector, the share of industries with higher **value addition** commands importance. Rising output from such high value added industries like, steel, automobiles, earth moving equipment, electrical engineering, fertilisers, pharmaceuticals, petroleum refining and textiles is indicative of promising industrial and technological environment. Such industries provide strong impetus to the growth of service industries, particularly in transport, finance and real estate. Many development economists use share of manufactured output on GDP as one of the measure of economic development.

AGRICULTURAL OUTPUT

Though the share of industry and services in **GDP** is an important indication of economic development, the level of agricultural output is a key indicator of macroeconomic conditions. *It is generally believed that all is not well with an economy if its agricultural sector under performs. A dwindling agricultural sector can destabilise an economy with far reaching consequences for the macro environment.* Agriculture provides food for population, raw materials to industry and employment to masses. Lapses in food production can raise serious questions on food security and the country can be dependent on food imports from other countries. It causes a drain on the country's scare **foreign exchange** resources and makes it economically vulnerable. Given inequalities in the distribution of income, food shortages create problems of malnutrition and hunger with widespread social implications. Countries with rising trends of hunger, poverty and morbidity statistics discourage private domestic and foreign investment and present a poor image of the economy.

Stagnant or falling non-food output, in the same way, increases the dependence of industry on imported inputs. Countries facing foreign exchange shortages generally have wide ranging import controls and generally higher import tariff rates. In such circumstances, industry can face rising costs of materials making them uncompetitive in both domestic and foreign markets. Agricultural stagnation in the face of rising population and industry demand generates inflationary pressures with a number of adverse effects on the economy (See, **Chapter 10**). In India, over the last seven years, the commercial crop production including groundnut, rapeseed, soybean, cotton and jute has stagnated causing the agro-industries based on these crops to become more import dependent and less competitive. There has been a slow increase in the output of fruits and vegetables which acts as a constraint on the growth of processed food industry. Since agricultural commodities are exportable with relatively small value addition, these contribute to the **foreign exchange** earnings and improve the overall macro scenario.

Agricultural sector demands a number of products as inputs from industry and service. Some of the major inputs are electricity, seeds, fertilisers, pesticides and insecticides, tractors, farm implements, diesel oil and packing materials. From the service sector, it requires credit, transport, insurance, training and marketing services. Not only that, prospering agriculture creates demand for final consumption products of industrial and service sector. This factor is particularly

important in countries like India where about 70 per cent of population depends directly or indirectly upon agriculture and allied areas. It is for this reason that the government takes special steps to protect and develop agriculture on a priority basis through subsidies, marketing support, concessional credit and a number of other farmer support services. Even in the present age of **trade liberalisation**, government protects agriculture against import competition. **Table 2.2** provides the list of import duty rates for major agricultural products in India.

Table 2.2: Import Duty on Agricultural Products, 2001-02

Product	Import duty (per cent)
1. Areca nut	100.0
2. Rice	70-80
3. Refined palm oil	92.4
4. Coffee	70.0
5. Tea	70.0
6. Sugar	60.0
7. Skimmed milk powder	60.0
8. Fresh apples	50.0
9. Refined soya oil	50.8
10. Millets	50.0
11. Crude palm oil	75.0

Source: Govt. of India, *Economic Survey 2002-03*.

In such economies, because of strong forward linkage of the agricultural sector, the level and rate of growth of agriculture *vis-à-vis* population growth is taken as a key indicator of the macro environment.

ELECTRICITY GENERATION

Electric power is the driver of modern technology and the sectors that are based on it. It is a major component of a country's infrastructure. It has a nationwide network and requires massive investment and expenditure for generation, transmission and distribution. Electricity an important component of the cost of a business firm and for that reason it's pricing is a sensitive and intricate factor. Because of massive investment and manpower requirements, it is managed by government or public enterprises in most of the developing economies and a sizeable portion of the budget outlay is earmarked for the power sector. In India, according to Annual Plan for the year 2002-03, the gross subsidy involved on account of sale of electricity under agriculture, domestic units and inter-state sale heads amounted to a staggering sum of about Rs 38,800 crore with the rate of return (all sectors) of minus 32 per cent.

Availability of sufficient power is a key factor indicating the environment for power-based business firms. Insufficient and interrupted power supply upsets production schedules and causes

excess capacity in firms. This raises per unit cost and lowers price-competitiveness. To prevent this, a large number of firms install internal power generation systems based on gas or diesel-powered generators. These are generally more expensive alternatives though they ensure continuity of power supply.

Power inadequacy discourages both domestic and foreign investment in the corporate sector. Power shortages adversely and equally affect agricultural sector. Power availability not only has to be sufficient at a particular time but should also be able to keep pace with the industrialisation process. Keeping in view the macroeconomic importance of electric power, the Government of India has already initiated a programme of power sector reforms including corporatisation of state electricity boards, 100 per cent metering, energy audit in all levels, commercial of distribution and rationalisation of power tariff rates in order to streamline transmission and distribution systems and cut losses. During the Ninth Five Year Plan (1997-2002), energy sector was allotted Rs. 2,22,375 crore which constituted about 26 per cent of the total plan outlay. At present, electricity production accounts for about 12 per cent of total industrial output and its growth has kept pace with manufacturing over the last one year. However, in spite of this, power availability has been a problem due to transmission and distribution losses, power theft and deficiency in the maintenance of distribution network.

RATE OF INFLATION

Inflation is a process in which the general price index records a sustained and appreciable increase over a period of time. Depending on the rate of increase in the general price level it has become fashionable to classify inflation into creeping, walking, running, galloping and hyper inflations (Table 2.3):

Table 2.3: Categories of Inflation on the Basis of its Speed

Type of Inflation	Annual rate of increase in GPL ¹
1. Creeping	2-5 per cent
2. Walking	5-10 per cent
3. Running	10-20 per cent
4. Galloping	20-50 per cent
5. Hyper	Above 50 per cent

Note¹: General price level

An inflation rate below 5 per cent is generally not considered problematic, rather it is considered a good booster for firms' growth as it provides expanding profit margins which serve as motivation to invest and produce more. Generally, it does not attract policy intervention. Inflation rate of 5-10 per cent causes concern and double-digit inflation (10 per cent or more) warrants anti-inflationary policy. Galloping and hyperinflations reflect economic crises and require bold anti-inflationary programmes including macroeconomic restructuring. Different countries use different methodologies to calculate rate of inflation. **Box 2.3** explains how inflation rate is calculated in India.

BOX 2.3**How is annual inflation rate calculated in india?**

At present, annual inflation rate (%) is based on Wholesale Price Index (WPI) using 1993-94 as the base year for a large number of product groups. The product groups are assigned suitable weights depending upon their share in total output. The price series is constructed on a weekly basis and price indices are presented for each year on 52-week annual average as well as at March-end on point-to-point basis.

Annual inflation data is also prepared in major commodity groups viz (i) **primary product group** (including major essential commodities of daily use like food grains, pulse, fruits and vegetables, milk, tea, etc.), (ii) **manufactured product group** (including processed food products like sugar and edible oils and major industrial products like textiles, paper, wood products, cement, iron and steel, (iii) **fuel power, light and lubricant group**. In January 2002, these groups carried the weights as 22, 64 and 14 respectively. Wholesale price indices are also separately prepared for **administered items**, seasonal items, raw material and essential commodities on quarterly as well as annual bases.

In addition to WPI three consumer price indices (CPI) are also constructed covering different socio-economic groups, viz. (i) urban non-manual employees, (ii) agricultural labours, and (iii) industrial workers. These indices are based on retail prices. Central government employees' wage compensations (usually revised on a six monthly basis) are based on the movement of consumer price index for industrial workers.

Source: Prepared from Govt. of India, Economic Survey, 2001-02, Ch.5

There is abundance of literature on the causes, consequences and control of **inflation**. Basically, inflation is explained in terms of demand-pull and cost-push factors. In the former explanation inflation results when aggregate demand in an economy exceeds the available supply and inflation continues so long as the imbalance persists. The pull of demand could be due to fast increase in money supply, bank credit or dissavings of the public as a result of such factors as a fall in the rate of interest. *The demand-pull factors gain momentum when government expenditure increases faster than its revenues causing fiscal deficit. The rise in the aggregate demand is also realised when there is sharp rise in exports or when the domestic consumers expect the prices to rise in future. On the cost-push side, inflation could be the result of sustained increase in the prices of inputs of firms, including capital goods, raw materials and intermediate products.* Cost-push is also triggered when workers are able to negotiate higher wages and more facilities at frequent intervals. Linking of wages with prices or cost of living produces similar effects, in which case wage-push inflation results. Cost-push could also be triggered by frequently rising rates of taxation and user charges for industries for water, electricity, waste disposal or other infrastructural facilities. For the cost-push inflation to sustain, the support of demand is essential.

An inflation rate of upto 5 per cent is generally a good sign of macroeconomic conditions and indicates stable and profitable conditions for business. It facilitates business planning and enables a firm to make reasonable projections about the future, at least in the short run. An inflation rate in the range 5-10 per cent makes the firms cautious on the cost front. A double digit inflation is an uncomfortable sign of business environment and the business sector is not sure what type of macroeconomic policy will be designed and implemented by the government and how soon and to what extent it will show results. *The impact of double-digit inflation on a particular firm will depend on whether as a result of inflation it benefits from higher prices of its products or faces the brunt of rising costs. Often, both the effects take place in opposite direction*

and their strength varies with the passage of time. A firm is often uncertain about the net effect that inflation produces. Further, the problem of inflation never comes alone. In the macroeconomic dynamics, inflation rate impacts the rate of exchange, rate of interest, exports and imports, money supply and credit and a number of other variables, which affect the business environment. Some of these effects are discussed in **Chapter 10**. Galloping or hyperinflation reflects a state of economic crises and failure of macroeconomic policies. Firms' cutback their investment plans. Capital tends to move from productive to speculative activities and drastic policy measures are expected.

MONEY SUPPLY

Money supply is another important indicator of macroeconomic environment. Money supply in an economy determines liquidity conditions in the market, interest rate structure and hence the cost of capital to the firms, and the rate of inflation. Fast expansion of money supply raises money incomes and the level of aggregate demand thereby creating inflationary pressure. At the same time, it increases the supply of loanable funds and lowers the interest rate structure, other things being equal. Through these variables, rising money supply in the secondary round affects income distribution, exchange rates, imports and exports and eventually economic growth. Some of these relationships are discussed in **Chapter 11**.

Money supply is basically determined by the central bank of a country (e.g. Reserve Bank of India) and the commercial banking network. RBI has adopted four measures of money supply viz. M1, M2, M3 and M4 of which M1 and M3 are most popular from operational point of view. M1 concept, called Narrow Money is defined to consist of (i) currency with the public (ii) demand deposits with banks and (iii) other deposits with the RBI. M3 concept, called Broad Money is defined to include (iv) M1 and time deposits with banks. Sources of changes in M3 are listed in **Box 2.4** M1 is also known as transaction money as it is basically used for transactions. Demand deposits are also included in transaction money as these deposits are freely withdrawable through cheques or otherwise and can be used to conduct transactions. Time deposits are not included in M1 because these are held not for transaction purposes but to earn interest income. However, these are included in broad money as these can be withdrawn though with a small loss of time (in completing procedural formalities) and value (by way of some deduction in the rate of interest), and used in transactions.

BOX 2.4

Sources of changes in broad money (3)

Sources of changes in M3, as per RBI approach are the following:

1. Net credit by the RBI and other banks to central and state governments;
2. Credit by RBI and other banks to the commercial sector;
3. Net foreign exchange assets of the banking sector;
4. Government's currency liabilities to the public; and
5. Banking sector's net non-monetary liabilities other than time deposits.

Money supply is a sensitive variable and has to be carefully planned and monitored. Ideally speaking, the rate of growth of money supply should match the rate of growth of output. This is necessary for price stability under competitive conditions. When the former is significantly lower than the latter, sufficient money is not available in the economy to conduct the transactions. *It creates liquidity shortage with consequent increase in the market rate of interest. On the other side, it depresses demand, and in the secondary round, the level of output.* Increase in the rate of interest raises cost of capital and lowers competitiveness of firms with high debt-equity ratio. Thus a low money supply growth rate is indicative of a depressed macro environment.

Excessive supply of money fuels inflation and lowers rate of interest in the first instance. Money supply is increased in any one or more of the following circumstances:

- a) RBI issues fresh currency to finance the budgetary deficit of the central and state governments;
- b) Commercial banks increase credit in the economy;
- c) RBI and commercial banks issue domestic currency in exchange for foreign exchange remittances from abroad;
- d) Reduction in Statutory Liquidity Ratio (SLR) and Cash Reserve Ratio (CRR) of commercial banks. (Box 2.5)

BOX 2.5

What are SLR and CRR? How do these affect supply of money and credit?

In almost all banking systems, commercial banks are required to maintain primary and secondary reserve requirements in the form of cash reserve ratio (CRR) and SLR (statutory liquidity ratio). Under Monetary and Credit Policy 2001-02 of the RBI, banks are required to maintain 6% of their deposits with RBI on which interest is also paid. A fall in the CRR spare more fund with the banks, which they can lend. SLR prescribes a certain % of deposits, which the banks have to maintain in the form of cash and permitted assets and securities and investments. A fall in the SLR makes more loanable funds available to them.

(Also see Ch. 11 and Ch. 17)

When more money comes into circulation, it props up aggregate demand. If demand-supply balance already exists, the increase in demand creates upward pressure on prices. Profit margins expand and firms are motivated to produce more. However, if the pressure of demand is intense and there are constraints on the additional supplies, prices start rising creating inflationary pressure. *The economies, in which money supply growth far outstrips the real rate of growth of output, are regarded as prone to inflation. An inflationary business environment is fraught with risk and uncertainty and the firms have to take suitable defenses.* Money supply growth rate is one of the reliable indicators of potential inflation while existing rate of inflation is calculable on the basis of available data on price indices.

FOREIGN TRADE

Foreign trade of a country not only affects its national income but also is an indication of its openness and competitiveness in the world markets. Foreign trade (exports plus imports) as percentage

of national income (called foreign trade orientation) is commonly used as a measure of a country's openness or globalisation. A high foreign trade orientation level is viewed favourably by domestic export firms and multinational organisations with international business operations. It is an indicator of competitive conditions, economic liberalisation and positive attitude of the government towards globalisation. A country with low level of exports and imports indicates its inward orientation, and poor international economic relations. The commodity composition of foreign trade reflects the nature of an economy. A slow-growth and low-income economy exports primary and low value added products most of which serve as food products or raw materials for industry and imports high value added industrial products including machinery, sophisticated consumer goods and defense items and its dependence on imports is large.

While the foreign trade size is an important indicator of the macro environment, particularly in relation to international business, foreign trade balance (exports minus imports) is a key indicator of the contribution of trade towards national income foreign exchange reserves. A negative trade balance, called trade deficit, drains on national income and foreign exchange reserves. India's merchandise trade balance has been consistently negative since 1990-91, the beginning of the economic reform process, and the country, in spite of trade liberalisation, still accounts for only about 0.6 per cent of world trade. Various trade ratios are used as indicators of the external side of the macro environment:

- Growth rate of exports and imports
- Exports as per cent of total outstanding external debt
- Exports as per cent of external debt service (interest plus principal) repayments (called debt service ratio)
- Export plus imports as percentage of national income (called foreign trade orientation)
- Exports as per cent of GDP at market prices.
- Imports as per cent of foreign exchange reserves.

A country with heavy and recurrent trade deficit eats up the foreign exchange receipts on other accounts and is eventually forced to adopt import control measures. This often attracts retaliation by other countries and in this process the exports of the country are further restricted. Trade deficit is a negative sign of macro environment and firms with international business are cautious in making new investment.

FOREIGN EXCHANGE RESERVES

Foreign exchange reserves consisting of foreign currency assets, gold holdings of the central bank and Special Drawing Rights (SDRs), are a key indicator of macro environment, particularly its external dimension. Foreign exchange reserves of a country indicate its ability to:

- pay for imports
- discharge its external debt liabilities

- raise fresh borrowings in international market
- intervene in the foreign exchange market to stabilise its rate of exchange.

The international credibility of a country is seriously jeopardised if it does not maintain adequate foreign exchange reserves. The adequacy of reserves is usually judged in terms of its payment obligation in foreign exchange on account of imports, profit repatriation by foreign investors, foreign debt servicing and withdrawal of funds from accounts held by foreign residents and the need to sell foreign exchange when foreign currency becomes short in supply in relation to demand and domestic currency tends to depreciate (See Box 2.6). Inability to meet such requirements, particularly over a longer time, can trigger off a confidence crisis and can destabilise the economy.

BOX 2.6

What are Special Drawing Rights? Why are these included in foreign exchange reserves?

SDRs are the international reserve assets created by IMF which are also widely used as international unit of account in international official transaction. These are convertible into leading currencies of the world and are universally acceptable. SDRs were originally created in 1969 at the rate of SDRI = US\$ 1 and the rate prevailed till December 1971 after which the rate was revised to SDRI = \$ 1.086 after devaluation of dollar. With the breakdown of the fixed parity system, SDR was floated and linked to basket of 16 leading currencies of the world. Since 1989 the SDR valuation has been simplified and linked to the weighted average of five leading currencies of the world viz., the US \$, British £, German M, French Franc and Japanese Yen. The weights are periodically revised according to the changing importance of these currencies in the world economy.

SDRs are created according to the needs of international liquidity of the world economy and are distributed to the member countries in proportion to their contribution to the IMF.

To project a good image of the economy, most governments, particularly in less developed countries, would maintain a comfortable level of reserves even by borrowing from abroad. That is why a good level of reserves is often seen to co-exist with a high level of external indebtedness. For example, in India, in April 2002, India's foreign exchange reserves stood at a comfortable level of \$55 billion whereas its outstanding external debt was about \$100 billion. The government has ever been reluctant to amortise high-cost debt using a part of the reserves. Similarly, on a number of occasions, RBI has been a silent spectator to rupee depreciation instead of stabilising the rupee by bringing a part of the foreign currency assets for sale in the market. Therefore, a manager must not be misled by the absolute level of reserves; it is always prudent to assess the level in relation to exchange rate fluctuations, external debt liabilities and the level of imports. For how many months, theoretically speaking, foreign exchange reserves can finance imports, is denoted by the concept of import coverage of foreign exchange reserves (expressed in number of months). In India, in December 2001, foreign exchange reserves stood at \$48 billion against the total external debt of \$100 billion, import coverage of about eight months and rupee depreciation of about 2.4 per cent during April-December 2001. A dangerously low level of foreign exchange reserves of a country indicates an imminent and substantial devaluation of currency, a foreign exchange crises and heavy restrictions on imports and outward remittances. All these signs indicate

a negative macro environment requiring strong and sweeping policy measures to alleviate the situation.

EXCHANGE RATE

Foreign trade involves the use of a number of currencies of different countries. The price of one unit of a currency in terms of the number of units of another currency is called its foreign exchange rate. For example, if 48 rupees exchange for one US dollar, it is called rupee-exchange rate. If this rate rises to Rs. 50 to a dollar then rupee depreciates in value or equivalently, dollar appreciates. On the other hand if the rate falls to Rs. 46, rupee is said to appreciate, or equivalently, US dollar to depreciate. The rate is determined in the foreign exchange market and depends upon the demand for and supply of foreign currency under competitive conditions. Foreign exchange is demanded for imports, foreign travel, debt servicing (amortisation of foreign debt and payment of interest), and withdrawal of foreign deposits and investments, profit repatriation to other countries, gifts and donations made to other countries. It is supplied through foreign investment exports, remittances by expatriate nations and gifts and donations received from abroad. Major participants in the foreign exchange market are exporters and importers, commercial banks, foreign exchange dealers and brokers, speculators, high net worth individuals, multinational companies, government and the central bank itself.

A good macro environment is characterised by exchange rate stability, among other things. The market by itself does not ensure stability. Central bank of the country has to constantly monitor the foreign exchange market and make corrective intervention from time to time. Exchange rate fluctuations bring uncertainty in foreign trade, encourage speculations and discourage investment by foreign companies and in export sectors. The currencies which have a long run tendency depreciate are called weak currencies and foreign investors don't generally prefer weak currency areas. Exchange rate stability is often regarded as a sign of stable economy and it facilitates business planning as well.

ECONOMIC INFRASTRUCTURE

Economic infrastructure is the foundation on which various economic activities take place. The growth of economic infrastructure including power (discussed earlier), telecommunications, transport, roads and posts is essential to sustain economic growth and development. Quality infrastructure is necessary for economic efficiency. It requires high upfront costs, long gestation periods and wide maintenance network. For these reasons, most of the infrastructural establishments and services have for long been in the public sector and in developing countries privatisation of these areas has been a relatively recent phenomenon. To encourage private enterprise in these areas, governments have been offering **tax holidays** and concessions, long-term financial assistance, assured rate of return and flexibility in operation.

Insufficiency or poor quality of infrastructure constrains business operations and raises operational costs. For example, poor quality of roads and congested ports increase delivery time,

raise working capital requirements and increase wear and tear. In India average time for cargo clearance at an Indian port is 15 days whereas it is 48 hours in Japan. In many developed countries, cargo is cleared the same day. A number of private sector projects in infrastructure have been held up for such reasons as power shortage, rationalisation of user charges, political risk, lack of resource commitments, insufficient demand and **time and cost overruns** over long **gestation periods**.

Availability of adequate and good quality infrastructure and kits potentiality to expand with growth of economic activity is one of the key indicators of promising macroeconomic environment. In fact, a developed infrastructure attracts investment. Almost all the industrial countries of the world have a developed infrastructure. In the absence of appropriate infrastructure it is futile to expect new investments, unless there are some other strong reasons for the same. Aspects of infrastructure development and policy in India are discussed in **Chapter 31**.

SOCIAL INDICATORS

Economic growth does not have much meaning in the society if it does not bring about an improvement in the quality of life of the masses. For this reason, concept of economic development, as explained earlier, has been much emphasised and the governments and non-government organisations have been actively involved in social development. Social development is directly related to human resource development and takes place through such factors as education, training, health care, sanitation, family welfare, water supply, social security, nutrition and social welfare. All such activities are classified as social services. Specific programmes targeted at women, children, old population, backward and economically poor classes and rural masses are important components of social services. United Nations under its United Nations Development Programme (UNDP) brings out the Human Development Report which reports the Human Development Index (HDI based on a large number of socio-economic parameters) for various countries of the world. In the year 2001 India ranked 115th out of 162 countries covered with HDI of 0.57, which is rated as Medium Human Development (the highest being 0.939 for Norway).

Another way to look at the level of social development is through the poverty ratio defined as the percentage of population living below the poverty line. In India, as per Planning Commission methodology, poverty at the national level is measured as the weighted average of state-wise poverty levels. Poverty ratio is estimated from the state specific poverty lines and the distribution of persons by expenditure groups obtained from the NSS data on consumptions pattern. Labour force participation rates and employment also reflect the state of social development. Enrolment and dropout rates at various levels of education indicate the quality of the educational system. In India, the literacy rate has gone up from 52.2 per cent in 1991 to 65.4 per cent in 2001. Demographics of a country like birth and death rates, growth of population, dependency ratio, population density, age distribution, urbanisation, and sex ratio also indicate social conditions. Closely related to these indicators are health indicators including fertility rate, maternity and infant mortality rate, life expectancy at birth for males and females and couple protection rate. Incidence of major diseases like, malaria, kala-azar, tuberculosis, leprosy, blindness, HIV/AIDS and heart diseases also provide the health profile of the society. Development of children and empowerment of women and socially disadvantaged groups are important pointers of social development. These social indicators

point to the human resource dimensions of macro environment and have to be at the acceptable levels for the environment to be rated well.

CONCLUSION

A business manager must comprehend these indicators in the correct perspective. A proper understanding of determination and changes in these variables is essential to understand the dynamics of business environment and make strategic adjustments to the changing scenario. Quite often these indicators send conflicting or confusing signals about the state of the health of the economy. For example, a bright agricultural performance could occur in the face of industrial recession. Or, these could be depreciation of the domestic currency in spite of a good balance of payments position. It is equally possible that the economy has falling interest rates and a low degree of inflation in spite of significant increase in money supply over a period. Nevertheless changes in such variables like power generation, money supply, foreign trade and exchange rate are more pronounced whereas changes in infrastructure, sectoral shares and social indicators are slow to come about. A large number of macroeconomic relations are lagged i.e. changes in a macro-variable in one year produce effect in next year or subsequent years. A proper understanding of the key indicators requires a good understanding of an economy and its macroeconomics.

Key Terms

Broad money	Forward linkage	Parallel economy
Cash reserve ratio	GDP deflator	Special drawing rights
Cost overrun	Gestation period	Statutory liquidity ratio
Demand deposits	Gross domestic product	Tax holding
Depreciation	Import coverage	Time deposits
Economic development	Inflation	Time overrun
Economic growth	Informal sector	Trade deficit
Excess capacity	International liquidity	Trade liberalisation
Fertility rate	Life expectancy	Transaction money
Fiscal deficit	Mortality rate	Transfer pricing
Foreign exchange	Narrow money	Value-addition
Foreign exchange rate	National income	Wholesale price index

Supplementary Readings

- Baye, Michaelr. R and Dennis W. Janseen (1996), *Money, Banking and Financial Markets* (New Delhi: AITBS)
- Brunner, Karl (1989), 'The Role of Money and Monetary Policy' *Federal Reserve Bank of St. Louis Review*, Vol. 71 (September-October).
- Dornbusch, R., Stanley Fischar and Richard Startz (2001), *Macroeconomics* (New Delhi: Tata McGraw-Hill).
- EPW Research Foundation (1993), 'Wholesale and Consumer Prices', *Economic and Political Weekly*, September 18.
- Gupta, G.S. and H.Keshava (1994), 'Income and Price Elasticities in India's Trade', *Vikalpa*, Vol. 14, April-June.

Lindert, Peter D (2002), *Kindleberger's International Economics* (Delhi: AITBS)

Samuelson, P.A. and William D. Nordhaus (1998), *Economics* (New Delhi: Tata McGraw Hill).

Todaro, Michael P. (1985), *Economic Development in the Third World* (New Delhi, Orient Longman)

Long Questions

1. What do you mean by 'fundamentals of an economy'? Briefly discuss the nature of variables which determine the performance of the economy?
2. As a business manager of a manufacturing unit, to which macro variables would you give greater importance in assessing business environment? Does a high rate of GDP growth signify bright business prospects for all business organisations in an economy?
3. In a country with higher level of globalisation, which indicators have greater importance in depicting the state of the economy? Give arguments in support of your answer.
4. How are economic infrastructure and social indicators important for an economy? As a business manager, which social indicators would you consider adverse and how will you adjust business decisions in the face of these indicators?
5. What is the significance of foreign trade, exchange rate and foreign exchange reserves of a country for an export-oriented unit? How do exchange rate fluctuations affect the business of such firms?
6. A foreign car manufacturing company wishes to set up its plant in India. What indicators of the economy would it study before making its investment decisions?
7. Is rising share of services in the national income of an economy a discouragement to a firm wishing to make investment in the manufacturing sector? Explain the interrelationship between agriculture, industry and services in Indian economy.

Short Questions

1. What are the basic indicators of the health of an economy?
2. What is the difference between nominal and real GDP?
3. What is GDP deflator? What is its use?
4. What is the significance of changes in the composition of GDP?
5. How does power generation affect GDP?
6. How is inflation rate calculated?
7. What are the dangers of a high rate of inflation?
8. What is the relation between:
 - a. Money supply and inflation?
 - b. Money supply and interest rates?
 - c. Money supply and exchange rate?
 - d. Inflation and interest rate?
 - e. Inflation and exchange rate?

Practical Assignments

1. Study the Economic Survey 2002-03 and prepare a comprehensive note on the current rate of the economy. (The assignment can be given to a group of 6-7 students, each taking up a different segment).
2. Identify about 20 different well-progressing business organisations in your region and interview their business managers to find out how do they assess the current state of the economy. Prepare a list of key variables which they prefer to use while making the assessment. (A team of 3-4 students can pick up the assignment and give a team presentation).
3. Study the Union Budget 2003-04 and prepare lists of industries which are favourably and adversely affected by the budget provisions. (The discussion can be initiated by a pair of students followed by an open house sessions.) Summarise comments and suggestions and prepare a comprehensive report.
4. The following table gives the key indicators of Indian economy of the last four years. Hold a group discussion to arrive at a conclusion about the current state of the economy.

