Foundation Course

POLITICAL ECONOMY

Dr. MCR HRD Institute

POLITICAL ECONOMY

FOUNDATION COURSE

CONTENTS

CHAPTER - 1

INTRODUCING ECONOMICS

In Western civilization wealth was the primary and original concern of economics, and in economics the questions about wealth concerned the means of acquiring, maintaining, and increasing it. Wealth was seen by Aristotle not as an end, but as a means of achieving ethical and political ends. Whereas the treatment of wealth in the non economic fields of religion, history, politics, and the like focused mostly on its distribution and its effect on affluence, poverty, and the state, the approach of the economists was to focus on the means to wealth.

The economic problem or the objective of the economic arrangement, be it in a primitive hunting and gathering society or in the most sophisticated modern industrial society, is that of provision—how to use scarce resources to produce goods and services and how to appropriately distribute the product. This problem has remained basically unchanged in human history. Over time, what has differed or changed are the modes of economic organization that correspond to the cultural arrangements in human societies. But the existence of the economic problem is different from an analysis of the economic problem. Organized economic systems existed in ancient Egypt, the great African empires of Western Sudan, the Aztec and Incan civilizations of the Americas, and the Assyrian and Babylonian theocracies. But according to Joseph Schumpeter, there is no trace of analytic effort until Greece. Even the beginning of the analytic effort did not become systematic until the eighteenth century. Hence, as a field of study, economics is relatively young, and only emerged as a full-fledged separate discipline following the publication of Adam Smith's *The Wealth of Nations* in 1776.

The term *economics,* from the Greek *oikonomika,* means a science or art of managing the household. In modern usage, it refers to the efficient allocation of scarce resources in the production, distribution, and consumption of goods and services to satisfy various desires. As a branch of knowledge, economics or economic science is the study of how to efficiently use limited resources—natural resources (land), capital, labor, entrepreneurship, and information—to achieve maximum satisfaction of human material wants. Like other social sciences, economics studies human behavior but focuses on maximizing satisfaction or benefit as efficiently as possible or at minimum cost in the production, distribution, and consumption of goods and services. Hence, economics deals with decision making, theory, and management of the economy or economic systems. The decision makers or economic units of the economic system are households, businesses, and government.

Although economics originally referred to the management of the affairs of the household (*oikonomia* in Greek), its meaning evolved into political economy—" The financial branch of the art or business of government" (Milgate) then into how to make a country wealthy, and finally into a social science that studies the production, distribution, and consumption of commodities.

Notable contributions to the field of economics include Richard Cantillon's *Essay on the Nature of Commerce* (1755), Adam Smith's *Wealth of Nations* (1776), Karl Marx's *Das Capital* (1867), Thorstein Veblen's *The Theory of the Leisure Class* (1899), and John Maynard Keynes's *General Theory of Employment, Interest, and Money*

(1936). Before the publication of the *Wealth of Nations,* there were other schools of thought whose main preoccupation was wealth creation and the organization of the economy, most prominently, mercantilism and physiocracy.

The study of economics is divided into two parts.

1. Micro Economics and 2. Macro Economics

Micro Economics

The word micro means a millionth part. Microeconomics is the study of the small part or component of the whole economy that we are analyzing. It deals with individual or specific economic units such as an individual industry, firm, or household and their interactions For example we may be studying an individual firm or in any particular industry. In Microeconomics we study of the price of the particular product or particular factor of the production. In 1817, David Ricardo (1772–1823) wrote on the forces that determine the functional distribution of income and the theories of value and price, and it was from these theories that microeconomic theory originated. Microeconomics in the early twenty-first century includes the theory of consumer behavior, theory of production, and the theory of markets. It deals with such topics as prices of a specific product, the number of workers employed in a specific firm, the revenue or income of a particular firm or household, and the expenditures of a specific firm, government entity, or family. Microeconomic analysis focuses mostly on optimization and equilibrium analysis.

Macro Economics

Macro economics is the study of behavior of the economy as a whole. It deals with the aggregate economy and the behavior of its major units—households, businesses, Government, and the foreign sector.

Macroeconomics is concerned with aggregate and average of entire economy. e.g. In Macro economics we study about forest not about tree.In other words in macro economics study how these aggregates and averages of economy as whole are determined and what causes fluctuation in them. For making of useful economic policies for the nation macroeconomics is necessary.

Developed in the 1930s, macroeconomics was practically invented by the English economist John Maynard Keynes (1883–1946) in his attempt to develop an answer to the Great Depression. Keynes argued that the Great Depression was a problem of insufficient aggregate demand and that if the private economy could not generate sufficient demand, it was the government's responsibility to do so. Macroeconomics focuses on such issues as growth, recessions, inflation, unemployment, and government policy and deals with such topics as total output or gross domestic product (GDP), total employment, total income, aggregate expenditure, and general level of prices.

Mercantilism or bullionism.

Mercantilism or bullionism is a loose economic school of thought whose basic belief is that a nation's wealth originated from gold and silver bullion and other forms of treasure. The mercantilist ideas were spread in an uncoordinated three-hundred-year

effort, mostly through the English pamphlet writers of the seventeenth and eighteenth centuries, a period marked by significant shortages of gold and silver bullion in Europe. Mercantilism believed in trade regulation, industrial promotion, and imposition of protective duties on imports of manufactures, encouragement of exports, population growth, and low wages. This belief in regulating wealth was grounded in the conviction that favorable balance of trade leads to national prosperity.

Mercantilists assumed that the total wealth of the world was fixed and reasoned that trade would lead to a zero-sum game. Consequently, they surmised that any increase in the wealth and economic power of one nation was necessarily at the expense of other nations. Hence, they emphasized balance of trade as a means of increasing the wealth and power of a nation.

Physiocracy:

The term Physiocracy (the order or rule of nature) developed for less than two decades as a reaction against the doctrines and restrictive policies of mercantilism. Founded on a doctrine of noninterference, the physiocratic ideas were first enunciated by the Frenchman François Quesnay (1694–1774). Quesnay argued that only agriculture can produce net output (produit net). According to Physiocracy, the farmers and landowners were considered to be the productive classes whereas the merchants and industrialists were not. The Physiocrats believed in natural laws, the free enterprise system, and the free operation of the natural order of things. Quesnay also developed the famous Tableau Economique (economic table) in an attempt to establish a general equilibrium through a basic input-output model. The main ideas of Physiocracy that were promoted by the intellectual disciples of Quesnay—a group of French social reformers—came directly or indirectly from his Tableau Economique. Another important contributor to Physiocracy is Anne-Robert-Jacques Turgot (1727–1781), whose Reflections on the Formation and the Distribution of Wealth (1769–1770) was one of the most important general treatises on political economy written before Smith's Wealth of Nations.

Major Theories

The study of economics is driven by theories of economic behavior and economic performance, which have developed along the lines of the classical ideas, the Marxist idea, or a combination of both. In the process, various models were developed, each trying to explain such economic phenomena as wealth creation, value, prices, and growth from a separate intellectual and cultural setting, each considering certain variables and relationships more important than others. Within the aforementioned historical framework, economics has followed a trajectory that is characterized by a multiplicity of doctrines and schools of thought, usually identifiable with a thinker or thinkers whose ideas and theories form the foundation of the doctrine.

Classical Economics.

Classical economic doctrine descended from Adam Smith and developed in the nineteenth century. It asserts that the power of the market system, if left alone, will ensure full employment of economic resources. Classical economists believed that although occasional deviations from full employment result from economic and political events, automatic adjustments in market prices, wages, and interest rates will restore

the economy to full employment. The philosophical foundation of classical economics was provided by John Locke's (1632–1704) conception of the natural order, while the economic foundation was based on Adam Smith's theory of self-interest and Jean-Baptiste Say's (1767–1832) law of the equality of market demand and supply.

Classical economic theory is founded on two maxims. First, it presupposes that each individual maximizes his or her preference function under some constraints, where preferences and constraints are considered as given. Second, it presupposes the existence of interdependencies—expressed in the markets—between the actions of all individuals. Under the assumption of perfect and pure competition, these two features will determine resource allocation and income distribution. That is, they will regulate demand and supply, allocation of production, and the optimization of social organization.

Led by Adam Smith and David Ricardo with the support of Jean-Baptiste Say and Thomas Robert Malthus (1766–1834), the classical economists believed in Smith's invisible hand, self-interest, and a self-regulating economic system, as well as in the development of monetary institutions, capital accumulation based on surplus production, and free trade. They also believed in division of labor, the law of diminishing returns, and the ability of the economy to self-adjust in a laissez-faire system devoid of government intervention. The circular flow of the classical model indicates that wages may deviate, but will eventually return to their natural rate of subsistence.

Marxist Economics.

Because of the social cost of capitalism as proposed by classical economics and the industrial revolution, socialist thought emerged within the classical liberal thought. To address the problems of classical capitalist economics, especially what he perceived as the neglect of history, Karl Marx (1818–1883), a German economic, social, and political philosopher, in his famous book titled Das Kapital or Capital (1867–1894) advanced his doctrine of dialectical materialism. Marx's dialectics was a dynamic system in which societies would evolve from primitive society to feudalism to capitalism to socialism and to communism. The basis of Marx's dialectical materialism was the application of history derived from Georg Wilhelm Friedrich Hegel (1770–1831), which maintained that history proceeds linearly by the triad of forces or dialectics called thesis, antithesis, and synthesis. This transition, in Marx's view, will result from changes in the ruling and the oppressed classes and their relationship with each other. He then envisaged conflict between forces of production, organization of production, relations of production, and societal thinking and ideology.

Marx predicts capitalist cycles that will ultimately lead to the collapse of capitalism. According to him, these cycles will be characterized by a reserve army of the unemployed, falling rate of profits, business crises, increasing concentration of industry into a few hands, and mounting misery and alienation of the proletariat. Whereas Adam Smith and David Ricardo had argued that the rational and calculating capitalists in following their self-interest promote social good, Marx argued that in rationally and purposefully pursuing their economic advantage, the capitalists will sow the seeds of their own destruction.

The economic thinking or school of economic thought that originated from Marx became known as Marxism. As the chief theorist of modern socialism and communism,

Marx advocated fundamental revolution in society because of what he saw as the inherent exploitation of labor and economic injustice in the capitalist system. Marxist ideas were adopted as the political and economic systems in the former Soviet Union, China, Cuba, North Korea, and other parts of the world.

The neo-Marxist doctrines apply both the Marxist historical dimension and dialectics in their explanation of economic relationships, behavior, and outcome. For instance, the dependency theory articulates the need for the developing regions in Africa, Latin America, and Asia to rid themselves of their endemic dependence on more advanced countries. The dependency school believes that international links between developing (periphery) and industrialized (center) countries constitute a barrier to development through trade and investment.

Neoclassical Economics.

The period that followed Ricardo, especially from 1870 to 1900, was full of criticism of classical economic theory and the capitalist system by humanists and socialists. The period was also characterized by the questioning of the classical assumption that laissez-faire was an ideal government policy and the eventual demise of classical economic theory and the transition to neoclassical economics. This transition was neither spontaneous nor automatic, but it was critical for the professionalization of economics.

Neoclassical economics is attributed with integrating the original classical cost of production theory with utility in a bid to explain commodity and factor prices and the allocation of resources using marginal analysis. Although David Ricardo provided the methodological rudiments of neoclassical economics through his move away from contextual analysis to more abstract deductive analysis, Alfred Marshall (1842–1924) was regarded as the father of neoclassicism and was credited with introducing such concepts as supply and demand, price-elasticity of demand, marginal utility, and costs of production.

Neoclassical or marginalist economic theories emphasized use value and demand and supply as determinants of exchange value. Likewise neoclassicals, William Stanley Jevons (1835–1882) in England; Karl Menger (1840–1925) in Austria; and Léon Walras (1834–1910) in Switzerland, independently developed and highlighted the role of marginal utility (and individual utility maximization), as opposed to cost of production, as the key to the problem of exchange valuation. Neoclassical models assume that everyone has free access to information they require for decision making. This assumption made it possible to reduce decision making to a mechanical application of mathematical rules for optimization. Hence, in the neoclassical view, people's initial ability to maximize the value of output will, in turn, affect productivity and determine allocation of resources and income distribution. Neoclassical economics is grounded in the rejection of Marxist economics and on the belief that the market system will ensure a fair and just allocation of resources and income distribution.

Since its emergence, neoclassical economics has become the dominant economic doctrine in the study and teaching of economics in the West, especially in the United States. A host of economic theories have emerged from neoclassical economics: neoclassical growth theory, neoclassical trade theory, neoclassical theory of production, and so on. In the neoclassical growth theory, the determinants of output growth are

technology, labor, and capital. The neoclassical growth theory stresses the importance of savings and capital accumulation together with exogenously determined technical progress as the sources of economic growth. If savings are larger, then capital per worker will grow, leading to rising income per capita and vice versa.

Known also as the neo liberal theory, neoclassical economics asserts that free movement of goods (free trade), services, and capital unimpeded by government regulation will lead to rapid economic growth. This, in the neoclassical view, will increase global output and international efficiency because the gains from division of labor according to comparative advantage and specialization will improve overall welfare. Even modern trade models (such as the Hecksche-Ohlin) are based on the neoclassical trade theory, which assumes perfect competition and concludes that trade generally improves welfare by improving the allocation of factors of production across sectors of the economy.

Economics - Global Organization And Orientation

Between the two World Wars, two important phenomena affected the organization and orientation of economics in the world. The first was the Bolshevik Revolution of 1917 and the exceptionally rapid industrialization of the Soviet Union. The second was the Great Depression of the 1930s. The former led to the development of the Marxist-Stalinist economic system and state-directed development, collectivization, and the establishment of a command economy. The Great Depression led to a declining faith in the classical (laissez-faire) self-regulating free market capitalism, and the emergence of Government interventionism, following the publication, by John Maynard Keynes in 1936, of *The General Theory of Money, Interest, and Employment.*

The new field of development economics was born in the 1940s and 1950s with W. Arthur Lewis providing the impetus for and being a prime mover in creating the sub discipline. The new Keynesian macroeconomics and development economics advocated widespread government intervention in the economic process. Likewise, the powerful and far-reaching movements of the developing countries in Africa, Asia, and Latin America in the 1940s gave rise to the rejection of free-market capitalism in those regions. In the 1940s and 1950s, economists advocated for a dominant role of the state and comprehensive national development planning was recommended as a way to eliminate the "vicious circle of poverty" and underdevelopment. The advocacy for dirigisme was founded on the notion of market segmentation and failures as well as on information asymmetries and resource constraints. Disappointing results after World War II forced a serious questioning and tempering of this development dirigisme.

As a social science, economics is subject to ideological manipulation. Aside from the orthodox (mainstream) and heterodox spheres, in the neoclassical intellectual tradition, there has been a split since the late nineteenth century as can be seen in the case of its liberal and conservative wings. Led by Paul Samuelson, liberal thinking is associated with advocacy for government intervention to correct market imperfections and market failures while conservatism or neoclassicism led by Milton Friedman is associated with a more pronounced advocacy for laissez-faire.

FUNDAMENTAL ECONOMIC CONCEPTS

1. Human wants:— Human wants are unlimited. When one want is satisfied, another want takes it's place.

2. Law of diminishing utility: — Utility means satisfaction. The intensity of any utility, or of a man's desire for any good, tends to decline as he consumes more units of it.

3. The law of demand and supply: — Every business man knows that the value or price of any article depends upon the demand for and supply of it. The law of demand tells that the price and demand are inversely related to each other. That means, a fall in price leads to a rise in demand and a rise in price leads to a fall in the demand for the good. The law of supply tells that the price and supply are directly related. That means, a rise in price leads to a rise in supply and a fall in price leads to a fall in supply.

4. Analysis of demand: — The desire for a commodity will not give demand to it. No matter how much a man may want an automobile, his desire can have no effect upon the prices or value of automobiles unless he has the necessary means of payment. Desire must be accompanied by the necessary purchasing power before it can become demand.

5. Analysis of supply: —The word supply as commonly used includes the entire stock of goods within reach of the market. But economists use it in a stricter sense. They mean supply as that portion of the entire stock which is actually offered for sale at a given price.

6. Agricultural law of diminishing returns:— One of the most important laws in economics was borrowed from the science of agriculture and is known as the law of diminishing returns.

This law is important because of its bearing upon the cost of production. As population increases farmers must do one of two things: (1) They must bring poorer or more distant lands into cultivation; (2) the land already tilled must be cultivated more intensively, by which is meant that more labor and capital must be applied. The result in either case is the same, namely, higher costs of production and hence higher prices of foodstuffs in the markets.

7. Mechanism of exchange:—The first form of exchange was that of goods or services for goods, which is termed barter. This system required coincidence of wants. Such a procedure could be used only in a primitive community where wants were few and goods were not of great variety. The inconvenience of applying this method led to the innovation of 'Money'

A very different state of affairs results after money has come into general use. Trades can now be made in terms of money with far greater ease, since everyone wants money. But many exchanges are made without the use of money. The seller is content with a promise to pay money, which serves in many respects the same purposes.

There are three stages of exchanges based on barter, money and credit.

8. Exchange without money:—The inconveniences of barter were largely removed by the use of money. However money has its limitations. Many of the objections raised against the use of money in larger transactions due to bulk and weight of the coin, have been removed by the introduction of paper money. Credit made the bulk transactions possible. Men buy and sell without possessing money and sometimes without owning property. The buyer gives instead of money, the promise to pay money. But the promise to pay money is not of necessity redeemed in money itself. This promise may be, and generally is, satisfied by the transfer of money's equivalent.

9. Credit: — The term credit is used in so many different senses, both in everyday life and in the business affairs. The common expression that a man is given credit for something means in mercantile life, that he enjoys the confidence of the community and has the ability to borrow. This is the personal side of credit. The Modern Business Text on "Credit and the Credit Man" will deal extensively with this personal aspect of credit.

10. Kinds of credit: — All credit arises in the process of exchange, either the exchange of credit for goods, credit for money, or credit for credit. If A buys goods of B, he may offer the price of the goods in gold or in bank notes, he may give his promissory note or he may give nothing but his simple promise to pay. When payment is made in gold no credit is involved.

11. Commercial credit: —The borrowing on bonds and mortgages naturally suggests a contrast to ordinary commercial credit. When a dealer purchases goods on credit he hopes to have sold these goods again before the expiration of the credit period and to be in a position to meet his obligation from the proceeds of the sale. By such action he expects to gain in addition a profit for himself. This illustrates what Mill had in mind when he defined credit as per-mission to use another's capital.

Similarly, when a manufacturer buys materials on credit or borrows money on his note to pay wages, he hopes to meet such obligations from the sale of his product. There is in these cases a confident expectation that the whole amount borrowed will be replaced, as it were, by a single transaction. When money is borrowed for longer terms the replacement of the capital is only gradual.

The distinction between borrowing for investment purposes and borrowing for operating expenses is very important, although it is not always observed either by those who seek or by those who grant credit accommodations.

12. Cost of credit: — Credit is an economic good and like other economic goods must be paid for by those who use it. In the case of bonds and certain long term notes the price is expressed as interest. In the case of notes discounted at the bank, the price of credit appears as discount.

The rate of interest is determined by the condition of the credit market. Rates of interest on bonds and other long-term obligations appear to be fairly fixed, although they vary somewhat with the demand for, and the supply of, such investments. These variations, in the case of bonds and similar securities, are more likely to find expression in the price of issue than in the interest rate.

13. What credit does:— Credit is a relation between individuals, a question which concerns not the aggregate of wealth but its distribution among individuals. The chief function of credit in the world of production is to distribute capital. Through its agency the active, energetic men of the world are enabled to secure control of the capital needed in their enterprises. Credit does not increase wealth but it increases capital greatly.

14. Money: — The word money is used so frequently in daily speech that its significance might well be deemed a matter of course, but in fact the word money is used so loosely that it means many things. To the banker money is the medium of exchange that serves as the basis of commercial obligations. To some people the word money means anything which buys products. another person may say that it is only the gold coin of the monetary standard.

Horace White declares, "Money is anything that serves as 'a common medium of exchange and measure of value." Money is the valuable thing or economic good which possesses in any country or community universal acceptability as a medium of exchange or means of payment.

15. Bank notes:—The methods pursued by the banks in different countries in loaning money vary. In some countries credit is extended chiefly through the use of bank notes. The applicant for a loan receives its proceeds in the notes of the bank, which he uses as money for the payments that he has to make. Such notes are simply the promissory notes of the bank. People are willing to accept them because in form they are similar to money, and because the bank is known generally to be solvent. This solvency is maintained by holding in the bank a reserve of standard money with which to redeem the notes on presentation. Such notes are always payable on demand. The reserve of money held against them is either fixed by law or dictated by experience, but the reserve is only a fraction of the amount of the notes issued. With a reserve of 20%, for example, the potency of money to effect exchanges is multiplied five times as long as the bank holds it in reserve for the redemption of notes issued against it.

The amount of gold held and the amount of notes issued against it varies with the demand for capital.

In dull times it is curtailed, and in easy times it increases in amount. These changes are brought about by the issue and the redemption of the notes. If notes are in excess of needs they flow back into the banks. In common speech such bank notes are usually spoken of as money, but the economist recognizes the important credit element which enters into them and calls them as credit money.

16. Demand for money: — The demand for money differs from the desire for wealth. The demand for money is simply the work that money is required to do.

17. Population and the money demand:— Other things being equal, the demand for money grows with the volume of business. The growth of population, independently of any other factors, has created a far larger demand for money. Business activity does not depend upon population alone; China with its teeming millions is not a business force comparable to other nations with much smaller numbers.

18. Supply of money: — The supply of money is the quantity of standard money in existence. The supply of money in any given country is employed as money is automatically regulated through international trade.

19. Functions of money: — As a matter of convenience the functions performed by money may be divided into: (1) Primary, (2) Secondary, and (3) contingent. The primary functions include : Money acting as a medium of exchange and a standard of value. The secondary functions tells about money as a standard of deferred payments, transfer values from one person to another, and act also as a store of value.

20. Token money:— When the bullion value of the coins is not equal to the nominal value they are called tokens or token coins. Such coins circulate because there is a big demand for them in order to meet the ordinary trade requirements. This offsets the fact that their value is less than the amount for which they circulate.

21. Paper money:— Paper currency was a by-product of Chinese block-printing. It started in Tang but not until Song dynasty that it became institutionized as a governmental policy. It had two main advantages over money made out of silver, gold, copper or iron: It was easier to carry around and the copper and iron could be saved for use in everyday objects. Names and seals were printed and written on paper money by the government officials who issued it. Unfortunatey no written documents exist today which enable us to know how this system of paper currency actually functioned prior to the Yuan period. When Maro Polo traveld to China in the 13th century, he was so impressed by paper money that he described how it was made, used and valued. Paper money was not used in Europe until the 17th century.

Paper money began with the "flying cash" of the Tang (618-907) dynasty around 800. The Tang government considering the inconvenience of shipping cash to distant areas where government purchases were made, paid local merchants with money certifiactes called "flying cash", because of its tendency to blow away. These certificates bearing different amounts of money could be converted into hard cash on demand at the capital. Since they were transferable, they were exchanged among merchants almost like currency.

"Flying cash" was not meant to be currency and its circulation was rather limited. Real paper currency was not introduced until early in the Song (960-1279) dynasty, when it was utilitzed by a group of rich merchants and financiers in Szechuan, the same province where the art of printing had been invented. Each banknote they issued had printed on it pictures of houses, trees, and people. Red and black inks were intermittently applied; the seals of the issuing banks were affixed; and confidential marks were made on each bill. All these devices made counterfeiting extremely difficult. These banknotes could be converted into hard cash at any time in any of the issuing banks. Widely circulated, they were readily accepted for the payment in debt and other financial obligations. In 1023 these banknotes were withdrawn and only official notes printed by the government were allowed. This new adopted governmental policy was successful at first for two reaons: First, for each issue of paper notes to be put into circulation, the government provided a cash backing. Second, paper notes and standard coins were interchangeable. Moreover, a citizen could buy salt or liquor with his paper notes from the government-owned stores. In short, paper notes were as good as coined money.

After Chin (1115-1234) occupied the north China, it followed Song's practice. In 1154 it established a Bureau of Paper Currency in Kaifeng as the central agency in charge of all issues. Two kinds paper currency were issued, one of large denominations, consisting of one to ten strings (each string was worth 1000 standard coins) and another of small denominations, bearing the amounts of one to seven hundred standard coins. The validity of each issue was limited to seven years. However little thought was given to backing the currency issue and inflation soared during the 12th century. Even though counterfeiter of paper currency was punishable by death, there were few attempts. In 1183, a printer, who had produced 2600 fake notes in 6 months was arrested and sentenced to death.

Soon after the Mongol took over China and established Yuan (1264-1368) dynasty, it followed the example of its predecessors, Tang, Song and Chin, in using paper currency. The first paper currency issued in Yuan dynasty was in 1260. Various denominations were printed, ranging from a face value of two standard coins to the highest denomination of two strings. Excessive printing year after year soon flooded the market with depreciated paper money until the face value of each certificate bore no relation whatsoever to its counterpart in silver. In 1272 a series of new issues was put in circulation and the old issues were converted into the new ones at the ratio of five to one. The new issues were printed with copper plates instead of wood blocks, as had been the case before. In 1309 another conversion became necessary. In fifty years from 1260 to 1309 Yuan's paper money was depreciated by 1000 percent. To make the situation worse, the government often refused to exchange for new issues old certificates that had been worn out through a long period of circulation.

Paper money went westward when the Mongols printed Chinese-style note in Iran in 1291 and led to the usual inflation. The earliest European paper money was printed in Sweden in 1601. It is possible that Europeans learned the art of printing and paper currency through the examination of Chinese paper money which were either obtained in Western Asia during the Yuan dynasty or had been brought back from China by travelling Europeans.

22. Prices of commodities: — Changes in the prices of commodities take place due either to changes which affect the commodity or due to changes which take place in the value of money. Change in price may therefore arise from a change in (1) the demand for, or (2) the supply of the commodity. Changes of this nature are reflected in the price of one commodity as compared with another; their positions in the price scale change.

A change in the demand for money will change prices. If the demand increases without change of supply an increased burden is placed on each money unit. There are more exchanges to be made but there is the same money with which to make them. Hence units of money must command larger quantities of commodities; prices fall and this indicates the in-creased value of money. Conversely, when the demand for money decreases, prices rise and the value of money falls.

Changes in the supply of money work similar results in prices. If the supply diminishes prices fall and the value of money increases. If the supply of money increases, the prices of commodities rise and the value of money falls.

It may be noted that when prices change by reason of differences in the demand for and supply of commodities, some commodities may rise in price, while others fall. Such readjustments in prices of commodities are constantly taking place.

23. Gresham's Law: — Sir Thomas Gresham reformulated this idea in the 16th century during Queen Elizabeth's reign. Hence, the law has been known as Gresham's Law.

The law has been put in as: "Bad money drives out good money." Thus stated, it applies to paper money as well as to metallic money.

Good money is money that shows little difference between its nominal value (i.e., the face value of the coin) and its commodity value (i.e., the actual rate at which the coins are exchanged for bullion versions of the commodity). In the original discussions of Gresham's law, money was conceived of entirely as metallic coins, so the commodity value was the market value of the coined bullion of which the coins were made. Bad money is money that has a substantial difference between its commodity value and its market value, where market value is lower than exchange value, or the actual value is lower than the market value.

In Gresham's day, bad money included any coin that had been "debased." Debasement was often done by members of the public, cutting or scraping off some of the metal. Coinage could also be debased by the issuing body, whereby less than the officially mandated amount of precious metal is contained in an issue of coinage, usually by alloying it with base metal. Other examples of "bad" money include counterfeit coins made from base metal. In all of these examples, the market value was the supposed value of the coin in the market.

In the case of clipped, scraped or counterfeit coins, the market value has been reduced by fraud, while the exchange value remains at the higher value. On the other hand, with coinage debased by a Government issuer the market value of the coinage was often reduced quite openly, but the exchange value of the debased coins was held at the higher level by legal tender laws.

All modern money is "bad money" in this sense, since fiat money has entirely replaced the commodity money to which Gresham's law applies. This money is not redeemable for any kind of valuable commodity, relying entirely on the Government's decree for its legitimacy, and valued purely in terms of the quantity of money in circulation relative to available goods. The ubiquity of fiat money could indeed be taken as evidence for the truth of Gresham's law.

Gresham's law says that any circulating currency consisting of both "good" and "bad" money (both forms required to be accepted at equal value under legal tender law) quickly becomes dominated by the "bad" money. This is because people spending money will hand over the "bad" coins rather than the "good" ones, keeping the "good" ones for themselves.

Consider a customer purchasing an item which costs five pence, who has in their possession several silver sixpence coins. Some of these coins are more debased, while others are less so — but legally, they are all mandated to be of equal value. The customer would prefer to retain the better coins, and so offers the shopkeeper the most debased one. In turn, the shopkeeper must give one penny in change — and has every

reason to give the most debased penny. Thus, the coins that circulate in the transaction will tend to be of the most debased sort available to the parties.

If "good" coins have a face value below that of their metallic content, individuals may be motivated to melt them down and sell the metal for its higher bullion value, even if such defacement is illegal. For an example of this, consider the 1965 US Half-dollars which were made from only 40% silver. The previous year the half-dollar was 90% silver. With the release of the 1965 half, which was legally required to be accepted at the same value as the previous year's 90% halves, the older 90% silver coinage of the US quickly disappeared from circulation, and the debased money was allowed to circulate in its stead. As the price of bullion silver rose above the face value of the coins, many of those old half-dollars were melted down. With the 1971 issue the government gave up on including any silver in the half dollars. A similar situation is occurred in 2007 in the United States with the rising price of copper and zinc, which led the U.S. government to ban the melting or mass exportation of one and five cent coins, respectively.

In addition to being melted down for its bullion value, money that is considered to be "good" tends to leave an economy through international trade. International traders are not bound by legal tender laws the way citizens of the country are, so they will offer higher value for good coins than bad ones, and thus higher value than can be obtained within the country. The good coins may leave their country of origin to become part of international trade. Thus, the good money is driven out of the country of issue, escaping that country's legal tender laws and leaving the "bad" money behind. This occurred in Britain during the period of the Gold Exchange Standard.

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CHAPTER - 2

INTRODUCING THE MODERN ECONOMY: THE MICRO VIEW

In a market economy, individual consumers make plans of consumption and individual firms make plans of production based on the changes in market prices.

Economists use the term invisible hand to describe the frequent exchanges in the market because everyone (no matter consumer or producer) takes the market price as a signal on trade and makes exchanges with private property rights (defined and protected by laws). The price system works in a market economy only if there is free choice within the market.

Supply and demand is one of the most fundamental concepts of economics and it is the backbone of a market economy. Demand refers to how much (quantity) of a product or service is desired by buyers. The quantity demanded is the amount of a product people are willing to buy at a certain price; the relationship between price and quantity demanded is known as the demand relationship. Supply represents how much the market can offer. The quantity supplied refers to the amount of a certain good producers are willing to supply when receiving a certain price. The correlation between price and how much of a good or service is supplied to the market is known as the supply relationship. Price, therefore, is a reflection of supply and demand.

The relationship between demand and supply underlie the forces behind the allocation of resources. In market economy theories, demand and supply theory will allocate resources in the most efficient way possible.

II. CONCEPT OF DEMAND

In economics, the word 'demand' consists of 4 main concepts:

It refers to both the ability to pay and a willingness to buy by the consumer (s). Demand is sometimes called effective demand.
Demand can be shown by a demand schedule which shows the maximum quantity demanded (willing & able to buy) at all prices.
Demand is a flow concept. Our willingness and ability to buy is subjected to a time period. At different times, we may have different demand schedules.
There are many factors affecting our demand. In order to explore the effect of price on quantity demanded, economists like to assume other factors unchanged so as to make the analysis easier.

In Latin, the term 'ceteris paribus' means ' holding other factors constant or unchanged'.

The Determinants

The determinants of demand for a product are :

1. Price of the good
2. Taste or level of desire for the product by the buyer

3. Income of the buyer
4. Prices of related products: substitute products (directly competes with the good in the opinion of the buyer); complementary products (used with the good in the opinion of the buyer)
5. Future expectations: expected income of the buyer expected price of the good.
6. For the total market demand (rather than individual one) the number of buyers in the market is also a determinant of the amount purchased.

An individual demand refers to the quantity of a good a consumer is willing to buy and able to buy at all prices within a period of time, ceteris paribus.

Demand Schedule & Demand Curve

A demand schedule is a table showing the quantities of a good that a consumer would buy at all different prices within a time period, ceteris paribus.
In mathematics, price & quantity demanded have a functional relationship. (In a demand function, price is called the independent variable and quantity demanded the dependent variable.)

A demand curve shows the above relationship in a graph.

The following example gives a demand schedule and a demand curve.

A Demand Schedule for A Good of A Consumer

Price ($ per uint)	Quantity Demanded
30	2
20	4
15	6
12	8
10	10
8	12

The example below gives a demand schedule and an increase in demand.

A Demand Schedule

Price ($/unit)	Original Quantity Demanded	New Quantity Demanded
30	20	40
20	40	60
15	60	80
12	80	100
10	10	120
8	12	140

Market Demand Curve

It refers to the demand for a good by all the consumers in the market, within a time period.

Let us suppose that there are Two consumers in a market. The Market demand Schedule in that case will be:

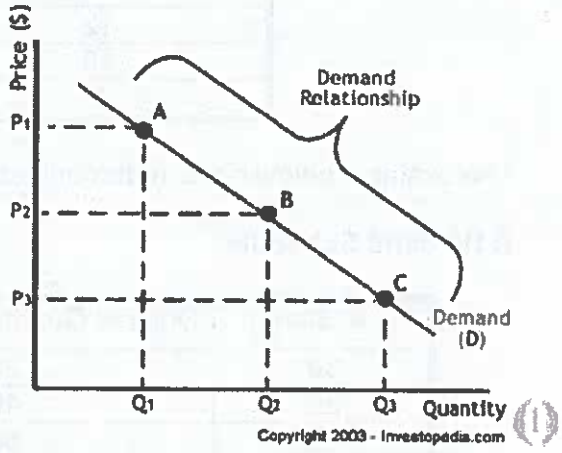
Price ($ per unit)	Quantity Demanded		
	Tom	Mary	Market (i.e. T + M)
30	2	1	3
20	4	3	7
15	6	5	11
12	8	7	15
10	10	9	19

Law of Demand

The relationship between prices and quantity demanded is called the 'law of demand' in economics. The law of demand states that, if all other factors remain equal, the higher the price of a good, the less people will demand that good. In other words, the higher the price, the lower the quantity demanded. The amount of a good that buyers purchase at a higher price is less because as the price of a good goes up, so does the opportunity cost of buying that good. As a result, people will naturally avoid buying a product that will force them to forgo the consumption of something else they value more.

The graph below shows that the demand curve is downward sloping. The slope implies that price and quantity demanded are inversely related, ceteris paribus.

A, B and C are points on the demand curve. Each point on the curve reflects a direct correlation between quantity demanded (Q) and price (P). So, at point A, the quantity demanded will be Q1 and the price will be P1, and so on. The demand relationship curve illustrates the negative relationship between price and quantity demanded. The higher the price of a good the lower the quantity demanded (A), and the lower the price, the more the good will be in demand (C).



(Economics argue that they have observed the reality and found that people behave as described above according to the law. Such a common behaviour is believed to be a general phenomenon of human behaviour. As a result, it is regarded as a law.)

Shifts vs. Movement

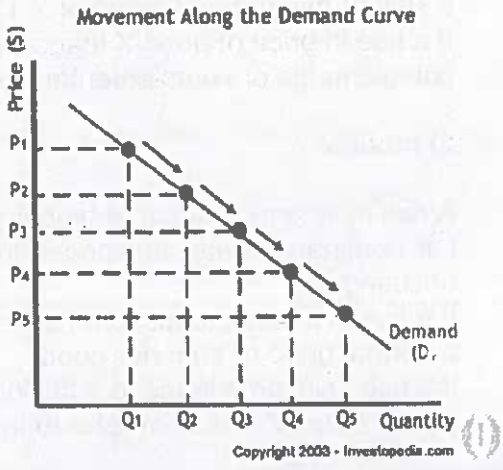
For economics, the "movements" and "shifts" in relation to the supply and demand curves represent very different market phenomena:

Change In Demand & Quantity Demanded

Whenever the price changes, a consumer will change its quantity demanded accordingly. According to the law of demand, when the price rises, the quantity demanded will fall. Such a change can be expressed by a movement along a demand curve.

The Movement Along A Demand Curve: Change In Quantity Demanded

A movement refers to a change along a curve. On the demand curve, a movement denotes a change in both price and quantity demanded from one point to another on the curve. The movement implies that the demand relationship remains consistent. Therefore, a movement along the demand curve will occur when the price of the good changes and the quantity demanded changes in accordance to the original demand relationship. In other words, a movement occurs when a change in the quantity demanded is caused only by a change in price, and vice versa.

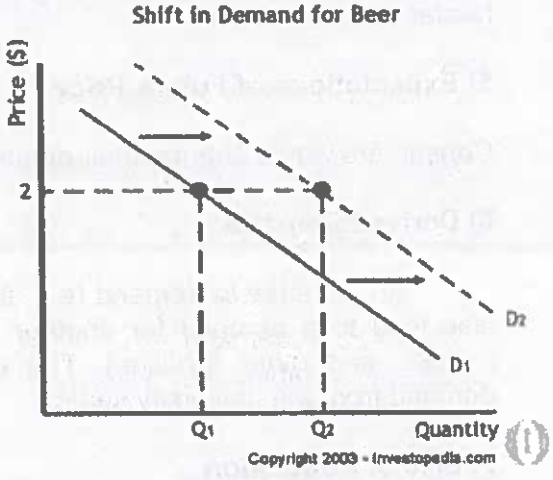


The Shift Of A Demand Curve: Change In Demand:

A change in demand refers to a change of the whole demand schedule, i.e. the quantity demanded (Q_d) changes at EVERY price. The change may be an increase or decrease.

A shift in a demand curve occurs when a good's quantity demanded or supplied changes even though price remains the same.

For instance, if the price for a bottle of beer was $2 and the quantity of beer demanded increased from Q1 to Q2, then there would be a shift in the demand for beer. Shifts in the demand curve imply that the original demand relationship has changed, meaning that quantity demand is affected by a factor other than price. A shift in the demand relationship would occur if, for instance, beer suddenly became the only type of alcohol available for consumption.



Conversely, if the price for a bottle of beer was $2 and the quantity supplied decreased from Q1 to Q2, then there would be a shift in the supply of beer. Like a shift in the demand curve, a shift in the supply curve implies that the original supply curve has changed, meaning that the quantity supplied is effected by a factor other than price.

Factors affecting a change in Demand: A Shift of Demand Curve

1) Prices of Related Goods

When the price of a good (X) rises, it does not only affect its Q_d, but also the Q_d of another related good (Y).
If a rise in price of good X leads to a in demand of good Y, these 2 goods are called substitutes in economics. (There involves a movement along the demand curve of X and
a shift of the demand curve of Y.)
If a rise in price of good X leads to a fall in demand of good Y, these 2 goods are called complements or complementary goods. They are in joint demand.

2) Income

A rise in income leads to a higher purchasing power or ability to buy of the consumers.
(If nominal income and prices increase by the same percentage, the real income is unchanged.)
If a rise in income leads to a rise in demand of a good by a consumer, the good is called a normal good or superior good.
If a rise in income leads to a fall in demand of a good, the good is called an inferior good. "Inferior" does not refer to the quality of the good.

3)Taste

It refers to the subjective choice of consumers. It may be affected by our knowledge, friends, education, culture and advertising.

4) Weather

We may demand different goods on different seasons or weather, e.g. umbrella, heater and even food.

5) Expectations of Future Price

Consumers would change their demand if they expect the future price changes.

6) Derived Demand

An increase in demand (e.g. for more university seats) of a good or service may also lead to a demand for another good or service (e.g. for more lecturers, student hostels, and other facilities). The demand for these related services is a derived demand from the university seats.

7) Size of Population

A larger population would mean more consumers. The market demand curve would shift to the right, i.e. an increase in quantity demand at all prices.

III. CONCEPT OF SUPPLY

The word 'supply' bears 4 similar concepts with demand:

It refers to both the ability to sell (produce) and the willingness to sell by the producer(s). Supply implies an effective supply.

Supply can be shown by a supply schedule which shows the maximum quantity supplied at all different prices.

Supply is also a flow concept. Time is an important factor affecting the condition of supply.There are again many factors affecting the supply of a firm. Economics hold the ceteris paribus condition in order to analyze the relationship between price and quantity supplied by a firm or producer.

An individual supply

Supply Schedule & Supply Curve

A supply schedule is a table showing the quantities of a good that a firm or producer would produce (sell) at all different prices within a time period, ceteris paribus. A supply curve shows the functional relationship between price & quantity supplied in a graph.

The following example gives a supply schedule and a supply curve of a firm.

A Supply Schedule for A Good of An Individual Firm

Price (Rs.per unit)	Quantity Supplied
10	2
18	4
28	6
40	8
50	10

A Supply Curve of A Good by A Firm

The slope implies that the higher the price, the greater the quantity supplied, vice versa and ceteris paribus.

Market Supply Curve

It refers to the supply for a good by all the producers or firms in the market, within a time
period.

The example below gives a supply schedule in a market consisting of only 2 firms, B & N.

A Supply Schedule Of A Market Consisted of Only 2 Firms

Price (Rs. per unit)	Quantity Supplied		
	B	N	Market (i.e. B + N)
10	2	3	5
18	4	5	9
28	6	8	14
40	8	10	18
50	10	11	21

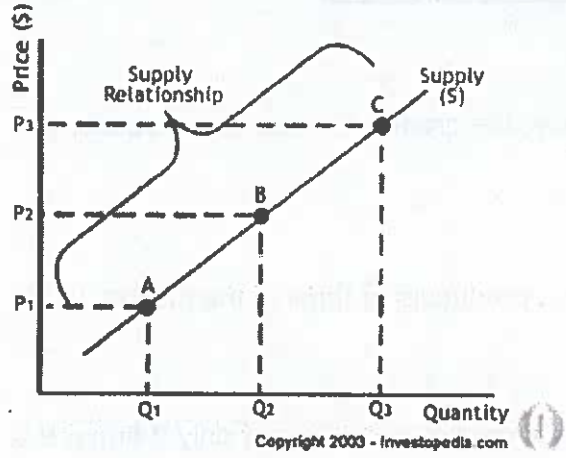
Like the case of market demand curve, the market supply curve is obtained by summing up the individual supply curves in the market. The technique is also horizontal summation.

Law of Supply

The law of supply demonstrates the quantities that will be sold at a certain price. But unlike the law of demand, the supply relationship shows an upward slope. This means that the higher the price, the higher the quantity supplied. Producers supply more at a higher price because selling a higher quantity at a higher price increases revenue.

The higher the price, the greater the quantity supplied by a firm will be, ceteris paribus. This direct relationship between price and quantity supplied is called the law of supply.

The graph below shows that the supply curve is upward sloping. The slope implies that price and quantity supplied are directly related.



A, B and C are points on the supply curve. Each point on the curve reflects a direct correlation between quantity supplied (Q) and price (P). At point B, the quantity supplied will be Q2 and the price will be P2, and so on.

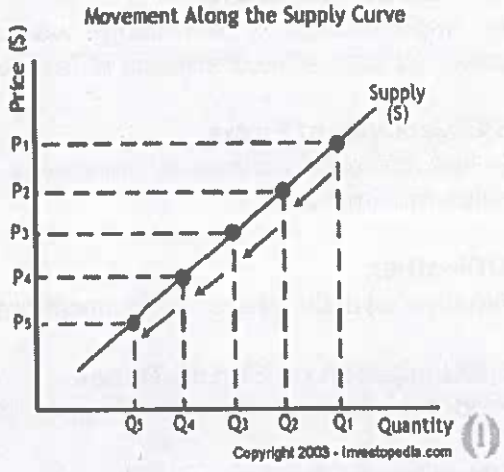
Change In Supply & Quantity Supplied

The Movement along A Supply Curve : Change in Quantity Supplied

Whenever the market price changes, a firm or supplier will change its quantity supplied accordingly. When the price rises, the quantity supplied will rise also. It is called as movement along the supply curve.

This movement shows the response of a firm (in case of an individual supply curve) or all firms in the market (in case of the market supply curve) to a change in market price, ceteris paribus.

Like a movement along the demand curve, a movement along the supply curve means that the supply relationship remains consistent. Therefore, a movement along the supply curve will occur when the price of the good changes and the quantity supplied changes in accordance to the original supply relationship. In other words, a movement occurs when a change in quantity supplied is caused only by a change in price, and vice versa.

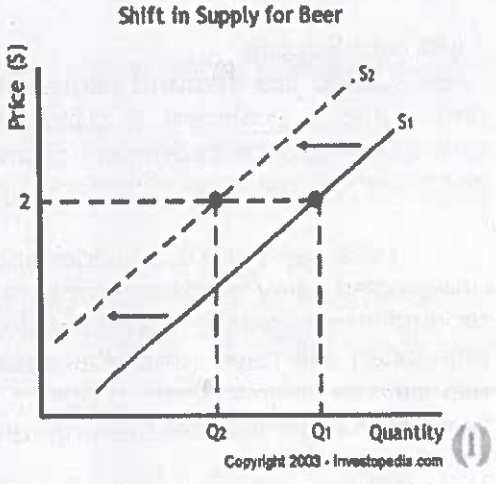


The Shift of A Supply Curve : Change In Supply

A change in quantity supplied is cause by a change in market price. A change in supply is cause by some other factors besides a change in price.

A change in supply refers to a change of the whole supply schedule, i.e. the Q_s changes at every price. It may be an increase or decrease.

A shift in the supply curve would occur if, for instance, a natural disaster caused a mass shortage of hops; beer manufacturers would be forced to supply less beer for the same price.



Factors affecting a change in Supply : A Shift of Supply Curve

Prices of Related Goods

When the price of a good (X) rises, it may lead to a decrease in supply of another good (Y). The 2 goods are in competitive supply, e.g. residential flats and commercial flats. When the prices of residential properties rise, the developers will put more resources (e.g. cement, concrete etc.) to build the flats. As a result, the supply of these building materials for commercial flats will decrease.

When the price of a good (M) rise, it may lead to an increase in supply of another good (N). The 2 goods are in joint supply, e.g. beef and leather.

When the price of beef rises, more beef will be supplied. At the same time, more leather is also available. A good which is a by-product of another good in general, is an example of joint supply.

1) Prices of Factors of Production
A change in factor prices will change the cost of production. As a result, supply is affected. A fall in factor prices would lower the production cost, leading to an increase in supply.

2) State of Technology
An improvement in technology would mean that a greater amount of output can be obtained from a fixed amount of factors. The supply curve would shift to the right.

3)Objectives of Firms
A firm based on different objectives would act differently, i.e. profit maximization or sales maximization.

5)Weather
Weather usually affects agricultural products or construction works.

6)Expectation on Future Prices
Producers would change their supply if they expect changes in the future price.

7)Number of Producers or Suppliers
The number of producers or suppliers also influences the supply in the market.

Time and Supply

Unlike the demand relationship, however, the supply relationship is a factor of time. Time is important to supply because suppliers must, but cannot always, react quickly to a change in demand or price. So it is important to try and determine whether a price change that is caused by demand will be temporary or permanent.

Let's say there's a sudden increase in the demand and price for umbrellas in an unexpected rainy season; suppliers may simply accommodate demand by using their production equipment more intensively. If, however, there is a climate change, and the population will need umbrellas year-round, the change in demand and price will be expected to be long term; suppliers will have to change their equipment and production facilities in order to meet the long-term levels of demand.

III.DEMAND & SUPPLY ANALYSIS

Supply and Demand Relationship

Concept of Market Price

With demand & supply in a market, the interaction between market demand & supply together will determine the market price of a good.

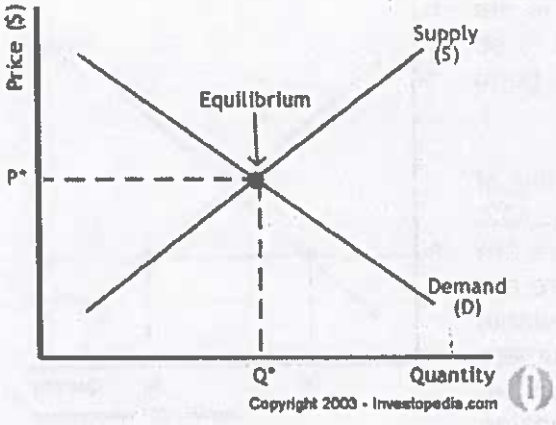
Determination of Equilibrium Price & Quantity In A Market

The example shows a schedule of market demand & supply for a good:

Price (Rs. per unit)	Quantity Demanded	Quantity Supplied
60	200	1100
50	400	900
40	600	700
30	800	500
20	1000	300
10	1200	100

Equilibrium

When supply and demand are equal (i.e. when the supply function and demand function intersect) the economy is said to be at equilibrium. At this point, the allocation of goods is at its most efficient because the amount of goods being supplied is exactly the same as the amount of goods being demanded. Thus, everyone (individuals, firms, or countries) is satisfied with the current economic condition. At the given price, suppliers are selling all the goods that they have produced and consumers are getting all the goods that they are demanding.



Equilibrium point is a point where the demand equal supply. It can be represented in the graph:

Equilibrium occurs at the intersection of the demand and supply curve. At this point, the price of the goods will be P* and the quantity will be Q*.

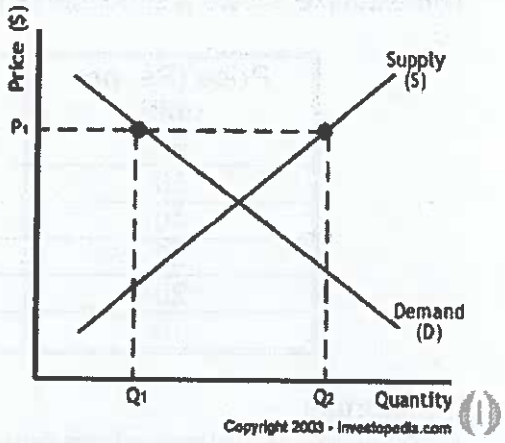
In the real market place equilibrium can only ever be reached in theory, so the prices of goods and services are constantly changing in relation to fluctuations in demand and supply.

Changes In Equilibrium

In many cases, there are factors leading to both a change in demand and a change in supply.Whenever both demand & supply increase, the quantity transacted (quantity exchanged between buyers & sellers) must be greater than before. The new equilibrium price is uncertain because it depend on the magnitude of shift of the 2 curves.Disequilibrium occurs whenever the price or quantity is not equal to P* or Q*.

1. Excess Supply

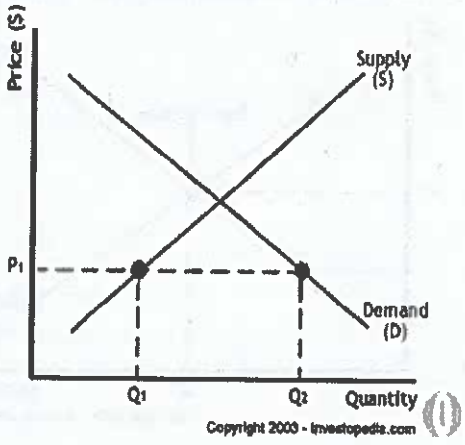
If the price is set too high, excess supply will be created within the economy and there will be allocative inefficiency.



At price P1 the quantity of goods that the producers wish to supply is indicated by Q2. At P1, however, the quantity that the consumers want to consume is at Q1, a quantity much less than Q2. Because Q2 is greater than Q1, too much is being produced and too little is being consumed. The suppliers are trying to produce more goods, which they hope to sell to increase profits, but those consuming the goods will find the product less attractive and purchase less because the price is too high.

2. Excess Demand

Excess demand is created when price is set below the equilibrium price. Because the price is so low, too many consumers want the good while producers are not making enough of it.



In this situation, at price P1, the quantity of goods demanded by consumers at this price is Q2. Conversely, the quantity of goods that producers are willing to produce at this price is Q1. Thus, there are too few goods being produced to satisfy the wants (demand) of the consumers. However, as consumers have to compete with one other to buy the good at this price, the demand will push the price up, making suppliers want to supply more and bringing the price closer to its equilibrium.

IV. NOMINAL PRICE & RELATIVE PRICE

Nominal Price refers to the price of a good (or service) expressed in terms of money.

Relative price refers to the price of a good (or service) expressed in terms of another good. For example, the (nominal) price of a ballpen is Rs.20 and the (nominal) price of a ruler is Rs.10. The relative price of a ballpen is 2 rulers (= Rs.20 / Rs.10).

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CHAPTER – 3

INTRODUCING THE MODERN ECONOMY: THE MACRO VIEW

Economic development is the development of economic wealth of countries or regions for the well-being of their inhabitants. It is the process by which a nation improves the economic, political, and social well being of its people.From a policy perspective, economic development can be defined as efforts that seek to improve the economic well-being and quality of life for a community by creating and/or retaining jobs and supporting or growing incomes and the tax base.

Economic growth is defined as an increase in an economy's ability to produce goods and services. Think of an economy as a giant cake. We all have a slice of the cake to eat, and may be happy with the size of our slice or not. If the economy grows, we would be able to see the overall size of the cake increasing.

Whether or not our individual slice grows depends on whether we are able to share in the growing economy. Even if we do not benefit directly, we should still be able to see some advantages to the growing economy. This is because the extra economic growth should produce higher tax revenues, which can then be spent on public services that should benefit everyone.

Economic Growth vs Economic Development

Economic development refers to social and technological progress. Economic growth is often assumed to indicate the level of economic development.The term "economic growth" refers to the increase (or growth) of a specific measure such as real national income, gross domestic product, or per capita income. National income or product is commonly expressed in terms of a measure of the aggregate value-added output of the domestic economy called gross domestic product (GDP). When the GDP of a nation rises economists refer to it as economic growth.

The term economic development on the other hand, implies much more. It typically refers to improvements in a variety of indicators such as literacy rates, life expectancy, and poverty rates. GDP is a specific measure of economic welfare that does not take into account important aspects such as leisure time, environmental quality, freedom, or social justice. Economic growth of any specific measure is not a sufficient definition of economic development.

Models of economic development

The 3 building blocks of most growth models are: (1) the production function, (2) the saving function, and (3) the labor supply function (related to population growth). Together with a saving function, growth rate equals s/β (s is the saving rate, and β is the capital-output ratio). Assuming that the capital-output ratio is fixed by technology and does not change in the short run, growth rate is solely determined by the saving rate on the basis of whatever is saved will be invested.

Harrod-Domar Model

The Harrod-Domar Model delineates a functional economic relationship in which the growth rate of gross domestic product (g) depends positively on the national saving ratio (s) and inversely on the national capital/output ratio (k) so that it is written as g = s / k. The equation takes its name from a synthesis of analysis of growth by the British economist Sir Roy F. Harrod and the Polish-American economist Evsey Domar. The Harrod-Domar model in the early postwar times was commonly used by developing countries in economic planning. With a target growth rate, and information on the capital output ratio, the required saving rate can be calculated.

Exogenous growth model

The exogenous growth model (or neoclassical growth model) of Robert Solow and others places emphasis on the role of technological change. Unlike the Harrod-Domar model, the saving rate will only determine the level of income but not the rate of growth. The sources-of-growth measurement obtained from this model highlights the relative importance of capital accumulation (as in the Harrod-Domar model) and technological change (as in the Neoclassical model) in economic growth. The original Solow (1957) study showed that technological change accounted for almost 90 percent of U.S. economic growth in the late 19th and early 20th centuries. Empirical studies on developing countries have shown different results .

Even so, in our post industrial economy, economic development, including in emerging countries is now more and more based on innovation and knowledge. Creating business clusters is one of the strategies used. One well known example is Bangalore in India, where the software industry has been encouraged by government support including Software Technology Parks.

Information-Led Development

Information-Led Development (ILD) most commonly refers to a development strategy whereby a developing country makes as a primary economic policy focus the creation and development of a national information technology (IT) sector with the express aim of relying on this sector as an engine of growth. Notable examples of such countries are India and the Philippines.

More recently, a new formulation of ILD has emerged. With origins in community economic development in the United States, the new ILD model describes the use of data to generate actionable information or information solutions to development challenges. Examples of this include the inclusion of non-financial payment obligations in consumer credit files, also known as alternative data, and the use of this information in underwriting, as a means to reduce financial exclusion in the United States, where an estimated 54 million Americans are shut out of mainstream credit access as there is insufficient information about them in their credit files to be scored by a credit scoring model. This variant of ILD was pioneered by PERC, a non-profit policy research organization and development intermediary headquartered in Chapel Hill, North Carolina . Other US-based organizations, including Social Compactand the Local Initiatives Support Corporation, employ variants of ILD, but none has applied this internationally except for PERC.

This development model is gaining traction in emerging markets such as Colombia and South Africa, where the data is being used to reduce financial exclusion and facilitate credit access as a means to build wealth and form assets. It is also attracting increasing attention from development agencies, including USAID, the International Finance Corporation, the World Bank Group, and the Consultative Group to Assist the Poor.

Factors affecting economic growth in developing countries

Savings and Investment

There are some economic facts of life that underpin all macroeconomic explanations of growth. Perhaps the most important is that in order for capital goods to be accumulated to produce greater quantities of consumer goods in the future, consumer goods have to be given up in the present. For example, if workers are building a textile factory they cannot simultaneously be making textiles these will only appear in the future as a result of the sacrifices of the present.

Increases in the amount of capital goods are called investment. For growth to occur the level of investment has to be greater than the amount of depreciation, i.e. the amount by which machines wear out or become obsolete during the year. The higher the level of investment above depreciation the greater the potential output of the economy in the future.

Unfortunately, the resources to enable investment have to come from somewhere. The only way that workers can be freed from making cars to build car factories is by an increase in savings by households i.e. by the postponement of any decision to buy goods today in favour of future consumption. Look now at the investment figures for your six case study countries and think about the differences between them, particularly those between Asian and Latin American countries. Notice also the very marked regional differences in investment and savings rates.

The Harrod Domar Model has been extremely influential in development economics.

Evaluation of the model:

An increased level of savings is not a sufficient condition for growth. For a start, the savings funds have to find their way to people who are willing to take the risk of investing. Provided they get the funds at reasonable rates of interest they then have to be able to make informed choices about the kind of investment needed e.g. what consumer tastes in the future are likely to be.

There are also problems coordinating investment projects often firms will only invest if other firms are also investing, e.g. providing intermediate goods, infrastructure support or external economies of scale. Indeed, the two-good PPF model illustrated in the diagram may be rather misleading because it leaves out of the picture the extent to which the various sectors of the economy are in tune with each other.

The extent to which the savings rate can be influenced by government policy may be very limited. The trouble is that the savings rate cannot really be taken as

independent of the level of GDP. To some extent peoples willingness to save depends on their income with people generally less inclined to save when their incomes are low. For example, in developed countries it is usual for people to borrow money when starting employment and only to start saving when their salaries are higher later on in their careers.

The situation is much more acute for people below the poverty line in developing countries. The prospect of future growth in GDP may act as a disincentive to do the savings necessary for that growth. What makes sense for the economy as a whole may not appear to be at all sensible for the individuals making the decisions.

A further major problem with the arguments of the Harrod-Domar model is its assumption that increases in capital automatically expand the PPF. Unfortunately, extra capital for a given quantity of labour can only bring a certain amount of growth. At some point the economy will run into diminishing returns, i.e. a shortage of labour. This suggests that the level of savings is much less important than the rate of technological change. Some countries have compulsory savings laws e.g. Singapore. But perhaps this works only if the economy is already growing fast enough to provide the economic and political basis on which to sustain compulsory savings. There is also a need for potential savers to trust the financial system e.g. that there will be a low inflationary environment and that institutions are safe places to deposit money.

Gross Domestic Product (GDP)

The **Gross Domestic Product (GDP)** or **Gross Domestic income (GDI)**, a basic measure of an economy's economic performance, is the market value of all final goods and services made within the borders of a nation in a year. GDP can be defined in three ways, all of which are conceptually identical.

First, it is equal to the total expenditures for all final goods and services produced within the country in a stipulated period of time (usually a 365-day year).

Second, it is equal to the sum of the value added at every stage of production (the intermediate stages) by all the industries within a country, plus taxes less subsidies on products, in the period.

Third, it is equal to the sum of the income generated by production in the country in the period—that is, compensation of employees, taxes on production and imports less subsidies, and gross operating surplus (or profits).

The most common approach to measuring and quantifying GDP is the **expenditure method**:

GDP = consumption + gross investment + government spending + (exports − imports), or,
GDP = C + I + G + (X − M).

"Gross" means that depreciation of capital stock is *not* subtracted out of GDP. If net investment (which is gross investment minus depreciation) is substituted for gross investment in the equation above, then the formula for net domestic product is obtained. Consumption and investment in this equation are expenditure on final goods

and services. The exports-minus-imports part of the equation (often called **net exports**) adjusts this by subtracting the part of this expenditure not produced domestically (the imports), and adding back in domestic area (the exports).

Economists (since Keynes) have preferred to split the general consumption term into two parts; private consumption, and public sector (or government) spending. Two advantages of dividing total consumption this way in theoretical macroeconomics are:

Private consumption is a central concern of welfare economics. The private investment and trade portions of the economy are ultimately directed (in mainstream economic models) to increases in long-term private consumption.

If separated from endogenous private consumption, **government consumption** can be treated as exogenous, so that different government spending levels can be considered within a meaningful macroeconomic framework.

Measuring GDP

Components of GDP

Each of the variables **C (Consumption)**, **I (Investment)**, **G (Government spending)** and **X − M (Net Exports)** (where **GDP = C + I + G + (X − M)** as above) (Note: * **GDP** is sometimes also referred to as **Y** in reference to a GDP graph)

C (Consumption) is **private** consumption in the economy. This includes most personal expenditures of households such as food, rent, medical expenses and so on but does not include new housing.

I (Investment) is defined as investments by business or households in capital. Examples of investment by a business include construction of a new mine, purchase of software, or purchase of machinery and equipment for a factory. Spending by households (not government) on new houses is also included in Investment. In contrast to its colloquial meaning, 'Investment' in GDP does not mean purchases of financial products. Buying financial products is classed as 'saving', as opposed to investment. The distinction is (in theory) clear: if money is converted into goods or services, it *is* investment; but, if you buy a bond or a share of stock, this transfer payment is excluded from the GDP sum. That is because the stocks and bonds affect the financial capital which in turn affects the production and sales which in turn affects the investments. So stocks and bonds indirectly affect the GDP. Although such purchases would be called *investments* in normal speech, from the total-economy point of view, this is simply swapping of deeds, and not part of real production or the GDP formula.

G (Government spending) is the sum of government expenditures on final goods and services. It includes salaries of public servants, purchase of weapons for the military, and any investment expenditure by a government. It does not include any transfer payments, such as social security or unemployment benefits.

X (Exports) is gross exports. GDP captures the amount a country produces, including goods and services produced for other nations' consumption, therefore exports are added.

M (Imports) is gross imports. Imports are subtracted since imported goods will be included in the terms **G**, **I**, or **C**, and must be deducted to avoid counting foreign supply as domestic.

Examples of GDP component variables

Examples of **C**, **I**, **G**, and **NX** (net exports): If you spend money to renovate your hotel so that occupancy rates increase, that is private investment, but if you buy shares in a consortium to do the same thing it is saving. The former is included when measuring GDP (in **I**), the latter is not. However, when the consortium conducted its own expenditure on renovation, that expenditure would be included in GDP.

For example, if a hotel is a private home then renovation spending would be measured as **C**onsumption, but if a Government agency is converting the hotel into an office for civil servants the renovation spending would be measured as part of public sector spending (**G**).

If the renovation involves the purchase of a chandelier from abroad, that spending would also be counted as an increase in imports, so that **NX** would fall and the total GDP is affected by the purchase. (This highlights the fact that GDP is intended to measure domestic production rather than total consumption or spending. Spending is really a convenient means of estimating production.)

If a domestic producer is paid to make the chandelier for a foreign hotel, the situation would be reversed, and the payment would be counted in **NX** (positively, as an export). Again, GDP is attempting to measure production through the means of expenditure; if the chandelier produced had been bought domestically it would have been included in the GDP figures (in **C** or **I**) when purchased by a consumer or a business, but because it was exported it is necessary to 'correct' the amount consumed domestically to give the amount produced domestically. (As in Gross Domestic **Product**.)

Types of GDP and GDP growth
GDP real growth rates

Current GDP is GDP expressed in the current prices of the period being measured
Nominal GDP growth is GDP growth in nominal prices (unadjusted for price changes).
Real GDP growth is GDP growth adjusted for price changes.

Another formula can be written as this:
GDP = R + I + P + SA + W
where R = rents ; I = interests ; P = profits ; SA = statistical adjustments (corporate income taxes, dividends, undistributed corporate profits) ; W = wages

GDP vs GNP

GDP can be contrasted with **Gross National Product** (**GNP**, or **Gross National Income**, **GNI**), which the United States used in its national accounts until 1992. The difference is that GNP includes net foreign income (the current account) rather than net exports and imports (the balance of trade). Put simply, GNP adds net

foreign investment income compared to GDP. United States GDP, GNP and GNI (Gross National Income) can be compared at EconStats .

GDP is concerned with the region in which income is generated. It is the market value of all the output produced in a nation in one year. GDP focuses on where the output is produced rather than who produced it. GDP measures all domestic production, disregarding the producing entities' nationalities.

In contrast, GNP is a measure of the value of the output produced by the "nationals" of a region. GNP focuses on who owns the production. For example, in the United States, GNP measures the value of output produced by American firms, regardless of where the firms are located. Year-over-year real GNP growth in the year 2007 was 3.2%.

Measurement
International standards

The international standard for measuring GDP is contained in the book System of National Accounts (1993), which was prepared by representatives of the International Monetary Fund, European Union, Organization for Economic Co-operation and Development, United Nations and World Bank. The publication is normally referred to as SNA93 to distinguish it from the previous edition published in 1968 (called SNA68)

SNA93 provides a set of rules and procedures for the measurement of national accounts. The standards are designed to be flexible, to allow for differences in local statistical needs and conditions.

National measurement

Within each country GDP is normally measured by a national government statistical agency, as private sector organizations normally do not have access to the information required (especially information on expenditure and production by governments).

Interest rates

Net interest expense is a transfer payment in all sectors except the financial sector. Net interest expenses in the financial sector are seen as production and value added and are added to GDP.

Cross-border comparison

The level of GDP in different countries may be compared by converting their value in national currency according to either Current Currency Exchange Rate or Purchasing Power Parity

Current Currency Exchange Rate:

GDP is calculated by exchange rates prevailing on international currency markets

Purchasing Power Parity Exchange Rate:

Under Purchasing Power Parity (PPP), GDP is calculated by each currency relative to a selected standard (usually the United States dollar).
The relative ranking of countries may differ dramatically between the two approaches.

The current exchange rate method converts the value of goods and services using global currency exchange rates. This can offer better indications of a country's international purchasing power and relative economic strength. For instance, if 10% of GDP is being spent on buying hi-tech foreign arms, the number of weapons purchased is entirely governed by *current exchange rates*, since arms are a traded product bought on the international market (there is no meaningful 'local' price distinct from the international price for high technology goods).

The Purchasing Power Parity method accounts for the relative effective domestic purchasing power of the average producer or consumer within an economy. This can be a better indicator of the living standards of less-developed countries because it compensates for the weakness of local currencies in world markets. (For example, India ranks 12th by nominal GDP but 4th by PPP). The PPP method of GDP conversion is most relevant to non-traded goods and services.

There is a clear pattern of the purchasing power parity method decreasing the disparity in GDP between high and low income (GDP) countries, as compared to the Current Exchange Rate Method. This finding is called the Penn effect.

Standard of living and GDP

World GDP per capita (in 1990 international dollars) changed very little for most of human history before the industrial revolution. (Note the empty areas mean no data, not very low levels. There are data for the years 1, 1000, 1500, 1600, 1700, 1820, 1900, and 2003.)

GDP per capita is not a measurement of a standard of living in an economy. However, it is often used as such an indicator with the rationale being that all citizens would benefit from their country's increased economic production. Similarly, GDP per capita is not a measurment of personal income. GDP may increase while incomes for the majority of a country's citizens may even decrease or change disproportionally. For example, in the US from 1990 to 2006 the earnings (adjusted for inflation) of individual workers, in private industry and services, increased by less than 0.5% per year while GDP (adjusted for inflation)increased about 3.6% per year over the same period.

The major advantages to using GDP per capita as an indicator of standard of living are that it is measured frequently, widely and consistently; frequently in that most countries provide information on GDP on a quarterly basis (which allows a user to spot trends more quickly), widely in that some measure of GDP is available for practically every country in the world (allowing crude comparisons between the standard of living in different countries), and consistently in that the technical definitions used within GDP are relatively consistent between countries, and so there can be confidence that the same thing is being measured in each country.

The major disadvantage of using GDP as an indicator of standard of living is that it is not, strictly speaking, a measure of standard of living. GDP is intended to be a measure of particular types of economic activity within a country. Nothing about the definition of GDP suggests that it is necessarily a measure of standard of living. For instance, in an extreme example, a country which exported 100 per cent of its production and imported nothing would still have a high GDP, but a very poor standard of living.

The argument in favour of using GDP is not that it is a good indicator of standard of living, but rather that (all other things being equal) standard of living tends to increase when GDP per capita increases. This makes GDP a proxy for standard of living, rather than a direct measure of it. GDP per capita can also be seen as a proxy of labour productivity. As the productivity of the workers increases, employers must compete for them by paying higher wages. Conversely, if productivity is low, then wages must be low or the businesses will not be able to make a profit.

Criticism:

There are a number of controversies about the use of GDP.
Limitations of GDP to judge the health of an economy

GDP is widely used by economists to gauge the health of an economy, as its variations are relatively quickly identified. However, its value as an indicator for the standard of living is considered to be limited.

Criticisms of how the GDP is used include:

Wealth distribution – GDP does not take disparity in incomes between the rich and poor into account. However, numerous Nobel-prize winning economists have disputed the importance of income inequality as a factor in improving long-term economic growth. In fact, short term increases in income inequality may even lead to long term decreases in income inequality. See income inequality metrics for discussion of a variety of inequality-based economic measures.

Non-market transactions – GDP excludes activities that are not provided through the market, such as household production and volunteer or unpaid services. As a result, GDP is understated. Unpaid work conducted on Free and Open Source Software (such as Linux) contribute nothing to GDP, but it was estimated that it would have cost more than a billion US dollars for a commercial company to develop.

Underground economy – Official GDP estimates may not take into account the underground economy, in which transactions contributing to production, such as illegal trade and tax-avoiding activities, are unreported, causing GDP to be underestimated.

Non-monetary economy – GDP omits economies where no money comes into play at all, resulting in inaccurate or abnormally low GDP figures. For example, in countries with major business transactions occurring informally, portions of local economy are not easily registered. Bartering may be more prominent than the use of money, even extending to services (I helped you build your house ten years ago, so now you help me).
GDP also ignores subsistence production.

Quality of goods – People may buy cheap, low-durability goods over and over again, or they may buy high-durability goods less often. It is possible that the monetary value of the items sold in the first case is higher than that in the second case, in which case a higher GDP is simply the result of greater inefficiency and waste. (This is not always the case; durable goods are often more difficult to produce than flimsy goods, and consumers have a financial incentive to find the cheapest long-term option. With goods that are undergoing rapid change, such as in fashion or high technology, the short lifespan may increase customer satisfaction by allowing them to have newer products.)

Quality improvements and inclusion of new products – By not adjusting for quality improvements and new products, GDP understates true economic growth. For instance, although computers today are less expensive and more powerful than computers from the past, GDP treats them as the same products by only accounting for the monetary value. The introduction of new products is also difficult to measure accurately and is not reflected in GDP despite the fact that it may increase the standard of living.

What is being produced – GDP counts work that produces no net change or that results from repairing harm. For example, rebuilding after a natural disaster or war may produce a considerable amount of economic activity and thus boost GDP. The economic value of health care is another classic example—it may raise GDP if many people are sick and they are receiving expensive treatment, but it is not a desirable situation. Alternative economic measures, such as the standard of living or discretionary income per capita better measure the human utility of economic activity.

Externalities – GDP ignores externalities or economic bads such as damage to the environment. By counting goods which increase utility but not deducting bads or accounting for the negative effects of higher production, such as more pollution, GDP is overstating economic welfare. The Genuine Progress Indicator is thus proposed by ecological economists and green economists as a substitute for GDP. In countries highly dependent on resource extraction or with high ecological footprints the disparities between GDP and GPI can be very large, indicating ecological overshoot. Some environmental costs, such as cleaning up oil spills are included in GDP.

Sustainability of growth – GDP does not measure the sustainability of growth. A country may achieve a temporarily high GDP by over-exploiting natural resources or by misallocating investment. Economies experiencing an economic bubble, such as a housing bubble or stock bubble, or a low private-saving rate tend to appear to grow faster owing to higher consumption, mortgaging their futures for present growth. Economic growth at the expense of environmental degradation can end up costing dearly to clean up; GDP does not account for this.

One main problem in estimating GDP growth over time is that the purchasing power of money varies in different proportion for different goods, so when the GDP figure is deflated over time, GDP growth can vary greatly depending on the basket of goods used and the relative proportions used to deflate the GDP figure. For example, in the past 80 years the GDP per capita of the United States if measured by purchasing power of potatoes, did not grow significantly. But if it is measured by the purchasing power of eggs, it grew several times. For this reason, economists comparing multiple countries usually use a varied basket of goods.

Cross-border comparisons of GDP can be inaccurate as they do not take into account local differences in the quality of goods, even when adjusted for purchasing power parity. This type of adjustment to an exchange rate is controversial because of the difficulties of finding comparable baskets of goods to compare purchasing power across countries. For instance, people in country A may consume the same number of locally produced apples as in country B, but apples in country A are of a more tasty variety. This difference in material well being will not show up in GDP statistics. This is especially true for goods that are not traded globally, such as housing.

Human Development Index

The **Human Development Index (HDI)** is an index used to rank countries by level of "human development", which usually also implies whether a country is a developed, developing, or underdeveloped country

The HDI combines normalized measures of life expectancy, literacy, educational attainment, and GDP per capita for countries worldwide. It is claimed as a standard means of measuring human development—a concept that, according to the United Nations Development Program (UNDP), refers to the process of widening the options of persons, giving them greater opportunities for education, health care, income, employment, etc. The basic use of HDI is to measure a country's development.

The index was developed in 1990 by Pakistani economist Mahbub ul Haq, Sir Richard Jolly, with help from Gustav Ranis of Yale University and Lord Meghnad Desai of the London School of Economics. It has been used since then by UNDP in its annual Human Development Report. It is claimed that ideas of Indian Nobel prize winner Amartya Sen were influential in the development of the HDI . The HDI now serves as a path towards a wide variety of more detailed measures contained in the Human Development Reports.

The HDI combines three basic dimensions:

1. Life expectancy at birth, as an index of population health and longevity
2. Knowledge and education, as measured by the adult literacy rate (with two-thirds weighting) and the combined primary, secondary, and tertiary gross enrollment ratio (with one-third weighting).
3. Standard of living, as measured by the natural logarithm of gross domestic product

Criticisms

The Human Development Index has been criticized on a number of grounds, including failure to include any ecological considerations, focusing exclusively on national performance and ranking, and not paying much attention to development from a global perspective. The index has also been criticized as "redundant" and a "reinvention of the wheel", measuring aspects of development that have already been exhaustively studied. The index has further been criticized for having an inappropriate treatment of income, lacking year-to-year comparability, and assessing development differently in different groups of countries.

Economic growth in India

Indian economy growth in colonial period

When India was first colonized by British, Indian economy was going through a relatively good period. Production and trade had increased. However, when India ceased being a colonial nation, it's economy had already been massively exploited and lay in tatters. A number of leftist economists had squarely blamed British for decline of Indian economy but their views have been opposed by rightist economists who opine that since a number of sectors in India were at a developmental stage, economy of India was unable to sustain that impressive rate of development.

India's economic growth really kicked off in 1990s when India made its markets more accessible. This was done by introducing a number of economic reforms. From that point in time Indian economy has been growing at a steady pace. However, India's economic growth has not been exactly steady. In 1991, Rajiv Gandhi-led Indian government imposed limits on office holders regarding expansion of capacity, brought down corporate taxes, and abolished price controls. This led to an increase in growth of Indian economy.

But there are some disparities across states and sectors. For example, Maharashtra has been in better economic condition than states like Bihar.

In past, India's economic growth has been hampered by a variety of factors. For example in 2002, lesser expenditures in areas like power, telecommunications, construction, real estate and transportation prevented good growth of Indian economy. This led to permission and promotion of foreign investment, which has contributed to a continuous rate of development in last one and a half year.

GDP growth in India

The rise in the GDP growth rate in India was due to the effect of adoption of liberal economic policy by Government of India. The change in the stance towards an open and globalized economic policy was taken in the wake of balance of payments crisis during the late 1980s. Traditionally, the Indian markets were strictly insulated from foreign investments and investors and the government of India machineries were the chief market regulators. The wide spread acceptance of border less trade and open market policies by other developing countries of the world necessitated opening up of Indian markets to foreign investors and investments. In India GDP growth rate skyrocketed to all time high, immediately after opening up of Indian markets to Foreign Direct Investments (FDI) and Foreign Institutional Investors (FII). This era, during the early 1990s marks the initiation of the rise of the India GDP growth rate.

The period after the 1990s witnessed around 4.5% to 5% rise of the Indian Gross Domestic Product output. Further, the astronomical growth of the Indian Information Technology, Indian service industry and the Indian BPO sector, skyrocketed the India GDP growth rate to around 6%, during the period from 1988 to 2003. The period after 2004 marks the meteoritic rise of gross domestic product of India and this rise was affected by service and manufacturing industry. The India GDP growth rate registered an impressive growth of 8.5% during this period. The present target of India GDP growth rate is pegged at 9.5% to 10 %.

In financial year 2007-08, India recorded a growth of 9.1 % in its gross domestic product. This has enabled India to be counted among two quickest emerging economies of global world. In this regard, it is placed right after China. A number of economists are of opinion that if India can sustain this rate of development they would soon be regarded as a big name in global economic scenario. Goldman Sachs has predicted that by 2020 India's gross domestic product would be four times of what it was in 2007.

GDP growth rate of India are as follows –

GDP factor for the first quarter of 2007-08 was at Rs 7,23,132 crore, registering a growth rate of 9.3% over the corresponding quarter of previous year. India's economy grew at 9.3% in quarter April-June and it was driven by manufacturing, construction and services sector and agriculture sector. The annual inflation rate was 4.45% for the week ended July 28, 2007. India's Balance of Payments is expected to remain comfortable . Merchandise Exports recorded strong growth. Manufacturing registered 11.95 % growth. The passenger vehicles sector grew by 11.61% during April-May 2007. Electricity, gas & water supply performed well and recorded an impressive growth rate of 8.3%. Construction growth rate rose to 10.7%. Trade, hotels, transport and communication registered a growth rate of 12%. Financing, insurance, real estate and business services recorded an impressive growth rate of at 11% during the 1st quarter of this fiscal year 2007. Community, social and personal services maintained a decent growth rate of 7.6%. The growth rate of agriculture, forestry & fishing' and 'mining & quarrying' are estimated at 3.8 %, and 3.2 %, respectively during the 1st quarter of 2007-2008. Exports grew by 18.11% during the 1st quarter of 2007-2008 and the imports shoot up by 34.30% during the same period. India's FOREX reserves (excluding Gold and SDRs) stood at $219.75 billion at the end of July ' 07. The food sector is estimated to be of US$ 200 billion and it is expected to grow to $310 billion by 2015 Stocks of food-grains grew by 13.1% to 17.73 million tonnes.

The productivity growth rate of Indian economy is estimated to be around 8% and it is expected to sustain until 2020. Moreover, at this rate of GDP growth, India is poised to become the second largest economy in the world after China. Further, the World Bank has ranked India as one of the top economic reformers worldwide, in the last decade. India has simplified business registration, cross-border trade, and payment of taxes, eased access to credit and strengthened investor's interest. The stupendous growth of Indian industries especially manufacturing, construction, and services together with bullish stock market suggests that the recent growth is likely to continue further. The factors like industrial growth, FIIs and FDIs inflow, Balance-of-payments, merchandise exports, invisible accounts and Foreign-exchange-reserves had substantial contribution towards the growth rate of Indian GDP.

Inflation Rate in India

The Indian economy has been registering stupendous growth after the liberalization of Indian economy. The opening up of the Indian economy in the early 1990s had increased India's industrial output and consequently has raised the inflation rate in India.

The stupendous growth rate of industrial output and employment has created

enormous pressure on the inflation rate. The Reserve Bank of India (the central bank) and the Ministry of Finance, Government of India are concerned about the prevalent and intermittent rise of the inflation rate. The present rise of inflation rate in India can be detrimental to the projected growth of Indian economy. Thus, the Reserve Bank of India is devising methods to arrest the rise of inflation by putting checks and measures in place. Although the central bank has assured the Indian business community and the general public about the harmless inflationary rise, apprehensions still exist among the business circles of India.

The main cause of rise of India Inflation Rate is the pricing disparity of agricultural products between the producer and end-consumer. Moreover, the meteoric rise of prices of food products, manufacturing products, and essential commodities has also catapulted the India Inflation Rate. As a result of this, the Wholesale Prices Index (WPI) of India touched 6.1% as on 6th January, 2007. Moreover, the Cash Reserve Ratio touched 5.5% on the same day.

To arrest the panic and discomfort amongst the Indian business circles, the Reserve Bank of India, in its recently drafted monetary policy, had given top priority to price stability. It also sought to sustain the stupendous rate of economic growth of India. The Reserve Bank of India has raised the Cash Reserve Ratio in a continuous manner to arrest the rise of India.

The solution to this problem lies in rationalizing the pricing disparity between the producer and the consumer. Only this will ensure inflation stabilization and thus sustainable economic growth of India.

National Income

According to the famous economist J.M. Keynes national income is the money value of all the goods and services produced in a country during a year. The National income of any country shows the economic position of the country. It is the national income which helps to compare the progress of the country over a period of time. The study of National income is important because of the following reasons:

To see the economic development of the country.
To assess the developmental objectives.
To know the contribution of the various sectors to National income.

There are various methods for calculating the national income such as production method, income method, expenditure method etc.

Calculation of National Income of India: A Brief History

The first attempt to calculate National Income of India was made by Dadabhai Naroji in 1867 -68. This was followed by several other methods. The first scientific method was made by Prof. V.K.R Rao in 1931-32. But this was not very satisfactory. The first official attempt was made by Prof.P.C.Mahalnobis in 1948-49, who submitted his report in 1954.

Difficulties in Calculation of National Income

In India people who are calculating the national incomes have shown the various difficulties in calculating the national income. The most severe one is the finding of reliable data. Most of the time, it is based on assumptions. Soon after independence the National Income Committee was formed to collect data and estimate national income. The two major problems which remain in the calculation of National Income are:

Most of the data is not from the current year.
Even if current data are available then values are underreported.

Obstacles in High Growth of National Income of India

Despite of India's impressive economic growth over recent decades, it still contains the largest concentration of poor people in the world, and has a higher rate of malnutrition among children under the age of three (46% in year 2007) than any other country in the world.

The percentage of people living below the new international poverty line $1.08 a day (PPP, in nominal terms Rs 21.6 a day in urban areas and Rs 14.3 in rural areas in 2005) decreased from 60% in 1981 to 42% in 2005 - the 3rd highest rate in South Asia after Nepal and Bangladesh, despite having a higher per capita income earning overall 85.7% of the population was living on less than $2.50 (PPP) a day in 2005, compared with 80.5% for Sub-Saharan Africa. Even though India has avoided famines in recent decades, half of children are underweight, one of the highest rates in the world and nearly double the rate of Sub-Saharan Africa.

It is also estimated that in the next 10 years India's national income is going to suffer a loss of nearly $200billion. The Government of India must try to frame suitable strategies for evolving greater generation of goods. Unemployment which is a big problem of the Indian economy must be solved. Only when people are employed, they will be able to contribute in the national income.

The other major factors which are going to hurt the National Income of India are: Slow growth of agricultural sector, defect in planning, poverty etc.

A higher national income will result in a prosperous economy. With an average annual GDP growth rate of 5.8% for the past two decades, the economy is among the fastest growing in the world. It has the world's second largest labour force, with 516.3 million people. In terms of output, the agricultural sector accounts for 28% of GDP; the service and industrial sectors make up 54% and 18% respectively. Major agricultural products include rice, wheat, oilseed, cotton, jute, tea, sugarcane, potatoes; cattle, water buffalo, sheep, goats, poultry; fish. Major industries include textiles, chemicals, food processing, steel, transport equipment, cement, mining, petroleum, machinery, software. India's trade has reached a relatively moderate share 24% of GDP in 2006, up from 6% in 1985.India's share of world trade has reached 1%. Major exports include petroleum products, textile goods, gems and jewelry, software, engineering goods, chemicals, leather manufactures. Major imports include crude oil, machinery, gems, fertilizer, chemicals.

India's GDP is US$1.089 trillion, which makes it the twelfth-largest economy in the world or fourth largest by purchasing power adjusted exchange rates. India's nominal per capita income US$977 is ranked 128th in the world. In the late 2000s, India's economic growth has averaged 7½% a year, which will double the average income in a decade.

In the revised 2007 figures, based on increased and sustaining growth, more inflows into foreign direct investment, Goldman Sachs predicts that "from 2007 to 2020, India's GDP per capita in US$ terms will quadruple", and that the Indian economy will surpass the United States (in US$) by 2043.Despite high growth rate, the report stated that India would continue to remain a low-income country for several decades but can be a "motor for the world economy" if it fulfills its growth potential. Goldman Sachs has outlined 10 things that it needs to do in order to achieve its potential and grow 40 times by 2050. These are : improve governance; raise educational achievement ; increase quality and quantity of universities; control inflation; introduce a credible fiscal policy ; liberalize financial markets; increase trade with neighbours ; increase agricultural productivity ; improve infrastructure and improve environmental quality.

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CHAPTER – 4

INDIAN PLANNING PROCESS

Rudimentary economic planning, deriving the sovereign authority of the state, first began in India in 1930s under the British Raj, and the colonial government of India formally established a planning board that functioned from 1944 to 1946. Private industrialists and economist formulated at least three development plans in 1944.

After India gained independence, a formal model of planning was adopted, and the planning commission, reporting directly to the Prime Minister of India was established. Accordingly, the Planning Commission was set up on 15 March 1950, with Prime Minister Jawaharlal Nehru as the chairman.

PLANNING COMMISSION:

The Planning Commission in India was set up in March 1950 to promote a rapid rise in the standard of living of the people by exploiting the resources of the country, increasing production and offering employment opportunities to all. The Planning Commission has the responsibility for formulating plans as to how the resources can be used in the most effective way. Jawaharlal Nehru was the first chairman of the Panning Commission.

The Government sought to uplift the condition of India's teeming millions by exploiting the country's rich resources (natural and otherwise) efficiently, providing employment opportunities to all, and by increasing the production levels in the agricultural as well as industrial sectors.

The various functions of India Planning Commission are:

- To assess the country's resources
- To formulate 5 year plans that make an effective use of the country's resources
- To determine national priorities and allot resources to the plans
- To decide the machinery required to make the plans successful
- To make appraisals of the plans periodically in order to check their progress

The composition of the India Planning Commission has changed a lot since its inception. With the Prime Minister as the ex-officio Chairman, the committee has a nominated Deputy Chairman, who is given the rank of a full Cabinet Minister. The Indian Planning Commission has a deputy chairman who is nominated and Cabinet Ministers with certain important portfolios act as part-time members of the Commission. The full-time members of the Indian Planning Commission are experts from various fields such as Economics, Industry, Science and General Administration. Mr. Montek Singh Ahluwalia is presently the Deputy Chairman of the Commission.

The first Five-year Plan was launched in 1951 and two subsequent five-year plans were formulated till 1965, when there was a break because of the Indo-Pakistan Conflict. Two successive years of drought, devaluation of the currency, a general rise in prices and erosion of resources disrupted the planning process and after three Annual Plans between 1966 and 1969, the fourth Five-year plan was started in 1969.

The Eighth Plan could not take off in 1990 due to the fast changing political situation at the Centre and the years 1990-91 and 1991-92 were treated as Annual Plans. The Eighth Plan was finally launched in 1992 after the initiation of structural adjustment policies.

For the first eight Plans the emphasis was on a growing public sector with massive investments in basic and heavy industries, but since the launch of the Ninth Plan in 1997, the emphasis on the public sector has become less pronounced and the current thinking on planning in the country, in general, is that it should increasingly be of an indicative nature.

India planning is undertaken by the Planning Commission of India in order to improve the standard of living of the people belonging to the country. To improve the quality of life of the people, the resources of the country have to be utilized efficiently.

In India, planning has been done in various areas such as sports, education, labor, health, village industry, urban development, rural development, agriculture, industry, information technology, environment, real estate, infrastructure, and finance. The Indian Planning Commission has been set up in March, 1950 and it undertook to draw up 5 year plans for developing the Indian economy. In these plans the Planning Commission of India, emphasized particular spheres such as industry, employment, agriculture, education, and health. Till 2007, there have been 10 five year plans. All these plans have helped improve the quality of life of the people of India.

In order to improve sports in India, the Sports Authority of India has been set up by the Indian government. This body sees to it that the infrastructure required for sports is upgraded regularly and kept in good condition. It also formulates new projects and gets funding from the government in order to promote sports in the country. Under India planning, education forms the most important area for it determines the future growth of the country. The department of higher education oversees all levels of education in India and is subsidized by the government of India heavily

For rural planning, India planning has set up a Rural Planning and Credit Department which is under the Reserve bank of India. This department formulates polices which help in rural development. It also extends credit for employment programs and agricultural activities in rural areas. Under India planning, local bodies have been set up in all states in order to develop urban areas. These urban local bodies such as the municipal corporation and the Panchayat see to it that the services and basic infrastructure are well maintained.

India planning has helped improve the quality of life of the people. The Indian government must make efforts so that it continues to do. India Planning has facilitated the utilization of the resources of the country for the common good of the people and also to develop the country.

I. FIVE YEAR PLANS :--

In 1951, the 1st 5 year plan was announced and the then Prime Minister, Jawaharlal Nehru was the chairman of that India Planning Commission. Till 1965, 2 consecutive 5 year plans had been formulated. After that, there was a pause in the

launch of 5 year plans in India due to the Indo-Pakistan war. Again, in 1969, the 4th five year plan was launched and by 1992, the 8th five year plan was started. In all these 8 plans emphasis has been laid on the public sector, with huge investments being made in heavy and basic industries. But in 1997, with the launch of the 9th five year plan, the emphasis shifted from the public sector and became more indicative in nature.

India Planning Commission has helped in the better utilization of the country's resources for the common good of the citizens. The Planning Commission is considered by many as the backbone of the country's progress and all-round development.

The first five year plan India (1951-1956) had been presented by the then Prime Minister Jawaharlal Nehru in the Indian Parliament on 8th December, 1951.

FIRST FIVE YEAR PLAN (1951-56)

The first five year plan had been made by the planning commission whose objective was to improve the standard of living of the people by effective use of the country's resources. In India, the first five year plan's total outlay was estimated to been worth Rs. 2,069 crore. In the first five year plan, this amount was allocated to various areas. They are:

- Community and agriculture development
- Energy and irrigation
- Communications and transport
- Industry
- Land rehabilitation
- Social services

The target of GDP growth in the first five year plan of India was 2.1% per year and the actual growth of GDP that was achieved had been 3.6% per year. This shows the extent to which the first five year plan in India had been successful. During the period of India first five year plan, many projects related to irrigation had been started, such as the Mettur Dam, Bhakra Dam, and Hirakud Dam.

In the first five year plan of India, provisions have been made for the rehabilitation of agricultural workers who were landless. Apart from that financial allocation was also made for conservation of soil, experiments, and training in co-operative organizations. Increased provisions have also been made for the improvement of roads, civil aviation, railways, telegraphs, and posts. For the development of the basic industry which includes the manufacture of fertilizers and electrical equipment, provisions have been made in the Indian first five year plan. Emphasis has also been given to small scale and village industries in the Indian plan of first five years. First five year plan in India had improved the living condition of the people of the country and is of historical importance

SECONAD FIVE YEAR PLAN(1956-61)

Second five year plan India (1956-1961) intends to increase and carry forward the development that had been started by the first five year plan in India.

These five year plans are formulated by the planning commission whose objective is to utilize the country's resources effectively, so that the standard of living of the people improves.

The various tasks of the second five year plan in India are:

- To increase by 25% the national income
- To make the country more industrialized
- To increase employment opportunities so that every citizen gets a job

In India, the second five year plan focused on industry - more specifically on the heavy industry. The domestic production of industrial goods in the public sector was encouraged by the second five year plan in India. The total amount for development given allocated under the second five year plan in India was Rs. 4,800 crore. This money has been distributed under the second five year plan in India for the development of various sectors. They are:

- Mining and industry
- Community and agriculture development
- Power and irrigation
- Social services
- Communications and transport
- Miscellaneous

During the second five year plan India, 5 steel plants in Jamshedpur, Durgapur, and Bhilai had been established, apart from a hydro-electric power project which was also undertaken and implemented. The production of coal increased during this period. Also, more railway lines were added in the north-east part of the country, during the Indian second five year plan. Land reform measures have been taken during the period of the second five year plan India, in order to remove the socio-economic constraints of the rural population. The second five year plan India has, to a large extent, improved the living standards of the people.

THIRD FIVE YEAR PLAN (1961-66)

The third five year plan India (1961-1966) intended to make a more determined effort to develop the nation, carrying forward the legacy set by the previous two five year plans.

These five year plans are formulated by the planning commission, the aim of which is to increase the quality of life of the citizens through effective use of the country's resources.

The various tasks of the third five year plan India are:

- To increase the national income by 5% per year
- To increase the production of agriculture so that the nation is self sufficient in food grains
- To provide employment opportunities for every citizen of the country
- To establish equality among all the people of the country

In the earlier 2 five year plans, agriculture was not given a great deal of importance in spite of the fact that India's economy is still primarily agrarian. But in the third five year plan of India, more stress had been given to agriculture because increase in agricultural production would lead to the growth of the Indian economy. Sufficient sops and subsidies were allowed by the government for the agricultural sector under the third five year plan of India.

In an effort to invite increased state participation to the India third five year plan, more responsibility was given to the states. Also, various organizations such as the Panchayat and Zila Parishads were set up at the block and district level in order to increase rural development. In India, the third five year plan have also laid emphasis on soil conservation, irrigation, afforestation, and dry farming. Many fertilizer and cement plants were built during the period of the third five year plan India. Stress had been given to the development of social services and education in India.

FOURTH FIVE YEAR PLAN (1969-74)

At this time Indira Gandhi was the prime minister and she nationalized of 19 major banks. The funds raised for industrialization was used in the Indo-Pak war of 1971. India also conducted nuclear tests in 1974.

FIFTH FIVE YEAR PLAN(1974-79)

The third five year plan in India had, to a large extent, improved the quality of life of Indian citizens, and played a crucial role in the growth and development of the country.

The Fifth Five Year Plan India was chalked out for the period spanning 1974 to1979 with the objectives of increasing the employment level, reducing poverty, and attaining self-reliance.

Background of the Fifth Five Year Plan India:

At the onset of the Fifth Five Year Plan India in the 1970s, the international economy was in a turmoil, which had a great impact on the economy of both, developed and developing countries of the world. The main changes were perceived in sectors such as food, oil, and fertilizers where prices sky-rocketed. As a result of this, attaining self-reliance in food and energy became a top priority. During this period, the Indian economy was affected by several inflationary pressures. Food grain production was above 118 million tons due to the improvement of infrastructural facilities like the functioning of the power plants and the rise in the supply of coal, steel, and fertilizers. Regarding the oil, credibility of Bombay High had shot up the commercial production of oil in India. In 1974-75, Indian exports crossed 18%, and the large earnings from these exports have further increased the Indian foreign exchange reserves.

Objectives of the Fifth Five Year Plan India:

The Fifth Five Year Plan India was designed with emphasis on certain objectives, enlisted as under:

- to reduce social, regional, and economic disparities for developmental planning
- to enhance agricultural productivity
- to initiate land reforms
- to check rural and urban unemployment
- to emphasize on household industries like carpet-weaving, handlooms, sericulture, and handicrafts
- to encourage self-employment through a well integrated local planning
- to encourage import substitution in areas like industrial machinery, chemicals, paper, iron and steel and non-ferrous metals
- to capture the markets with locational advantages
- to initiate appropriate use of fiscal, credit and production support policies in the cottage industry sector
- to develop labor intensive technological improvements

SIXTH FIVE YEAR PLAN (1980-85)

The Sixth Five Year Plan India was undertaken for the period between 1980 to1985, with the main aim of attaining objectives like speedy industrialization, rise in the employment level, poverty reduction, and acquisition of technological self-reliance.

Background of Sixth Five Year Plan India:

At the onset of the Sixth Five Year Plan India, Rajiv Gandhi, the then prime minister prioritized speedy industrial development, with special emphasis on the information technology sector. From the Fifth Five Year Plan, the nation had been able to achieve self sufficiency in food. Moreover, the industrial sector was also diversified and science and technology also made a significant advance. One of the major hindrances in the way of further development in this period was the boom in the Indian population. However, several successful programs on improvement of public health and epidemic control were also undertaken to reduce infant mortality and increase life expectancy. Significant investments were made by the government in the Indian healthcare sector.

Objectives of the Sixth Five Year Plan India:

The objectives of the Sixth Five Year Plan India were mainly focused on increasing industrialization and reducing long-standing problems such as poverty and unemployment. Some of the highlights and predominant aims of the Sixth Five Year Plan India are enumerated as under :

- to increase the growth rate of the economy
- to concentrate on the promotion of efficient use of resources
- to improve productivity level
- to initiate modernization for achieving economic and technological self-reliance
- to control poverty and unemployment
- to develop indigenous energy sources and efficient energy usage
- to promote improved quality of life of the citizens
- to introduce Minimum Needs Program for the poor and needy with an emphasis to reduce the discrepancies in income and wealth accumulation

- to initiate Family Planning Programs in order to check the growing population trends
- to protect and improve ecological and environmental assets
- to promote the education at all levels

SEVENTH FIVE YEAR PLAN (1985-89)

The Seventh Five Year Plan India was for the duration between 1985 and 1989 under the approval of the National Development Council in India.

The main objectives of the 7th five year plans were to establish growth in the areas of increasing economic productivity, production of food grains, and generating employment opportunities.

As an outcome of the sixth five year plan, there had been steady growth in agriculture, control on rate of Inflation, and favorable balance of payments which had provided a strong base for the seventh five Year plan to build on the need for further economic growth. The 7th Plan had strived towards socialism and energy production at large. The thrust areas of the 7th Five year plan have been enlisted below:

- Social Justice
- Removal of oppression of the week
- Using modern technology
- Agricultural development
- Anti-poverty programs
- Full supply of food, clothing, and shelter
- Increasing productivity of small and large scale farmers
- Making India an Independent Economy

Based on a 15-year period of striving towards steady growth, the 7th Plan was focused on achieving the pre-requisites of self-sustaining growth by the year 2000. The Plan expected a growth in labor force of 39 million people and employment was expected to grow at the rate of 4 percent per year.

- Anti-poverty program: Special emphasis was given to the most vulnerable classes of people in the society viz., women, children, schedule tribes, and schedule castes. The poverty ratio was expected to decline to 26 percent in 1989-90.
- Agriculture: The government undertook to increase productivity of oilseeds, fruits, vegetables, pulses, cereals, fish, egg, meat, and milk.
- Welfare: Improved facilities for education to girls, family welfare, healthcare, reduction in infant mortality were undertaken by the government as part of the 7th five year plan.
- Communications: Emergence of informatics, telematics, and hooking up of telecommunications with computers were important features of the 7th five year plan in terms of development in Communications.
- Transport: More stress was laid on increasing supplementary modes of transport such as inland waterways, product pipelines, civil aviation, coastal shipping. The 7th Plan expected an increase in accessibility to about 60 percent of the villages in India.

Some of the expected outcomes of the Seventh Five Year Plan India are given below:
Balance of Payments (estimates):
Export - Rs. 33 thousand crore, Imports - (-)Rs.54 thousand crore, Trade Balance - (-)Rs.21 thousand crore
Merchandise exports (estimates): Rs. 60,653 crore
Merchandise imports (estimates): Rs. 95,437 crore
Projections for Balance of Payments: Export - Rs.60.7 thousand crore, Imports - (-) 95.4 thousand crore,
Trade Balance- (-) Rs.34.7 thousand crore

Seventh Five Year Plan India strove to bring about a self-sustained economy in the country with valuable contributions from voluntary agencies and the general populace.

EIGHTH FIVE YEAR PLAN (1992-97)

Eighth Five Year Plan India runs through the period from 1992 to1997 with the main aim of attaining objectives like modernization of the industrial sector, rise in the employment level, poverty reduction, and self-reliance on domestic resources.

Background of the Eighth Five Year Plan India:

Just before the formulation of the Eighth Five Year Plan India, there was great political instability in India which hindered the implementation of any five years plan for the following two years after the Seventh Five Year Plan. This period is characterized by extreme FOREX reserve crisis and introduction of liberalization and privatization in Indian economy. To invite FDI in Indian industrial sector and to follow free market reforms were the only possible ways to revive the country from foreign debt.

Objectives of the Eighth Five Year Plan India:

The main objectives of the Eighth Five Year Plan India are:

- to prioritize the specific sectors which requires immediate investment
- to generate full scale employment
- to promote social welfare measures like improved healthcare, sanitation, communication and provision for extensive education facilities at all levels
- to check the increasing population growth by creating mass awareness programs
- to encourage growth and diversification of agriculture
- to achieve self-reliance in food and produce surpluses for increase in exports
- to strengthen the infrastructural facilities like energy, power, irrigation
- to increase the technical capacities for developed science and technology
- to modernize Indian economy and build up a competitive efficiency in order to participate in the global developments
- to place greater emphasis on role of private initiative in the development of the industrial sector
- to involve the public sector to focus on only strategic, high-tech and essential infrastructural developments

- to create opportunities for the general people to get involved in various developmental activities by building and strengthening mass institutions

NINTH FIVE YEAR PLAN (1997-2002

Ninth Five Year Plan India runs through the period from 1997 to 2002 with the main aim of attaining objectives like speedy industrialization, human development, full-scale employment, poverty reduction, and self-reliance on domestic resources.

Background of Ninth Five Year Plan India:

The main feature of the Ninth Five Year Plan India is that at its onset our nation crossed the fifty years of independence and this called for a whole new set of development measures. There was a fresh need felt for increasing the social and economic developmental measures. The government felt that the full economic potentiality of the country, yet to be explored, should be utilized for an overall growth in the next five years. As a result in the Ninth Five Year Plan India, the emphasis was on human development, increase in the growth rate and adoption of a full scale employment scheme for all. For such development one needs to promote the social sectors of the nation and to give utmost importance to the eradication of poverty.

The Ninth Five Year Plan India looks through the past weaknesses in order to frame the new measures for the overall socio-economic development of the country. However, for a well-planned economy of any country, there should be a combined participation of the governmental agencies along with the general population of that nation. A combined effort of public, private, and all levels of government is essential for ensuring the growth of India's economy.

Objectives of Ninth Five Year Plan India:

The main objectives of the Ninth Five Year Plan India are:

- to prioritize agricultural sector and emphasize on the rural development
- to generate adequate employment opportunities and promote poverty reduction
- to stabilize the prices in order to accelerate the growth rate of the economy
- to ensure food and nutritional security
- to provide for the basic infrastructural facilities like education for all, safe drinking water, primary health care, transport, energy
- to check the growing population increase
- to encourage social issues like women empowerment, conservation of certain benefits for the Special Groups of the society
- to create a liberal market for increase in private investments

TENTH FIVE YEAR PLAN (2002-2007)

The Tenth Five Year Plan India (2002-2007) aims to transform the country into the fastest growing economy of the world and targets an annual economic growth of 10%. This was decided after India registered a 7% GDP growth consistently over the last decade.

This GDP growth of 7% is much higher than the world's average GDP growth rate. Thus, the Planning Commission of India sought to stretch the limit and set targets which would propel India to the super league of industrially developed countries.

In a nutshell, the Tenth Five Year Plan India envisages -

- More investor friendly flexible economic reforms
- Creation of congenial investment environment
- Encourage private sector involvement
- Setting up state-of-the-art infrastructure
- Capacity building in industry
- Corporate transparency
- Mobilizing and optimizing all financial resources
- Implementation of friendly industrial policy instruments
- The Tenth Five Year Plan India documents are -
- Vol. I: Dimensions and strategies
- Perspective, objectives and strategy
- Macroeconomic dimensions
- Public sector plan: resources and allocations.
- External sector dimensions
- Employment perspective
- Governance and implementation
- Disaster management: the development perspective
- Policy imperatives and programmatic initiatives

ELEVENTH FIVE YEAR PLAN (2007-08)

The major objectives of the eleventh five year plan are income generation, poverty alleviation, education, health, infrastructure, environment etc.

II. OTHER PLANS:--

1. EDUCATION PLANNING IN INDIA

Education Planning in India is one of the essential areas of concern in all the Five year Plans in India. With the onset of globalization and modernization in recent times, education at all levels is very necessary if India is to outdo other nations.

Since the 1990s, the Indian government has been emphasizing the need to develop education in India across all levels - elementary, secondary, vocational, higher level, and technical. Towards this, the government has also formulated certain measures to increase adult literacy and continuing education among Indians.

Hindrances for Education Planning in India:

The major problems of the Education Planning in India as far as analysts opine are as under:

- high drop-out rates
- low levels of learning achievement

- low participation of girl students
- inadequate school infrastructure
- teacher absenteeism rate high
- large-scale teacher vacancies
- inadequate teaching/learning material
- lack of public involvement in provisioning of educational services
- variation in the literacy rates for the Special Groups of citizens
- variation in inter-state literacy rates

Steps taken by Government in accelerating Education Planning in India:

The Central as well as the State Governments have been emphasizing on the growth of education at all levels. Moreover there are District Literacy Societies or Zilla Saksharta Samiti who also plays the most pivotal role in the pursuance of adult education. The first step taken by the Indian government is to initiate measures for universal elementary education among all. The other significant steps taken on the Education Planning in India are -

- to increase the number of institutions, teachers and students at elementary level
- to provide for incentives like textbooks, free uniforms and scholarships
- to offer Centrally Sponsored Program of Nutritional Support to Primary Education or Mid Day Meal Scheme
- to launch the Sarva Siksha Abhiyan Scheme
- to initiate the District Elementary Education Plan
- to launch the National Literacy Mission for providing functional literacy to the non-literates between the age group of 15 and 35
- to provide free and compulsory education for children
- to improve the Industrial Training Institutes, Boards of Technical Education and Engineering Colleges, and Polytechnology and Apprenticeship Schools
- to upgrade the Indian Institutes of Technology and Indian Institutes of Management
- to progress in new technology based areas like biotechnology, bioinformatics, and nano-technology

2. SPORTS PLANNING

The Ministry of Youth Affairs and Sports is playing a pivotal role for Sports Planning in India.
The Government of India is in the process of including legislative guidelines in the Indian Constitution with regard to sports. The major responsibilities towards sports planning in India have already been taken up by the Sports Ministry. The following are a list of such responsibilities:

Launching of Government schemes - Relating to awards, events, anti-doping, incentives, state sports academies etc.

- Adequate sports infrastructure
- Developing various sports career opportunities for Indians - As offered by National Institute of Sports (Patiala), Lakshmibai National Institute of Physical Education (Gwalior), and Lakshmibai National College of Physical Education (Kerala)

- Having a proper database of sportsperson
- Efficient coaching facilities
- Emphasis on sport sciences like nutrition, psychology, medicines, and prohibited items
- Anti-doping program - The Government of India has established anti-doping programs through an ISO certified Dope Control Center having modern testing facilities. The National Anti-doping Agency is acting as an advisory board to The GOI's anti-doping program.

The apex sports coordinating body of the Indian Government known as Sports Authority of India (SAI) was set up in 1984 with a view to build excellence in the career of sportsmen and emphasize on efficient Sports Planing in India.

SAI has facilitated the building of 5 major stadiums in the country which are: Jawaharlal Nehru Stadium (New Delhi), Indira Gandhi Stadium (New Delhi), National Stadium (New Delhi), Talkatora Swimming pool (New Delhi), and Dr. Karni Singh Shooting Ranges (New Delhi).

SAI has introduced 4 schemes under its banner viz., Special Area Games (SAG), National Sports Talent Contest (NSTC), SAI Training Centers (STC), and Army Boys Sports Company (ABSC).

Intelligent Sports Planning in India is the key to setting up the stage for growth in the sports talents in India where sportsmen belong to a varied range of sports disciplines - hockey, weightlifting, archery, athletics, kabaddi, swimming, badminton, shooting, and volleyball.

3. HEALTH PLANNING

Establishing health planning in India is a key to improving the health of the Indian Population. The Ministry of Health and Family Welfare has been facilitating Health needs in India by establishing various schemes and organizations.

The Government is conscious of the need for dynamic Indian health planning and management. Innovative healthcare and development programs are the need of the hour. For this, major organizations like the National AIDS Control organization have been established by the Health Ministry. The areas to focus on in Health Planning have been laid down by the Ministry's National Health Policy. Some of them are mentioned below:

- Increasing Healthcare programs: To be implemented in various socio-economic settings of different States of India
- Increasing Public Health infrastructure: More hospitals, Outdoor medical facilities, Medical equipments
- Efficient doctors and nurses: To ensure minimum standards of Patient care
- Family Medicine: Establishing more personnel for family healthcare
- Low cost drugs and vaccines: Keeping in view of the possible globalization induced high costs
- Mental health: Need for increase in hospitals and professionals
- Health research: Medical innovation and specialization is needed

- Disease control: More database needs to be collected in this regard in order treat and prevent diseases
- Women's health: Adequate access to public healthcare facilities is a necessity which in turn will improve family health as well
- List of National Health Programs organized by the health ministry are National Vector Borne Disease Control Program (NVBDCP) , National Iodine Deficiency Disorders Control Program, National Leprosy Eradication Program, National Program for Control of Blindness, National Filaria Control Program, National Program for Prevention and Control of Deafness, National Cancer Control Program, National Aids Control Program, Universal Immunization Program (RTI ACT, 2005), Revised National TB Control Program, and National Mental Health Program.

Some more endeavors for health planning in India are Medical Health Division, Hospital Services Consultancy Corporation, SC/ST facilities, Central Government Health Schemes, Prevention of food adulteration, establishment of food and drug testing laboratories, L.R.S. Institute of Tuberculosis and Respiratory Diseases, National Rural Health Mission, etc.

Good health planning in India will enable the country to establish a Healthcare system which will be socially acceptable, medically sound, and cost-effective enough for every Indian.

4. SOCIAL AND CULTURAL PLANNING

Social and Cultural Planning in India aims at preserving the social and cultural heritage of India. The Ministry of Culture strives to promote, preserve, and portray the art forms and diverse culture of India in a planned and organized manner.

The Ministry has indulged in a number of promotional activities in order to support India's cultural heritage which are enlisted below:

- Maintaining archival libraries and records
- Important National personalities of the society are honored by observing centenaries and anniversaries in their name
- Conservation and maintenance of archaeological sites and historical monuments
- Promotion of museums and art exhibitions
- Promoting Buddhist and Tibetan study institutions
- Building relations with foreign countries
- Various autonomous bodies have been set up for promoting, disseminating, and preserving Indian culture. Some of them are Gandhi Smriti and Darshan Samiti (New Delhi), Nava Nalanda Maha Vihara (Bihar), Raja Rammohan Roy Library Foundation (Kolkata), Kalakshetra Foundation (Chennai), Lalit Kala Akademi (New Delhi), and Salar Jung Museum (Hyderabad).
- The Government of India has established some important Acts to facilitate social and cultural planning in India such as:
- Ancient Monuments and Archaeological Sites and Remains Act of 1958
- The Antiquities and Art Treasures Act of 1972
- The Delivery of Books (Public Libraries) Act of 1952
- Public Records Act of 1993

- As far as social planning in India is concerned, the Ministry of Social Justice and Empowerment has played a significant role too. This Ministry is focused in areas of:
- Social Defense
- Schedule Caste Welfare
- Welfare of disabled persons
- Welfare of backward class
- Grants-in-Aid to NGOs
- Justice to workers and employees

The chief aim of this Ministry is to uplift the marginalized and to help them come to a position of being self-reliant.

Efficient and considerate Social and Cultural Planning in India is the need of the hour. It is thus, the prime duty of the Government as well as the general populace to work together in striving to make India a premium destination for tourists across the world.

5. RURAL PLANNING

Rural Planning in India is an area of prime importance for the Ministry of Rural Development. As part of the Planning objectives in India, Rural Planning needs to reflect growth and social justice. Growth in the rural sector is the key to social and economic development of India.

The Government of India has stated its policy objective as achieving 'Samagra Gramin Vikas' which means catering to the basic necessities and demands of the rural scenario. Hence, the Ministry of Rural Development has been playing a key role in organizing life improvement programs and other schemes for the development of rural India.

The departments of the Ministry of Rural Development established to facilitate rural needs have been enlisted below:

- Department of Land Resources- (i) Land Reforms Division and (ii) Wastelands Development Division
- Department of Rural Development
- Department of Drinking Water Supply
- Rural Planning in India is based on various issues. The chief areas of development include:
- Rural infrastructure habitant development
- Poverty reduction
- Provision of basic minimum service
- Employment generation
- Making available basic necessities

In order to meet these needs of rural India, the Indian Government had launched various rural schemes. A brief description of those schemes has been given below:

- Sampoorna Gramin Rozgar Yojana (SGRY): A self employment program for the rural people in which all necessary financial help, infrastructure, training, etc is given
- Rural Housing (Indira Awaas Yojana): A former sub-scheme of Rural Landless Employment Guarantee Programme, IAY facilitates the construction of houses for the rural homeless and deprived. The vision is to establish pucca houses for all by the arrival of the 11th Plan. Pradhan Mantri Gram Sadak Yojana (PMGSY): A scheme aiming at increasing connectivity to unreached rural areas with a population of minimum 500 and hilly and desert areas having a population of minimum 250.
- Training Schemes: Institutions like NIRD have taken up endeavours in training, seminars, workshops, and international programs.
- Other programs and schemes facilitating rural planning are Accelerated Rural Water Supply Programme, Jawahar Gram Samridhi Yojana (JGSY), Drought Prone Areas Programme (DPAP), and Integrated Wastelands Development Programme (IWDP)

Rural Planning in India has indeed become an integral part of the development of the country's economy and the Ministry of Rural Development is playing a pivotal role in this regard.

6. AGRICUTURAL PLANNING

Agriculture in India Planning is one of the major factors for the growth of the Indian economy which is still primarily agrarian.

Agriculture is the most important sector in India. As the Indian economy is mainly based on agriculture, the annual output of products from the agricultural sector is an important factor in the growth of the economy. Agriculture also has a crucial role to play in Indian exports, where it has a significant contribution. Many of the industries in India are dependent on agriculture for raw materials. So, without agriculture and agriculture-based products, the Indian economy cannot sustain or accelerate its growth rate.

Agriculture Planning in India is a very important tool to enhance and maximize the total agriculture based produce. The planning in agriculture is mainly looked after by the Planning Commission of India which operates and executes under the aegis of the government of India. Agriculture in India planning takes into account all factors that are related to the rural sector where most of Indian agriculture originates. The sole objective of the Planning Commission in terms of Agriculture Planning in India is to enhance the total output of agriculture and boost the economic growth of the country.

The major objectives under Agriculture in India Planning:

- Wastelands and underutilized lands to be utilized
- Development and reclamation of problematic lands
- Harvesting the abundant rainwater for the purpose of irrigation
- Irrigation development
- Utility and conservation of natural resources
- The activities to be diversified to high value crops

- The intensity of cropping to be increased
- To have adequate inputs on time
- Area of expansion under Agriculture in India Planning:
- Improvement in production
- Improvement in productivity
- Reduction in the cost of production
- Improvement in quality of the produce
- Value additions
- Promoting marketing and exports of the produce
- Development in Human resource
- Provision of proper storage facilities like store houses and warehouses
- The projections under the Agriculture in India Planning:
- Growth in the Indian Agriculture is based on resources being used efficiently and conservation of natural resources
- Growth must be equal in all the levels of the society including the farmers
- Growth will be demand and export oriented
- Growth will be due to the technological advancements
- Growth rate is projected to be more than 4%

7. VILLAGE INDUSTRY PLANNING

Village Industry Planning in India and its subsequent development are predicated to a large extent upon the development of India's 700-million strong rural population. Village Industry Planning in India is drafted according to the needs of rural India since majority of the population lives in around 600,000 small villages of India.

This section of the Indian population is primarily engaged with occupations that are directly or indirectly linked with agriculture. A substantial portion of India's current agricultural labor force had to move to non-agriculture sectors for making a livelihood. The challenge for Village Industry Planning in India is to manage the transition of 80% of the rural population from a village-centric, agricultural-based economy to a industry-based village economy.

As a part of Village Industry Planning in India the retarding factors for the development of industries in Indian villages were identified, as follows:

A set of basic facts define the constraints within which the economic growth and development of India's rural population must be addressed. Fundamentally, they relate to resource constraints, the nature of infrastructure, and the future trajectory of the geographical distribution of the population.

Infrastructure investment is irregular and inadequate to support India's 600,000 villages and the average cost of providing infrastructure is inversely related to the scale of the operation.

Limitations in the financial and other resources available for providing infrastructure made it impossible to provide infrastructure at every village in India and even if they were, it would not have been commercially sustainable.

The basic geographical structure of population distribution will change once India shifts from being an agriculture-based country to an industry-based nation.

The Ministry of Rural Infrastructure, Government of India and the Planning Commission of India aim at Village Industry Planning in India and its development on the following lines –

- Irrigation
- Roads
- Housing
- Water Supply
- Electrification
- Telecommunication Connectivity

Further, they have launched the "Bharat Nirman" scheme for the development of rural infrastructure. Plans proposed for the development of industries in Indian villages are -

- To connect 66,800 habitations with population over 1000 with all weather roads
- To construct 146,000 km of new rural roads
- To upgrade and modernize 194,000 km of existing rural roads
- Total investment of Rs. 174,000 crore envisaged under "Bharat Nirman", investment on rural roads estimated to be at Rs. 48,000 crore.
- To provide corpus of Rs. 8,000 crore to Rural Infrastructure Development Fund (RIDF).
- Village Industry Planning in India to encourage further development of -
    - Poultry farming
    - Fishery
    - Sericulture
    - Aviary
    - Handicrafts
    - Textile designing
    - Pottery
    - Food products

8. URBAN PLANNING

Urban Planning in India is slowly but steadily gaining pace. The rapid increase in urban population of India is the result of aggressive industrialization. According to reports, in 2001 the number of people lived in urban India was around 285 million.

In the last 40 years, there has been more than 350% of increment in the urban population and at this rate, the projection is around over 400 million by the end of year 2011 and 533 million by the end of year 2021. Urban Planning in India took a beating during the period from 1991 to 2001 as the number of metropolitan cities increased from 23 to 35. This in turn resulted in the shortage in housing, drinking water supply, sewerage, health care center etc. Further, this had led to increased vehicular traffic, pollution, poverty, and social chaos, thus compromising the main essence of urban life. Urban Planning in India includes (but is not confined to) the following -

- Town planning
- Regulation of land use for residential and commercial purposes
- Construction of buildings
- Planning for economic development

- Planning for social development
- Construction of roads
- Constructions of bridges
- Water supply for domestic use, industrial and commercial purposes
- Public health care management
- Sewerage, sanitation and solid waste management
- Proper fire services
- Urban forestation and maintenance
- Protection of environment through sustainable development
- Promotion of ecological balance and maintenance
- Safeguarding the interests of weaker sections of society
- Offering proper infrastructural help to the handicapped and mentally retarded population of the society
- Organized slum improvement
- Phased removal or alleviation of urban poverty
- Increased provision of basic urban facilities like public urinals, subways, footpaths, parks, gardens, and playgrounds
- Increased public amenities including street lighting, parking lots, bus-stop and public conveyances
- Continual promotion of cultural, educational and aesthetic aspects of the environment
- Increased number of burials, burial grounds, cremation grounds and electric crematoria
- Proper regulation of slaughter houses and tanneries
- Absolute prevention of / zero tolerance of cruelty to animals
- Proper maintenance of population statistics, including registration of births and deaths records
- Urban Planning in India functions through mechanisms called Urban Local Bodies or ULBs. These Urban Local Bodies are classified into four major categories -
- Municipal corporations,
- Municipalities (Municipal council, municipal board, municipal committee)
- Town area committees
- Notified area committees

In the year 1991, there were around 3255 Urban Local Bodies in the country. These Urban Local Bodies are responsible for providing and overseeing the maintenance of basic urban infrastructure and services in cities and other relevant areas.

Until the early 1990s, Industry in India Planning was in a state of sorry affairs. By the end of 1980s, the Indian industry was a protected and strictly regulated sector. But the period from 1990s was marked with speedy reforms and their subsequent successful implementation.

The Government took measures which were more rational than previous ones. Although skeptics had their reservations, the trend was clearly towards that of globalization and liberalization that were effecting sweeping changes in the world economy.

Further, Industry in India Planning is now more focused on areas like improving

the urban infrastructure, ensuring fair competition and access to markets, reduction of import duties, quality improvements in vocational and higher education, increased investment in R&D, and support of SMEs. Government leaders, experts, and researchers are striving towards making the Indian industry globally competitive and to being about a sustained growth which would contribute significantly to GDP growth, employment generation, and overall economic development.

Indian industrial policy also aims to identify factors hampering industrial growth and seeks to redress these factors. A brief summary of Industry in India Planning in all 5 year plans, are as follows -

- The first four 5-year plans involved a total public sector disbursement of Rs.314.1 billion. The first plan prioritized agriculture and power projects
- The second plan focused on new industrial policy, rapid industrialization and envisaged 25% increase in national income The third plan targeted rapid industrialization, with 24.6% outlay on transport and communications and 20.1% on industry and minerals
- The fourth plan stressed on agriculture and allied sectors and received around 27%, while industry and minerals outlay was 18.5%, transport and communications stood at 18.4%, and power development at 17.8%
- The fifth plan envisaged removal of poverty and the attainment of self-reliance. A total spent of Rs.393.2 billion was allocated, and actual expenditures amounted to Rs.394.2 billion
- The sixth plan targeted developmental plans and the projected outlays amounted to Rs.975 billion
- The seventh plan projected 5% overall GDP growth (which was surpassed) based on increases of 4% in agricultural and and 8% industrial output. And spent amounted to Rs.1,800 billion
- The eighth development plan laid the foundation for long-term economic gains. The eighth plan was a grand success and economic growth rose to 6% a year, generated more employment, poverty was curtailed, exports increased many folds, and inflation declined substantially
- The ninth plan witnessed overall stupendous improvement in the GDP growth rate from an average of about 5.7% to about 6.1% The Tenth Plan envisages -
- More investor friendly flexible economic reforms
- Creation of congenial investment environment
- Encourage private sector involvement
- Setting up state-of-the-art infrastructure
- Capacity building in industry
- Corporate transparency
- Mobilizing and optimizing all financial resources
- Implementation of friendly industrial policy instruments

9. INFORMATION TECHNOLOGY PLANNING

The robust growth of the India IT Industry can be attributed to meticulous Information Technology Planning in India. In fact, the Information Technology Planning in India was so aggressive and accurate that no other Indian industry could rival or better the performance of the Indian Information Technology industry.

The master control of Information Technology Planning in India is in the hands of

Department of Information Technology which aims to make the Indian IT industry, a Global IT Super Power by 2008 and bring the benefits of electronics to every walk of life. Further, Information Technology Planning in India is drafted to enhance creation of wealth, employment generation, and IT led economic growth. According to sources, annual revenue projections for Indian IT sector in 2008 are US$ 87 billion and market openings are emerging across 4 broad sectors - IT services, software products, IT enabled services, and e-businesses, thus creating a number of opportunities for Indian companies. All these segments have opportunities in foreign and as well as in domestic markets. With the formation of a new ministry for IT, the Government of India (GOI) has taken major steps towards promoting the Indian IT industry. It has taken steps to promote angel investors, venture creators, and incubation to promote further growth of the IT industry in India.

Information Technology Planning in India has taken major steps to promote –

- Electronics and hardware manufacturing
- Increased budget for R&D activities
- Protection of Intellectual Property Rights related to Information Technology industry
- Strengthening Indian Cyber law
- Arrest random use of pirated version of software products
- Feasibility of software patenting
- Increase PC penetration
- Increase utilization of Internet
- Domestic software market growth consolidation
- Development of local language softwares
- Tax holidays
- Use of Information Technology to increase productivity
- Use of Information Technology as a means of generating employment
- Increment of technical work force
- Increase in number and quality of training facilities
- Encouraging IT education
- Information Technology Planning in India sources estimates -
- Information Technology services will contribute over 7.5 % of the overall GDP
- Information Technology product exports will account for 35% of the total exports with potential for 2.2 million jobs in IT by 2008
- Information Technology industry will attract Foreign Direct Investment (FDI) of U.S. $ 4-5 billion Market capitalization of Information Technology shares will be around U.S. $ 225 billion
- The Indian IT sector is a knowledge-based industry and it will help take the Indian economy to a new horizon and further change the scenario of Indian IT industry, fueling India's economic growth.

10. TOURISM PLANNING

Tourism planning in India started quite late with the first tourism policy being announced by the Government of India in November, 1982 after tourism was recognized as an industry by the Planning Commission of India in June, 1982.

In July, 1986 the Planning Commission of India set up the National Committee on

Tourism in order to formulate plans for this sector. The government's initiatives of incorporating a planned tourism sector in India went a long way in boosting Indian tourism.

In May, 1992 the National Action Plan for tourism was announced. The objectives of this landmark plan for tourism planning in India were:

- To improve the economy category domestic tourism
- To develop the tourist areas socially and economically
- To preserve the environment and the national heritage
- To encourage international tourism
- To improve in world tourism India's share
- To increase opportunities for employment in this sector
- India tourism planning increased with the seventh five year plan India (1985-1989). The various polices advocated by the seventh plan for tourism planning in India are:
- To promote aggressively domestic tourism
- It laid stress on creating more beach resorts
- To conduct conferences, trekking, conventions, and winter sports so that various options are available to the foreign tourists
- These polices of the seventh five year plan gave a boost to the tourism planning India. To further encourage tourism planning in India, the eighth five year plan (1992- 1997) mentioned that the private sector should increase its participation in the sector. The various polices advocated by the eighth plan for tourism planning in India are:
- To develop the tourists places
- To develop winter sports, beach resort, and wildlife tourism
- To restore the projects of national heritage
- To provide in tourists centers economy class accommodation

Tourism planning in India has increased by leaps and bounds in the last few years and the government and Department of Tourism needs to make continuous efforts to ensure that tourism planning in India takes the tourism sector of the country to greater heights on a sustainable basis.

11. REAL ESTATE PLANNING

Real estate planning in India has been introduced as a separate chapter by the Planning Commission of India in the tenth five year plan (2002-2007). The chapter on India Real Estate planning covers shopping malls, residential townships, multiplexes, entertainment centers, hotels, factories, and industrial building as activity related to real estate. The real estate sector is one of the fastest growing sectors of India and provides many employment opportunities as well. More than 250 industries indirectly or directly depend on the Indian real estate industry.

The Indian real estate sector contributes 6.5% to the country's GDP. This shows the importance of the real estate sector in the Indian economy. This is the reason that the government of India is making more efforts in order to organize this industry which is at present largely unorganized. In order to increase planning of real estate in India, the

National Building Organization has been set up. This is an agency which is under the Housing and Poverty Alleviation Ministry of India.

According to the Indian Planning Commission, around 61.8 million people lived in urban slums in 2001. This means that there is need millions of houses with basic civic facilities. In the Indian real estate planning, a National Housing and Habitat Policy- 2006 had been formulated, which aimed at providing shelter for all slum-dwellers by 2010. Under this policy, the government plans to provide 2 million dwelling houses per year. All these plans have given a major boost to real estate planning in India.

The planning of real estate in India has increased in recent years for it have been found that the majority of people are evading taxes related to real estate. The government of India plans to make the tax regime more rationalized in this sector, so that the evasion of taxes becomes less.

Real estate planning in India has begun only recently. The government needs to make diligent efforts to ensure that this sector grows and realizes it full potential in the near future.

12. INFRASTRUCTURE PLANNING

Infrastructure in Indian planning is a recent development which was ushered in with the setting up of the committee on infrastructure (CoI) on 31st August, 2004. A sub-committee has also been set up on 16th May, 2005 in order to assist the committee and its functioning.

The various objectives of the committee on infrastructure for infrastructure planning in India are:

- To make polices that lead to the creation of infrastructure that is of world class standard
- To monitor the progress of the various infrastructure projects in order to see that they are completed on time
- To make such polices that maximize the private- public partnership role in the infrastructure field
- The various sectors in which the committee on infrastructure is planning infrastructure in India are:
- Ports
- Highways
- Power
- Railways
- Telecoms
- Airports

The Indian infrastructure planning has taken place in various sectors of which ports infrastructure planning deserves a special mention. A program called the National Maritime Development had been launched under which over Rs 50,000 crore will be invested in order to develop the ports infrastructure. All the 12 major ports in the country will be developed so that they attain international quality standards. In India, the planning of infrastructure has also been done in the highways sector. The golden quadrilateral, which is 5,900 km long, is being developed as a four-lane project. The North-South East-West (NSEW) corridor is also a four-lane project and is expected to

be concluded by December, 2009. In the power sector, the planning of infrastructure India has also been done.

Infrastructure planning in India has been done in the railways sector. With an investment of Rs. 22,000 crore, freight corridors are to be built in the eastern and western routes. Infrastructure in India planning has also been done in the telecom sector. In the airport sector of the infrastructure planning in India, significant development is also being made. In Hyderabad and Bangalore, international green field airports are coming up and the Mumbai and Delhi airports are also being modernized.

Infrastructure in India planning has led to the modernization of the country and has also given a boost to the Indian industry.

Forest and environment planning in India began in the 1970s, after the Human Environment Conference at Stockholm which was held by the United Nations. It was after attending this conference that the government of India became aware of issues relating to environment.

As a result, the National Committee on Environmental Planning and Co-ordination (NCEPC) had been set up by the government. Forest and environment planning in India includes survey and conservation of the fauna, flora, forests, afforestation, and control and prevention of pollution.

Unplanned urbanization, industrialization, and deforestation have resulted in the degradation of the soil, forests, and water resources. These have also led to environmental pollution. It was to check all these phenomena that the Indian government felt the need for planning of forest and environment in India. The Indian Planning Commission emphasized environmental issues in the fourth and fifth five year plans. In the mid 1980s, the Ministry of environment and Forests (MoEF) was established by the government of India in order to plan the environment and forests in India. This agency plans, promotes, and implements programs which are related to forestry and environmental conservation.

The government has set up various offices, independent agencies, and institutions in order to implement forest and environment planning in India. There are over 1 lakh forest management committees (FMC) at the village level. These committees aim at regenerating 22 million hectares of forests. The National Forest Policy has also been formulated by the India government to encourage the planning of environment and forest in India. This policy encourages people to involve themselves in the regeneration, protection, management, and development of the degraded forests of India.

Investment and financial planning in India has been successful to a very large extent, as is evident from the fact that in the present scenario, India is the 5th largest economy of the world.

The market in India offers very high potential for earning and growth in all the spheres of business. All this has been possible due to the proper financial and investment planning in India. The Ministry of finance regulates all the investment and financial planning in India. It is this ministry that formulates all the rules and regulations that are to be followed for financial investment in the country.

The National Common Minimum Program was formulated by the government of India, for planning investments and finances in India. This program had identified certain sectors which must be given more emphasis in order to boost investments and economic growth of the country. The National development council is an agency which had been set up by the Indian government in order to boost financial and investment planning in India.

The Indian Planning Commission, in the 4th and 5th five-year plans, has implemented investment and financial planning in India in such a manner that it has given huge amounts of resources to the states. But in the 9th and 10th five year plans, this financial assistance given to the states has been cut down sharply.

In the planning of finance and investment in India, the 9th five year plan did not lay down a definite investment pattern. Due to this it was not possible to gauge the investment requirements in the various sectors, the amount of investment that was likely to take place, and the sectors that will have insufficient or excess of funds.

In the 10th five year plan in India, investments had to be cut by 12.5% in important areas like manufacturing, agriculture, and power due to constraints in resources. However, it cannot be denied that Investment and financial planning in India has helped the country to grow economically.

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CHAPTER – V

PUBLIC-PRIVATE PARTNERSHIP

Public-private partnership (PPP) describes a government service or private business venture which is funded and operated through a partnership of government and one or more private sector companies. These schemes are sometimes referred to as PPP or P^3.

In some types of PPP, the government uses tax revenue to provide capital for investment, with operations run jointly with the private sector or under contract. In other types, capital investment is made by the private sector and Government provides service. Government contributions to a PPP may also be in kind. In projects that are aimed at creating public goods like in the infrastructure sector, the Government may provide a capital subsidy in the form of a one-time grant, so as to make it more attractive to the private investors. In some other cases, the Government may support the project by providing revenue subsidies, including tax breaks or by providing guaranteed annual revenues for a fixed period.

Public service provision in India is seen by many as inadequate. It is not that India lacks the engineering expertise or the desire to provide reliable and quality public services; but it is just a matter of organisation and funding.

Some commentators, such as the World Bank, point out that the Government tries to extend access to services, perhaps in terms of political capital instead of sound economics.

Added to that, corruption is a major problem, making sure that funds intended for the payment of service provision do not find their way to the intended end users. Using private money to fund the provision of public services may be part of the solution.

Also with sufficient risk transfer to the private sector, the use of private money and private sector expertise in providing public services may be acceptable and justifiable, in terms of value for money, to the Indian Government.

The concept of partnerships between the public and private sectors is already being embraced by a number of so called 'developing' countries.

In PPP schemes, the public sector asks the private sector to fund, provide and take some of the risks inherent in the project, in return for the possibility of making a profit. The idea is that the public body purchases a service.

It is not a method of infrastructure procurement per se, although the project will involve either the construction or refurbishment of infrastructure.

In a hospital scheme for example, the services being purchased will be the use of the hospital, equipment and the provision of ancillary services (such as cleaning and repair) -- the doctors and nurses are still trained and employed by the Government.

This switches the role of the public sector from a provider of services to a guardian of services. Control in the day to day delivery of certain services is taken away from Government officials and Government managers. If services are not being provided satisfactorily, the public sector managers can make deductions from the fees paid.

At the heart of the PPP concept is optimum risk allocation. Certain risks are transferred to the private sector such as design risk, construction risk and operational risk, incidental to running any business.

Risk transfer is supposed to outweigh the increased cost of borrowing by the private sector who will have to obtain the finance from an investment bank at a more expensive rate than the Government. Whether this is true is a matter of debate and still requires some research.

Origin

Initially, most public-private partnerships were negotiated individually, as one-off deals. In 1992, however, the Conservative government of John Major in the United Kingdom introduced the private finance initiative (PFI), the first systematic program aimed at encouraging public-private partnerships. In the 1992 program, the main focus was on reducing the Public Sector Borrowing Requirement, although, as already noted, the effect on the public accounts was largely illusory. The Labour government of Tony Blair elected in 1997, persisted with the PFI sought to shift the emphasis to the achievement of "value for money" mainly through an appropriate allocation of risk.

A number of Australian State Governments have adopted systematic programs based on the PFI. The first, and the model for most others, is Partnerships Victoria.

Public-private Partnership Model In India: Concepts, issues And Outlook

According to the official estimates, an estimated 50% of the population in India will be living in cities by 2025. That means the Governments at the Central, State and Local levels face the hard task of providing efficient and reliable infrastructure facilities to improve the quality of life, connectivity, utilities and access to basic/civic amenities for all citizens. For instance, factors like lack of skilled manpower, project management expertise, time and financial resources act as major constraints before the Government in developing infrastructure on massive scale in areas like national highways, power, railways, ports and airports. The role of private sector becomes crucial as the Governments and urban local bodies alone cannot shoulder the responsibility due to certain constraints. Hence, the private sector especially entrepreneurs, builders and NGOs (non-governmental organizations) got an opportunity to jointly execute infrastructure development projects through the Public-Private Partnership (PPP) model.

CRITICISM

However, PPPs are not without their critics, and many of the problems facing the UK will of course also relate to any implementation in India. Some schemes have not worked well at all and have collapsed.

Also, in the UK, many people (mainly on the political Left) see PPPs as a kind of mortgage, for which the public will pay more in the long run. Evidence suggests that some PPPs are more expensive than outright procurement, and some people object to the 'have now, pay later' mentality.

A further problem facing the introduction of such schemes (and one which might affect any introduction in India) is the views of the public sector workers. In the UK, some public sector workers and their unions object to the private sector taking control in areas where there is a long tradition of public service.

Public sector workers may also consider (rightly or wrongly) that their employment rights will be reduced and job security threatened and this may lead to industrial action.

Whatever the specific problems India may face if she were to introduce PPPs, the acid test will be whether banks are interested in funding such projects. As the bank is providing the finance, it will want to ensure that there is no risk or impediment to its loan being repaid, which ultimately flows from contract payments made by the public sector. It would also like to see quick and efficient dispute resolution procedures and will require as many procedures in place to avoid corruption. The ultimate challenge is whether the Government can provide an investment environment that will attract banks and funding.

The electorate can see the infrastructure being built before their eyes and projects may not be affected by a new Government reversing the decision or cutting off the funding.

PPPs are not necessarily a bad idea; some schemes in the UK are delivered early, to a good quality standard and on budget. It remains to be seen whether they are good value for money.

The Indian Government should therefore look very carefully at PPPs, because if economic advancement can be made via infrastructure improvements, it may meet any increased cost of involving the private sector.

PPP-AP

Located in south India, Andhra Pradesh is the fourth largest economy in the country. At national level, the state stands first in the generation of hydroelectric power. According to the predictions of 2007-2008, its gross state domestic product (GSDP) at constant prices is projected to record a growth of 10.37 percent. During the 11th Five Year Plan (2007-2012), the state is focusing on 9 % annual economic growth. The states' GSDP growth averaged 6.8 % during 2002-07. Its major thriving fields have been IT, pharmaceuticals, biotech, outsourcing, electronic hardware, textiles, and mining.

Advantage to Andhra Pradesh

- Hyderabad is ranked as the No. 1 Indian ITES destination by NASSCOM
- Ranks second in the number of industrial estates in the country
- Only state with abundant energy

- Several world-class academic institutions with foreign collaborations
- Accounts for about 23 % of software professionals in India
- Second largest storehouse of minerals in the country

SPECIAL ECONOMIC ZONES

A Special Economic Zone (SEZ) is a geographical region that has economic laws that are more liberal than a country's typical economic laws. The category 'SEZ' covers a broad range of more specific zone types, including Free Trade Zones (FTZ), Export Processing Zones (EPZ), Free Zones (FZ), Industrial Estates (IE), Free Ports, Urban Enterprise Zones and others. Usually the goal of a structure is to increase foreign investment. One of the earliest and the most famous Special Economic Zones were found by the Government of the People's Republic of China under Deng Xiaoping in the early 1980s.

The most successful Special Economic Zone in China, Shenzhen, has developed from a small village into a city with a population over 10 million within 20 years. Following the Chinese examples, Special Economic Zones have been established in several countries, including Brazil, India, Iran, Jordan, Kazakhstan, Pakistan, the Philippines, Poland, Russia, and Ukraine. North Korea has also attempted this to a degree, but failed. Currently, Puno, Peru has been slated to become a "Zona Economica" by its president Alan Garcia. A single SEZ can contain multiple 'specific' zones within its boundaries. The two most prominent examples of this layered approach are Subic Bay in the Philippines and the Aqaba Special Economic Zone in Jordan. According to World Bank estimates, as of 2007 there are more than 3,000 projects taking place in SEZs in 120 countries worldwide.

SEZs have been implemented using a variety of institutional structures across the world ranging from fully public (Government operator, Government developer, Government regulator) to 'fully' private (private operator, private developer, public regulator). In many cases, public sector operators and developers act as quasi-government agencies in that they have a pseudo-corporate institutional structure and have budgetary autonomy. SEZs are often developed under a public-private partnership arrangement, in which the public sector provides some level of support (provision of off-site infrastructure, equity investment, soft loans, bond issues, etc) to enable a private sector developer to obtain a reasonable rate of return on the project (typically 10-20% depending on risk levels).

India

India was one of the first in Asia to recognize the effectiveness of the Export Processing Zone (EPZ) model in promoting exports, with Asia's first EPZ set up in Kandla in 1965. With a view to overcome the shortcomings experienced on account of the multiplicity of controls and clearances; absence of world-class infrastructure, and an unstable fiscal regime and with a view to attract larger foreign investments in India, the Special Economic Zones (SEZs) Policy was announced in April 2000.

Special Economic Zones (SEZs) Scheme in India was conceived by the Commerce and Industries Minister Murosoli Maran during a visit to Special Economic Zones in China in 1999. The scheme was announced at the time of

annual review of EXIM Policy effective from 1.4.2000. SEZ is basically a geographically distributed area or zones where the economic laws are more liberal as compared to other parts of the country. Within SEZs, units may be set-up for the manufacture of goods, provisioning of services, and other activities including processing, assembling, trading and repairing etc. A SEZ may be set-up in the public, private, or joint sector and /or by a state government and even by a foreign country. The minimum land area requirement for establishing a SEZ is 1000 hectares. Out of this total area, only 30-35% of area is used for setting up plants and rest of the area is used to provide housing facilities, malls, multiplexes etc. The area under 'SEZ' covers a broad range of zone types, including Export Processing Zones (EPZ), Free Zones (FZ), Industrial Estates (IE), Free Trade Zones (FTZ), Free Ports, Urban Enterprise Zones and others. Usually the goal of an SEZ structure is to increase foreign investment. In Indian, at present there are eight functional Special Economic Zones located at Santa Cruz (Maharashtra), Cochin (Kerala), Kandla and Surat (Gujarat), Chennai (Tamil Nadu), Visakhapatnam (Andhra Pradesh), Falta (West Bengal) and Nodia (Uttar Pradesh) in India. Further a Special Economic Zone at Indore (Madhya Pradesh) is also ready for operation. In addition 18 approvals have been given for setting up of SEZ at Positra (Gujarat), Navi Mumbai and Kopata (Maharashtra), Nanguneri (Tamil Nadu), Kulpi and Salt Lake (West Bengal), Paradeep and Gopalpur (Orissa), Bhadohi, Kanpur, Moradabad and Greater Noida (U.P.), Vishakhapatnam and Kakinada (Andhra Pradesh), Vallarpadam /Puthuvypeen (Kerala) Hassan (Karnataka), Jaipur and Jodhpur (Rajasthan) on the basis of proposals received from the State Governments. Any new policy or amendment related to the Special Economic Zones (SEZs) will be very soon released with the new EXIM Policy 2008-2009 on or after 31st March 2008. The policy relating to Special Economic Zones is governed by SEZ Act 2005, and the Rules framed there under.

This policy intended to make SEZs an engine for economic growth supported by quality infrastructure complemented by an attractive fiscal package, both at the Centre and the State level, with the minimum possible regulations. SEZs in India functioned from 1.11.2000 to 09.02.2006 under the provisions of the Foreign Trade Policy and fiscal incentives were made effective through the provisions of relevant statutes.

To instill confidence in investors and signal the Government's commitment to a stable SEZ policy regime and with a view to impart stability to the SEZ regime thereby generating greater economic activity and employment through the establishment of SEZs, a comprehensive draft SEZ Bill prepared after extensive discussions with the stakeholders. A number of meetings were held in various parts of the country both by the Minister for Commerce and Industry as well as senior officials for this purpose. The Special Economic Zones Act, 2005, was passed by Parliament in May, 2005 which received Presidential assent on the 23rd of June, 2005. The draft SEZ Rules were widely discussed and put on the website of the Department of Commerce offering suggestions/comments. Around 800 suggestions were received on the draft rules. After extensive consultations, the SEZ Act, 2005, supported by SEZ Rules, came into effect on 10th February, 2006, providing for drastic simplification of procedures and for single window clearance on matters relating to central as well as state governments. The main objectives of the SEZ Act are:

(a) generation of additional economic activity
(b) promotion of exports of goods and services;
(c) promotion of investment from domestic and foreign sources;
(d) creation of employment opportunities;
(e) development of infrastructure facilities;

It is expected that this will trigger a large flow of foreign and domestic investment in SEZs, in infrastructure and productive capacity, leading to generation of additional economic activity and creation of employment opportunities.

The SEZ Act 2005 envisages key role for the State Governments in Export Promotion and creation of related infrastructure. A Single Window SEZ approval mechanism has been provided through a 19 member inter-ministerial SEZ Board of Approval (BoA). The applications duly recommended by the respective State Governments/UT Administration are considered by this BoA periodically. All decisions of the Board of approvals are with consensus.

The SEZ Rules provide for different minimum land requirement for different class of SEZs. Every SEZ is divided into a processing area where alone the SEZ units would come up and the non-processing area where the supporting infrastructure is to be created.

The SEZ Rules provide for :

Considering the need to enhance foreign investment and promote exports from the country and realizing the need that a level playing field must be made available to the domestic enterprises and manufacturers to be competitive globally, the Government of India had in April 2000 announced the introduction of Special Economic Zones policy in the country, deemed to be foreign territory for the purposes of trade operations, duties and tariffs. As of 2007, more than 500 SEZs have been proposed, 220 of which have been created. This has raised the concern of the World Bank, which questions the sustainability of such a large number of SEZs. The Special Economic Zones in India closely follow the PRC model. India passed special economic zone act in 2005.

Considering the need to enhance foreign investment and promote exports from the country and realizing the need that level playing field must be made available to the domestic enterprises and manufacturers to be competitive globally, the government had in April 2000 announced the introduction of Special Economic Zones policy in the country, deemed to be foreign territory for the purposes of trade operations, duties and tariffs.

SEZs when operational are expected to offer high quality infrastructure facilities and support services, besides allowing for the duty free import of capital goods and raw materials. Additionally, attractive fiscal incentives and simpler customs, banking and other procedures are offered in such zones. Setting up of SEZs is also treated as an infrastructure development activity and offered same incentives.

Salient features of the Indian SEZ initiative include:

- Unlike most of the international instances where zones are primarily developed by Governments, the Indian SEZ policy provides for development of these zones in the government, private or joint sector. This offers equal opportunity to both Indian and international private developers.
- For green field SEZs, the Government has specified a minimum preferable area of 1,000 hectares. However, for sector specific SEZs, there is no restriction of minimum area.
- 100 per cent FDI is permitted for all investments in SEZs, except for activities under the negative list.
- SEZ units are required to be positive net foreign exchange earners and are not subject to any minimum value addition norms or export obligations.
- Goods flow into the SEZ area from Domestic Tariff Area (DTA) will be treated as exports and goods coming from the SEZ area into DTA are treated as imports.

Currently, a number of SEZ projects are coming up in the country. The government has given a go-ahead for around 17 SEZs to be set up in the private sector or the joint sector. Of these, the projects at Positra (Gujarat), Vishakhapatnam (Andhra Pradesh), Indore (Madhya Pradesh) and Navi Mumbai (Maharashtra) are in advanced stages of planning and development, while the others are preparing to get off the ground.

Incentives and Benefits

Besides providing state-of-the-art infrastructure and access to a large well-trained and skilled work force, the SEZ policy also provides enterprises and developers with a favourable and attractive framework of incentives:

- Duty free import/domestic procurement of goods for development, operation and maintenance of SEZ units
- 100% Income Tax exemption on export income for SEZ units under Section 10AA of the Income Tax Act for first 5 years, 50% for next 5 years thereafter and 50% of the ploughed back export profit for next 5 years.
- 100% FDI in the manufacturing sector permitted through automatic route, barring a few sectors.
- 100% FDI permitted to SEZ franchisee in providing basic telephone services in SEZs.
- Exemption from minimum alternate tax under section 115JB of the Income Tax Act.
- External commercial borrowing by SEZ units upto US $ 500 million in a year without any maturity restriction through recognized banking channels.
- Exemption from Central Sales Tax.
- Exemption from Service Tax.
- Exemption from industrial licensing requirements for items reserved for the SSI sector.
- Exemption from customs duties on import of capital goods, raw materials, consumables, spares etc

- Exemption from Central Excise duties on procurement of capital goods, raw materials, consumable spares etc., from the domestic market.
- Exemption from State sales tax and other levies as extended by the respective State Governments.
- Single window clearance for Central and State level approvals.
- No cap on foreign investment for small scale sector reserved items.
- No import licence requirements
- No routine examinations by Customs for export and import cargo.
- Facility to realize and repatriate export proceeds within 12 months.
- Profits allowed to be repatriated without any dividend-balancing requirement.
- Job work on behalf of domestic exporters for direct export allowed.
- Subcontracting both domestic and international is permitted; this facility is available to jewellery units as well.
- Facility to retain 100% foreign exchange receipts in Exchange Earners' Foreign Currency Account.
- Facilities to set up off-shore banking units in SEZs.

Incentives and facilities offered to the SEZs

The incentives and facilities offered to the units in SEZs for attracting investments into the SEZs, including foreign investment include:-

Incentives to Developers

- Exemption from duties on import /procurement of goods for the development, operation and maintenance of SEZ.
- Exemption from minimum alternate tax under Section 115 JB of the Income Tax Act.
- Exemption from dividend distribution tax under Section 115O of the Income Tax Act.
- Exemption from Central Sales Tax (CST).
- Exemption from Service Tax (Section 7, 26 and Second Schedule of the SEZ Act).
- Income tax exemption for a block of 10 years in 15 years under Section 80-IAB of the Income Tax Act.
- Exemption from Service Tax
- FDI to develop townships within SEZs with residential, educational, health care and recreational facilities permitted on a case-to-case basis.

Approval mechanism

The developer submits the proposal for establishment of SEZ to the concerned State Government. The State Government has to forward the proposal with its recommendation within 45 days from the date of receipt of such proposal to the Board of Approval. The applicant also has the option to submit the proposal directly to the Board of Approval.

The Board of Approval has been constituted by the Central Government in exercise of the powers conferred under the SEZ Act. All the decisions are taken in

the Board of Approval by consensus. The Board of Approval has 19 Members. Its constitution is as follows:

(1)	**Secretary, Department of Commerce**	**Chairman**
(2)	Member, CBEC	Member
(3)	Member, IT, CBDT	Member
(4)	Joint Secretary (Banking Division), Department of Economic Affairs, Ministry of Finance	
(5)	Joint Secretary (SEZ), Department of Commerce	Member
(6)	Joint Secretary, DIPP	Member
(7)	Joint Secretary, Ministry of Science and Technology	Member
(8)	Joint Secretary, Ministry of Small Scale Industries and Agro and Rural Industries	Member
(9)	Joint Secretary, Ministry of Home Affairs	Member
(10)	Joint Secretary, Ministry of Defence	Member
(11)	Joint Secretary, Ministry of Environment and Forests	Member
(12)	Joint Secretary, Ministry of Law and Justice	Member
(13)	Joint Secretary, Ministry of Overseas Indian Affairs	Member
(14)	Joint Secretary, Ministry of Urban Development	Member
(15)	A nominee of the State Government concerned	Member
(16)	Director General of Foreign Trade or his nominee	Member
(17)	Development Commissioner concerned	Member
(18)	A professor in the Indian Institute of Management or the Indian Institute of Foreign Trade	Member
(19)	Director or Deputy Sectary, Ministry of Commerce and Industry, Department of Commerce	Member Secretary

Administrative set up

The functioning of the SEZs is governed by a three tier administrative set up. The Board of Approval is the apex body and is headed by the Secretary, Department of Commerce. The Approval Committee at the Zone level deals with approval of units in the SEZs and other related issues. Each Zone is headed by a Development Commissioner, who is ex-officio chairperson of the Approval Committee.

Once an SEZ has been approved by the Board of Approval and Central Government has notified the area of the SEZ, units are allowed to be set up in the SEZ. All the proposals for setting up of units in the SEZ are approved at the Zone level by the Approval Committee consisting of Development Commissioner, Customs Authorities and representatives of State Government. All post approval clearances including grant of importer-exporter code number, change in the name of the company or implementing agency, broad banding diversification, etc. are given at the Zone level by the Development Commissioner. The performance of the SEZ units are periodically monitored by the Approval Committee and units are liable for penal action under the provision of Foreign Trade (Development and Regulation) Act, in case of violation of the conditions of the approval.

SEZ Approval Status

Consequent upon the SEZ Rules coming into effect w.e.f. 10th February, 2006, Twenty-eight meetings of the Board of Approvals have since been held. During these meetings, formal approval has been granted to 531 SEZ proposals. There are 143 valid in-principle approvals. Out of the 531 formal approvals, 260 SEZs have been notified.

Land requirements for approved Special Economic Zones:

The total land requirement for the formal approvals granted till date is approximately 67680 hectares out of which about 109 approvals are for State Industrial Development Corporations/State Government Ventures which account for over 20853 hectares. In these cases, the land already available with the State Governments or SIDCs or with private companies has been utilized for setting up SEZ. The land for the 270 notified SEZs where operations have since commenced involved is approximately over 31405 hectares only.

Out of the total land area of 2973190 sq km in India, total agricultural land is of the order of 1620388 sq km (54.5%). It is interesting to note that out of this total land area, the land in possession of the 270 SEZs notified amounts to approximately over 314 sq km only. The formal approvals granted also works out to only around 676 sq km.

SEZs- leading to the growth of labour intensive manufacturing industry:

Out of the 531 formal approvals given till date, 174 approvals are for sector specific and multi product SEZs for manufacture of Textiles & Apparels, Leather Footwear, Automobile components, Engineering etc.. which would involve labour intensive manufacturing. SEZs are going to lead to creation of employment for large number of unemployed rural youth. Nokia and Flextronics electronics hardware SEZs in Sriperumbudur are already providing employment to 14577 and 1058 persons. Hyderabad Gems SEZ for Jewellery manufacturing in Hyderabad has already employed 2145 persons. majority of whom are from landless families, after providing training to them. They have a projected direct employment for about 2267 persons. Apache SEZ being set up in Andhra Pradesh will employ 20, 000 persons to manufacture 10,00,000 pairs of shoes every month. Current employment in Apache SEZ is 5536 persons. Brandix Apparels, a Sri Lankan FDI project would provide employment to 60,000 workers over a period of 3 years. Even in the services sector, 12.5 million sq meters space is expected in the IT/ITES SEZs which as per the NASSCOM standards translates into 12.5 lakh jobs. It is, therefore, expected that establishment of SEZs would lead to fast growth of labour intensive manufacturing and services in the country.

Benefits derived from SEZs

Benefit derived from SEZs is evident from the investment, employment, exports and infrastructural developments additionally generated. The benefits derived from multiplier effect of the investments and additional economic activity in the SEZs and the employment generated thus will far outweigh the tax exemptions and the losses

on account of land acquisition. Stability in fiscal concession is absolutely essential to ensure credibility of Government intensions.

(a) Exports from the functioning SEZs during the last three years are as under:

Year	Value (Rs. Crore)	Growth Rate (over previous year)
2003-2004	13,854	39%
2004-2005	18,314	32%
2005-2006	22 840	25%
2006-20007	34,615	52%
2007-2008	66,638	92%

(b) Investment and employment in the SEZs set up prior to the SEZ Act, 2005:

At present, 1943 units are in operation in the SEZs. In the SEZs established prior to the Act coming into force, there are 1143 units providing direct employment to over 1.97 lakh persons; about 37% of whom are women. Private investment by entrepreneurs in these SEZs established prior to the SEZ Act is of the order of over Rs. 5626.24 crore.

(c) Investment and employment in the SEZs notified under the SEZ Act 2005:

Current investment and employment:
Investment: Rs. 83450crore
Employment: 1,13,426 persons

Special Economic Zones Act, 2005 & Special Economic Zones Rules, 2006

The Government of India had announced a SEZ scheme in April, 2000 with a view to provide an internationally competitive environment for exports. The objectives of SEZs include making available goods and services free of taxes and duties supported by integrated infrastructure for export production, expeditious and single window approval mechanism and a package of incentives to attract foreign and domestic investments for promoting export-led growth.

In order to give a long term and stable policy framework with minimum regulatory regime and to provide expeditious and single window clearance mechanism, the Special Economic Zones Act, 2005 has been brought into effect along with the Special Economic Zones Rules, 2006 from 10 February 2006.

The Act and the Rules together aim to provide a single self contained legislation governing the operations of SEZs and replaces the hitherto applicable legislations and rules governing the operations of SEZ in India.

Under the Act, SEZ could be set up either jointly or severally by the Central Government, State Government, or any person (including a private or public limited company, partnership or proprietorship):

- for manufacture of goods; or
- for rendering services; or
- for both manufacturing of goods and for rendering services; or
- as a Free Trade and Warehousing Zone.

The Act provides for certain fiscal incentives to developers of SEZ and units established in SEZs. Key fiscal incentives have been outlined below:

Fiscal incentives for developers/ SEZ units - Indirect Tax incentives

Developer and the SEZ unit shall be entitled to the following exemptions, drawbacks and concessions:

- exemption from customs duty on goods imported into the SEZ by the Developer or SEZ Unit to carry on the authorised operations;
- exemption from customs duty on goods exported from the SEZ by the Developer or SEZ Unit to any place outside India;
- exemption from excise duty on goods brought from Domestic Tariff Area ("DTA") to the SEZ by the Developer or SEZ unit to carry on the authorized operations;
- drawback or such other benefits (as may be admissible from time to time) on goods brought from the DTA into a SEZ by the Developer or Unit to carry on the authorized operations;
- exemption from service tax on taxable services provided to a Developer or Unit to carry on the authorized operations in a SEZ. However, please note that there is no specific service tax exemption on services provided by a Developer of an SEZ or a SEZ Unit. Exemption, if any, would be as per the service tax legislation;
- exemption from the securities transaction tax in case the taxable securities transactions are entered into by a non-resident through the International Financial Services Centre ("IFSC");
- exemption from levy of Central Sales Tax on the sale or purchase of goods by the Developer or SEZ unit if such goods are meant to carry on the authorized operations;
- Local sales tax/ VAT exemption or concession on supply of goods to an SEZ Developer or Unit or sale of goods by an SEZ Developer or Unit is subject to the respective sales tax/ VAT legislation of the state in which the SEZ is set up.

The Central government has prescribed the manner, terms and conditions subject to which above exemptions/ concessions would be available.

Removal of goods into DTA is subject to prescribed conditions and on payment of applicable customs duties as levied on importation of such goods into India.

Fiscal incentives - Income Tax incentives for SEZ units:

1. Tax Holiday for SEZ units engaged in manufacture or providing services A new section 10AA has been inserted in the IT Act by SEZ Act, 2005 which provides that

the units in SEZ which start manufacturing or producing articles/ things or which start providing services on or after April 1, 2005 will be eligible for a deduction of 100 percent of export profits for the first five years from the year in which such manufacture/ provision of services commences and 50 percent of the export profits for the next five years. Further, for the next five years a deduction shall be allowed of upto 50 percent of the profit as is debited to the profit and loss account and credited to the Special Economic Zone Reinvestment Reserve Account (subject to conditions).

2. Tax Holiday for Offshore Banking units in SEZ
A deduction in respect of certain incomes would be allowed under the new section 80LA, to scheduled banks or foreign banks having an Offshore Banking unit in SEZ or to a unit of IFSC. The deduction shall be for 100 percent of income for five consecutive years beginning from the year in which permission/ registration has been obtained under the Banking Regulation Act or the SEBI Act or any other relevant law and 50 percent of income for next five years.

3. Interest received by non-residents and not ordinary residents on deposits made with an Offshore Banking Unit on or after April 1, 2005 shall be exempt from tax.

4. Exemption from Minimum Alternate Tax ("MAT")
Income arising or accruing on or after April 1, 2005 from any business carried on, or services rendered by SEZ unit would be exempt from MAT under section 115JB.

5.Exemption from Capital Gains
Capital gains arising on transfer of assets (machinery, plant, building, land or any rights in buildings or land) on shifting of the industrial undertaking from an urban area to any SEZ would be exempt from capital gains tax.

The exemption would be allowable if within one year before or three years after such transfer:

- machinery or plant is purchased for the purposes of business of industrial undertaking in SEZ by the assessee;
- assessee has acquired land or building or has constructed building for the purposes of business in SEZ;
- the original assets are shifted and establishment of the industrial undertaking is transferred to SEZ; and
- other specified expenses are incurred.

The amount of exemption for capital gains would be restricted to the costs and expenses incurred in relation to all or any of the purposes mentioned above.

Fiscal incentives - Income Tax incentives for SEZ developers:

1.Tax holiday for SEZ developers
A new section 80-IAB has been introduced in the IT Act vide SEZ Act, 2005 whereby a deduction of 100 percent of profits derived from the business of developing SEZ (notified on or after April 1, 2005) would be available to developer of SEZ for any 10 consecutive years out of 15 years beginning from the year in which SEZ has been notified.

2.Exemption under section 10(23G) that was available to infrastructure capital fund or a cooperative bank on interest and long term capital gains investment had been extended to investment made by SEZ developers qualifying for tax holiday under section 80-IAB of the IT Act. However, this exemption has been withdrawn with effect from assessment year 2007-08.

3.Exemption from Dividend Distribution Tax ("DDT")
No DDT would be payable by a developer of SEZ on dividend declared, distributed or paid on or after April 1, 2005 out of current income.

4.Exemption from MAT

Any income earned on or after April 1, 2005 by a SEZ developer would be exempt from MAT under section 115JB of the Act.
Sale from Domestic Tariff Area (DTA) to SEZ

Regarding implementation of the Special Economic Zone Act, 2005 and the Special Economic Zone Rules, 2006, a Circular No 29/2006-Cus, dated December 27,2006, has been issued which clarifies that the procedure for procurement of goods from Domestic Tariff Area to a SEZ Developer or a unit would be governed by the provisions of Rule 30 of the SEZ Rules, 2006.

Impact of the scheme

The overwhelming response to the SEZ scheme is evident from the flow of investment and creation of additional employment in the country. The SEZ scheme has generated tremendous response amongst the investors, both in India and abroad, which is evident from the list of Developers who have set up SEZs:

Nokia SEZ in Tamil Nadu
Quark City SEZ in Chandigarh
Flextronics SEZ in Tamil Nadu
Mahindra World City in Tamil Nadu
Motorola, DELL and Foxconn
Apache SEZ (Adidas Group) in Andhra Pradesh
Divvy's Laboratories, Andhra Pradesh
Rajiv Gandhi Technology Park, Chandigarh
ETL Infrastructure IT SEZ, Chennai
Hyderabad Gems Limited, Hyderabad

List of SEZs in India

The policy provides for setting up of SEZs in the public, private, joint sector or by State Governments. It was also envisaged that some of the existing Export Processing Zones would be converted into Special Economic Zones. Accordingly, the Government has converted Export Processing zones located at
Sri City (SEZ), Andhra Pradesh (http://www.sricity.in)
Velankani SEZ, Chennai (http://www.velankanisez.com)
Pharma and Biotech SEZ, Aurangabad, Maharashtra (http://www.inspirainfra.com)
Visakhapatnam (Andhra Pradesh)
Hyderabad (Andhra Pradesh)

Polepally (Andhra Pradesh)
Ahmedabad, Baroda, Kandla and Surat (Gujarat)
Cochin (Kerala)
Pithampur (Madhya Pradesh)
Nagpur also refer MIHAN, Pune and SEEPZ in Mumbai (Maharashtra)
Chennai, Ilandaikulam Madurai, Nanguneri and Tirunelveli (Tamil Nadu)
NOIDA, Greater NOIDA (Uttar Pradesh) UP
Falta (West Bengal)
Bangalore [Karnataka]
Kensington [Powai, Mumbai]

Currently, India has 1022 units in operations in 9 functional SEZs, each an average size of 200 acres (0.81 km^2). 8 Export Processing Zones (EPZs) have been converted into SEZs. These are fully functional. All these SEZs are in various parts of the country in the private/joint sectors or by the State Government. But this process of planning and development is under question, as the states in which the SEZs have been approved are facing intense protests, from the farming community, accusing the government of forcibly snatching fertile land from them, at heavily discounted prices as against the prevailing prices in the commercial real estate industry. Also some reputed companies like Bajaj and others have commented against this policy and have suggested using barren and wasteland for setting up of SEZs.

Attempts to set up a Special Economic Zone in Nandigram have led to protests by villagers in the area. A Parliamentary Committee to study and give recommendations on SEZs has said that no further SEZs be notified unless the existing law is amended to incorporate the changes related to the land acquisitions.

Genpact has announced its plans to expand its presence in Hyderabad by setting up a Special Economic Zone (SEZ) across 50 acres (200,000 m^2) in the city at Jawahar Nagar.
PointIndu has inaugurated Hyderabad by setting up a Special Economic Zone (SEZ) across 150 acres (0.61 km^2) near Shamshabad close to airport.

SEZ Disadvantages :

Special economic zones and the SEZ projects have instigated certain SEZ controversy and a SEZ debate regarding the SEZ Disadvantages:

- Revenue losses due to various tax exemptions and tax benefits awarded to the India special economic zones.
- Most Real Estate Developers In India are interested in setting up a SEZ to cash in the india real estate bubble by acquiring SEZ land at cheap rates and creating a land bank for themselves
- India Real Estate holds a special section for SEZ where details regarding the SEZ news and notification, upcoming SEZ projects, listing of SEZ developers, SEZ consultants and consultant agencies, SEZ companies group engaged in development of special economic zones in India and others deserve special mention.

Presently around fourteen major special economic zones functional in India:

- Santa Cruz, Mumbai, Maharashtra
- Cochin, Kerala
- Kandla And Surat in Gujarat
- Chennai, Tamil Nadu
- Vishakhapatnam, Andhra Pradesh
- Falta And Salt Lake in West Bengal
- Noida, Greater Noida in Uttar Pradesh
- Indore, Madhya Pradesh
- Jaipur, Rajasthan

Owing to the mass attraction of SEZ's in terms of the SEZ benefits or advantages, major Indian conglomerates are jumping into the SEZ development bandwagon. Some of the names that deserve mention here are Mahindra & Mahindra with Mahindra World City in Chennai and Reliance Industries along with Haryana Government and coming up Special Economic Zones by Leading Real Estate Builders And Developers in India like Unitech India Ltd. and DLF . The newer areas attracting SEZ development are Navi Mumbai, Manesar,Gurgaon,Noida, Indore, Dehradun, Kanpur, Kochi, Nadigram, Surat, Nagpur, surrounding areas of Pune, Goa, Bangalore, Hyderabad, Jaipur, and Karnataka.

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CHAPTER-6

TRENDS IN INDIAN ECONOMY

India's economy has made great strides in the years since independence. In 1947 the country was poor and shattered by the violence and economic and physical disruption involved in the partition from Pakistan. The economy had stagnated since the late nineteenth century, and industrial development had been restrained to preserve the area as a market for British manufacturers. In fiscal year (FY--see Glossary) 1950, agriculture, forestry, and fishing accounted for 58.9 percent of the gross domestic product (GDP--see Glossary) and for a much larger proportion of employment. Manufacturing, which was dominated by the jute and cotton textile industries, accounted for only 10.3 percent of GDP at that time.

India's new leaders sought to use the power of the state to direct economic growth and reduce widespread poverty. The public sector came to dominate heavy industry, transportation, and telecommunications. The private sector produced most consumer goods but was controlled directly by a variety of government regulations and financial institutions that provided major financing for large private-sector projects. Government emphasized self-sufficiency rather than foreign trade and imposed strict controls on imports and exports. In the 1950s, there was steady economic growth, but results in the 1960s and 1970s were less encouraging.

Beginning in the late 1970s, successive Indian governments sought to reduce state control of the economy. Progress toward that goal was slow but steady, and many analysts attributed the stronger growth of the 1980s to those efforts. In the late 1980s, however, India relied on foreign borrowing to finance development plans to a greater extent than before. As a result, when the price of oil rose sharply in August 1990, the nation faced a balance of payments crisis. The need for emergency loans led the government to make a greater commitment to economic liberalization than it had up to this time. In the early 1990s, India's postindependence development pattern of strong centralized planning, regulation and control of private enterprise, state ownership of many large units of production, trade protectionism, and strict limits on foreign capital was increasingly questioned not only by policy makers but also by most of the intelligentsia.

As India moved into the mid-1990s, the economic outlook was mixed. Most analysts believed that economic liberalization would continue, although there was disagreement about the speed and scale of the measures that would be implemented. It seemed likely that India would come close to or equal the relatively impressive rate of economic growth attained in the 1980s, but that the poorest sections of the population might not benefit.

At independence the economy was predominantly agrarian. Most of the population was employed in agriculture, and most of those people were very poor, existing by cropping their own small plots or supplying labor to other farms. Landownership, land rental, and sharecropping rights were complex, involving layers of intermediaries (see Land Use, ch. 7). Moreover, the structural economic problems inherited at independence were exacerbated by the costs associated with the partition of British India, which had resulted in about 12 million to 14 million refugees fleeing past each other across the new borders between India and Pakistan (see

National Integration, ch. 1). The settlement of refugees was a considerable financial strain. Partition also divided complementary economic zones. Under the British, jute and cotton were grown in the eastern part of Bengal, the area that became East Pakistan (after 1971, Bangladesh), but processing took place mostly in the western part of Bengal, which became the Indian state of West Bengal in 1947. As a result, after independence India had to employ land previously used for food production to cultivate cotton and jute for its mills.

India's leaders--especially the first prime minister, Jawaharlal Nehru, who introduced the five-year plans--agreed that strong economic growth and measures to increase incomes and consumption among the poorest groups were necessary goals for the new nation. Government was assigned an important role in this process, and since 1951 a series of plans have guided the country's economic development. Although there was considerable growth in the 1950s, the long-term rates of growth were less positive than India's politicians desired and less than those of many other Asian countries. From FY 1951 to FY 1979, the economy grew at an average rate of about 3.1 percent a year in constant prices, or at an annual rate of 1.0 percent per capita. During this period, industry grew at an average rate of 4.5 percent a year, compared with an annual average of 3.0 percent for agriculture. Many factors contributed to the slowdown of the economy after the mid-1960s, but economists differ over the relative importance of those factors. Structural deficiencies, such as the need for institutional changes in agriculture and the inefficiency of much of the industrial sector, also contributed to economic stagnation. Wars with China in 1962 and with Pakistan in 1965 and 1971; a flood of refugees from East Pakistan in 1971; droughts in 1965, 1966, 1971, and 1972; currency devaluation in 1966; and the first world oil crisis, in 1973-74, all jolted the economy.

The rate of growth improved in the 1980s. From FY 1980 to FY 1989, the economy grew at an annual rate of 5.5 percent, or 3.3 percent on a per capita basis. Industry grew at an annual rate of 6.6 percent and agriculture at a rate of 3.6 percent. A high rate of investment was a major factor in improved economic growth. Investment went from about 19 percent of GDP in the early 1970s to nearly 25 percent in the early 1980s. India, however, required a higher rate of investment to attain comparable economic growth than did most other low-income developing countries, indicating a lower rate of return on investments. Part of the adverse Indian experience was explained by investment in large, long-gestating, capital-intensive projects, such as electric power, irrigation, and infrastructure. However, delayed completions, cost overruns, and under-use of capacity were contributing factors.

Private savings financed most of India's investment, but by the mid-1980s further growth in private savings was difficult because they were already at quite a high level. As a result, during the late 1980s India relied increasingly on borrowing from foreign sources. This trend led to a balance of payments crisis in 1990; in order to receive new loans, the government had no choice but to agree to further measures of economic liberalization. This commitment to economic reform was reaffirmed by the government that came to power in June 1991.

India's primary sector, including agriculture, forestry, fishing, mining, and quarrying, accounted for 32.8 percent of GDP in FY 1991. The size of the agricultural sector and its vulnerability to the vagaries of the monsoon cause relatively large fluctuations in the sector's contribution to GDP from one year to another.

In FY 1991, the contribution to GDP of industry, including manufacturing, construction, and utilities, was 27.4 percent; services, including trade, transportation, communications, real estate and finance, and public- and private-sector services, contributed 39.8 percent. The steady increase in the proportion of services in the national economy reflects increased market-determined processes, such as the spread of rural banking, and government activities, such as defense spending.

Despite a sometimes disappointing rate of growth, the Indian economy was transformed between 1947 and the early 1990s. The number of kilowatt-hours of electricity generated, for example, increased more than fiftyfold. Steel production rose from 1.5 million tons a year to 14.7 million tons a year. The country produced space satellites and nuclear-power plants, and its scientists and engineers produced an atomic explosive device. Life expectancy increased from twenty-seven years to fifty-nine years. Although the population increased by 485 million between 1951 and 1991, the availability of food grains per capita rose from 395 grams per day in FY 1950 to 466 grams in FY 1992.

However, considerable dualism remains in the Indian economy. Officials and economists make an important distinction between the formal and informal sectors of the economy. The informal, or unorganized, economy is largely rural and encompasses farming, fishing, forestry, and cottage industries. It also includes petty vendors and some small-scale mechanized industry in both rural and urban areas. The bulk of the population is employed in the informal economy, which contributes more than 50 percent of GDP. The formal economy consists of large units in the modern sector for which statistical data are relatively good. The modern sector includes large-scale manufacturing and mining, major financial and commercial businesses, and such public-sector enterprises as railroads, telecommunications, utilities, and government itself.

The greatest disappointment of economic development is the failure to reduce more substantially India's widespread poverty. Studies have suggested that income distribution changed little between independence and the early 1990s, although it is possible that the poorer half of the population improved its position slightly. Official estimates of the proportion of the population that lives below the poverty line tend to vary sharply from year to year because adverse economic conditions, especially rises in food prices, are capable of lowering the standard of living of many families who normally live just above the subsistence level. The Indian government's poverty line is based on an income sufficient to ensure access to minimum nutritional standards, and even most persons above the poverty line have low levels of consumption compared with much of the world.

Estimates in the late 1970s put the number of people who lived in poverty at 300 million, or nearly 50 percent of the population at the time. Poverty was reduced during the 1980s, and in FY 1989 it was estimated that about 26 percent of the population, or 220 million people, lived below the poverty line. Slower economic growth and higher inflation in FY 1990 and FY 1991 reversed this trend. In FY 1991, it was estimated that 332 million people, or 38 percent of the population, lived below the poverty line.

Farmers and other rural residents make up the large majority of India's poor. Some own very small amounts of land while others are field hands, seminomadic shepherds, or migrant workers. The urban poor include many construction workers

and petty vendors. The bulk of the poor work, but low productivity and intermittent employment keep incomes low. Poverty is most prevalent in the states of Orissa, Bihar, Uttar Pradesh, and Madhya Pradesh, and least prevalent in Haryana, Punjab, Himachal Pradesh, and Jammu and Kashmir.

By the early 1990s, economic changes led to the growth in the number of Indians with significant economic resources. About 10 million Indians are considered upper class, and roughly 300 million are part of the rapidly increasing middle class. Typical middle-class occupations include owning a small business or being a corporate executive, lawyer, physician, white-collar worker, or land-owning farmer. In the 1980s, the growth of the middle class was reflected in the increased consumption of consumer durables, such as televisions, refrigerators, motorcycles, and automobiles. In the early 1990s, domestic and foreign businesses hoped to take advantage of India's economic liberalization to increase the range of consumer products offered to this market.

Housing and the ancillary utilities of sewer and water systems lag considerably behind the population's needs. India's cities have large shantytowns built of scrap or readily available natural materials erected on whatever space is available, including sidewalks. Such dwellings lack piped water, sewerage, and electricity. The government has attempted to build housing facilities and utilities for urban development, but the efforts have fallen far short of demand. Administrative controls and other aspects of government policy have discouraged many private investors from constructing housing units.

Liberalization in the Early 1990s

Increased borrowing from foreign sources in the late 1980s, which helped fuel economic growth, led to pressure on the balance of payments. The problem came to a head in August 1990 when Iraq invaded Kuwait, and the price of oil soon doubled. In addition, many Indian workers resident in Persian Gulf states either lost their jobs or returned home out of fear for their safety, thus reducing the flow of remittances. The direct economic impact of the Persian Gulf conflict was exacerbated by domestic social and political developments. In the early 1990s, there was violence over two domestic issues: the reservation of a proportion of public-sector jobs for members of Scheduled Castes and the Hindu-Muslim conflict at Ayodhya. The central government fell in November 1990 and was succeeded by a minority government. The cumulative impact of these events shook international confidence in India's economic viability, and the country found it increasingly difficult to borrow internationally. As a result, India made various agreements with the International Monetary Fund and other organizations that included commitments to speed up liberalization.

In the early 1990s, considerable progress was made in loosening government regulations, especially in the area of foreign trade. Many restrictions on private companies were lifted, and new areas were opened to private capital. However, India remains one of the world's most tightly regulated major economies. Many powerful vested interests, including private firms that have benefited from protectionism, labor unions, and much of the bureaucracy, oppose liberalization. There is also considerable concern that liberalization will reinforce class and regional economic disparities.

The balance of payments crisis of 1990 and subsequent policy changes led to a temporary decline in the GDP growth rate, which fell from 6.9 percent in FY 1989 to 4.9 percent in FY 1990 to 1.1 percent in FY 1991. In March 1995, the estimated growth rate for FY 1994 was 5.3 percent. Inflation peaked at 17 percent in FY 1991, fell to 9.5 percent in FY 1993, and then accelerated again, reaching 11 percent in late FY 1994. This increase was attributed to a sharp increase in prices and a shortfall in such critical sectors as sugar, cotton, and oilseeds. Many analysts agree that the poor suffer most from the increased inflation rate and reduced growth rate.

Many early post independence leaders, such as Nehru, were influenced by socialist ideas and advocated government intervention to guide the economy, including state ownership of key industries. The objective was to achieve high and balanced economic development in the general interest while particular programs and measures helped the poor. India's leaders also believed that industrialization was the key to economic development. This belief was all the more convincing in India because of the country's large size, substantial natural resources, and desire to develop its own defense industries.

The Industrial Policy Resolution of 1948 gave government a monopoly in armaments, atomic energy, and railroads, and exclusive rights to develop minerals, the iron and steel industries, aircraft manufacturing, shipbuilding, and manufacturing of telephone and telegraph equipment. Private companies operating in those fields were guaranteed at least ten years more of ownership before the government could take them over. Some still operate as private companies.

The Industrial Policy Resolution of 1956 greatly extended the preserve of government. There were seventeen industries exclusively in the public sector. The government took the lead in another twelve industries, but private companies could also engage in production. This resolution covered industries producing capital and intermediate goods. As a result, the private sector was relegated primarily to production of consumer goods. The public sector also expanded into more services. In 1956 the life insurance business was nationalized, and in 1973 the general insurance business was also acquired by the public sector. Most large commercial banks were nationalized in 1969. Over the years, the central and state governments formed agencies, and companies engaged in finance, trading, mineral exploitation, manufacturing, utilities, and transportation. The public sector was extensive and influential throughout the economy, although the value of its assets was small relative to the private sector.

Controls over prices, production, and the use of foreign exchange, which were imposed by the British during World War II, were reinstated soon after independence. The Industries (Development and Regulation) Act of 1951 and the Essential Commodities Act of 1955 (with subsequent additions) provided the legal framework for the government to extend price controls that eventually included steel, cement, drugs, nonferrous metals, chemicals, fertilizer, coal, automobiles, tires and tubes, cotton textiles, food grains, bread, butter, vegetable oils, and other commodities. By the late 1950s, controls were pervasive, regulating investment in industry, prices of many commodities, imports and exports, and the flow of foreign exchange.

Export growth was long ignored. The Government's extensive controls and pervasive licensing requirements created imbalances and structural problems in

many parts of the economy. Controls were usually imposed to correct specific problems but often without adequate consideration of their effect on other parts of the economy. For example, the government set low prices for basic foods, transportation, and other commodities and services, a policy designed to protect the living standards of the poor. However, the policy proved counterproductive when the government also limited the output of needed goods and services. Price ceilings were implemented during shortages, but the ceiling frequently contributed to black markets in those commodities and to tax evasion by black-market participants. Import controls and tariff policy stimulated local manufacturers toward production of import-substitution goods, but under conditions devoid of sufficient competition or pressure to be efficient.

Private trading and industrial conglomerates (the so-called large houses) existed under the British and continued after independence. The government viewed the conglomerates with suspicion, believing that they often manipulated markets and prices for their own profit. After independence the government instituted licensing controls on new businesses, especially in manufacturing, and on expanding capacity in existing businesses. In the 1960s, when shortages of goods were extensive, considerable criticism was leveled at traders for manipulating markets and prices. The result was the 1970 Monopolies and Restrictive Practices Act, which was designed to provide the government with additional information on the structure and investments of all firms that had assets of more than Rs200 million, to strengthen the licensing system in order to decrease the concentration of private economic power, and to place restraints on certain business practices considered contrary to the public interest. The act emphasized the government's aversion to large companies in the private sector, but critics contended that the act resulted from political motives and not from a strong case against big firms. The act and subsequent enforcement restrained private investment.

The extensive controls, the large public sector, and the many government programs contributed to a substantial growth in the administrative structure of government. The government also sought to take on many of the unemployed. The result was a swollen, inefficient bureaucracy that took inordinate amounts of time to process applications and forms. Business leaders complained that they spent more time getting government approval than running their companies. Many observers also reported extensive corruption in the huge bureaucracy. One consequence was the development of a large underground economy in small-scale enterprises and the services sector.

India's current economic reforms began in 1985 when the government abolished some of its licensing regulations and other competition-inhibiting controls. Since 1991 more "new economic policies" or reforms have been introduced. Reforms include currency devaluations and making currency partially convertible, reduced quantitative restrictions on imports, reduced import duties on capital goods, decreases in subsidies, liberalized interest rates, abolition of licenses for most industries, the sale of shares in selected public enterprises, and tax reforms. Although many observers welcomed these changes and attributed the faster growth rate of the economy in the late 1980s to them, others feared that these changes would create more problems than they solved. The growing dependence of the economy on imports, greater vulnerability of its balance of payments, reliance on debt, and the consequent susceptibility to outside pressures on economic policy

directions caused concern. The increase in consumerism and the display of conspicuous wealth by the elite exacerbated these fears.

The pace of liberalization increased after 1991. By the mid-1990s, the number of sectors reserved for public ownership was slashed, and private-sector investment was encouraged in areas such as energy, steel, oil refining and exploration, road building, air transportation, and telecommunications. An area still closed to the private sector in the mid-1990s was defense industry. Foreign-exchange regulations were liberalized, foreign investment was encouraged, and import regulations were simplified. The average import-weighted tariff was reduced from 87 percent in FY 1991 to 33 percent in FY 1994. Despite these changes, the economy remained highly regulated by international standards. The import of many consumer goods was banned, and the production of 838 items, mostly consumer goods, was reserved for companies with total investment of less than Rs6 million. Although the government had sold off minority stakes in public-sector companies, it had not in 1995 given up control of any enterprises, nor had any of the loss-making public companies been closed down. Moreover, although import duties had been lowered substantially, they were still high compared to most other countries.

Political successes in the mid-1990s by nationalist-oriented political parties led to some backlash against foreign investment in some parts of India. In early 1995, official charges of serving adulterated products were made against a KFC outlet in Bangalore, and Pepsi-Cola products were smashed and advertisements defaced in New Delhi. The most serious backlash occurred in Maharashtra in August 1995 when the Bharatiya Janata Party (BJP--Indian People's Party)-led state government halted construction of a US$2.8 million 2,015-megawatt gas-fired electric-power plant being built near Bombay (Mumbai in the Marathi language) by another United States company, Enron Corporation.

The government has initiated, sustained, and refined many programs since independence to help the poor attain self sufficiency in food production. Probably the most important initiative has been the supply of basic commodities, particularly food at controlled prices, available throughout the country. The poor spend about 80 percent of their income on food while the rest of the population spends more than 60 percent. The price of food is a major determinant of wage scales. Often when food prices rise sharply, rioting and looting follow. Until the late 1970s, the government frequently had difficulty obtaining adequate grain supplies in years of poor harvests. During those times, states with surpluses of grain were cordoned off to force partial sales to public agencies and to keep private traders from shipping grain to deficit areas to secure very high prices; state governments in surplus-grain areas were often less than cooperative. After the late 1970s, the central government, by holding reserve stocks and importing grain adequately and early, maintained sufficient supplies to meet the increased demand during drought years. It also provided more remunerative prices to farmers.

In rural areas, the government has undertaken programs to mitigate the worst effects of adverse monsoon rainfall, which affects not only farmers but village artisans and traders when the price of grain rises. The government has supplied water by financing well digging and, since the early 1980s, by power-assisted well drilling; rescinded land taxes for drought areas; tried to maintain stable food prices; and provided food through a food-for-work program. The actual work accomplished through food-for-work programs is often a secondary consideration, but useful

projects sometimes result. Employment is offered at a low daily wage, usually paid in grain, the rationale being that only the truly needy will take jobs at such low pay.

In the 1980s and early 1990s, Indian government programs attempted to provide basic needs at stable, low prices; to increase income through pricing and regulations, such as supplying water from irrigation works, fertilizer, and other inputs; to foster location of industry in backward areas; to increase access to basic social services, such as education, health, and potable water supply; and to help needy groups and deprived areas. The total money spent on such programs for the poor was not discernible from the budget data, but probably exceeded 10 percent of planned budget outlays.

India has had a number of antipoverty programs since the early 1960s. These include, among others, the National Rural Employment Programme and the Rural Landless Employment Guarantee Programme. The National Rural Employment Programme evolved in FY 1980 from the earlier Food for Work Programme to use unemployed and underemployed workers to build productive community assets. The Rural Landless Employment Guarantee Programme was instituted in FY 1983 to address the plight of the hard-core rural poor by expanding employment opportunities and building the rural infrastructure as a means of encouraging rapid economic growth. There were many problems with the implementation of these and otherschemes, but observers credit them with helping reduce poverty. To improve the effectiveness of the National Rural Employment Programme, in 1989 it was combined with the Rural Landless Employment Guarantee Programme and renamed Jawahar Rozgar Yojana, or Jawahar Employment Plan.

State governments are important participants in antipoverty programs. The constitution assigns responsibility to the states in a number of matters, including ownership, redistribution, improvement, and taxation of land. State governments implement most central government programs concerned with land reform and the situation of small landless farmers. The central government tries to establish programs and norms among the states and union territories, but implementation has often remained at the lower bureaucratic levels. In some matters concerning subsoil rights and irrigation projects, the Central Government exerts political and financial leverage to obtain its objectives, but the states sometimes modify or retard the impact of Central Government policies and programs.

Development Planning

Planning in India dates back to the 1930s. Even before independence, the colonial government had established a planning board that lasted from 1944 to 1946. Private industrialists and economists published three development plans in 1944. India's leaders adopted the principle of formal economic planning soon after independence as an effective way to intervene in the economy to foster growth and social justice.

The Planning Commission was established in 1950. Responsible only to the prime minister, the commission is independent of the cabinet. The prime minister is chairperson of the commission, and the minister of state with independent charge for planning and program implementation serves as deputy chairperson. A staff drafts national plans under the guidance of the commission; draft plans are presented for approval to the National Development Council, which consists of the Planning

Commission and the chief ministers of the states. The council can make changes in the draft plan. After council approval, the draft is presented to the cabinet and subsequently to Parliament, whose approval makes the plan an operating document for central and state governments.

The First Five-Year Plan (FY 1951-55) attempted to stimulate balanced economic development while correcting imbalances caused by World War II and partition. Agriculture, including projects that combined irrigation and power generation, received priority. By contrast, the Second Five-Year Plan (FY 1956-60) emphasized industrialization, particularly basic, heavy industries in the public sector, and improvement of the economic infrastructure. The plan also stressed social goals, such as more equal distribution of income and extension of the benefits of economic development to the large number of disadvantaged people. The Third Five-Year Plan (FY 1961-65) aimed at a substantial rise in national and per capita income while expanding the industrial base and rectifying the neglect of agriculture in the previous plan. The third plan called for national income to grow at a rate of more than 5 percent a year; self-sufficiency in food grains was anticipated in the mid-1960s.

Economic difficulties disrupted the planning process in the mid-1960s. In 1962, when a brief war was fought with China on the Himalayan frontier, agricultural output was stagnating, industrial production was considerably below expectations, and the economy was growing at about half of the planned rate. Defense expenditures increased sharply, and the increased foreign aid needed to maintain development expenditures eventually provided 28 percent of public development spending. Midway through the third plan, it was clear that its goals could not be achieved. Food prices rose in 1963, causing rioting and looting of grain warehouses in 1964. War with Pakistan in 1965 sharply reduced the foreign aid available. Successive severe droughts in 1965 and 1966 further disrupted the economy and planning. Three annual plans guided development between FY 1966 and FY 1968 while plan policies and strategies were reevaluated. Immediate attention centered on increasing agricultural growth, stimulating exports, and searching for efficient uses of industrial assets. Agriculture was to be expanded, largely through the supply of inputs to take advantage of new high-yield seeds becoming available for food grains. The rupee was substantially devalued in 1966, and export incentives were adjusted to promote exports. Controls affecting industry were simplified, and greater reliance was placed on the price mechanism to achieve industrial efficiency.

The Fourth Five-Year Plan (FY 1969-73) called for a 24 percent increase over the third plan in real terms of public development expenditures. The public sector accounted for 60 percent of plan expenditures, and foreign aid contributed 13 percent of plan financing. Agriculture, including irrigation, received 23 percent of public outlays; the rest was mostly spent on electric power, industry, and transportation. Although the plan projected national income growth at 5.7 percent a year, the realized rate was only 3.3 percent.

The Fifth Five-Year Plan (FY 1974-78) was drafted in late 1973 when crude oil prices were rising rapidly; the rising prices quickly forced a series of revisions. The plan was subsequently approved in late 1976 but was terminated at the end of FY 1977 because a new government wanted different priorities and programs. The fifth plan was in effect only one year, although it provided some guidance to

investments throughout the five-year period. The economy operated under annual plans in FY 1978 and FY 1979.

The Sixth Five-Year Plan (FY 1980-84) was intended to be flexible and was based on the principle of annual "rolling" plans. It called for development expenditures of nearly Rs1.9 trillion (in FY 1979 prices), of which 90 % would be financed from domestic sources, 57 % of which would come from the public sector. Public-sector development spending would be concentrated in energy (29%); agriculture and irrigation (24%); industry including mining (16%); transportation (16%); and social services (14%). In practice, slightly more was spent on social services at the expense of transportation and energy. The plan called for GDP growth to increase by 5.1 % a year, a target that was surpassed by 0.3%. A major objective of the plan was to increase employment, especially in rural areas, in order to reduce the level of poverty. Poor people were given cows, bullock carts, and handlooms; however, subsequent studies indicated that the income of only about 10 percent of the poor rose above the poverty level.

The Seventh Five-Year Plan (FY 1985-89) envisioned a greater emphasis on the allocation of resources to energy and social spending at the expense of industry and agriculture. In practice, the main increase was in transportation and communications, which took up 17 % of public-sector expenditure during this period. Total spending was targeted at nearly Rs3.9 trillion, of which 94 percent would be financed from domestic resources, including 48 % from the public sector. The planners assumed that public savings would increase and help finance government spending. In practice that increase did not occur; instead, the government relied on foreign borrowing for a greater share of resources than expected.

The schedule for the Eighth Five-Year Plan (FY 1992-96) was affected by changes of government and by growing uncertainty over what role planning could usefully perform in a more liberal economy. Two annual plans were in effect in FY 1990 and FY 1991. The eighth plan was finally launched in April 1992 and emphasized market-based policy reform rather than quantitative targets. Total spending was planned at Rs8.7 trillion, of which 94 percent would be financed from domestic resources, 45 percent of which would come from the public sector. The eighth plan included three general goals. First, it sought to cut back the public sector by selling off failing and inessential industries while encouraging private investment in such sectors as power, steel, and transport. Second, it proposed that agriculture and rural development have priority. Third, it sought to renew the assault on illiteracy and improve other aspects of social infrastructure, such as the provision of fresh drinking water.

Government documents issued in 1992 indicated that GDP growth was expected to increase from around 5 % a year during the seventh plan to 5.6 % a year during the eighth plan. However, in 1994 economists expected annual growth to be around 4 % during the period of the eighth plan.

Four decades of planning show that India's economy, a mix of public and private enterprise, is too large and diverse to be wholly predictable or responsive to directions of the planning authorities. Actual results usually differ in important respects from plan targets. Major shortcomings include insufficient improvement in income distribution and alleviation of poverty, delayed completions and cost overruns on many public-sector projects, and far too small a return on many public-

sector investments. Even though the plans have turned out to be less effective than expected, they help guide investment priorities, policy recommendations, and financial mobilization.

Finance

The early governments after independence operated with only modest budget deficits, but in the 1970s and 1980s the amount of the budget deficit as a proportion of GDP increased gradually, reaching 8.4 percent in FY 1990. Following economic reforms, the deficit declined to 6.7 percent by FY 1994. More than 80 percent of the public debt was financed from domestic sources, but the proportion of foreign debt rose steadily in the late 1980s. However, although foreign aid to India was substantial, it was much lower than most other developing countries when calculated on a per capita basis. Banking and credit were dominated by government-controlled institutions, but the importance of the private sector in financial services was increasing slowly.

Budget

India's public finance system follows the British pattern. The constitution establishes the supremacy of the bicameral Parliament--specifically the Lok Sabha (House of the People)--in financial matters. No central government taxes are levied and no government expenditure from public funds disbursed without an act of Parliament, which also scrutinizes and audits all government accounts to ensure that expenditures are legally authorized and properly spent. Proposals for taxation or expenditures, however, may be initiated only within the Council of Ministers--specifically by the minister of finance. The minister of finance is required to submit to Parliament, usually on the last day of February, a financial statement detailing the estimated receipts and expenditures of the central government for the forthcoming fiscal year and a financial review of the current fiscal year.

The Lok Sabha has one month to review and modify the government's budget proposals. If by April 1, the beginning of the fiscal year, the parliamentary discussion of the budget has not been completed, the budget as proposed by the minister of finance goes into effect, subject to retroactive modifications after the parliamentary review. On completion of its budget discussions, the Lok Sabha passes the annual appropriations act, authorizing the executive to spend money, and the finance act, authorizing the executive to impose and collect taxes. Supplemental requests for funds are presented during the course of the fiscal year to cover emergencies, such as war or other catastrophes. The bills are forwarded to the Rajya Sabha (Council of States--the upper house of Parliament) for comment. The Lok Sabha, however, is not bound by the comments, and the Rajya Sabha cannot delay passage of money bills. When signed by the president, the bills become law. The Lok Sabha cannot increase the request for funds submitted by the executive, nor can it authorize new expenditures. Taxes passed by Parliament may be retroactive.

Each state government maintains its own budget, prepared by the state's minister of finance in consultation with appropriate officials of the central government. Primary control over state finances rests with the state legislature in the same manner as at the central government level. State finances are supervised by the central government, however, through the comptroller and the auditor general; the latter reviews state government accounts annually and reports the findings to the

appropriate state governor for submission to the state's legislature. The central and state budgets consist of a budget for current expenditures, known as the budget on revenue account, and a capital budget for economic and social development expenditures.

The national railroad (Indian Railways), the largest public-sector enterprise, and the Department of Posts and Telegraph have their own budgets, funds, and accounts (see Railroads; Telecommunications, this ch.). The appropriations and disbursements under their budgets are subject to the same form of parliamentary and audit control as other government revenues and expenditures. Dividends accrue to the central government, and deficits are subsidized by it, a pattern that holds true also, directly or indirectly, for other government enterprises.

During the eighth plan, the states were expected to spend nearly Rs1.9 trillion, or 42.9 percent of the public outlay. Because of its greater revenue sources, the central government shared with the states its receipts from personal income taxes and certain excise taxes. It also collected other minor taxes, the total proceeds of which were transferred to the states. The division of the shared taxes is determined by financial commissions established by the president, usually at five-year intervals. In the early 1990s, the states received 75 % of the revenue collected from income taxes and around 43 % of the excise taxes. The central government also provided the states with grants to meet their commitments. In FY 1991, these grants and the states' share of taxes collected by the central government amounted to 40.9 % of the total revenue of state governments.

The states' share of total public revenue collected declined from 48 percent in FY 1955 to about 42 percent in the late 1970s, and to about 33 percent in the early 1990s. An important cause of the decline was the diminished importance of the land revenue tax, which traditionally had been the main direct tax on agriculture. This tax declined from 8 percent of all state and central tax revenues in FY 1950 to less than 1 percent in the 1980s and early 1990s. The states have jurisdiction over taxes levied on land and agricultural income, and vested interests exerted pressure on the states not to raise agricultural taxation. As a result, in the 1980s and early 1990s agriculture largely escaped significant taxation, although there has long been nationwide discussion about increasing land taxes or instituting some sort of tax on incomes of the richer portion of the farm community. The share of direct taxes in GDP increased from 2.1 % in FY 1991 to 2.8 % in FY 1994.

Since independence government has favored more politically palatable indirect taxes--customs and excise duties--over direct taxes. In the 1980s and early 1990s, indirect taxes accounted for around 75 % of all tax revenue collected by the central government. State governments relied heavily on sales taxes. Overall, indirect taxes accounted for 84.1 percent of all government tax revenues in FY 1990. Total government tax revenues amounted to 17.1 percent of GDP in that year, up from 9.0 % in FY 1960, 11.5 % in FY 1970, and 14.9 percent in FY 1980. In FY 1990, the share of the public sector in GDP was 26.4 percent. In terms of rupees (in current prices), total government income rose from Rs259.8 billion in FY 1981 to Rs1.3 trillion in FY 1992.

Comprehensive tax reforms were implemented with the FY 1985 budget. Corporate tax was cut, income taxes simplified and lowered for high-income groups, and wealth taxes reduced. Tax receipts in FY 1985 rose by 20 percent over FY 1984

as a result of tightened enforcement, and taxpayers responded to lower taxes with greater compliance. In FY 1986, another major change was made with the launching of a long-term program of tax reform designed to eliminate annual changes, which had produced uncertainty. However, in FY 1987, when the monsoon failed, the government raised taxes on higher income groups. The emergency budget of FY 1991, designed to cope with the nation's 1990 balance of payments crisis, increased indirect and corporate taxes, but the budgets for FY 1992 and FY 1993 reflected the policy of economic liberalization. They reduced and simplified direct taxes, removed the wealth tax from financial investments, and indexed the capital gains tax. The highest marginal rate of personal income tax was 42.5 percent in FY 1992.

Historically, the Indian government has pursued a cautious policy with regard to financing budgets, allowing only small amounts of deficit spending. Budget deficits increased in the late 1980s, and the necessity of financing these deficits from foreign borrowing contributed to the 1990 balance of payments crisis. The central government budget deficit reached 8.4 percent of GDP in FY 1990, up from 2.6 percent in FY 1970, 5.9 percent in FY 1980, and 7.8 percent in FY 1989. The deficit was cut to 5.9 percent in FY 1991 and 5.2 percent in FY 1992, but widened to 7.4 percent in FY 1993. It was expected to recede to 6.2 percent in FY 1995.

The central government's budget deficits during the 1980s increased the total public debt rapidly until in FY 1991 it stood at Rs3.9 trillion. The bulk of this debt was owed to citizens and domestic institutions and firms, particularly the central bank. Readers of Indian monetary statistics should be alert to the use of the terms *lakh* and *crore,*which are used to express higher numbers.

Monetary Process

The basic elements of the financial system were established during British rule (1757-1947). The national currency, the rupee, had long been used domestically before independence and even circulated abroad, for example, in the Persian Gulf region. Foreign banks, mainly British and including some from such other parts of the empire as Hong Kong, provided banking and other services. The Reserve Bank of India was formed in 1935 as a private bank, but it also carried out some central bank functions. This colonial banking system, however, was geared to foreign trade and short-term loans. Banking was concentrated in the major port cities.

The Reserve Bank was nationalized on January 1, 1949, and given broader powers. It was the bank of issue for all rupee notes higher than the one-rupee denomination; the agent of the Ministry of Finance in controlling foreign exchange; and the banker to the central and state governments, commercial banks, state cooperative banks, and other financial institutions. The Reserve Bank formulated and administered monetary policy to promote stable prices and higher production. It was given increasing responsibilities for the development of banking and credit and to coordinate banking and credit with the five-year plans. The Reserve Bank had a number of tools with which to affect commercial bank credit.

After independence the government sought to adapt the banking system to promote development and formed a number of specialized institutions to provide credit to industry, agriculture, and small businesses. Banking penetrated rural areas, and agricultural and industrial credit cooperatives were promoted. Deposit insurance and a system of postal savings banks and offices fostered use by small savers.

Subsidized credit was provided to particular groups or activities considered in need and which deserved such help. A credit guarantee corporation covered loans by commercial banks to small traders, transport operators, self-employed persons, and other borrowers not otherwise effectively covered by major institutions. The system effectively reached all kinds of savers and provided credit to many different customers.

The government nationalized fourteen major private commercial banks in 1969 and six more in 1980. Nationalization forced commercial banks increasingly to meet the credit requirements of the weaker sections of the nation and to eliminate monopolization by vested interests of large industry, trade, and agriculture.

The banking system expanded rapidly after nationalization. The number of bank branches, for instance, increased from about 7,000 in 1969 to more than 60,000 in 1994, two-thirds of which were in rural areas. The deposit base rose from Rs50 billion in 1969 to around Rs3.5 trillion in 1994. Nevertheless, currency accounted for well over 50 percent of all the money supply circulating among the public. In 1992 the nationalized banks held 93 percent of all deposits.

In FY 1990, twenty-three foreign banks operated in India. The most important were ANZ Grindlays Bank, Citibank, the Hongkong and Shanghai Banking Corporation, and Standard Chartered Bank.

Public-sector banks are required to reserve their lending based on 40 percent of their deposits for priority sectors, especially agriculture, at favorable rates. In addition, 35 percent of their deposits have to be held in liquid form to satisfy statutory liquidity requirements, and 15 percent are needed to meet the cash reserve requirements of the Reserve Bank. Both these percentages represent an easing of earlier requirements, but only a small proportion of public-sector banks' resources can be deployed freely. In late 1994, the rate of interest on bank loans was deregulated, but deposit rates were still subject to ceilings.

More than 50 percent of bank lending is to the government sector. With the onset of economic reform, India's banks were experiencing major financial losses as the result of low productivity, bad loans, and poor capitalization. Seeking to stabilize the banking industry, the Reserve Bank of India developed new reporting formats and has initiated takeovers and mergers of smaller banks that were operating with financial losses.

India has a rapidly expanding stock market that in 1993 listed around 5,000 companies in fourteen stock exchanges, although only the stocks of about 400 of these companies were actively traded. Financial institutions and government bodies controlled an estimated 45 percent of all listed capital. In April 1992, the Bombay stock market, the nation's largest with a market capital of US$65.1 billion, collapsed, in part because of revelations about financial malpractice amounting to US$2 billion. Afterward, the Securities and Exchange Board of India, the government's capital market regulator, implemented reforms designed to strengthen investor confidence in the stock market. In the mid-1990s, foreign institutional investors took greater interest than ever before in the Indian stock markets, investing around US$2 billion in FY 1993 alone.

Despite increases in energy costs and other pressures from the world economy, for most of the period since independence India has not experienced severe inflation. The underlying average rate of inflation, however, has tended to rise. Consumer prices rose at an annual average of 2.1 percent in the 1950s, 6.3 percent in the 1960s, 7.8 percent in the 1970s, and 8.5 percent in the 1980s.

Three factors lay behind India's relative price stability. First, the government has intervened, either directly or indirectly, to keep stable the price of certain staples, including wheat, rice, cloth, and sugar. Second, monetary regulation has restricted growth in the money supply. Third, the overall influence of the labor unions on wages has been small because of the weakness of the unions in India's labor-surplus economy.

Foreign Economic Relations

Since independence India has had to draw on foreign investments to finance part of its economic development. Although the government has attempted to be as self-reliant as possible, the absolute amount of foreign aid received has been high. In per capita terms, however, it has been much less than most other developing countries receive.

In August 1958, the World Bank organized the Aid-to-India Consortium, consisting of the World Bank Group and thirteen countries: Austria, Belgium, Britain, Canada, Denmark, the Federal Republic of Germany (at that time, West Germany), France, Italy, Japan, the Netherlands, Norway, Sweden, and the United States. The consortium was formed to coordinate aid and establish priorities among India's major sources of foreign assistance and to simplify India's requests for aid based on its plans for development. Consortium aid was bilateral government-to-government aid from the thirteen consortium countries, and almost all of the aid, including that from the World Bank Group, was for specific projects judged to be valuable contributions to India's development. Of the Rs630 billion in aid authorized by all aid donors between FY 1974 and FY 1989, more than 60 percent was provided by the consortium.

Collectively, the Western nations have donated a substantial amount of aid to India. In 1980 this aid totaled nearly US$1.5 billion and reached US$2.5 billion in 1990. In 1992 Western aid reached a new height: US$3.9 billion, which represented 49.8 percent of all Western multilateral and bilateral aid given to South Asian nations that year. The largest bilateral donor is Japan. Between 1984 and 1993, Japan's official development assistance grants to India totaled US$337 million. Much greater than the outright grants has been Japan's large-scale loan program, which supports economic infrastructure development (power plants and delivery systems, and road improvement) and environmental protection. Between 1984 and 1993, Japanese loans to India totaled nearly US$2.4 billion. A ¥125 billion (US$1.2 billion) loan financing major projects was granted in December 1994, bringing Japanese loans to India since 1957 to a total of ¥1.6 trillion.

United States assistance was significant in the late 1950s and 1960s but, because of strained India-United States relations, fell off sharply in the 1970s (see United States, ch. 9). The United States accounted for 8.6 percent of all of the aid India received from independence through FY 1988, but for only 0.7 percent in FY 1989 and 0.6 percent in FY 1990. United States aid to India remained relatively

insignificant in the early 1990s when it took the form of grants for food aid and consultants in a wide variety of economic growth areas, such as computers, steel, telecommunications, and energy production. In FY 1993, actual United States obligations through the United States Agency for International Development totaled almost US$161 million. The bulk of this aid was provided as United States Public Law 480 food aid grants with lesser amounts for development assistance (including energy and the environment, population control, child survival, acquired immune deficiency syndrome (AIDS) prevention, and economic growth) and housing guaranty loans. Germany and Britain also have substantial aid-to-India programs.

Among countries not in the World Bank consortium, the Soviet Union was the most important contributor, providing more than 16 percent of all aid between 1947 and FY 1988. Since 1991, however, Russia has provided little aid.

About 90 percent of all aid received by India has been in the form of loans. Aid disbursements from all providers for FY 1990 were Rs67 billion.

India maintains a small but well-established foreign aid program of its own. In FY 1990, Rs1.6 billion of aid was authorized, of which Rs582 million was for Bhutan and Rs578 million for Nepal. Bangladesh and Vietnam received significant amounts of aid during the 1980s, but, as the result of changing world political and economic conditions, these programs were small by the early 1990s.

Trade

Despite its size, India plays a relatively small role in the world economy. Until the 1980s, the government did not make exports a priority. In the 1950s and 1960s, Indian officials believed that trade was biased against developing countries and that prospects for exports were severely limited. Therefore, the government aimed at self-sufficiency in most products through import substitution, with exports covering the cost of residual import requirements. Foreign trade was subjected to strict government controls, which consisted of an all-inclusive system of foreign exchange and direct controls over imports and exports. As a result, India's share of world trade shrank from 2.4 percent in FY 1951 to 0.4 percent in FY 1980. Largely because of oil price increases in the 1970s, which contributed to balance of payments difficulties, governments in the 1970s and 1980s placed more emphasis on the promotion of exports. They hoped exports would provide foreign exchange needed for the import of oil and high-technology capital goods. Nevertheless, in the early 1990s India's share of world trade stood at only 0.5 percent. In FY 1992, imports accounted for 9.3 percent of GDP and exports for 7.7 percent of GDP.

Based on trends throughout the 1980s and early 1990s, it appears likely that the balance of trade will remain negative for the foreseeable future (see table 19, Appendix). The 1979 increase in the price of oil produced a Rs58.4 billion deficit in FY 1980, close to 5 percent of GNP. The deficit was barely reduced in nominal rupee terms over the next five years, although it improved considerably as a share of GNP (to 2.3 percent in FY 1984) and in dollar terms (from US$7.4 billion in FY 1980 to US$4.3 billion in FY 1984). Pressure on the balance of trade continued through the late 1980s and worsened with the attempted annexation of Kuwait by Iraq in August 1990, which led to a temporary but sharp increase in the price of oil. In FY 1990, the balance of trade deficit reached a record level in rupees (Rs106.5 billion) and in dollars (US$6 billion). Import controls and devaluation of the rupee allowed

the trade deficit to fall to US$1.6 billion in FY 1991. However, it widened to US$3.3 billion in FY 1992 before falling to an estimated US$1 billion in FY 1993. However, one optimistic sign, noted by India's minister of finance in March 1995, was that exports had come to finance 90 percent of India's imports, compared with only 60 percent in the mid-1980s.

No one product dominates India's exports. In FY 1993, handicrafts, gems, and jewelry formed the most important sector and accounted for an estimated US$4.9 billion (22.2 percent) of exports. Since the early 1990s, India has become the world's largest processor of diamonds (imported in the rough from South Africa and then fabricated into jewelry for export). Along with other semiprecious commodities, such as gold, India's gems and jewelry accounted for 11 percent of its foreign-exchange receipts in early 1993. Textiles and ready-made garments combined were also an important category, accounting for an estimated US$4.1 billion (18.5 percent) of exports. Other significant exports include industrial machinery, leather products, chemicals and related products.

The dominant imports are petroleum products, valued in FY 1993 at nearly US$5.8 billion, or 24.7 percent of principal imports, and capital goods, amounting to US$4.2 billion, or 21.8 percent of principal imports. Other important import categories are chemicals, dyes, plastics, pharmaceuticals, uncut precious stones, iron and steel, fertilizers, nonferrous metals, and pulp paper and paper products.

India's most important trading partners are the United States, Japan, the European Union, and nations belonging to the Organization of the Petroleum Exporting Countries (OPEC). From the 1950s until 1991, India also had close trade links with the Soviet Union, but the breakup of that nation into fifteen independent states led to a decline of trade with the region. In FY 1993, some 30 percent of all imports came from the European Union, 22.4 percent from OPEC nations, 11.7 percent from the United States, and 6.6 percent from Japan. In that same year, 26 percent of all exports were to the European Union, 18 percent to the United States, 7.8 percent to Japan, and 10.7 to the OPEC nations.

Trade and investment with the United States seemed likely to experience an upswing following a January 1995 trade mission from the United States led by Secretary of Commerce Ronald H. Brown and including top executives from twenty-six United States companies. During the weeklong visit, some US$7 billion in business deals were agreed on, mostly in the areas of infrastructure development, transportation, power and communication systems, food processing, health care services, insurance and financing projects, and automotive catalytic converters. In turn, greater access for Indian goods in United States markets was sought by Indian officials.

In February 1995, in a bid to improve commercial prospects in Southeast Asia, India signed a four-part agreement with the Association of Southeast Asian Nations (ASEAN--see Glossary). The pact covers trade, investment, science and technology, and tourism, and there are prospects for further agreements on joint ventures, banks, and civil aviation.

India's balance of payments position is closely related to the balance of trade. Foreign aid and remittances from Indians employed overseas, however, make the balance of payments more favorable than the balance of trade .

Foreign-Exchange System

The central government has wide powers to control transactions in foreign exchange. Until 1992 all foreign investments and the repatriation of foreign capital required prior approval of the government. The Foreign-Exchange Regulation Act, which governs foreign investment, rarely allowed foreign majority holdings. However, a new foreign investment policy announced in July 1991 prescribed automatic approval for foreign investments in thirty-four industries designated high priority, up to an equity limit of 51 percent. Initially the government required that a company's automatic approval must rely on matching exports and dividend repatriation, but in May 1992 this requirement was lifted, except for low-priority sectors. In 1994 foreign and nonresident Indian investors were allowed to repatriate not only their profits but also their capital. Indian exporters are also free to use their export earnings as they see fit. However, transfer of capital abroad by Indian nationals is only permitted in special circumstances, such as emigration. Foreign exchange is automatically made available for imports for which import licenses are issued.

Because foreign-exchange transactions are so tightly controlled, Indian authorities are able to manage the exchange rate, and from 1975 to 1992 the rupee was tied to a trade-weighted basket of currencies. In February 1992, the government began moves to make the rupee convertible, and in March 1993 a single floating exchange rate was implemented. In July 1995, Rs31.81 were worth US$1, compared with Rs7.86 in 1980, Rs12.37 in 1985, and Rs17.50 in 1990.

Industrial Growth :

The strong growth seen till the year 2007-08, lost steam in 2008-09 with the economy turning extremely weak since November 2008 on account of the turmoil in the global economy.

The adverse developments in the Indian industry made the industry post negative growth numbers in February 2009 of 1.2% compared to a significantly high growth of 9.5% recorded in the same month of previous year. It has been seen that the constituents of overall index, especially production in mining and manufacturing fell by 1.6% and 1.4 % respectively during the month 2009 compared to 7.9% and 9.6% posted a year ago.

Electricity sector was however seen to slow to 0.7% compared to 9.8% previously. Basic and intermediate sectors lurched below 0% level, posting a negative 0.4% and 5.4% respectively while capital goods was seen to sustain its high growth levels achieved last year maintaining above 10% growth in February 2009.

Consumer goods segment were also observed to post negative growth of 3% during February 2009 compared to positive 11.7% in the corresponding month of previous year. The growth in total consumer goods is seen to erode due to fall in the growth of consumer non durables category.

The disaggregated growth data on the manufacturing sector that included seventeen broad industry sectors showed as many as nine industry sectors in February 2009 were in the negative zone. These sectors were food products, cotton textiles, jute, textile products, paper products, leather products, metal products and

transport equipments. Six more sectors namely beverages & tobacco, wool, silk and manmade textiles basic chemicals, rubber, non metallic mineral products slowed in growth compared to that of the previous year. Only machinery and equipment and other manufacturing industries exceeded the growth posted a year ago.

Core infrastructure industries

Adverse market conditions seem to impact the six core infrastructure industries as it managed to grow at 2.2% in February 2009 as against the 7.0% growth posted in the previous year.

Growth at disaggregated levels show finished steel production inch up by 3.6% compared to the growth of 2.3% in the previous year. The laggards in the month were cement that grew at 8.3% (12.8%), petroleum refinery by 0.5% (5.8%), coal by 6.0% (11.7%) and power by 0.3%(9.6%). The only sector that posted negative was petroleum.

Inflation Trends

The wholesale price index based inflation cools further. The average inflation for February 2009 calculated on YoY basis was 3.5% and was lower than the 4.5% recorded in the previous year. The wholesale basket shows softening of fuel prices aiding to the gradual decline in inflation numbers. Some of essential items as the primary food articles and items in the manufactured category were found to get dearer causing concern.

Monetary Indicators:

In February 2009, money supply swelled by 15.9% as against 17% in the same month of previous year. Not only was there a significant rise in the borrowings by the Government by 32.0% (3.5%) up to February 2009, the commercial sector rose by 13% however remained lower than the growth of 15.7% in the previous year. Foreign exchange assets of banks eroded to the extent of 1.2% in February 2009 in contrast to the accretion by 34.9% in February 2008.

Non-monetary liabilities have shrunk by 3.8% compared to an increase of 20.6% in the last year. Aggregate deposits swelled by 16.9% compared to 18% in the previous year. Scale up in investments in government and approved securities were to the tune of 22.2% and this was little below 24.8% recorded in the previous year.

Stock Market Trends

Markets showed weakness since last year on account of series of upheavals in the economy. The Sensex continues to drag around 10K levels. The momentary upward thrusts seen in the indices are being countered by the still-negatives (indicators) in the economy. A quick recovery seems less likely in the near term, however it is also felt that with the improvement in the global economic situation stock markets would come back to the levels it has left behind.

Fiscal Management

In the penultimate month of the current fiscal the gross tax collection continues to grow at single digit from double digit growth seen in the previous year. The growth in collection up to February 2009 has been only 7% compared to 26.7% in the previous year. The state of poor tax collection seen in both the direct and indirect taxes was caused due to low profits by corporate sector and indirect tax relief by the government to aid the ailing industry and promote consumer spending. Rate of corporate tax collection has been 17.4% in February 2009 compared to 37.1% registered in the previous year and income tax collected was only 7.5% in February this year in contrast to 42.4% previously. There has been deterioration in the government finances due to large assistance by the government. The revised consolidated deficit of the centre and the states is above 10% as estimated by EAC to the PM

Foreign Trade

Exports fell flat and hence been experiencing negative growth since October 2008. The latest release of commerce ministry on merchandise trade shows exports in February 2009 slide by 21.7%. Imports were also seen to shrink by 23% in February 2009 demonstrating limited consumption in the domestic economy.

Capital Inflows

Total foreign investments have plunged due to the fact that large number of foreign
institutional investors chose the exit path mainly to park funds in instruments that are more secured. However, the country continues to attract foreign direct investments and this remain little impacted. The total foreign direct investments up to February 2009 was USD 31 billion compared to USD 25 billion in the same period of previous year

Foreign Exchange Reserves

Our current forex reserves stand at USD 249 billion and are enough to cover for 9-10 months of imports. The FII exit from security holdings is seen the main reason for the drain in the forex reserves.

Trends in the Exchange Rates

Pressure on Indian Rupee to weaken further is high due to the fact that FII outflows continue and exports are not likely to recover anytime soon. The Rupee showed gradual weakness against the USD as it progressed from 48 to a $ to 50 to a $ during last trading
sessions of the month.

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CHAPTER -7
POVERTY AND UNEMPLOYMENT

The fruits of economic growth have not benefited everyone uniformly. Some are left behind and some others are not touched by the benefits of economic growth. It is proved globally that the so-called trickle down effect does not work in all the societies and India is no exception to this. There are various reasons for this uneven development in the society. Modern economy is technology driven and not labour-intensive. High volume of high quality goods and services are produced with fewer labour hands. In short, the modern economy is not generating much employment and sometimes it displaces and replaces labour with machines and tools. The period of 1999-2000 to 2004-2005 saw rapid economic growth in the country but it has not impacted on the unemployment problem of the country. During this period, the unemployment rate remained almost same for rural males and decreased by just one percentage for urban male. On the other hand, unemployment among females increased by one percentage for urban and rural females.

Unemployment and poverty are the two major challenges that the world economy is facing at present. Unemployment leads to financial crisis and reduces the overall purchasing capacity of a nation. This in turn results in poverty followed by increasing burden of debt. Now, poverty can be described in several ways. As per the World Bank definition, poverty implies a financial condition where people are unable to maintain the minimum standard of living.

Poverty

There is no generally agreed definition of poverty. This is because, Piachaud argues, the definition of poverty is a moral question - it refers to hardship which is unacceptable. 'Poverty' may refer to:

material conditions - needing goods and services, multiple deprivation, or a low standard of living;

economic position - low income, limited resources, inequality or low social class; and

social position of the poor, through lack of entitlement, dependency or social exclusion. Conventionally, poverty is represented in two main models.

Absolute poverty is based on subsistence, a minimum standard needed to live. Seebohm Rowntree's research identified a 'poverty line' on the basis of minimum needs. The Copenhagen Declaration defines absolute poverty as "a condition characterised by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. It depends not only on income but also on access to social services."

Relative poverty is based on a comparison of poor people with others in society. Peter Townsend defines poverty as "the absence or inadequacy of those diets, amenities, standards, services and activities which are common or customary in society."

Poverty, like all need , is defined in terms of the society where it takes place: what people can eat, and where they can live, depend on the society they live in. That does not mean that it is based on a comparison with others in the same society; there are some countries where most people are poor.

Thus, poverty can be of different types like absolute poverty and relative poverty. There may be many other classifications like urban poverty, rural poverty, primary poverty, secondary poverty and many more. Whatever be the type of poverty, the basic reason has always been lack of adequate income. Here comes the role of unemployment behind poverty. Lack of employment opportunities and the consequential income disparity bring about mass poverty in most of the developing and under developed economies of the world.

Causes of poverty

The problems of poverty have been explained in many ways. *Pathological* explanations are those which attribute poverty to the characteristics or behaviour of poor people. They include:

individualistic explanations. Poor people are assumed to be inadequate, to have made bad choices, or to have chosen their lifestyle.

familial. Poverty is believed to run in families, with the transmission of inadequate behaviour from one generation to the next. (This proposition has been thoroughly researched; it is untrue)

sub-cultural views. The 'culture of poverty' suggests that poor people learn to be different, and 'adapt' to poverty. The evidence here is ambiguous, and much disputed.

Structural explanations explain poverty in terms of the society where it occurs. They include:

class-based explanations. Poverty is the result of some people's marginality in relation to the process of economic production, which limits their life-chances.

'agency' views. Poverty is attributed to the failures of public services.

inequality. Poverty is attributed to inequalities in the structure of society, which lead to denial of opportunity and perpetuation of disadvantage. Examples are the inequalities of income, wealth, race, and gender.

Measuring poverty

Because there is no agreed definition of poverty, there can be no agreed measure. Even if definitions were agreed, though, poverty would be complex and difficult to quantify. Measures of poverty have to be 'indicators', or signposts. The most commonly used measure is based on income. The World Bank, for example, uses the arbitrary

standard of $31 dollars a month ($1 a day); at this level there are nearly 1200 million poor people in the world. At $2 a day, another arbitrary line, the figure approaches three billion.

Some nations use 'budget standards', estimating the cost of a minimum basket of goods. The US defines its poverty threshold by identifying the cost of a food basket and estimating from that how much income is necessary. Others use relative measures. The European Union uses a comparative measure which sets a poverty line at 50% of the median income. (The median comes half-way up the income distribution). This means that there is more poverty where there is more inequality, or 'economic distance'.

Social science surveys have estimated the numbers of poor people in various ways. Some use budget standards; others use a 'subjective' poverty test, to see whether people identify themselves as poor. Others again have developed a 'consensual' method, where an opinion poll is used to identify what people in that society see as essential, and working from there to see who can afford that standard. A recent survey for the Joseph Rowntree Foundation estimates that on these tests a quarter of Britain's population is poor.

Unemployment

The causes of unemployment are complex. Some kinds are long term: technical unemployment happens when people's skills are made redundant. Some are medium term: cyclical unemployment happens because there is inadequate demand to keep production going. Some are short term: frictional unemployment happens because people change jobs or locations. Seasonal work, casual employment and subemployment are patterns of work which lead to people being employed only for short periods at a time.

Exclusion from the labour market takes many forms: some people can opt for early retirement, further education or domestic responsibility, and others cannot. If poor people are unemployed more, it is not just because they are more marginal in the labour market; it is also because they have fewer choices, and because people who become classified as 'unemployed' are more likely to be poor. The unemployment figures are an artefact; economic analyses which are based solely on the formal 'unemployment rate' are generally misconceived.

Sources of Unemployment

Lack of effective aggregate demand of labor is one of the principal reasons for unemployment. In the less developed economies a substantial portion of the total workforce works as surplus labor. This problem is particularly prevalent in the agricultural sector. Due to excess labor, the marginal productivity of the workforce may be zero or even negative. This excess pool of labor is the first to become unemployed during the period of economic or social crisis.

When a capitalist economy undergoes some dynamic changes in its organizational structure, it results in structural unemployment. This type of unemployment may also emerge if the lack of aggregate demand continues for a substantially long period of time. In case of frictional unemployment, workers are temporarily unemployed. There may be

cases of hidden unemployment where workers restrain themselves from working due to absence of appropriate facilities.

One-third of the country's population is still illiterate and a majority are not educated up to the age of 15 yr. Even among the educated, all do not have employable skills of the modern economy. The education system is not tuned to the changing economic scenario. The large agricultural workforce in rural areas is not sustainable with dwindling cultivable land and use of modern methods of cultivation. As a result, the rural labour is pushed into cities in search of work but they do not have any employable skills in the urban formal sector often end up doing odd jobs in urban areas. Urbanization in this country is mainly due to acute poverty in rural areas rather than due to the economic opportunities in urban areas. Further, poverty is not uniformly spread in the country. States like Orissa, Bihar and Madhya Pradesh have high level of poverty and the levels have not come down significantly in the post economic reform era. It is therefore that clear while the economic reform did bring in prosperity to the country, the benefits are not evenly distributed and some are even deprived of the benefits. It is also pertinent to understand that some of them are unable to be part of the economic reform and do not have the capacity to participate in the economic development process. Such groups need government intervention to ensure that they are not left behind in the development process and deprived of the benefits because they do not have the capacity to be part of the global economy. The government needs to develop safety nets for such groups and try to mainstream them in the development process. They need welfare measures in the form of poverty alleviation programmes to ensure that they survive if not prosper in this era of economic reform. Further, the poor are not a homogeneous population and their capacity to survive the economic reform varied from one group of poor to another. Especially, those who are below the poverty line or the poorest among the poor need more government help.

Unemployment and Poverty: the Latest Trends

It is true that unemployment and poverty are mostly common in the less developed economies. However, due to the global economic recessions, the developed economies are also facing these challenges in the recent times. The US subprime crisis and its wide spread impacts have played a major role in worsening the situation.

In India, the problems of unemployment and poverty have always been major obstacles to economic development. Underemployment and unemployment have crippled the Indian economy from time to time. Even during the period of good harvest, the Indian farmers are not employed for the entire year. Excessive population is another major problem as far as Indian economy is concerned. Regional disparity is also crucial in this context. A part of the urban workforce in India is subjected to sub-employment. Mass migration from rural to urban regions is adding to the problems of unemployment and poverty in India.

Unemployment in India & Development Programmes

Whenever there is a discussion of the Indian Economy, a common topic that comes up is that of Unemployment which has been plaguing the nation. **Unemployment** refers to a situation in which people who are able and willing to work do not get employment opportunities and jobs that match their capabilities and skills.

Structural Unemployment - India suffers from a condition of Structural unemployment in which enough jobs are not created due to insufficient productive capacity.

The National Sample Survey Organization (NSSO) has 3 concepts of unemployment:

1. Chronic Unemployment 2. Weekly Unemployment 3. Daily Status Unemployment

Types of unemployment:

Structural unemployment – in such a situation the productive capacity is inadequate.

Seasonal unemployment - such as that affecting the rain-fed agricultural farmers who remain out of work for four to six months in a year.

Open unemployment – their is a migration of people from rural areas to urban areas in search of work.

Frictional unemployment – generation of unemployment due to change in market conditions.

Disguised unemployment – a situation in which more persons are involved in a certain job than needed in which case the marginal productivity of labour is 0.

Measures to Prevent Unemployment and Poverty

Economic reforms, changes in the industrial policy and better utilization of available resources are expected to reduce the problem of unemployment and poverty that results from it. The economic reform measures need to have major impacts on the employment generating potential of the economy. The governmental bodies are also required to initiate long term measures for poverty alleviation. Generation of employment opportunities and equality in income distribution are the two key factors that are of utmost importance to deal with the dual problem of unemployment and poverty.

Anti-poverty, employment generation and basic services programmes

(a) Pradhan Mantri Gram Sadak Yojana (PMGSY)

Launched in December 2000 as a 100 per cent CSS, PMGSY aims to provide all-weather connectivity to all the eligible unconnected rural habitations. Bharat Nirman, envisages connectivity by 2009 to all the habitations with a population of 1000 or more in the plains, and of 500 or more in the hilly, desert and tribal areas. The systematic upgradation of the existing rural road network also is an integral component of the

scheme, funded mainly from the accruals of diesel cess in the Central Road Fund, with support of the multilateral funding agencies and the domestic financial institutions. Up to December 2005, with an expenditure of Rs.12,049 crore, a total length of 82,718 km. of road works had been completed.

(b) Indira Awaas Yojana (IAY)

IAY aims to provide dwelling units, free of cost, to the Scheduled Castes (SCs), Scheduled Tribes (STs), and freed bonded labourers, and also the non-SC/ST BPL families in rural areas. It is funded on a cost-sharing basis in the rates of 75.25 between the Centre and the States. Under IAY, the ceiling on construction assistance is Rs.25,000/- per unit in the plains and Rs.27,500/- for hilly/difficult areas; and Rs. 12,500/- on upgradation of unserviceable kutcha house to pucca/semi pucca house for all areas. Up to January 30, 2006, about 138 lakh houses had been constructed/upgraded with an expenditure of Rs.25,208 crore.

(c) Swarnjayanti Gram Swarozgar Yojana (SGSY)

SGSY, launched in April, 1999 after restructuring the Integrated Rural Development Programme and allied schemes, is the only self-employment programme for the rural poor. The objective is to bring the selfemployed above the poverty line by providing them income-generating assets through bank credit and Government subsidy. Up to November 2005, the Centre and States, sharing the costs on 75:25 basis, had allocated Rs.8,067 crore, of which Rs. 6,980 crore had been utilized to assist 62.75 lakh self-employed.

(d) Sampoorna Grameen Rozgar Yojana (SGRY)

SGRY, launched on September 25, 2001 to provide additional wage employment in the rural areas, has a cash and food grains component, and the Centre bears 75 per cent and 100 per cent of the cost of the two with the balance borne by the States/UTs. In 2004-05, 82.23 crore persondays were generated with the Centre releasing Rs. 4,496 crore as cash component and about 50 lakh tonnes of foodgrains to the States/ UTs. Besides, under the special component of the SGRY, with the States/UTs meeting the cash components, Centre released 26 lakh tonnes of foodgrains to the 13 calamity affected States. In 2005-06 up to November, 2005, the number of persondays generated under SGRY was 48.75 crore, while the Centre's contributions in terms of the cash and foodgrains components up to January, 2006 were Rs. 4651 crore and 35 lakh tonnes, respectively. Under the special component, about 11.65 lakh tonnes of foodgrains have been released to the 11 calamity-hit States in the current year

(e) National Food for Work Programme (NFFWP)

The NFFWP was launched as a CSS in November 2004 in the 150 most backward districts to generate additional supplementary wage employment with food security. States receive food grains under NFFWP free of cost. The focus of the programme is on works relating to water conservation, drought proofing (including aforestation /tree plantation), land development, flood-control/protection (including drainage in waterlogged areas), and rural connectivity in terms of all-weather roads. In 2004-05, allocation of Rs

2,020 crore and 20 lakh tonnes of foodgrains generated 7.85 crore persondays of employment. In 2005-06, of the allocation of Rs 4,500 crore and 15 lakh tonnes of food grains (Revised), Rs.2,219 crore and 11.58 lakh metric tonnes of foodgrains had been released up to January 27, 2006. About 17.03 lakh persondays were generated up to December 2005.

(f) DPAP, DDP and IWDP

Drought Prone Areas Programme (DPAP) was launched in 1973-74 to tackle the special problems faced by those areas constantly affected by severe drought conditions. Desert Development Programme (DDP) was launched in 1977-78 to mitigate the adverse effects of desertification. Integrated Wastelands Development Programme (IWDP) has been under implementation since 1989-90 for the development of wastelands/ degraded lands. The basis of implementation has been shifted from sectoral to watershed basis from April 1995. For 2005-06, Rs.353 crore, Rs.268 crore and Rs.485 crore have been allocated for DPAP, DDP and IWDP, respectively. So far in 2005-06 up to October, 2005, 3000 new projects covering 15 lakh ha., 2000 new projects covering 10 lakh ha. and 340 new projects covering 16 lakh ha. have been sanctioned under DPAP, DDP and IWDP, respectively.

(g) Swarna Jayanti Shahari Rozgar Yojana (SJSRY)

In December 1997, the Urban Self-Employment Programme (USEP) and the Urban Wage Employment Programme (UWEP), which are the two special components of the SJSRY, substituted for various programmes operated earlier for urban poverty alleviation. The SJSRY is funded on a 75:25 basis between the Centre and the States. In 2003-04, the central allocation of Rs. 94.50 crore plus Rs. 10.50 crore for North- Eastern Region including Sikkim was fully utilized. Even 2004-05 saw the release of the entire budgetary allocation of Rs. 122.00 crore. In 2005-06, out of an allocation of Rs. 160.00 crore, Rs. 84.52 crore had been utilized until November 30, 2005.

(h) Valmiki Ambedkar Awas Yojana (VAMBAY)

VAMBAY, launched in December 2001, facilitates the construction and up-gradation of dwelling units for the slum dwellers, and provides a healthy and enabling urban environment through community toilets under Nirmal Bharat Abhiyan, a component of the Scheme. The Central Government provides a subsidy of 50 per cent, with the balance provided by the State Government. Since its inception and up-to December, 31 2005, Rs. 866.16 crore had been released as Central subsidy for the construction/ upgradation of 4,11,478 dwelling units and 64,247 toilet seats under the Scheme. For 2005-06, out of the tentative Central allocation of Rs. 249 crore, up to December 31, 2005, an amount of Rs.96.4 crore had been released covering 60,335 dwelling units and 381 toilet seats.

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MONEY MARKET, MONEY SUPPLY, MONEY DEMAND

What is Money?

The definition of money has been an issue of dispute for a long time, and the difficulties have been compounded recently by the computer and internet revolution. Once upon a time, gold silver, and other commodities served as money. Slowly, but surely, paper money (banknotes) edged out these **commodities monies**. Next came the widespread use of sight deposits. Nowadays, the speed, ease, and low cost of converting one type of asset into another have blurred conventional distinctions between money and other related forms of wealth. Plastic cards are a familiar sight and e-money are on the rise. A proper definition must capture the enduring qualities that characterize money, while abstracting from those that are transient, arbitrary, or country-specific.

Money is the means of payment or medium of exchange.

A Narrow Definition

Currency (banknotes and coins) is undoubtedly a form of money, even though a century ago, there were doubts that these forms were trustworthy as coins made from precious metals. Yet, the use of currency to settle transactions is relatively limited, economic agents often use bank deposits instead. This is the rationale for a first definition of money: currency in the hands of the public (households, firms, and government) plus sight deposits (bank accounts that are payable on demand, often called demand deposits or checking accounts). This monetary aggregate is denominated as M1. One key characteristic of M is that it is generally accepted as a means of payment.

M1 = currency in circulation + sight deposits.

Broader Aggregates

Sight deposits at banks have two main characteristics: (1) cheques can be written or transfers can be made against them, and (2) the interest paid is either mil or lower than that what other assets offer. This is why banks often offer more attractive accounts that bear interest, but cannot be drawn with cheques. Yet such funds can often be transferred into regular sight deposits – often a phone call, a series of keystrokes an a telephone handset or an intertnet connection, is enough. The ease of transfer renders these assets very similar to deposits. This is why they are included in our second definition of money, M2:

M2 = M1 + time (or savings) deposits at banks with unrestricted access.

An even broader measure includes instruments such as large certificates of deposits, or time deposits with a longer term and possibly restricted access, foreign currency deposits, and deposits with nonbank institutions. The precise meaning of "larger" and "longer maturity" depends on local rules and regulations. The distinction is one of the degree: these instruments are less liquid, meaning that they are more costly or difficult to convert it into cash or checking accounts This is called M3:

M3 = M2 + larger, fixed-term deposits + accounts at non-bank institutions.

The Evolution of Money

Our modern financial system with currency, checks, automated teller machines, and scores of sophisticated financial instruments did not spring up overnight. It has evolved over centuries. But at the heart of the financial system is money, which is defined as follows:

Money is anything that serves as a commonly accepted medium of exchange or means of payments.

Commodities were the earliest kind of money, but over time money evolved into paper currencies and checking accounts. All these have the same essential quality: they are accepted as payment for goods and services.

Barter contrasts with **monetary economy**, in which the trade takes place through a commonly accepted medium of exchange. Barter consists of the exchange of goods for other goods.

Commodity money. Money as medium of exchange first came into human history in the form of commodities. A great variety of items have served as money at one time to another: cattle, olive oil, beer or wine, copper, iron, gold, silver, rings, diamonds, cigarettes etc. Each of the above has advantages and disadvantages. Cattle are not divisible into small change. Beer does not improve with keeping, although wine may. Olive oil provides a nice liquid currency, but it is a bit messy to handle. And so forth.

By the nineteenth century, commodity money was almost exclusively limited to metals like silver and gold. These forms of money had *intrinsic value*, denoting that they had use value in themselves. Because money had intrinsic value, there was no need for the government to guarantee its value, and the quantity of money was regulated by the market through the supply and demand for gold and silver. The disadvantages of metallic money are that scarce resources are required to dig it out of the ground and that it might become scarce or abundant simply because of accidental discoveries of ore deposits.

Paper Money. The age of commodity money gave way to the age of paper money. The essence of money is now laid bare. Money is not want for its own sake but for the things it will buy. We do not wish to consume money directly; rather we use it by getting rid of it. Even when we choose to keep money, its value comes from the fact we can spend it later on. The use of paper money has become widespread because it is convenient medium of exchange. Currency is easily carried and stored. With

careful engraving, the value of money can be protected from counterfeiting. The fact that private individuals cannot legally create money keeps it scarce.

Given this limitation in supply, currency has value. It can buy things. As long as people can their bills with currency, as long as it is accepted as a means of payment, it serves the function of money.

Bank money. Today is the age of bank money – check written on funds deposited in a bank or other financial institution. Checks are accepted in place of cash payment for many goods and services. In fact, if we calculate the total dollar amount of transactions, nine-tenths take place by bank money, the rest by currency.

COMPONENTS OF THE MONEY STOCK: MONETARY AGGREGATES

There is a vast array of financial assets in economy, from currency to complicated claims on other financial assets. Which part of these assets is called money? Generally, there are four main monetary aggregates: currency, M1, M2, M3, and L.

M1 comprises those claims that can be used directly, instantly, and without restrictions to make payments. These claims are liquid. **An asset is liquid if it can immediately, conveniently, and cheaply be used for making payments.** M1 corresponds most closely to the traditional definition of money as the means of payment. **M2** includes, in addition, claims that are not instantly liquid- withdrawal of time deposits, for example, may require notice to the depository institution, money market mutual funds may set a minimum on the size of checks drawn on an account. But with these qualifications, these additional claims also fall into a broader category. In **M3** we include items that most people never see, namely, large negotiable deposits and repurchase agreements. These are held primarily by corporations but also by wealthy individuals. Finally, **L** includes several liquid assets that are close substitutes for, but which are not themselves, money.

As we move from M1 to M3, the **liquidity of the assets** decreases, while their interest yield increases. Currency earns zero interest, checking accounts earn less than money market deposit accounts, and so on. This is typical economic trade-off – in order to get more liquidity, asset holders have to give up yield.

The most commonly used measure for studying the effects of money on the economy are M1 and M2. There is no consensus, however, about which measure of the money stock is best.

The composition of M1, M2, M3 in more details

Money definition M1

In the most narrow useful definition, the money supply is designated **M1** and composed of two items:

1. Currency, that is, coins and paper money in the hands of the nonbank public.
2. All checkable deposits, (sight deposits – current accounts) meaning deposits in commercial banks and "thrift" or savings institutions on which checks can be drawn.

Coins and paper money are debts of government and governmental agencies. Checking account represent debts of the commercial bank or savings institution.

Money, M1 = currency + checkable deposits

Money definition M2

A second and broader definition includes M1 plus several near-monies. Near monies are certain highly liquid financial assets, which do not directly function as a medium of exchange but can be readily converted into currency or checkable deposits without risk of financial loss. There are four near-monies included along with M1 in the M2 definition of money.

1. On demand you can withdraw currency from a **noncheckable savings account** at a commercial bank or thrift institution. Or you may request that funds be transferred from a noncheckable savings account to a checkable account.
2. You can also withdraw funds quickly from **money market deposit account** (MMDA). These are interest-bearing accounts offered by banks and thrifts which pool individual deposits to buy a variety of interest-bearing short term securities. MMDAs have minimum balance requirements and limit how often money can be withdrawn.
3. **Time deposits** become available to a depositor only at maturity. For example, a 6-month time deposit can only be withdrawn without penalty 6 months or more after it has been deposited. In return for this withdrawal limitation, the financial institution pays a higher interest rate on such deposits are less liquid than noncheckable savings accounts, they can be taken as currency or shifted to checkable accounts when they mature.
4. Through a telephone call, a depositor can redeem shares in a **money market mutual fund** (MMMF) offered through a mutual fund company. Such companies use the combined funds of individual shareholders to buy interest-bearing short-term credit instruments such as certificates of deposits and U.S. government securities. Thus, they in turn can offer interest on the money market accounts of their mutual fund customers (depositors).

Money, M2 = M1 + noncheckable savings deposits + MMDAs + small (less than $100 000) time deposits + MMMFs.

Money definition M3

A third money supply definition, M3, recognizes that large ($100 000 or more) time deposits – usually owned by businesses as certificates of deposit – are also a near-money, which can be converted into checkable deposits. There is a market for these certificates, and they can be sold (liquidated) at any time, although perhaps at the risk of a loss. Adding these large time deposits to M2 yield the still broader M3 definition of money:
Money, M3 = M2 + large ($100 000 or more) time deposits.

Table 1 The measures of money: money aggregates

Symbol	Assets included
C	Currency
M1	Sum of currency, demand deposits, traveller's checks, and other checkable deposits
M2	Sum of M1 and overnight repurchase aggreement, Eurodolars, money market deposit accounts, money market mutual fund shares, and savings and small time deposits
M3	Sum of M2 and large time deposits (usually less than $100 000) and term repurchase agreements
L	Sum of M3 and savings bonds, short-term Treasury securities, and other liquid assets

THE FUNCTIONS OF MONEY

1. **Medium of exchange.** Money is usable for buying and selling things. In mythical barter economy in which there is no money, every transaction has to involve an exchange of goods (and/ or services) on both sides of the transaction. The examples of the difficulties of barter are endless. The economist wanting a haircut would have to find a barber wanting to listen to a lecture on economics; the actor wanting a suit would have to find a tailor wanting to watch a performance; and so on. Without a medium of exchange, modern economies could not operate. Money, as a medium of exchange, makes it necessary for there to be a "double coincidence of wants", such as the barber and economist bumping into each other at just the right time.

There are three traditional functions of money, of which medium of exchange is the first. The other two are the store of value, and unit of account. These stand on a different footing from the medium of exchange function.

2. **Unit of account.** Money is also a unit of account. Society uses the monetary unit as a yardstick for measuring the relative worth of a wide variety of goods, services, and resources. Just as we measure distance in miles or kilometres, we gauge the value of goods in dollars, pounds, euros etc. With a money system we need not state the price of each product in terms of all other products for which it can be exchanged; we need not specify the price of cows in terms of corn, crayons, cigars, Chevrolets, and croissants. This use of money as a common denominator means that the price of each product need be stated only in terms of the monetary unit. It permits buyers and sellers to readily compare the prices of various commodities and resources. Such comparisons aid rational decision-making.

3. **Store of value.** Finally money serves as a store of value. Because money is the most liquid- meaning the most spendable- of all assets, it is a very convenient way to store wealth. The money you place in a safe or checking account will still be available to you months or years later when you wish to use it. A store of value is an asset that maintains over time. Thus, an individual holding a store of value can use that asset to make purchases at a future date. If an asset were not a store of value, it would not be used as a medium of exchange. To be useful as money, an asset must be a store of value, but there are many stores of value other than money – such as bonds, stocks, and houses.

THE DEMAND FOR MONEY

When economists speak of the "demand for money", we are asking about the stock of assets held as cash, checking accounts, and closely related assets, specifically not generic wealth or income. Our interest is in why consumers and firms hold money as opposed to an asset with a higher rate of return.

The public wants to hold some of its wealth as money for two basic reasons: to make purchases with it and to hold it as an asset.

Transaction demand, Dt

People want money because it is a medium of exchange; it is convenient for purchasing goods and services. Households must have enough money on hand to buy groceries and pay mortgage and utility bills until the next paycheck. Businesses need money to pay for labour, materials, power and other inputs. Money demanded for all such purposes is called the **transaction demand for money**.

The basic determinant of the amount of money demanded for transactions is the level of nominal GDP. The larger the total money value of all goods and services exchanged in the economy, the larger the amount of money needed to negotiate these transactions. ***The transaction demand for money varies directly with nominal GDP.***

Asset demand, Da

The second reason for holding money derives from money's function as a store of value. People may hold their financial assets in many forms – as corporate stocks, private or government bonds, or as M1 money. Thus, there is an assets demand for money.

The asset demand for money varies inversely with the rate of interest. When the interest rate or the opportunity cost of holding money as an asset is low, the public will choose to hold a large amount of of money as assets. When the interest rate is high, it is costly to to "be liquid" and the amount of assets held as money will be small. When it is expensive to hold money as an asset, people hold less of it; when money can be held cheaply, people hold more of it.

Total money demand, Dm

As shown in Figure 1, the total demand for money, Dm is found by horizontally adding the assets demand to the transaction demand. The resulting downsloping line in figure 1 represent the total amount of money the public wants to hold – for transactions and as an asset – at each possible interest rate.

Recall that the transactions demand for money depend mainly on the nominal GDP (or National Income respectively). A change in the nominal GDP – working through the transaction demand for money – will shift the total money demand curve. Specifically, an increase of nominal GDP means the public wants to hold a larger amount of money for transactions, and this will shift the total money demand curve to the right.

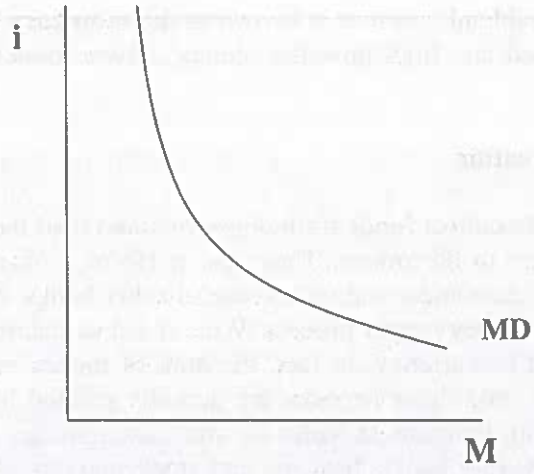

Figure 1 The demand for money. *People want to hold money for transactions and asset demand purposes. The total demand for money is the sum of the transactions and asset demands; it is graphed as an inverse relationship (downsloping line) between the interest rate and the quantity of money demanded.*

THE SUPPLY OF MONEY, THE BANKING SYSTEM AND MONEY CREATION

The quantity of money available is called the **money supply**. In an economy that uses commodity money, the money supply is the quantity of that commodity. In the economy that uses money (fiat money), the government controls the supply of money. Legal restrictions give the government a monopoly on printing of bank notes. Just as the level of taxation and the level of government purchases are policy instruments of the government, so is the money supply.

In the majority of developed countries, the control of the money supply is delegated to a partially independent institution called the **central bank**. The control of the money supply is called **monetary policy**. The primary way in which the Central banks (CBs) control the supply of money is through open-market operations – the purchase and sale of government bonds. To increase the supply of money, the CBs use money to buy government bonds from the public. This purchase increases the quantity of money in circulation. To decrease the supply of money, the CBs sell some of its government bonds. This open-market sale of bonds takes some money out of the hands of the public.

The Roles of Central and Commercial banks

The central bank and monetary base

The **central bank** is a public or quasi public agency with an explicit, exclusive legal mandate to control money and credit conditions. It is the 'banker's bank' through which banks can settle claims against each other, and it may also serve as a clearing house of cheques written by depositors. It generally does not take deposits from the private sector but may serve as the government's bank. It may also gather, process and analyse information about the financial and real economy. Most importantly, the central bank guarantees the value of the currency by aiming at price stability. It does so by issuing currency, one of the components of M1. It also creates **bank reserves**, which are claims on the central bank held by commercial banks. The

sum of currency in circulation and commercial bank reserves is known as the **monetary base**, sometimes called M0 (other expressions used are 'high powered money', 'base money', or 'central bank money').

The role of commercial banks in money creation

As financial intermediaries, commercial banks collect funds from depositors and lend them to customers, channelling resources from savers to borrowers. They also perform a payment-clearing role in setting accounts among their customers and with those of other banks. Much more important, however, is their role in the money supply process. Were it not for banks, the only circulating medium of exchange would be currency. In fact, the bulk of money supply used in modern economies is bank deposits, and these deposits are actually created by the commercial bank system. The money-creating function of banks is what distinguishes them from other financial intermediaries such as saving banks, brokers, and stock markets. All of those institutions collect, lend, and invest funds, but none of them has the right of to create money, because none of them may legally lend more than they received in deposits.

By lending money that they do not directly possess, commercial banks are in effect issuing money. How do they do it? We will learn below that, by issuing a loan to a customer, a bank increases the volume of its assets, as shown in figure 5. The increase is matched on the liability side by the amount of the loan credited to the customer's bank account. That is, in a nutshell how new money is created by a bank.

100 Percent-Reserve Banking

We begin by imagining a world without banks. In such a world all money takes the form of currency, and the quantity of money is simply the number of dollars in the hands of the public. For this discussion, suppose that there is $1,000 of currency in this economy.

Now introduce banks. At firs, suppose that banks accept deposit but do not make loans. The deposits that bank have received but have not lent out are called **reserves**. Some reserves are held in the vaults of local banks throughout the country, but most are held at a central bank. In our hypothetical economy, all deposits are held as reserves: banks simply accept deposits, place the money in reserve, and leave the money there until the depositor makes a withdrawal or writes a check against the balance. This system is called **100-percent-reserve banking.**

Suppose that people deposit the economy's entire $1,000in Firstbank. Figure 2 shows the **balance sheet** – the accounting statement of assets and liabilities – of Firstbank. The banks assets are the $1,000 it holds as reserves; the bank liabilities are the $1,000 it owes to depositors. Unlike banks in our economy, this bank is not making loans, so it will not earn profit from its assets. The bank presumably charges depositors a small fee to cover its costs. The advantage to being a depositor is that keeping money in the bank is safer than keeping it in one's wallet.

Fisrtbank's Balance Sheet

Assets		Liabilities	
Reserves	$1,000	Deposits	$1,000

Figure 2 A Balance Sheet Under 100-Percent-Reserve Banking. *A bank's balance sheet shows its assets and liabilities. Under 100-percent-reserve banking, banks hold all deposits as reserves.*

What is money supply in this economy? Before the creation of Firstbank, the money supply is the $1,000 of currency. After the creation of Firstbank, the money supply is the $1,000 of demand deposits. A dollar deposited in a bank reduces currency by one dollar and raises deposits by one dollar, so the money supply remains the same. ***If banks hold 100 percent of deposits in reserve, the banking system has no influence on the supply of money.***

Fractional-Reserve banking

Now imagine that banks start to use some of their deposits to make loans – for example, to families who are buying houses or to firms that are investing new plants and equipment. The advantage to banks is that interest can be charged on the loans. The banks must keep some reserves on hand so that reserves are available whenever depositors want to make withdrawals. But as long as the amount of new deposits approximately equals the amount of withdrawals, a bank need not to keep all of its deposits to reserve. Thus, bankers have an incentive to make loans. When they do so, we have **fractional-reserve bank**, a system under which banks keep only a fraction of their deposits in reserve. Figure 3 shows the balance sheet of Firstbank after it makes a loan. This balance sheet assumes that the reserve-deposit-ratio- the fraction of deposits kept in reserve – is 20 percent. Therefore, Fisrtbank keeps $200 of the $1,000 in deposits in reserve and lends out the remaining $800.

Fisrtbank's Balance Sheet

Assets		Liabilities	
Reserves	$200	Deposits	$1,000
Loans	$800		

B. Secondbank's Balance Sheet

Assets		Liabilities	
Reserves	$160	Deposits	$800
Loans	$640		

C. Thirdbank's Balance Sheet

Assets		Liabilities	
Reserves	$128	Deposits	$640
Loans	$512		

Figure 3 Balance Sheets Under Fractional-Reserve Banking. *This figure shows how $1,000 in reserves leads to a much greater quantity of deposits. Thus, under a fractional-reserve system, banks create money.*

Notice that Firstbank increases the supply of money by $800 when it makes this loan. Before the loan is made, the money supply is $1,000 equaling the deposits in Firstbank. After the loan is made, the money supply is $1,800: the depositor still has a demand deposit of $1,000, but now the borrower holds $800 in currency. ***Thus, in a system of fractional-reserve banking, banks create money.***

The creation of money does not stop with the Firstbank. If the borrower deposits the $800 in another bank (or if the borrower uses the $800 to pay someone who then deposits it), the process of money creation continues. Figure 5B shows the balancesheet of Secondbank. Secondbank receives the $800 in deposits, keeps 20 percent, or $160, in reserve, $640 is eventually deposited in Thirdbank, this bank keeps 20percent, or $128, in reserve and loans out $512, and so on. With each deposit and loan, more money is created.

Although this process of money creation can continue through an infinite number of banks, it does not create an infinite amount of money. Letting rr denote the reserve-deposit ratio – in our example, rr = 0,2 – the amount of money that the original $1,000 creates is:

Original Deposit = $1,000
Firstbank Lending = $(1 - rr)$ x $1,000
Secondbank Lending = $(1 - rr)^2$ x $1,000
Thirdbank Lending = $(1 - rr)^3$ x $1,000

. . .

Total Money Supply = $[1 + (1 - rr) + (1 - rr)^2 + (1 - rr)^3 + \ldots 1$ x $1,000 = (1 / rr)$ x $1,000

Thus each $1 of reserves generates $ (1 / rr) of money. In our example, rr = 0,2, so the original $1,000 generates $5,000 of money.

Simplified Money Multiplier Formula

If the required reserve ratio is some fraction, rr (or m), an injection of $1of excess reserves into the banking system can lead to the creation of $1 / rr (or $1 / m) in new money. That is, the so-called "money multiplier" is given by:

Change in money supply = (1/m) x Change in excess reserves.

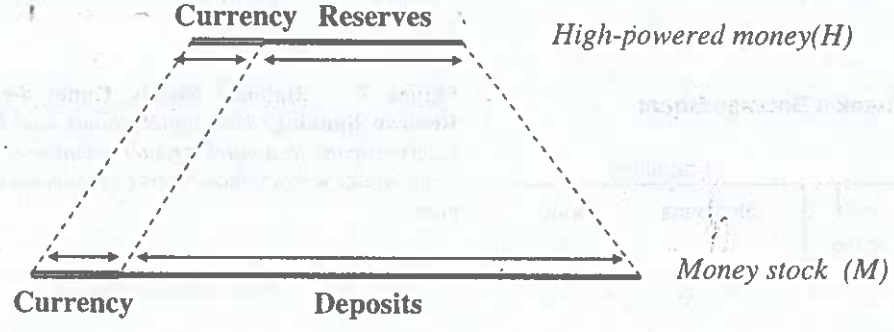

Figure 4 Relation between high-powered money and the money stock

High-powered money (or the monetary base) consists of currency (notes and coins) and banks' deposits at the Central bank.

The money multiplier is the ratio of the stock of money (M1) to the stock of high-powered money (M0).

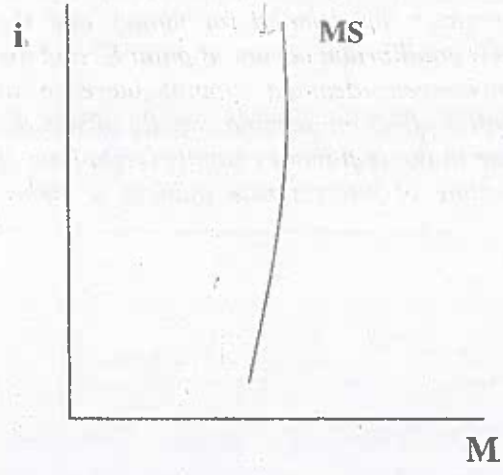

Figure 5 The Supply of money. *We assume that the nominal money supply, which, for a given price level, renders the (real) money supply exogenous; hence the curve of money supply is vertical. It is independent (not sensitive) on the level of interest rate.*

The Money Market

We can combine the demand for money with the supply of money to portray the money market and determine the equilibrium rate of interest. In figure X, the vertical line, Sm, represents the money supply. The money supply is shown as a vertical line because we assume the monetary authorities and financial institutions have provided economy with some particular stock of money, such as the M1 total.

Just as in product market, the intersection of demand and supply determines equilibrium interest rate (i_e) that is the price paid for the use of money.

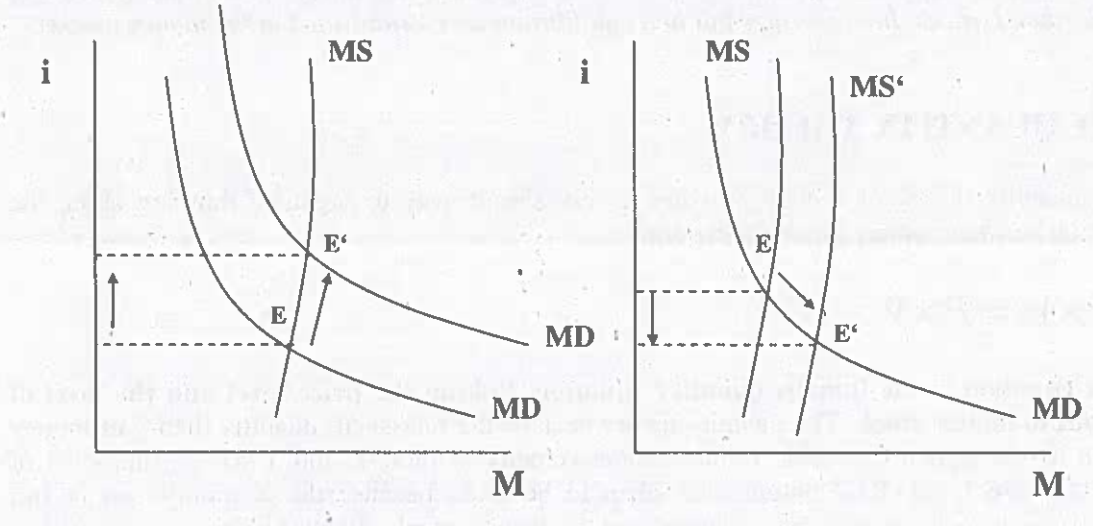

Figure 6 Changes in Equilibrium on Money Market: Shifts of Money Demand and Money Supply *Combining the money supply (stock) Sm with total money demand Dm*

portrays the money market and determines the equilibrium interest rate i_e. (1) An increase in real economic activity (left part of the figure) increases the demand for money and the schedule shifts to the right. Starting at point E_1 the new equilibrium occurs at point E' and the nominal interest rate increases. With supply unchanged, demand cannot increase in equilibrium. The interest rate must rise until its negative effect on demand exactly offsets the positive effect of the increase in GDP. (2) An increase in the real money supply (right part of the figure) lowers the nominal interest rate. A decline in interest rate induces a higher demand so as to match the higher supply.

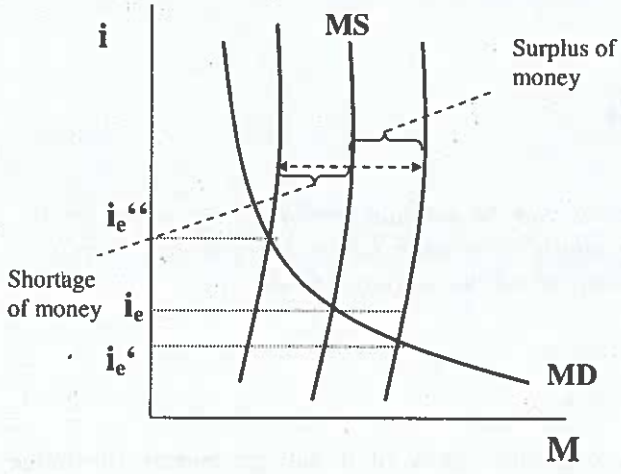

Figure 7 Restoring equilibrium in the money market (p.275-Brue) *A decrease in the supply of money creates temporary shortage of money in the money market. People and institutions attempt to gain more money by selling bonds. The supply of bonds therefore increases, which reduces bond prices and raises interest rates. At higher interest rates, people reduce the amount of money they wish to hold. Thus, the amount of money supplied and demanded once again is equal at the higher interest rate. An increase in the supply of money creates a temporary surplus of money, resulting in an increase in the demand for bonds and higher bond prices. Interest rates fall and equilibrium is re-established in the money market.*

THE QUANTITY THEORY

The quantity theory of money provides a very simple way to organize thinking about the relation between money, prices, and output:

$$M \times V = P \times V$$

This equation is the famous quantity equation, linking the price level and the level of output to money stock. The quantity theory became the (classical) quantity theory of money when it was argued that both V, the income velocity of money, and Y (or Q), the level of output, were fixed. Real output was taken to be fixed because the economy was at full employment, and velocity was assumed not to change much. Neither of these assumptions holds in fact, but it is, nonetheless, interesting to see where they lead If both V and Y are fixed, it follows that the price level is proportional to the money stock. Thus the classical quantity theory was a theory of inflation.

The classical quantity theory is the proposition that the price level is proportional to the money stock:

$$P = \frac{V \times M}{Y}$$

If V is constant, changes in the money supply translate into proportional changes in nominal GDP, $P \times Y$. When the classical case (vertical) supply function examined in lesson 3 applies, Y is fixed and changes in money translate into changes in the overall price level, P.

Note: **The income velocity of money** is the number of times the stock of money is turned over per year in financing the annual flow of income. It is equal to the ratio of nominal GDP to the nominal money stock.

$$V = \frac{P \times Y}{M} = \frac{Y}{M/P}$$

BALANCE OF PAYMENTS UPDATE

January 02, 2009

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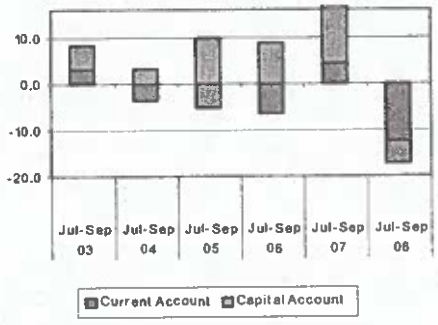
BoP deficit at $ 4.7 billion

The Balance of Payments for Q2 2008-09 was noted at a deficit of $ 4.7 billion. This is the first time the Balance of Payments is noted at deficit since October – December 2005. In Q1 2008-09 BOP was noted at 2.2 billion, which was sharply lower than surplus of $ 11.2 billion noted in Q1 2007-08. Hence, this has been a steep reversal from high surplus years of 2005-07. The BoP of Q21 2008-09 comprised $ 12.5 billion deficit on the current account and $ 7.8 billion surplus on the capital account.

Figure 1 | Balance of Payments (in $ bn)



Source: Reserve Bank of India

Table 1: Balance of Payments **(US$ bn)**

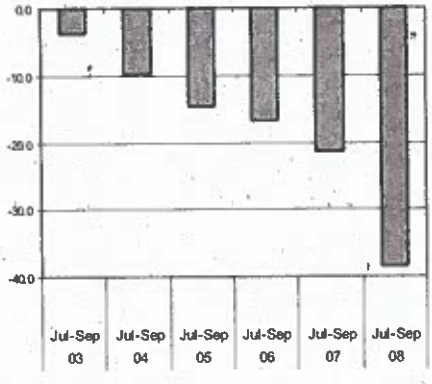
	Jul-Sep 07	Jul - Sep 08
1. Exports	38.3	47.7
2. Imports	59.5	86.3
3. Trade Balance (1-2) #	- 21.2	-38.6
4. Invisibles	16.9	26.1
5. Current Account Balance (3+4)	-4.3	-12.5
6. Capital Account Balance *	33.5	7.8
7. Balance of Payments (5+6)	29.2	-4.7

- indicates deficit / + indicates surplus * Includes error and omissions

Source: Reserve Bank of India

Current Account Deficit at a record level

Figure 2 | Trade Balance (in $ bn)



Source: Reserve Bank of India

During Q2 2008-09, exports grew by 24.6% higher than 17.0% seen in Q2 2007-08. The growth in the imports was much higher at 45.0% compared to 22.2% seen in Q2 2007-08.

The increase in imports was on account of higher growth in both oil and non-oil imports. Oil imports grew by 45.1% in Q2 2008-09 higher than 11.3% seen in Q2 2007-08. Non-oil imports grew by 37.6% Q2 2008-09 higher than 22.4% in Q2 2007-08. The growth in non-oil imports was on account of capital goods, chemicals and fertilisers.

The higher increase in imports than exports, led to widening of the trade deficit from $ 21.2 billion in Q2 2007-08 to $ 38.6 billion in Q2 2008-09. This implies a growth rate of 82.1% from Q2 2007-8 and Q2 2008-09.

The net foreign exchange inflow from services increased by 41.1% during Q2 2008-09, higher than 30.1% seen during Q2 2007-08. The net inflow from software services during Q2 2008-09 grew by 24.0% lower than growth of 27.1% during Q2 2007-08. The total export from software services in Q2 2008-09 was at $ 11.2 billion higher than $ 9.1 billion seen in Q2 2007-08. The growth in other service sectors was mixed. Robust growth was noted in business services (316.8%) where as sharp decline was noted in financial services (negative 75.2%). In communication services a growth of 2% was noted.

The remittances from abroad also increased from $ 9.3 billion to $ 14.2 billion, with private remittances forming majority of the transfers.

Despite the rise in invisibles, the current account deficit in Q2 2008-09 was nearly triple of deficit in Q2 2007-08. The total current account deficit for Q2 2008-09 was noted at $ 12.5 billion higher than $ 4.3 billion seen in Q2 2007-08. This was because trade deficit widened substantially tracking increase in oil and non-oil imports. In absolute terms, the current account deficit is at its highest level in a quarter.

Capital Account surplus at $ 7.8 billion

Though, the current account deficit has declined sharply in Q2 2008-09, the main problem is the sharper decline in capital inflows. The capital account surplus was noted at $ 7.8 billion for Q2 2008-09, compared to the surplus of $ 33.5 billion previous quarter. This is the lowest capital account surplus since October-December 2005 when it was noted at a negative of 0.6 million.

There is a sharp decline in sub-components of Capital account like Portfolio flows and External Commercial Borrowings. The net inflows from portfolio investments in Q2 2007-08 were at $ 10.9 billion and in Q2 2008-09 there are net outflows worth $ 1.3 billion. In Q1 2008-09 the net outflows were noted at $ 4.2 billion. External Commercial Borrowings (ECBs) during Q2 2008-09 were both noted at $ 1.8 billion lower than $ 4.2 billion in Q1 2007-08.

However, there is a big positive as inflow on account of Foreign Direct Investments continue. Net FDI in Q1 2008-09 was noted at $ 10.7 billion much higher than $ 2.1 billion noted in Q1 2007-08. Even in Q2 2008-09, net inflow is noted at 5.6 billion higher than $2.1 billion in Q1 2007-08. The inward FDI was noted at $ 9.3 billion in Q2 2008-09 higher than $ 5.5 billion in Q2 2007-08. Outward FDI was at US $ 3.7 billion in Q2 of 2008-09 compared to US $ 3.4 billion in Q2 2007-08.

There was a slowdown in net inflows from Banking Capital from $ 6.6 billion to $ 2.1 billion. Banking capital shows flows of foreign assets and foreign liabilities of commercial banks. The banking capital inflows have increased from $ 13.7 billion to $ 16.2 billion. However, the outflows have doubled from $ 7.1 billion to $ 14.1 billion. Within banking capital, Non-Resident Indian (NRI) deposits witnessed a net inflow of $ 259 million in Q2 2008-09 slightly lower than the net inflow of US $ 369 million in Q2 2007-08.

Table 2: Capital Account (US$ bn)

Capital Flows	Jul-Sep 07	Jul- Sep 08
Foreign Direct Investment	2.1	5.6
Foreign Portfolio Investment	10.9	-1.3
External Commercial Borrowings	4.2	1.9
Banking Capital	6.6	2.1
NRI deposits	0.4	0.3
Capital Account Surplus	33.5	7.8

Source: Reserve Bank of India

India's external debt stands at $ 222.6 billion

India's total external debt of RBI increased by $ 21.1 billion between Dec 2007 and Sep 2008 and stood at $ 222.6 billion; an increase of 10.5% between the period.

Table 3: Sources of External Debt (US$ bn)

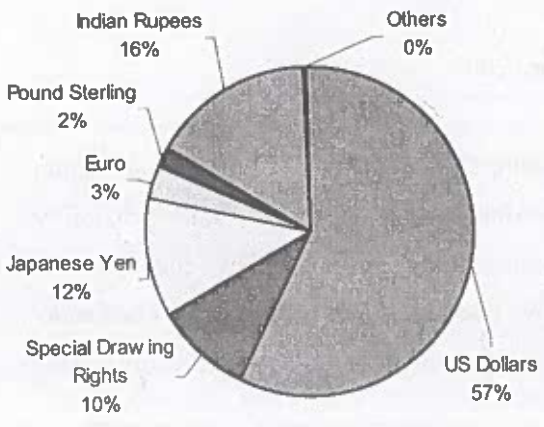
Particulars	End of Jun 07	End of Jun 08
Multilateral Debt	37.9	38.9
Bilateral Debt	17.2	18.8
International Monetary Fund	0	0
Trade Credit	8.9	12.2
Commercial Borrowings	57.0	60.3
NRI Deposits	43.0	40.6
Rupee Debt	2.1	1.7
Total Debt	201.5	222.6

Source: Reserve Bank of India

The growth in external debt was primarily on account of the rise in trade credits. Trade credits rose by 37.1% during the period. The increase in multilateral debt and bilateral debt during 2006-07 was noted at 2.6% and 9.3% respectively.

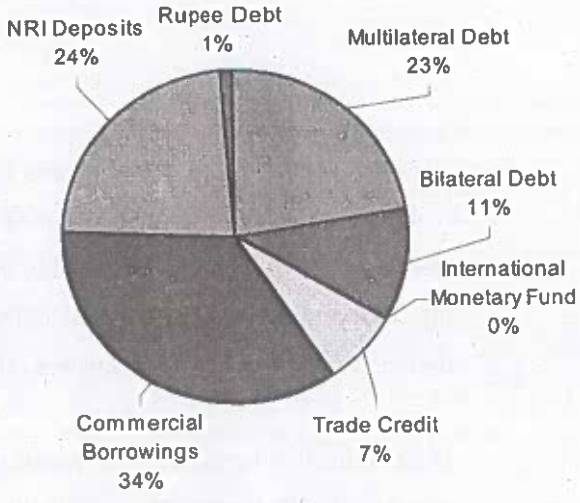
Of the total external debt, short-term credit upto 1 year was at $ 50.1 billion, while long-term trade credit stood at $ 172.5 billion.

Figure 3 | Composition of External Debt



Source: Reserve Bank of India

Figure 4 | Currency Composition of External Debt



Source: Reserve Bank of India

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Welfare Economics and Public Choice

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Welfare economics provides the basis for judging the achievements of markets and policy makers in allocating resources. Its most powerful conceptual tool is the utility possibility frontier. This defines the set of utility allocations that can be achieved in a society subject to the constraints of tastes and technologies. Any allocation on the frontier cannot be Pareto dominated and hence would satisfy a rather minimal condition for it to be socially desirable.

Distributional judgements about points on the Pareto frontier are typically embodied in a social welfare function. The social choice literature, beginning with Arrow (1951), has demonstrated the difficulties of *deriving* such a function from citizens' underlying preferences over social alternatives without making interpersonal comparisons of utility. By postulating a social welfare function for pedagogical purposes, the analyst is implicitly assuming that interpersonal comparisons of utility can be made and has adopted a position on how society should weigh such comparisons (Sen (1977)).

The analysis of competitive markets culminated in the fundamental theorems of welfare economics which elucidated the (restrictive) conditions under which resource allocation by markets would achieve Pareto efficiency. The first fundamental theorem says that all perfectly competitive equilibria with complete markets (to deal with externalities and uncertainty) are Pareto efficient. The second fundamental theorem says that any Pareto efficient allocation might be decentralized by suitable choice of lump-sum transfers.

Modern welfare economics builds on this by putting incentive constraints at centre stage. Among the seminal contributions are Mirrlees (1971) and Hammond (1979). This analysis dispenses with the assumption that lump-sum transfers are feasible because of the incentive problems that they create. The appropriate benchmark for government is second best Pareto efficiency, taking into account appropriate restrictions on policy instruments. A whole tradition of policy analysis in this vein has been developed (see, for example, Atkinson and Stiglitz (1980)).

Welfare economic approaches to the policy process have been criticized by those operating in the public choice tradition, for failing to consider how actual policy choices are made. Thus, even if we were able to understand what optimal policies are, there is no guarantee that the kinds of decision making institutions that we observe in reality will bring them about. The *public choice critique of welfare economics* says that, by failing to model government, it provides a misleading view of the appropriate role for government. (See Buchanan (1970) for a forceful plea for a level playing field.)

To see the logic of the critique, consider the argument that the government should intervene to fix a market failure, say by introducing a Pigouvian tax. Then, the welfare economist will select the tax, and other policy instruments, to maximize some social welfare objective. There is no reason at all to expect the political process to yield this outcome. Even if the tax is chosen to be second best Pareto efficient, the distributional outcome selected by the political process need not match that of the "social planner". While this may suggest that a public choice approach has to be more conservative, this is only true when equilibrium effects on other policy instruments are ignored. As argued in Besley and Coate (2002), it is possible for these other policy instruments to be changed in a welfare improving direction.

Many models in the public choice literature lead to efficient policies which fail to maximize social welfare. A good example is the Leviathan approach of Brennan and Buchanan (1980). In this case politicians extract resources for themselves at the expense of voters. Proponents of probabilistic voting models have sometimes suggested that particular social welfare functions are maximized in political equilibrium. (See Coughlin (1992) for a discussion.) However, they rest on strong assumptions and it appears unlikely that technological assumptions are at the heart of the distributional conflict implicit in political competition.

Some economists use the benchmark of social surplus to judge political outcomes. However, this is conceptually problematic and is even (misleadingly) labeled as an efficiency criterion. The notion of surplus is only defined under restrictive assumptions about preferences. Moreover, the criterion really only makes if (i) there are lump-sum transfers and (ii) social preferences weight a dollar in every citizen's hands equally. This would be fine if both the political process and the planner were able to use lump-sum transfers. However, even then, the exact allocation of transfers would enter the calculus of whether the intervention is

justified unless (ii) also holds. But the latter is only one particular distributional preference and not an efficiency criterion.

Policies chosen by the political process may fail to be efficient using second-best efficiency as a benchmark. Besley and Coate (1998) define a welfare economic definition of *political failure* in this way. To motivate this, consider the textbook analysis of market efficiency. First, the set of efficient allocations is characterized (graphically, the utility possibility frontier). This is a purely technological notion of efficiency, since the frontier depends only on the tastes and technologies of the economy. The second step requires a model, such as that developed by Arrow-Debreu, to specify how markets allocate resources. The idea of market failure, then comes from observing that, under certain conditions, markets do not result in allocations that are on the frontier. The term "failure" is justified by the observation that, in principle, all citizens could be made better off. A parallel notion of political failure arises when resources used to determine policy fail to produce a selection from the second-best Pareto frontier so that, in principle, all citizens can be made better off.

This welfare economic notion of political failure should be contrasted with the standard approach to political failure rooted in the work of Wicksell. He argued that government intervention is legitimate only if government dominates a status quo point where government is absent. Then a political failure is defined when government fails to select a Pareto dominant point.

The welfare economic approach and Wicksellian approach are distinct. To see this, consider the comparison between the outcome attained from a political process to a policy vector x_0 which is the outcome that would prevail with no government intervention. A *Wicksellian political failure* is now defined as a situation in which the political process selects a policy outcome which does not Pareto dominate x_0. Let A denote the utility allocation associated with x_0. By fixing market failures, we suppose that (in-line with the welfare economic approach) the government can, in principle, shift out the Pareto frontier. Let x_0 be the new policy vector and consider possible utility outcomes associated with it. Point B which is on a higher Pareto frontier and hence is (second best) efficient. However, this point is not a Pareto improvement over point A. Hence, if chosen by government, it would constitute a Wicksellian political failure. However, it would not be a political failure according to the definition above as it is on the Pareto frontier and there is no scope for improving government

efficiency. Now consider point C. According to the Wicksellian definition, it is not a political failure as it a Pareto improvement relative to A. However, the definition based on second-best Pareto efficiency would regard it as a political failure. It is possible to make all citizens better off beginning from this point.

(Figure 1 about here)

Wicksell's definition of political failure embodies an important distributional judgement which outlaws any pure redistribution of resources around point A except in so far as this is justified on citizens' underlying preferences for redistribution. A government can intervene efficiently in the welfare economic sense and yet still create a political failure. Moreover, the scope for political failure on this definition is vast, depending on the status quo point x_0 being posited.

Are there good reasons to believe that governments chose inefficient policies using second best Pareto efficiency as the criterion? In answering this, it is essential that the same set of instruments that a welfare economist would allow the government to use should be available in the political process. Claims about the inefficiency of outcomes associated with the median voter often miss this point. Consider the claim that the median voter fails to provide public goods efficiently. While it is true that, in general, the Lindahl-Samuelson rule does not yield the same outcome as the median voter rule, this has nothing to do with political inefficiency. The Lindahl-Samuelson rule requires that lump-sum transfer are feasible while the median voter model usually works with a more restrictive tax system. The former achieves first best efficiency while the latter a very constrained form of second best efficiency.

Why then does this kind of claim persist? The difficulty lies in the need to make sufficient restrictions on the model of political resource allocation to get an equilibrium to exist. These often exclude the rich policy space studied in welfare economics. However, the failing is on the side of economists not governments -- the latter struggling with a satisfactory theory of public choice. If the theory of market failure had proceeded in this way, it would have lead to many strange conclusions. Suppose that economists were limited in their ability to study multi-product pricing by firms. Then, we would conclude that there is always a market

failure when the government can make these choices instead! This critique of the literature was raised in an important article by Wittman (1989).

In a static model of policy choice where rulers choose policy in their own interests (no matter how narrow), there is a presumption of second-best efficiency (Besley and Coate (1997)). A good example of this is the Leviathan model. There is no reason for Leviathan to extract resources from citizens in an inefficient way. However, there are potential sources of second-best Pareto inefficiency: the use of influence activities, legislative inefficiencies, coordination problems and strategic use of policies in a dynamic setting. We now discuss each of these briefly in turn.

There is a vast literature on why the policy process may be subject to influence activities -- rent-seeking or lobbying. The literature on rent-seeking originating with Tullock (1967) and Krueger (1974) studied how private actions influence policy. Following Tullock (1980), formal analysis has focused mostly on modelling competition among individuals or groups to obtain an indivisible policy favor, the aim being to characterize the aggregate expenditure on rent-seeking activities (see, for example, Baye, Kovenock and de Vries (1994) and the references therein).

Whether this activity is inefficient depends critically on the form that it takes. Cash transfers, as modeled by Grossman and Helpman (1994) yield movements around the Pareto frontier. However, examples such as campaign finance as modeled in Grossman and Helpman (1986) yield real resource misallocation. For this to be second-best inefficient (i.e. a political failure), there must exist is a way of re-organizing the influence game so that all players (including those involved in the influence process) can be better off. An example along these lines is studied in Besley and Coate (2001). But why might political favors not be granted in the most efficient way? An intriguing answer is given in Coate and Morris (1995). If voters fail to re-elect politicians who engage in such behavior that disguised forms of transfer may be preferred to keep voters in the dark.

Political failure may also occur because of coordination difficulties among voters. Consider a world where there are both competent and incompetent candidates -- the latter defined as candidates who (for fixed ideological preferences) can generate a potential Pareto improvement. Then, it is possible to construct a political equilibrium between two

incompetent and one competent candidate of different ideologies where voters fail to coordinate on the competent candidate who therefore loses (Besley and Coate (1997)).

Legislative policy making is also a potential source of political failure -- with important insights going back to the seminal work by Buchanan and Tullock (1957). However, for a legislature to pick a Pareto dominated point, it must be that there is some failure in the bargaining procedure used to make decisions -- either limits on transfers or the credibility of promises. The famed example of Shepsle, Weingast and Johnsen (1981) rests on limits of transfers between the legislators operating the norm of universalism.

In dynamic models, examples of political failure are created principally by the strategic use of policy. One of the earliest examples to illustrate this is the work of Persson and Svensson (1989) and Tabellini and Alesina (1990). They show that governments will have an incentive to run deficits to reduce the policy flexibility of future incumbents. Aghion and Bolton (1980) and Milesi-Ferretti and Spaolore (1994)) show that strategic policy choice can also lead to changes in who is elected. This too may lead to policies being selected that are inefficient. Privatization decisions may be a key practical instance of this (Biais and Perrotti (2002)). Many governments underpriced privatizations to create a class of stakeholders committed to voting in favor of particular kinds of governments. This could explain privatization even without appealing to economic gains. Besley and Coate (1998) pulls this ideas together to give a unified definition of political failure in dynamic models where the criterion is second best Pareto efficiency.

So what do we learn from this pathology? In cases of true political failure, there should be unanimous consent that something should be done (provided that the failure results in a truly Pareto dominant outcome). In all the above cases, there are important and interesting questions about institutions can be redesigned to mitigate the political failure. This is similar in spirit to the notion, in traditional public choice writings, that there should be a focus on designing a fiscal and procedural constitution (Brennan and Buchanan (1985)). In practice, it is likely that progress will come from piece-meal analysis of specific institutional variations.

The juxtaposition of welfare economic and public choice approaches to the role of government is frequently overstated. There are as strong reasons for public choice economists to study welfare economics and optimal policy. Similarly, welfare economists

need to understand public choice. Societies frequently have make choices about how to govern their affairs which have both efficiency and distributional implications. The role of welfare economics in a world of public choice is to provide an analysis of this.

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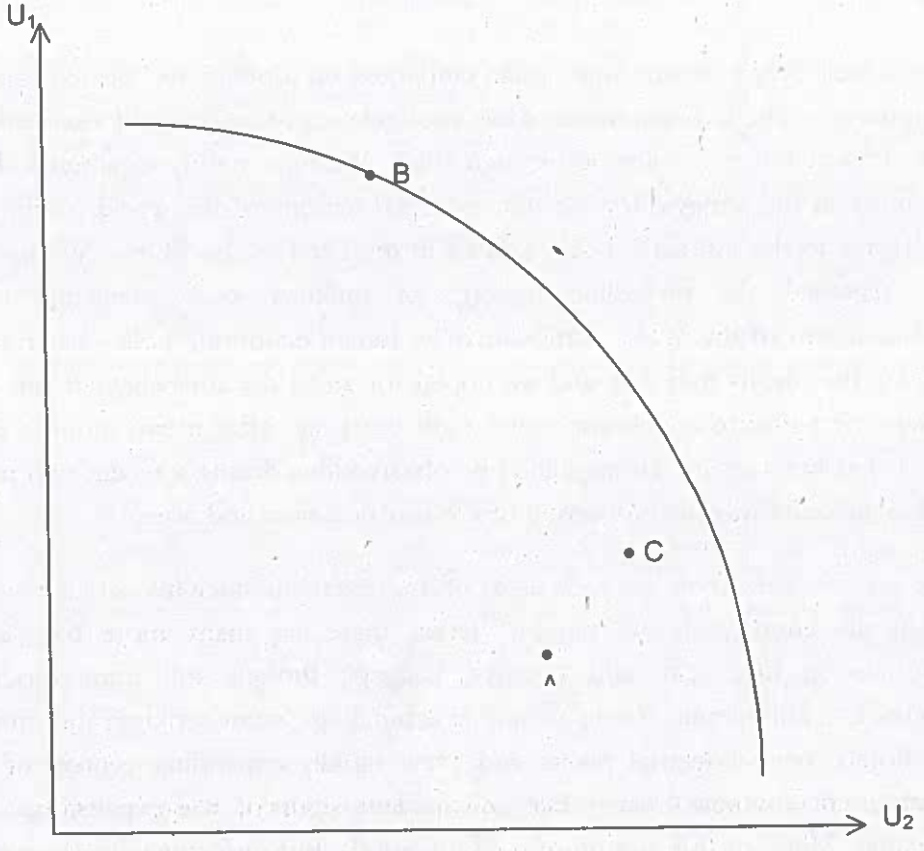

Figure 1

INDIAN ECONOMIC PLANNING

by
MILTON FRIEDMAN
FIRST DRAFT May 6, 1963

It is now well over a decade since India embarked on a policy of "planed economic development". The U.S. government has strongly supported this policy, contributing a total of $4 billion in foreign aid through 1962. We have rightly regarded India as a key country in the struggle for the uncommitted nations of the world, as the major counterforce to the influence being exerted in the Far East by China. We have also rightly regarded the incredible poverty of millions as a challenge to the humanitarianism of the West. Unfortunately, Indian economic policy has not been producing the results that they and we hoped for and I do not believe it can do so. That was my tentative conclusion some eight years ago after a two months visit to India. It has been greatly strengthened by observations during a recent two months visit, and particularly by a comparison of the situation then and now.

On the positive side, there are clear signs of improvement since my earlier visit. The roads in the countryside are notably better, there are many more bicycles and automobiles in both city and country, beggars, though still numerous, seem somewhat less ubiquitous. There are any new buildings, some striking, and more and better hotels; new industrial plants and few rapidly expanding centers of small industry; there are new Universities and evident signs of the expansions of old Universities. Much of this and more is to the good. But unfortunately, the progress appears spotty, and some of the appearance of progress is misleading. Many of the most impressive new structures are signs not of progress but of waste, for example, factories producing items at for higher cost than that at which they can be purchased abroad. Most important of all, there is little that is evident to the naked eye in the way of improvement in the conditions of the masses of the people. On every side, there are extremes of unrelieved poverty that it is difficult to make credible to someone who has not been to India. As a friend form Britain remarked after his first visit to Calcutta where over a tenth of the population have no home other than the street: "One can adjust to a square mile of this kind of thing but when it goes on for square mile after square mile, it is more than one can bear." These conditions seem to have shown little if any change in the past decade.

This kind of casual impression is most untrustworthy, especially when it concerns conditions at a level of living which the observer has never come close to experiencing himself. What the poor in India might regard as a major improvement, you and I might not be able to recognize. However, much objective evidence confirms these general impressions.

One bit comes from work done for a committee appointed by the Prime Minister to study changes in the distribution of income. The chairman of the Committee, Prof. P.C. Mahalanobis, is director of the Indian institute of Statistics, a member of the Indian Planning Commission, the author of the draft framework of the second five-year plan, and one of the people who has done most to shape present Indian ideas of economic planning. The report of the Committee had not yet been made public when I was in India but Prof. Mahalanobis, in private conversation, showed me some of the work he and his associates at the Indian Statistical Institute had done for the Committee. Data from sample surveys of Indian rural and urban households indicate that the poorest third or so of the populations experienced no increase whatsoever in food consumption per capita during the decade for the 50's - which roughly coincides with the first two five - year plans. And it must be recorded that food accounts for three-quarters or more of the total consumption expenditure of the poor.

Aggregate figures on the consumption of specific items support the general impression given by household surveys. The major items of consumption for the masses of India are food and cloth. The greater part of food consumption is accounted for by food grains rice, wheat, other cereals, and pulses. Indeed, at the bottom of the income scale, food grains along account for half or more of total expenditure on all items of consumption. Per capita availability of food grains has fluctuated a good deal but with no steady upward trend: it was about the same in 1958 as in 1950, in 1960 as in 1955. The situation is not much different for cloth. The number of yards of cloth per capita is now no higher than in 1939. [CORRECT?] In the decade from 1950 to 1960, it has varied from in 19 to in 19 . The consumption items that have shown the most rapid increases have been items like bicycles, sewing machines, automobiles-not luxuries by Western standards by clearly so by Indian standards.

The official estimates of national income - that favourite magnitude of modern growth-men -give only a slightly more favourable impression. National

income, corrected for price change, rose during the decade of the first two five-year plans at the rate of about 3 ½ percent per year, but population rose at the rate of 2 per cent a year, so per capita output rose by about 1 1/2 per cent per year. And even these figures overstate the progress. In the first place, the official figures probably overstate the growth in output during the second five-year plan period because they make insufficient allowance of the price rise that occurred (this overstatement is almost surely much larger than the major error in the opposite direction, which is underestimation of the growth in the output of small-scale industry). In the second place, an increasing fraction of national income has taken the form of capital investment and government expenditures. The new and elaborate office buildings in New Delhi, the elaborate luxury Ashoka hotel built by the government in New Delhi, the strikingly well appointed and attractive guest houses, as well as all the new buildings, at the Universities newly constructed, and, of course, also the new automobile plants, fertilizer, steel, and other plants all these enter the national income at their current costs and regardless of whether they will ultimately add to the national output, as the fertilizer and steel plants my, or be a perpetual drain, as the automobile plants are and will continue to be,

For the purpose of judging progress, the increase in consumption is much more meaningful than the increase in total output, both because its measurement is less ambiguous and because the aim of development is, after all, to raise the consumption level of the populace. Even the official figures show that per capita consumption has risen at the rate of only one per cent per year.

Some growth in total output but at a disappointingly slow rate and with a widening, rather than a narrowing of the distribution of income: that is the conclusion suggested by all the evidence. I met no Indian economist who did not agree with this general verdict.

Just how disappointing the rate of growth is can be judged by measuring it against a standard that is repeatedly set forth. Time and again one will hear as an article of faith in India that the economic and political pressure for development is so urgent that India must develop at a faster rate than Western countries did. A standard cliché is that India must compress into decades what took other countries centuries. There is, of course, much merit to this position. The scope for improvement is tremendous, the desirability of improvement is unquestioned; and it should be easier and faster to imitate than to initiate. But the actually achieved rate of

growth to date is lower than was achieved in Britain, the United States, and other developing countries during their early stages of development. It is lower than the current rate of growth in Japan, Greece, Israel, Formosa or in Italy, France, and Germany, Even at the officially estimated 1 1/2 per cent per year growth in per capita output, it would take over a century of steady growth at that rate for India to reach the current level of per capita income in Japan, and well over three centuries to reach the current level of per capita in the U.S. The current danger is that India will stretch into centuries what took other countries decades.

And all this under circumstances that have most been very favourable for economic growth. The achievement of independence form Britain I 948m raised many real problems, particularly as a result of partition, the relocation of populations, and the bloodshed between Hindus and Moslems. But it also created real opportunities. For decades, the enthusiasm ad energy of a sizable fraction of the ablest people of India had been devoted to the independence struggle. They had themselves been engaged in activities that were not merely neutral but actively hostile to economic development and they had persuaded a large of fraction their countrymen to do likewise. Independence released these energies and made them available to promote economic progress. Independence also fostered a weakening of rigid social and economic arrangements, increased flexibility in institutions, greater mobility of people, and in general an environment more suited than before to change. Finally, the years after independence saw a great inflow of resources form abroad. External assistance during the decade spanning the first two five-years plans averaged about 1 ½ per cent of national income, which means that it provided something like a fifth of net investment; and external assistance was disproportionately concentrated in the second five-year plan period, when it amounted to about 2 ½ per cent of national income or to over a fourth of net investment. One that score alone, growth should have accelerated during the second five-year plan rather than apparently slowing down a bit.

What is the reason for the disappointingly slow rate of growth? One frequently heard explanation is that it reflects the social institutions of Indians, the nature of the Indian people, the climatic conditions in which they live. Religions taboos, the caste system, a fatalistic philosophy are said to imprison the society in a strait jacket of custom and tradition. The people are said to be un-enterprising and slothful. The hot and humid climate of much of the land saps energy.

These factors may have some relevance in explaining the present low level of income in India, but I believe they have almost none in explaining the low rate of growth. Certainly the visitor to India is forcibly struck by the enormous waste of resources, in terms of his own system of values, produced by the holiness of the cow, to take the most obvious example of the economic effect of religious belief. India has one of the highest if not the highest of cows per person in the world, yet the water buffalo is the primary source of milk, and of course beef is almost unavailable as food. Cows wander freely in the streets of major cities, most of them scrawny, poorly cared for, and of little or no economic value. Yet they invariably have the right of way and, poorly as they are fed, doubtless absorb a very large aggregate amount of foodstuffs that could be made available for human consumption. The rigid assignment of tasks to specific castes often means that two or three people are required to do a job that one person, willing to turn his hand to everything, could perform.

Similarly, human qualities are certainly important. A dramatic illustration from India is the differential experience of two groups ;of refugees from Pakistan after partition: the Punjabis and the Bengalis. The Punjabis have doubled the average agricultural yield in the area in which they resettled, and have besides been among the most enterprising, active, and dynamic business groups in India. The Bengali have had great difficulties in resettling, many of them are still in government resettlement camps some 15 years after partition, and they have been a drain on the country rather than a source of growth.

But none of this explains a lack of growth. Insofar as the religious and social customs make for inefficient use of resources, they will keep the Indian level of output lower that otherwise but they need not prevent it from rising at a rapid rate along that lower path. One the contrary, a change in religious and social attitudes, such as is unquestionably occurring, provides an additional reason to expect growth. There need not be a complete reversal of attitudes. A 5 to 10 per cent per year increase in total output would be a very satisfactory record need. To contribute to this, there is required only a small and gradual substitution of attitudes more favourable to the effective use of resources.

The same thing is true about human qualities. It is not necessary that every individual be an enterprising, risk-taking economic man. The history of every nation that has experienced economic growth shows that it is a tiny percentage of the

community that sets the pace, undertakes the path-breaking ventures, coordinates the economic activity of the host of others. Most people everywhere are simply hewers of wood and drawers of water. But their hewing of wood and drawing of water is made far more productive by the activities of the minority of industrial and commercial innovators and the much larger but still tiny minority of imitators. And there is no doubt that India has an adequate supply of potential entrepreneurs, both innovators and imitators.

Indians who migrated to Africa to South East Asia have in country after country formed a major part of the entrepreneurial class, have been the dynamic element initiating and promoting economic progress. It is hard to believe that those who left India are radically different from those who stayed at home.

The clearest evidence that they are not is currently provided by the dramatic growth of small-scale industry in the Punjab. The most encouraging experience during my stay in India was a visit I made to Ludhiana, a medium sized town in the Punjab which is fast becoming a major centre for the production of machine tools, bicycles, sewing machines, and similar Items, and which has long been a major centre for the production of knitted goods. Here was the Industrial Revolution at its inception - I repeatedly felt that I was seeing in true life the descriptions of Manchester and Birmingham the end of the 18the century that I had read in economic histories. There are thousands of small and medium size workshops, with extraordinarily detailed specialization of function. Here was a three man shop where saddles for bicycles were being assembled from parts which in turn were made by other small enterprises. But here also was bicycle factory employing hundreds which purchased many of its parts from the smaller firms, and the output of which had been growing at the rate of 50% a year. One of the owners of the factory who showed me around was particularly proud of the part he had his associates had played in helping their employees to establish independent firms. Here was a small open cubby-hole on the main street in which with the aid of a few tools, a thirty-ton press was being constructed, but here also a firm on a substantial scale making many machine tools, mostly with tools that it has in turn made itself. There is in shortage of enterprise, or drive, or technical skill in Ludhiana. There is rather a self confident, strident, raw capitalism bursting at the seams.

One reason why Westerners so often feel that enterprise and entrepreneurial capacity is lacking in India is because they look at India with expectations derived

from the advanced countries of the West. They think in terms of the large, modern corporation, of General Motors, Genera Electric, and other industrial giants. But it was not firms like this that produced the Industrial revolution; they are, if anything, its end products. The hope for India lies not in the exceptional Tátas or similar giants, but precisely in the hole-in-the wall firm, in the small and medium size enterprises, in Ludhiana not Jamshedpur; in the millions of small entrepreneurs who line the streets of every city with their sometimes miniscule shops and workshops. If the tendencies so evident in Ludhiana could be given full rein, and not hampered and hindered in every direction by governmental interference and control, India could achieve a rate of growth that would exceed today's fondest hopes.

As this final remark suggests, the correct explanation for India's slow growth is in my view not to be found in its religious or social attitudes, or in the quality of its people, but rather in the economic policy that India has adopted; most especially in the extensive use of detailed physical controls by government.

"Planning" dose not by itself have any very specific content. It can refer to a wide range of arrangements: to a largely laissez-faire society, in which individuals plan the use of their own resources and government's role is limited to preserving law and order, enforcing private contracts, and constructing public works; to the recent French policy of mixing exhortation, prediction, and cooperative guesstimating; to centralized control by a totalitarian government of the details of economic activity. Along still different dimension, Mark Spade(Nigel Balchin), in his wonderful book on How to Run a Bassoon Factory and Business for Pleasure defined the deference between a planned and an unplanned business in a way that often seems letter-perfect for India. "In an unplanned business", he writes, "things just happen, i.e. they crop up. Life is full of unforeseen happenings and circumstances over which you have no control. On the other hand: In a planned business things still happen and crop up and so on, but you know exactly what would have been the state of affairs if they hadn't".

In India, planning has come to have a very specific meaning, one that is patterned largely on the Russian model. It has meant a sequence of five-year plans, each attempting to specify the allocation of investment expenditures and productive capacity to different lines of activity, with great emphasis being placed on the expansion of the so-called "heavy" or "basic" industries. A Planning Commission in New Delhi is charged with drawing up the plans and supervising their

implementation. There is some decentralization to the separate states but the general idea is centralized governmental control of the allocation of physical resources.

Whether because of the adoption of the Russian model of economic planning or for other reasons. Russia and India have one feature in common that strongly impresses the casual visitor. In both, if I may pervert a phrase made famous by our present Ambassador to India, there is a striking contrast between public affluence and private squalor. In both countries, whenever one sees a magnificent structure, newly built or well maintained, the odds are heavy that it is governmental. If some activity is luxuriously financed and well provided for, the odds are that is governmentally sponsored. The city in India which showed the most striking improvement since my earlier visit was New Delhi, with impressive new governmental buildings, residence and luxury hotels. I should add that although the public affluence is not notably different in the two countries, the private squalor is much worse in India than in Russia.

Though Indian economic planning is cut to the Russian pattern, it operates in a different economic and political structure. Agricultural land is almost entirely privately owned and operated; so are most trading and industrial enterprises. However, the government does own and operate many important industrial undertakings in a wide variety of fields-from railroads and air transport to steel mils, coal mines, fertilizer factories, machine tool plants, and retail establishments; Parliament has explicitly adopted "the socialist pattern of society" as the objective of economic and social policy; a long list of industries have been explicitly reserved to the "public sector" for future development, and the successive plans have allocated to public sector investment a wholly disproportionate part of total investment - in the third five-year plan, 60 percent although the public sector accounts at present for not much more that a tenth of total income generated. In addition, the government exercises important controls over the private sector: no substantial enterprise can be established without an "industrial" license from the government, existing firms must get government allocations of foreign exchange and also of domestic products in the public sector; and so on in endless variety.

The difference between India and Russia in political structure is at the moment even sharper that in economic structure. The British left parliamentary democracy and respect for civil rights as a very real heritage to India. Though I very much fear that this heritage is being undermined and weakened, as of the moment it

is still very strong indeed. There is tolerance of wide range of opinion, free discussion, open opposition by organized political parties, and judicial protection of individual civil rights-except for recent emergency actions under the Defence of India Act.

The kind of centralized economic planning India has adopted can enable a strong authoritarian government to extract a high fraction of the aggregate output the people for governmental purposes - Russia is a prime current example and China, though we know much less about her, may be another; Egypt under the Pharaohs is a more ancient example. This is one way, and I believe almost the only way, in which such a system can foster economic growth-if the resources extracted are indeed used for productive capital investment rather than for arms or governments. But this advantage- if advantage it be - of centralized economic planning, India is not able to obtain precisely because of the difference between its economic and political structure and those of Russia or China.

For the rest, centralized economic planning is adverse to economic development. First, and most basic, it is an inefficient way to use the knowledge available to the community as a whole. That knowledge is scattered among millions of individuals each of whom has some special information about local resources and capacities, about the particular competence of particular people, characteristics of his local market, and so on in endless variety. The reason the free market can be so efficient an organizing device is because it enables this scattered information to be effectively coordinated and each individual to contribute his mite. Centralized economic planning substitutes the knowledge and information available at the centre for this scattered knowledge. The people at the centre may individually be exceedingly intelligent and informed much more so than the average participant in the economic process. Yet even so their combined knowledge is meagre compared to that of the millions of people whose activities they are seeking to control and coordinate. It is the height of arrogance - or perhaps more realistically, of ignorance - for central planners to suppose otherwise.

In the second place, growth is process of change; it requires flexibility, adaptability, and the willingness to experiment; above all, is a process of trial and error that requires an effective system for ruthlessly weeding out the errors and for generously backing the successful experiments. But centralized economic planning tends to be cumbersome and rigid. So-called plans are laid out long in advance and it

is exceedingly difficult to modify them as circumstances change. Inevitable and necessary bureaucratic procedures mean that the right hand does not know what the left hand is doing, that a long process of files going up the channels of communication and then coming back down is involved in adjusting to changing circumstances. Above all, the unwillingness to admit error, and the political costs of doing so, mean that the unsuccessful experiments are rarely weeded out; unless they are failures of the most extreme kind, they will be subsidized, protected, supported, and labelled successes.

India's publicly operated steel plants provide a current example. These were built for India by foreign countries; one by the British, one by the West Germans, and one by the Russians. All are apparently technologically efficient and modern mills. They are repeatedly cited as great achievements of Indian economic planning,. Yet, on probing, it will be admitted that their costs are much higher than those of the private steel firms, despite the much older and less modern facilities possessed by the latter. Part of the explanation is apparently the extension to their administration of the Civil Service administrative system developed for very different purposes. A senior civil servant, who has had no experience in steel whatsoever and has perhaps only a few more years to retirement, is posted to be in charge of a steel plant, and many of his subordinates will be similarly recruited. Whatever the explanation, the inefficiency can continue because the firms are propped up by restrictions on the import of steel and by domestic prices that my be tool low to restrict the amount demanded to the amount available and yet are high enough to give the private firms very satisfactory profits indeed.

A third major defect of centralized economic planning is the strong tendency for planners to go in for prestige projects- to leave monuments to their activity, perhaps in the form of flashy international airlines, perhaps of highly mechanized factories when more labour -intensive techniques would be better suited to the country's needs, perhaps of luxury hotels like the Ashoka, or perhaps of major dams when a large number of small scale tube wells might be far better.

These defects of central planning impressed me greatly when I was in India eight years ago. But despite them, I was then inclined to guarded optimism. In summarizing my conclusions at that time for the International Cooperation Administration (predecessor of AID), on whose behalf I had been in India, I wrote; "The basic fact about Indian economic development is that there has begun a

breaking down of traditional attitudes and social arrangements that promises to release great reserves of private energy and initiative. India is on the move. The underlying forces making for change are so powerful that I think India can stand much unwise-economic policy.....

"Looking forward, I am optimistic about the chances for growth, not because of the projected five-year plan but despite it. The ambitious plans for government investment and projects, if carried through, will I am persuaded involve waste of capital resources; impressive public plants are a sort of twentieth century Taj Mahal. But India can stand this waste provided it does not lead either to open inflation or to an extensive and deadening network of direct controls designed to suppress inflation".

Unfortunately - and this is the major reason for my present pessimism- the second of these provisos has been contradicted. Price rises in India during the second five-year plan period have produced an extensive and deadening network of direct controls, particularly in connection with foreign exchange and foreign trade. These controls have not yet stifled completely the momentum for growth, but t hey have distorted it greatly, have made for enormous waste of resources, and are a major factor undermining political freedom and democracy.

The Achilles heel of the Indian Economy at the moment is the artificial and unrealistic exchange rate. The official exchange rate is the same today as it was in 1995. In the interim, prices within India have risen some 30 to 40 per cent; whereas prices in the US, UK, and Germany have risen far less, at most by 10 per cent. If the rupee was worth 21 cents in 1955, it clearly is not worth 21 cents today. And even in 195, India was experiencing difficulty in balancing its payments. It was even then engaged in extensive foreign exchange control, import restrictions, and export subsidies.

The attempt to maintain an over-valued rupee has had far reaching effects ---- as similar attempts have had in every other country that has tried to maintain an overvalued currency. The rise in internal prices without a change in the official price of foreign currency has made foreign goods seem cheap relative to domestic goods and so has encouraged attempts to increase imports; it has also made domestic goods seem expensive to foreign purchasers and so has discouraged exports. As a result, India's recorded exports have risen much less than world trade a whole, while the demand for imports has steadily expanded.

The pressure on the balance of payments has been officially met in three ways: first, by using up large foreign exchange reserves; second, by getting additional assistance and loans from abroad; third, by extending direct controls over imports and subsidizing export. There has been a fourth unofficial way, namely, black market transactions in exchange and the smuggling of goods. Though no records exist on this fourth way, there is little doubt that it has expanded greatly as it increasingly renders official statistics unreliable as measures of India's foreign trade transactions. For example, though the number of tourists entering India in recent years has been growing, the amount recorded in official statistics as spent by tourists has been declining.

Exchange control has not in fact been able to stimulate exports. They have stagnated or fallen. It has operated almost entirely by preventing individuals form importing as much as they would like at the controlled exchange rate. In doing so, it has done immense harm to the Indian economic and political structure. There is no satisfactory criterion available to the planning authorities to determine what items and how much of each should be permitted to be imported. There is much talk of restricting "unessential" imports and permitting only "essential" ones. But this is just talk unless there is some way of determining what is and what is not essential. In the absence of a market test, there is in fact no satisfactory way to do so. When a family must reduce its expenditures, it does not cut out whole categories of goods; it cuts its expenditures a little here and a little there, balancing the loss from spending a rupee less on toothpaste with that from spending a rupee less on toothpaste with that from spending a rupee less on moves and so on in infinite variety. The same principle applies in restricting imports to the amount that can be purchased with the foreign exchange available. But how can planners at the counter have the necessary information about each of the tens of thousands of items imported? How can they know how much a little cut here will reduce exports of a hundred other items? How costly it will be to provide domestic substitutes, directly or indirectly? How much the consumers of the ultimate products would be willing to sacrifice in other directions for a little more of a particular import item?

The fact is that the planners cannot possibly know what they would have to know to ration exchange intelligently. Instead, they resort to the blunt axe of cutting out whole categories of imports; to the dead hand of the past, in allocating a certain percentage of imports in some base years; and to submission to influence, political

and economic, which is brought to bear on them. And they have no alternative, since there is no sensible way they can do what they set out to do.

Automobiles provide a striking example of the economic waste produced by this policy. In the name of restricting "luxuries" to "save foreign exchange", the importation of automobiles from abroad is in effect prohibited, whether these be second hand or new. But at the same time, new automobiles, copies of foreign makes, are being produced at very high cost in small runs under extremely uneconomic conditions at three (?) different plants in India. these are available by one channel or another for the luxury" consumption it is said to be desirable to suppress. Many of their components are imported, and many of those made in India use indirectly imported materials. The result is that not only is the total cost of the amount of motor transportation actually produced multiplied manifold, but even the foreign exchange cost is probably larger.

The results are most striking in the market for second hand cars. A car that I sold before I left the US for $22 (a) 1950 Buick) was being quoted in Bombay when I was there at 7,500 o 10,000 rupees or $1,500 to $2,000 at the official exchange rate and over $1,000 at the free market rate. Clearly, the sensible rate and cheap way for India to get automobile transportation is o import second-hand cars and trucks from abroad. Aside from the direct saying through getting the cars cheap, this would have great indirect advantage in promoting technical literacy, using the abundant manpower resources of India, and conserving capital. But India in effect says, "We are too to buy second-hand motor vehicles, we must buy new ones."!

Some very crude estimates I have made suggest that the extra amount India is currently spending annually to acquire motor vehicle transportation is of the order of one-tenth of annual US aid. This fraction of our aid is simply being thrown away to support conspicuous production.

What is true of automobiles is true in industry after industry India has become a protected economy in which items are produced at a multiple of the costs at which they could be obtained from abroad. and at the same time, foreign exchange is wasted in purchasing goods abroad for which it would be more economical to use domestic substitutes (like the domestic repair and maintenance of second-hand automobiles which would be a substitute for the import of materials for the production of new ones.)

Need less to say, in spite of the proliferation and extension of direct exchange controls, it has not been possible in fact to maintain the artificial exchange rate. Aside from black market transactions, the various explicit promotion schemes and restrictions on imports have the effect of making the actual exchange rate different from the official one. For example, a manufacturer of sewing machine heads who was exporting some told me that he sold he same head for 132 rupees in India, and for 7 pounds sterling abroad. This works out to an exchange rate of 19 rupees to the pound sterling compared with the official rate of 13 ½ rupees. Other rates that I calculated in the same way varied from 15 to 26 rupees to the pound. If similar comparisons of internal and external price were made for import items, the range would be even wider. Through the adoption of expedient after expedient in attempting to shore up an artificial rate of exchange, the planners have in fact created a multiple exchange rate system that not one of them would be willing go defend as rational if he examined the whole structure explicitly.

Though the controls in the field of foreign exchange are the most widespread and destructive at the moment, their adverse effect is reinforced by a whole series of other domestic controls. For example, steel is rational to users, who spend much time and energy is reshuffling allocations and distributing the steel more rationally. Some of the entrepreneurs at Ludhiana estimated that an eighth to a quarter of their working time was being spent on either getting allocations or finding ways to acquire the materials they needed by more devious channels.

Aside from the economic harm they do, the controls are doing enormous harm to the political fabric of Indian society. Corruption and petty bribery are of course universal ,and not only in underdeveloped societies. But they have been reaching new heights in India. On my earlier visit to India, I heard almost nothing about explicit corruption in the higher ranks of the civil service, though much about political influence. On this visit, there was widespread talk on all sides, and in the press, about bribery of government officials, the securing of favours by contributions to political parties and so on and on, with even the naming of names, in private conversation, of very highly placed persons directly involved. A standard jest heard over and over was that while the U.S. might be an "affluent society", India was an "influence society ". A major reason for the corruption is that the techniques of economic planning employed in India have put relatively minor civil economic value. An import licence, carrying with it price, can often be sold at once for double

or triple its nominal value. Much the same is true of a permit to acquire steel at the controlled price. Industrial licence, access to credit on specially favourable terms, or to other special programmes designed to "promote" development in one direction or another, and so on, add further to the stimulus to corruption provided in all countries by large scale governmental expenditures, with the opportunities they offer for juicy contracts. C. Rajagopalachari, the first Indian Governor-General after Independence and currently the octogenarian leader of the opposition Swatantra (Freedom) party , has labelled the existing system a license-and-permit-raj, and people of every political persuasion admit the aptness of the label. The westerner who has formed his opinion of India solely from what he has read about it is likely to have the impression that a strong central government is at times ruthlessly and always forcefully shaping private conduct to further what it regards as the public interest. In fact, it would be no less accurate to describe the situation as one in which powerful private groups are able, through political and financial influence, to use governmental policy as an instrument to further their own interests.

Corruption undermines the political heritage directly by destroying the moral and the efficiency of the civil service, and by undermining respect for law on the part of the public at large. But the factors that give rise to it operate in more subtle fashions as well. The newspapers, for example, are subject to newsprint rationing; moreover, they are for the most part owned by persons who also have large interests in industrial concerns heavily dependent on government for licenses, permits, and orders. It clearly is the better part of valour for them to mute their criticism of the government in power, and certainly this reader of the papers had the impression that they did so, avoiding any general criticism, and restricting criticism to specific points. For example, as a result of the Chinese episode, a not-negligible fraction of the intellectuals I met, even those strongly in favour of the general economic policies for the government, have become disenchanted with Nehru and believe that he should be replaced. Yet I read not a single editorial or column in any major English-language newspaper voicing such a view. Published statements to this effect were either in explicitly party organs or in small -circulation personal journals. I head of one journalist who had been discharged from a leading newspaper because of anti-Nehru comments in his articles. Three persona who circulated a public letter after the Chinese invasion urging that Nehru be replaced were held in jail for some months without ever being brought to trial and then re-released. While I heard different

stories about the extent to which this event had even been reported in the press, apparently none of the news paper conducted a vigorous editorial campaign about the incident. The major protects were by private committees and through public meeting. As a final item, a leading businessman who was a strong backer of the Swatantra party cited as a sign of his courage and independence that he had given as much money to Swatantra as to Nehru's congress party !

Though these trends are important and may ultimately be decisive, let me repeat that, as of the present, India is, on any absolute scale, a remarkably free country with a high respect for civil and political right. That is why there is still so much hope and why it is so important to recognize and alter the policies that are threatening its internal freedom.

On one level, there is ground for optimism about India. I am my self still persuaded, as I was in 1955, that India lacks none of the basic requisites for economic growth expect a proper economic policy. I believe that drastic but technically feasible changes in economic policy-the substitution of a freely floating exchange rate for the present fixed rate and elimination of the exchange controls, import restrictions, and export subsidies designed to prop up the present rate; and a similar policy of substituting the free market for direct controls in the domestic economic scene-could release an enormous reservoir of energy and drive and produce a dramatic accelerate of economic growth in India comparable to that which occurred I Japan after the Meiji restoration.

On another level, how ever, I am exceedingly pessimistic. The intellectual climate of opinion about economic policy is almost wholly adverse to any changes in the direction that seems to me required. There is a deadening uniformity of opinion in India, particularly among economists, about issues of economic policy. In talks to and with students and teachers of economics at a number of universities, Personal of the planning commission, economists in the civil service, financial journalists, and business men, I encountered again and again the same stereotyped responses expressed often in precisely the same words. It was as if they were repeating a catechism, learned by rote, and believed in as a matter of faith. And this was equally so when the responses were patently contradicted by empirical evidence as when they were supported by the evidence or at least not contradicted.

There is only one prominent professional economist, Professor B.R. Shenoy of Gujarat University, who is openly and publicly and at all effectively opposed to

present policies and in favour of greater reliance on a free market. He is a remarkable and courageous man. In 1955, when the second five-year plan was in preparation, the government appointed an advisory committee of 21 professional economists to criticize the draft framework that had been prepared by Prof. Mahalanobis. The committee submitted two reports. One, signed by 20 economists, was largely a restatement of the draft framework and contained hardly any critical comments, though doubtless many of the signers had strong individual reservations on specific points. The other was a minority report by Prof. Shenoy, which criticized the fundamental structure of the proposed plan, and pointed out in detail where difficulties would arise and what their character would be. If one reads Shenoy's report now, it sounds like a retrospective description of what happened rather than a forecast. But needless to say, tough most economists display a deep respect for Shenoy's courage and personal qualities, he remains a prophet without honour in his own country.

There are a few younger and less well known economists who deviate from the dominate opinion, and there are many who share the main tenets of the dominant view yet differ on particular elements - for example, on the desirability of maintaining the present exchange rate. There are more numerous persons in the business world, particularly some connected with the Swatantra party, who recognize the defects of detailed centralized planning, and the virtues of a greater reliance on the market. But even among business men, most grumble about details but accept the views of the professional economists as necessarily right in the main. I shall not soon forget the tongue lashing I received from a prominent and highly successful manufacturer when I made remarks into which he correctly read implicit criticism of India's current economic policies. Of course, many of the currently most successful businessmen have a great stake in the existing system. The virtue of a free market is that it is a profit and loss system. If it were permitted to operate, it would quickly and ruthlessly weed out many who are currently protected by the ubiquitous controls. In India as in the United States, existing private entrepreneurs are in practice among the most effective enemies of free enterprise.

It will, I fear, take a major political or economic crisis to produce a substantial change in the course on which India is no set in economic policy, and I am not at all optimistic that such a crisis if it occurs, will produce a shift toward greater freedom rather than toward greater authoritarianism.

CAPITALISM BEYOND THE CRISIS

By Amartya Sen. Feb 15, 2009. The New York Review of Books

2008 was a year of crises. First, we had a food crisis, particularly threatening to poor consumers, especially in Africa. Along with that came a record increase in oil prices, threatening all oil-importing countries. Finally, rather suddenly in the fall, came the global economic downturn, and it is now gathering speed at a frightening rate. The year 2009 seems likely to offer a sharp intensification of the downturn, and many economists are anticipating a full-scale depression, perhaps even one as large as in the 1930s. While substantial fortunes have suffered steep declines, the people most affected are those who were already worst off.

The question that arises most forcefully now concerns the nature of capitalism and whether it needs to be changed. Some defenders of unfettered capitalism who resist change are convinced that capitalism is being blamed too much for short-term economic problems—problems they variously attribute to bad governance (for example by the Bush administration) and the bad behavior of some individuals (or what John McCain described during the presidential campaign as "the greed of Wall Street"). Others do, however, see truly serious defects in the existing economic arrangements and want to reform them, looking for an alternative approach that is increasingly being called "new capitalism."

The idea of old and new capitalism played an energizing part at a symposium called "New World, New Capitalism" held in Paris in January and hosted by the French president Nicolas Sarkozy and the former British prime minister Tony Blair, both of whom made eloquent presentations on the need for change. So did German Chancellor Angela Merkel, who talked about the old German idea of a "social market"—one restrained by a mixture of consensus-building policies—as a possible blueprint for new capitalism (though Germany has not done much better in the recent crisis than other market economies).

Ideas about changing the organization of society in the long run are clearly needed, quite apart from strategies for dealing with an immediate crisis. I would separate out three questions from the many that can be raised. First, do we really need some kind of "new capitalism" rather than an economic system that is not monolithic, draws on a variety of institutions chosen pragmatically, and is based on social values that we can defend ethically? Should we search for a new capitalism or for a "new world"—to use the other term mentioned at the Paris meeting—that would take a different form?

The second question concerns the kind of economics that is needed today, especially in light of the present economic crisis. How do we assess what is taught and championed among academic economists as a guide to economic policy—including the revival of Keynesian thought in recent months as the crisis has grown fierce? More particularly, what does the present economic crisis tell us about the institutions and priorities to look for? Third, in addition to working our way toward a better assessment of what long-term changes are needed, we have to think—and think fast—about how to get out of the present crisis with as little damage as possible.

What are the special characteristics that make a system indubitably capitalist—old or new? If the present capitalist economic system is to be reformed, what would make the end result a new capitalism, rather than something else? It seems to be generally assumed that relying on markets for economic transactions is a necessary condition for

an economy to be identified as capitalist. In a similar way, dependence on the profit motive and on individual rewards based on private ownership are seen as archetypal features of capitalism. However, if these are necessary requirements, are the economic systems we currently have, for example, in Europe and America, genuinely capitalist?

All affluent countries in the world—those in Europe, as well as the US, Canada, Japan, Singapore, South Korea, Australia, and others—have, for quite some time now, depended partly on transactions and other payments that occur largely outside markets. These include unemployment benefits, public pensions, other features of social security, and the provision of education, health care, and a variety of other services distributed through nonmarket arrangements. The economic entitlements connected with such services are not based on private ownership and property rights.

Also, the market economy has depended for its own working not only on maximizing profits but also on many other activities, such as maintaining public security and supplying public services—some of which have taken people well beyond an economy driven only by profit. The creditable performance of the so-called capitalist system, when things moved forward, drew on a combination of institutions—publicly funded education, medical care, and mass transportation are just a few of many—that went much beyond relying only on a profit-maximizing market economy and on personal entitlements confined to private ownership.

Underlying this issue is a more basic question: whether capitalism is a term that is of particular use today. The idea of capitalism did in fact have an important role historically, but by now that usefulness may well be fairly exhausted.

For example, the pioneering works of Adam Smith in the eighteenth century showed the usefulness and dynamism of the market economy, and why—and particularly how—that dynamism worked. Smith's investigation provided an illuminating diagnosis of the workings of the market just when that dynamism was powerfully emerging. The contribution that The Wealth of Nations, published in 1776, made to the understanding of what came to be called capitalism was monumental. Smith showed how the freeing of trade can very often be extremely helpful in generating economic prosperity through specialization in production and division of labor and in making good use of economies of large scale.

Those lessons remain deeply relevant even today (it is interesting that the impressive and highly sophisticated analytical work on international trade for which Paul Krugman received the latest Nobel award in economics was closely linked to Smith's far-reaching insights of more than 230 years ago). The economic analyses that followed those early expositions of markets and the use of capital in the eighteenth century have succeeded in solidly establishing the market system in the corpus of mainstream economics.

However, even as the positive contributions of capitalism through market processes were being clarified and explicated, its negative sides were also becoming clear—often to the very same analysts. While a number of socialist critics, most notably Karl Marx, influentially made a case for censuring and ultimately supplanting capitalism, the huge limitations of relying entirely on the market economy and the profit motive were also clear enough even to Adam Smith. Indeed, early advocates of the use of markets,

including Smith, did not take the pure market mechanism to be a freestanding performer of excellence, nor did they take the profit motive to be all that is needed.

Even though people seek trade because of self-interest (nothing more than self-interest is needed, as Smith famously put it, in explaining why bakers, brewers, butchers, and consumers seek trade), nevertheless an economy can operate effectively only on the basis of trust among different parties. When business activities, including those of banks and other financial institutions, generate the confidence that they can and will do the things they pledge, then relations among lenders and borrowers can go smoothly in a mutually supportive way. As Adam Smith wrote:

When the people of any particular country have such confidence in the fortune, probity, and prudence of a particular banker, as to believe that he is always ready to pay upon demand such of his promissory notes as are likely to be at any time presented to him; those notes come to have the same currency as gold and silver money, from the confidence that such money can at any time be had for them.[1]

Smith explained why sometimes this did not happen, and he would not have found anything particularly puzzling, I would suggest, in the difficulties faced today by businesses and banks thanks to the widespread fear and mistrust that is keeping credit markets frozen and preventing a coordinated expansion of credit.

It is also worth mentioning in this context, especially since the "welfare state" emerged long after Smith's own time, that in his various writings, his overwhelming concern—and worry—about the fate of the poor and the disadvantaged are strikingly prominent. The most immediate failure of the market mechanism lies in the things that the market leaves undone. Smith's economic analysis went well beyond leaving everything to the invisible hand of the market mechanism. He was not only a defender of the role of the state in providing public services, such as education, and in poverty relief (along with demanding greater freedom for the indigents who received support than the Poor Laws of his day provided), he was also deeply concerned about the inequality and poverty that might survive in an otherwise successful market economy.

Lack of clarity about the distinction between the necessity and sufficiency of the market has been responsible for some misunderstandings of Smith's assessment of the market mechanism by many who would claim to be his followers. For example, Smith's defense of the food market and his criticism of restrictions by the state on the private trade in food grains have often been interpreted as arguing that any state interference would necessarily make hunger and starvation worse.

But Smith's defense of private trade only took the form of disputing the belief that stopping trade in food would reduce the burden of hunger. That does not deny in any way the need for state action to supplement the operations of the market by creating jobs and incomes (e.g., through work programs). If unemployment were to increase sharply thanks to bad economic circumstances or bad public policy, the market would not, on its own, recreate the incomes of those who have lost their jobs. The new unemployed, Smith wrote, "would either starve, or be driven to seek a subsistence either by begging, or by the perpetration perhaps of the greatest enormities," and "want, famine, and mortality would immediately prevail...."[2] Smith rejects interventions that exclude the market—but not interventions that include the market while aiming to do those important things that the market may leave undone.

Smith never used the term "capitalism" (at least so far as I have been able to trace), but it would also be hard to carve out from his works any theory arguing for the sufficiency of market forces, or of the need to accept the dominance of capital. He talked about the importance of these broader values that go beyond profits in The Wealth of Nations, but it is in his first book, The Theory of Moral Sentiments, which was published exactly a quarter of a millennium ago in 1759, that he extensively investigated the strong need for actions based on values that go well beyond profit seeking. While he wrote that "prudence" was "of all the virtues that which is most useful to the individual," Adam Smith went on to argue that "humanity, justice, generosity, and public spirit, are the qualities most useful to others."[3]

Smith viewed markets and capital as doing good work within their own sphere, but first, they required support from other institutions—including public services such as schools—and values other than pure profit seeking, and second, they needed restraint and correction by still other institutions—e.g., well-devised financial regulations and state assistance to the poor—for preventing instability, inequity, and injustice. If we were to look for a new approach to the organization of economic activity that included a pragmatic choice of a variety of public services and well-considered regulations, we would be following rather than departing from the agenda of reform that Smith outlined as he both defended and criticized capitalism.

Historically, capitalism did not emerge until new systems of law and economic practice protected property rights and made an economy based on ownership workable. Commercial exchange could not effectively take place until business morality made contractual behavior sustainable and inexpensive—not requiring constant suing of defaulting contractors, for example. Investment in productive businesses could not flourish until the higher rewards from corruption had been moderated. Profit-oriented capitalism has always drawn on support from other institutional values.

The moral and legal obligations and responsibilities associated with transactions have in recent years become much harder to trace, thanks to the rapid development of secondary markets involving derivatives and other financial instruments. A subprime lender who misleads a borrower into taking unwise risks can now pass off the financial assets to third parties—who are remote from the original transaction. Accountability has been badly undermined, and the need for supervision and regulation has become much stronger.

And yet the supervisory role of government in the United States in particular has been, over the same period, sharply curtailed, fed by an increasing belief in the self-regulatory nature of the market economy. Precisely as the need for state surveillance grew, the needed supervision shrank. There was, as a result, a disaster waiting to happen, which did eventually happen last year, and this has certainly contributed a great deal to the financial crisis that is plaguing the world today. The insufficient regulation of financial activities has implications not only for illegitimate practices, but also for a tendency toward overspeculation that, as Adam Smith argued, tends to grip many human beings in their breathless search for profits.

Smith called the promoters of excessive risk in search of profits "prodigals and projectors"—which is quite a good description of issuers of subprime mortgages over the past few years. Discussing laws against usury, for example, Smith wanted state

regulation to protect citizens from the "prodigals and projectors" who promoted unsound loans:

A great part of the capital of the country would thus be kept out of the hands which were most likely to make a profitable and advantageous use of it, and thrown into those which were most likely to waste and destroy it.[4]

The implicit faith in the ability of the market economy to correct itself, which is largely responsible for the removal of established regulations in the United States, tended to ignore the activities of prodigals and projectors in a way that would have shocked Adam Smith.

The present economic crisis is partly generated by a huge overestimation of the wisdom of market processes, and the crisis is now being exacerbated by anxiety and lack of trust in the financial market and in businesses in general—responses that have been evident in the market reactions to the sequence of stimulus plans, including the $787 billion plan signed into law in February by the new Obama administration. As it happens, these problems were already identified in the eighteenth century by Smith, even though they have been neglected by those who have been in authority in recent years, especially in the United States, and who have been busy citing Adam Smith in support of the unfettered market.

While Adam Smith has recently been much quoted, even if not much read, there has been a huge revival, even more recently, of John Maynard Keynes. Certainly, the cumulative downturn that we are observing right now, which is edging us closer to a depression, has clear Keynesian features; the reduced incomes of one group of persons has led to reduced purchases by them, in turn causing a further reduction in the income of others.

However, Keynes can be our savior only to a very partial extent, and there is a need to look beyond him in understanding the present crisis. One economist whose current relevance has been far less recognized is Keynes's rival Arthur Cecil Pigou, who, like Keynes, was also in Cambridge, indeed also in Kings College, in Keynes's time. Pigou was much more concerned than Keynes with economic psychology and the ways it could influence business cycles and sharpen and harden an economic recession that could take us toward a depression (as indeed we are seeing now). Pigou attributed economic fluctuations partly to "psychological causes" consisting of *variations in the tone of mind of persons whose action controls industry, emerging in errors of undue optimism or undue pessimism in their business forecasts.*[5]

It is hard to ignore the fact that today, in addition to the Keynesian effects of mutually reinforced decline, we are strongly in the presence of "errors of...undue pessimism." Pigou focused particularly on the need to unfreeze the credit market when the economy is in the grip of excessive pessimism:

Hence, other things being equal, the actual occurrence of business failures will be more or less widespread, according [to whether] bankers' loans, in the face of crisis of demands, are less or more readily obtainable.[6]

Despite huge injections of fresh liquidity into the American and European economies, largely from the government, the banks and financial institutions have until

now remained unwilling to unfreeze the credit market. Other businesses also continue to fail, partly in response to already diminished demand (the Keynesian "multiplier" process), but also in response to fear of even less demand in the future, in a climate of general gloom (the Pigovian process of infectious pessimism).

One of the problems that the Obama administration has to deal with is that the real crisis, arising from financial mismanagement and other transgressions, has become many times magnified by a psychological collapse. The measures that are being discussed right now in Washington and elsewhere to regenerate the credit market include bailouts—with firm requirements that subsidized financial institutions actually lend—government purchase of toxic assets, insurance against failure to repay loans, and bank nationalization. (The last proposal scares many conservatives just as private control of the public money given to the banks worries people concerned about accountability.) As the weak response of the market to the administration's measures so far suggests, each of these policies would have to be assessed partly for their impact on the psychology of businesses and consumers, particularly in America.

The contrast between Pigou and Keynes is relevant for another reason as well. While Keynes was very involved with the question of how to increase aggregate income, he was relatively less engaged in analyzing problems of unequal distribution of wealth and of social welfare. In contrast, Pigou not only wrote the classic study of welfare economics, but he also pioneered the measurement of economic inequality as a major indicator for economic assessment and policy.[7] Since the suffering of the most deprived people in each economy—and in the world—demands the most urgent attention, the role of supportive cooperation between business and government cannot stop only with mutually coordinated expansion of an economy. There is a critical need for paying special attention to the underdogs of society in planning a response to the current crisis, and in going beyond measures to produce general economic expansion. Families threatened with unemployment, with lack of medical care, and with social as well as economic deprivation have been hit particularly hard. The limitations of Keynesian economics to address their problems demand much greater recognition.

A third way in which Keynes needs to be supplemented concerns his relative neglect of social services—indeed even Otto von Bismarck had more to say on this subject than Keynes. That the market economy can be particularly bad in delivering public goods (such as education and health care) has been discussed by some of the leading economists of our time, including Paul Samuelson and Kenneth Arrow. (Pigou too contributed to this subject with his emphasis on the "external effects" of market transactions, where the gains and losses are not confined only to the direct buyers or sellers.) This is, of course, a long-term issue, but it is worth noting in addition that the bite of a downturn can be much fiercer when health care in particular is not guaranteed for all. For example, in the absence of a national health service, every lost job can produce a larger exclusion from essential health care, because of loss of income or loss of employment-related private health insurance. The US has a 7.6 percent rate of unemployment now, which is beginning to cause huge deprivation. It is worth asking how the European countries, including France, Italy, and Spain, that lived with much higher levels of unemployment for decades, managed to avoid a total collapse of their quality of life. The answer is partly the way the European welfare state operates, with much stronger unemployment insurance than in America and, even more importantly, with basic medical services provided to all by the state.

The failure of the market mechanism to provide health care for all has been flagrant, most noticeably in the United States, but also in the sharp halt in the progress of health and longevity in China following its abolition of universal health coverage in 1979. Before the economic reforms of that year, every Chinese citizen had guaranteed health care provided by the state or the cooperatives, even if at a rather basic level. When China removed its counterproductive system of agricultural collectives and communes and industrial units managed by bureaucracies, it thereby made the rate of growth of gross domestic product go up faster than anywhere else in the world. But at the same time, led by its new faith in the market economy, China also abolished the system of universal health care; and, after the reforms of 1979, health insurance had to be bought by individuals (except in some relatively rare cases in which the state or some big firms provide them to their employees and dependents). With this change, China's rapid progress in longevity sharply slowed down.

This was problem enough when China's aggregate income was growing extremely fast, but it is bound to become a much bigger problem when the Chinese economy decelerates sharply, as it is currently doing. The Chinese government is now trying hard to gradually reintroduce health insurance for all, and the US government under Obama is also committed to making health coverage universal. In both China and the US, the rectifications have far to go, but they should be central elements in tackling the economic crisis, as well as in achieving long-term transformation of the two societies.

The revival of Keynes has much to contribute both to economic analysis and to policy, but the net has to be cast much wider. Even though Keynes is often seen as a kind of a "rebel" figure in contemporary economics, the fact is that he came close to being the guru of a new capitalism, who focused on trying to stabilize the fluctuations of the market economy (and then again with relatively little attention to the psychological causes of business fluctuations). Even though Smith and Pigou have the reputation of being rather conservative economists, many of the deep insights about the importance of nonmarket institutions and nonprofit values came from them, rather than from Keynes and his followers.

A crisis not only presents an immediate challenge that has to be faced. It also provides an opportunity to address long-term problems when people are willing to reconsider established conventions. This is why the present crisis also makes it important to face the neglected long-term issues like conservation of the environment and national health care, as well as the need for public transport, which has been very badly neglected in the last few decades and is also so far sidelined—as I write this article—even in the initial policies announced by the Obama administration. Economic affordability is, of course, an issue, but as the example of the Indian state of Kerala shows, it is possible to have state-guaranteed health care for all at relatively little cost. Since the Chinese dropped universal health insurance in 1979, Kerala—which continues to have it—has very substantially overtaken China in average life expectancy and in indicators such as infant mortality, despite having a much lower level of per capita income. So there are opportunities for poor countries as well.

But the largest challenges face the United States, which already has the highest level of per capita expenditure on health among all countries in the world, but still has a relatively low achievement in health and has more than forty million people with no guarantee of health care. Part of the problem here is one of public attitude and understanding. Hugely distorted perceptions of how a national health service works need

to be corrected through public discussion. For example, it is common to assume that no one has a choice of doctors in a European national health service, which is not at all the case.

There is, however, also a need for better understanding of the options that exist. In US discussions of health reform, there has been an overconcentration on the Canadian system—a system of public health care that makes it very hard to have private medical care—whereas in Western Europe the national health services provide care for all but also allow, in addition to state coverage, private practice and private health insurance, for those who have the money and want to spend it this way. It is not clear just why the rich who can freely spend money on yachts and other luxury goods should not be allowed to spend it on MRIs or CT scans instead. If we take our cue from Adam Smith's arguments for a diversity of institutions, and for accommodating a variety of motivations, there are practical measures we can take that would make a huge difference to the world in which we live.

The present economic crises do not, I would argue, call for a "new capitalism," but they do demand a new understanding of older ideas, such as those of Smith and, nearer our time, of Pigou, many of which have been sadly neglected. What is also needed is a clearheaded perception of how different institutions actually work, and of how a variety of organizations—from the market to the institutions of the state—can go beyond short-term solutions and contribute to producing a more decent economic world.

—February 25, 2009

Notes

[1] Adam Smith, An Inquiry into the Nature and Causes of the Wealth of Nations, edited by R.H. Campbell and A.S. Skinner (Clarendon Press, 1976), I, II.ii.28, p. 292.
[2] Smith, The Wealth of Nations, I, I.viii.26, p. 91.
[3] Adam Smith, The Theory of Moral Sentiments, edited by D.D. Raphael and A.L. Macfie (Clarendon Press, 1976), pp. 189–190.
[4] Smith, The Wealth of Nations, I, II.iv.15, p. 357.
[5] A.C. Pigou, Industrial Fluctuations (London: Macmillan, 1929), p. 73.
[6] Pigou, Industrial Fluctuations, p. 96.
[7] A.C. Pigou, The Economics of Welfare (London: Macmillan, 1920). Current works on economic inequality, including the major contributions of A.B. Atkinson, have been to a considerable extent inspired by Pigou's pioneering initiative: see Atkinson, Social Justice and Public Policy (MIT Press, 1983).

Usha Thorat: Impact of global financial crisis on Reserve Bank of India (RBI) as a national regulator

Presentation by Ms Usha Thorat, Deputy Governor of the Reserve Bank of India, at the 56th EXCOM Meeting and FinPower CEO Forum organised by APRACA, Seoul, 29 June 2009.

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I am delighted to be here in Seoul, participating in this 56th EXCOM Meeting and FinPower CEO Forum – my thanks to Secretary General Bayaua for inviting me to make this presentation on the "impact of the global financial crisis on RBI as a national regulator".

In order to understand the impact of the global crisis on India and the manner in which the Reserve Bank of India (RBI) responded, it is important to realise that the RBI is a central bank that is entrusted with multi-dimensional roles and hence in this talk I propose to analyse how the RBI responded with respect to several of these roles.

Multi-dimensional roles of the RBI

The RBI is entrusted with several functions, one of the most important one being the monetary authority of the country. As monetary authority, the RBI has as its objectives price stability, growth and financial stability. The weight and emphasis accorded to each of these objectives would vary depending on the overall macro economic conditions. In addition to its role as monetary authority, the RBI has responsibilities for forex management and government domestic debt management – both national and sub national. It is also the banking regulator – it regulates commercial banks, cooperative banks (both rural and urban), financial institutions and non banking financial companies. It has a developmental role to ensure inclusive growth – thus, policies on rural credit, SME and financial inclusion are an integral part of its functions.

Impact of the global crisis on India

The direct effect of the global financial crisis on the Indian banking and financial system was almost negligible, thanks to the limited exposure to riskier assets and derivatives. The relatively low presence of foreign banks also minimised the impact on the domestic economy.

However, the crisis did have knock on effects on the country, broadly, in three ways. First, the reduction in foreign equity flows – especially FII flows – impacted the capital and forex markets and the availability of funds from these markets to domestic businesses; second, the shrinking of credit markets overseas had the impact of tightening access to overseas lines of credit including trade credit for banks and corporates. Both these factors led to pressure on credit and liquidity in the domestic markets with the knock on effects, and third, the fall in global trade and output had impact on consumption and investment demand. The cumulative impact of all this was a slowing down of output and employment. Despite the slowing down, India is still the second fastest growing economy in the world.

Moderation in growth

After clocking an average of 9.4 per cent during three successive years from 2005-06 to 2007-08, the growth rate of real GDP slowed down to 6.7 per cent (revised estimates) in 2008-09. Industrial production grew by 2.6 per cent as compared to 7.4 per cent in the previous year. In the half year ended March 2009, imports fell by 12.2 per cent and exports fell by 20.0 per cent. The trade deficit widened from $88.5 billion in 2007-08 to $119.1 billion

in 2008-09. Current account deficit increased from $17.0 billion in 2007-08 to $29.8 billion in 2008-09. Net capital inflows at US$ 9.1 billion (0.8 per cent of GDP) were much lower in 2008-09 as compared with US$ 108.0 billion (9.2 per cent of GDP) during the previous year mainly due to net outflows under portfolio investment, banking capital and short-term trade credit. As per the estimate made by the RBI in its Annual Policy announced on April 21, 2009, GDP is expected to grow by 6 per cent in 2009-10.

RBI's response as monetary authority

Till August 2008, the RBI followed a tight monetary stance in view of the inflationary pressures arising from crude, commodity and food prices. In mid-September 2008, severe disruptions of international money markets, sharp declines in stock markets across the globe and extreme investor aversion brought pressures on the domestic money and forex markets. The RBI responded by selling dollars consistent with its policy objective of maintaining orderly conditions in the foreign exchange market. Simultaneously, it started addressing the liquidity pressures through a variety of measures. A second repo auction in the day under the Liquidity Adjustment Facility (LAF) was also re-introduced in September 2008. The repo rate was cut in stages from 9 per cent in October 2008 to the current rate of 4.75 per cent. The reverse repo rate was brought down from 6 per cent to 3.25 per cent. The cash reserve ratio which was 9 per cent in October 2008 has been brought down to 5 per cent. To overcome the problem of availability of collateral of government securities for availing of LAF, a special refinance facility was introduced in October 2008 to enable banks to get refinance from the RBI against a declaration of having extended bona fide commercial loans, under a pre-existing provision of the RBI Act for a maximum period of 90 days. The statutory liquidity ratio requiring banks to keep 25 per cent of their liabilities in government securities was reduced to 24 per cent. These actions of the RBI since mid-September 2008 resulted in augmentation of actual/potential liquidity of nearly $50 billion.

Financial stability objective – RBI's response

The immediate result of tightening of the money and credit markets in October 2008 created demands on banks that were already expanding credit well beyond the resources raised from the public by way of deposits. Companies which were substituting overseas credit and capital market sources with bank funds started withdrawing funds parked with mutual funds and utilising their undrawn limits with banks. Some of the companies that had issued commercial paper in the market – especially the real estate companies and the non banking companies – found it difficult to roll over the maturing paper. The Commercial Paper and Certificates of Deposit markets became illiquid and mutual funds started facing severe redemption pressures. Hence, in the interest of maintaining financial stability, the RBI instituted a 14-day special repo facility for a notified amount of about $ 4 billion to alleviate liquidity stress faced by mutual funds, and banks were allowed temporary use of Statutory Liquidity Ratio (SLR) securities for collateral purposes for an additional 0.5 per cent of Net Demand and Time Liabilities exclusively for this. Subsequently, this facility was extended for Non Banking Finance Companies (NBFCs) and later to housing finance companies as well. The relaxation in the maintenance of the SLR was enhanced to the extent of up to 1.5 per cent of their NDTL.

In order to curtail leveraging, commercial banks, all-India term lending and refinancing institutions were not allowed to lend against or buy back CDs held by mutual funds. This restriction was relaxed in the context of the drying up of liquidity for CDs and CPs.

Considering the systemic importance of the NBFC sector, the Government in consultation with the RBI announced the setting up of a special purpose vehicle (SPV) that could raise funds from the RBI against government-guaranteed bonds to meet the temporary liquidity

constraints of systemically important non- deposit taking n on-banking financial companies (NBFCs-ND-SI).

RBI's response as forex manager

The RBI assured the markets that it would continue to sell foreign exchange (US dollar) through agent banks to augment supply in the domestic foreign exchange market or intervene directly to meet any demand-supply gaps, and did so, especially in Octob er 2008. It also provided forex swap facility with a three month ten or, to Indian public an d private sector banks having overseas bran ches or sub sidiaries – this acted as a strong comfort to such banks in the context of the d rying up of the overseas money markets. Furt her, for funding the swap facility, banks were allowed to borrow und er the LAF for the corresponding tenor at the prevailing repo rate. The forex swap facility o f tenor up to three mo nths was extended up to March 31, 2010. T he prudential limit on o verseas borrowing by banks has been doubled.

Taking into account t he difficulties faced b y exporters, as order s got ca ncelled and receivables mounted, the RBI exten ded the period of conce ssional pre-shipment and post-shipment export credit. The export credit refina nce available to banks f rom the RBI was also increased.

Interest rates on dollar and rupee deposits kept in Indian b anks by non resident In dians are capped by the RBI in o rder to prevent hot mon ey flows. In order to address the impact of slow down in capital flows, the ceiling rates on these deposits were raised.

The ceiling on the inter est rates at which com panies co uld raise fun ds from abroad were increased and the end use restrictions that were placed on the deployment of such funds, to deal with the huge inflows in 2007-08, were restored to the status quo position.

Systemically important NBFCs that were not otherwise p ermitted to resort to overseas borrowing were allowed to raise sh ort term foreign borrowings; housin g finance companies were also allowed to access External Commercial Borrowings (ECBs) subje ct to RBI approval.

Taking advantage of the discount o n Foreign Currency Con vertible Bonds (FCCBs) issued by Indian co mpanies in overseas markets, they were allow ed to prema turely buy back the ir FCCBs at prevailing discounted rates.

Regulator of banks and NBFCs – RBI's response

As indicated earlier, the Indian banking system was not affe cted by the global crisis and all financial parameters have remaine d strong wit h capital ad equacy ratio for the system at 13.65 per cent (tier I ratio at 8.95 per cent), return on assets over 1 per cent, non-performing loans around 2 per cent as of March 2009. All commercial banks meet the minimum capital adequacy norm of 9 per cent and th roughout the crisis period, inter-ba nk markets for money, forex and debt have been functioning smoothly.

The impact of the crisis in India, as in many Emerging Ma rket Economies (EMEs), spilled over from the real sector to the financial sector. Industry and businesses especially the Small and Medium Enterprises (SME) sect or had to grapple with a host of pro blems such as delay in payments of bills fro m ov erseas buyers as also domest ic buyers af fected by th e global slowdown; increase in stocks of fin ished goods; fa ll in value of inventories, especi ally raw material, which in many cases were acquired at higher prices such as metal and crude oil based prod ucts; slowing down of capacity expansion du e to fall in investment demand; demand compression f or employment intensive industries, such as, gems and jewellery, construction and allied activities, textiles, aut o and auto components and othe r export

oriented industries. Hotels and airlines apart from IT also saw fall in demand due to global downturn.

Recognising that the unexpected and swift turn of events could lead to problems of a spiralling downturn, the RBI took a series of regulatory measures in addition to providing liquidity and special refinance.

During the years from 2005-6 onwards, in the context of high growth in bank credit to certain sectors, the RBI had raised in stages the risk weights for these sectors and had also increased the provisioning requirements for standard assets. In November 2008, as a countercyclical measure, the additional risk weights and provisions were withdrawn and restored to previous levels.

The prudential regulations for restructured accounts were modified, as a one-time measure and for a limited period of time in view of the extraordinary external factors, for preserving the economic and productive value of assets which were otherwise viable. The modified regulations were in operation for applications for re-structuring received up to March 31, 2009 and restructured packages implemented within 120 days of receipt of application or by June 30, 2009, whichever was earlier. Banks were, therefore, required to take swift action for detecting weaknesses and putting in place the re-structured packages in order to avail of the benefits in assets classification under the modified prudential regulations. The modifications permitted the restructured accounts to be treated as standard assets provided they were standard on the eve of the crisis, viz., September 1, 2008, even if they had turned non-performing when restructuring had been taken up. This special regulatory treatment for restructured accounts was extended to most cases of second restructuring and for first restructuring of exposures to commercial real estate in view of the sudden downturn. To take care of the problem of restructured accounts that had become unsecured due to loss in the value of inventories, special regulatory treatment for asset classification was permitted if additional provisions were made as prescribed for the unsecured portion.

In the case of NBFCs, having regard to their need to raise capital, they were allowed to issue perpetual debt instruments qualifying for capital. They were also allowed further time of one more year to comply with the increased Capital to Risk- Weighted Asset Ratio (CRAR) stipulation of 15 per cent as against the existing requirement of 12 per cent. Risk weight on banks' exposures to NBFCs which had been increased earlier was brought down.

The impact of liquidity easing and prudential measures is reflected in the credit growth in the year ended June 2009 at 15.8 per cent against 26.3 per cent in the previous year. Though there was slowing down in the period after October 2008, the credit growth in the period October 2008 to June 2009 clocked annualised rate of 8.9 per cent. The credit growth during November 2008 – May 2009 was higher than average for sectors such as infrastructure, real estate, NBFCs, SME, agriculture and certain industries like iron and steel.

Employment intensive sectors – RBI's response

Following the announcement in the Union Budget 2008 in February 2008, the commercial banks, cooperative banks and regional rural banks implemented in the period till June 2008, the debt waiver (100 per cent waiver) program for small and marginal farmers and debt relief (25 per cent relief) program for other farmers, covering an estimated 40 million farmers to the extent of nearly Rs. 71,000 crore or $14.5 billion. The RBI took sector-specific measures to alleviate the stress faced by employment intensive sectors such as SME, export and housing. In order to address the problems faced by the MSEs, meetings of the State Level Bankers Committee were convened almost on a monthly basis in the first half of this year. During these meetings, State governments and banks were sensitised about the need to respond promptly to the credit needs of the sector to ensure that units do not get into distress. The RBI guidelines on restructuring were disseminated at such meetings.

The RBI extended special refinance of $1.4 billion to Small Industries Development Bank of India (SIDBI) to enable it to on-lend to banks and financial institutions towards incremental SME loans. Banks were advised to carve out and monitor separate sub-limits of large companies to meet payment obligations to micro and small enterprises. MSME (Refinance) Fund of Rs. 2000 crore ($400 million) was instituted and banks were asked to contribute towards this fund against their shortfall in their lending to the weaker sections as low interest deposits with SIDBI to be used by the latter for providing assistance to the MSME sector.

Considering the knock on effects on the housing sector, and the role of housing finance companies (HFCs) in providing housing loans, the National Housing Bank (NHB) was made available a refinance limit of $800 million to assist the sector. As in case of SIDBI, banks were asked to deposit specified amount against the shortfall in their lending to the weaker sections with NHB. Loans to HFCs were made eligible for the special repo window opened for bank lending to mutual funds. HFCs were also allowed to borrow abroad from bilateral and multilateral agencies with prior approval from the RBI.

The period of concessional export credit was extended and the entitlement of banks under the export refinance facility from the RBI was enhanced. Export-Import Bank of India (EXIM Bank) was given a special refinance limit of $1 billion as also extended a special forex swap facility as in case of banks with overseas branches.

RBI's response as debt manager

To contain the knock on effects of the global slowdown, the Government of India announced three fiscal stimulus packages during December 2008-February 2009. These stimulus packages were in addition to the already announced post-budget expenditure towards farm loan waiver, rural employment guarantee and other social security programs, enhanced pay structure arising from the sixth pay commission, etc. As a result, the net borrowing requirement for 2008-09 increased by nearly 2.5 times the original projection in 2008-09 from 2.08 per cent of GDP to 5.89 per cent of GDP.

The RBI managed the additional borrowings in a non-disruptive manner through a combination of measures including unwinding under the market stabilisation scheme (MSS), open market operations and easing of monetary conditions.

The MSS was introduced in 2004 to help the RBI sterilise the impact of capital flows when huge accretion to reserves added primary liquidity to the system. Under an agreement entered into between the Government of India (GOI) and RBI, GOI agreed to issue bills and bonds the proceeds of which were immobilised with the RBI and thereby the liquidity impact of forex purchase by the RBI was neutralised. The MSS operates symmetrically, and acts as a store of liquidity and hence has the flexibility to smoothen liquidity in the banking system both during episodes of capital inflows and outflows. When capital outflows were experienced in 2008, and the borrowing requirement of government increased, it was decided to buy back MSS securities while simultaneously issuing new securities under the borrowing program. The agreement between RBI and GOI alluded to earlier was amended in February 2009 to allow the funds immobilised under the MSS to be de-sequestered instead of going in for fresh borrowing. So far between March and May this year, cash balances of nearly $8 billion have been de-sequestered.

Keeping in view the government market borrowing in 2009-10 as provided in the interim budget, coming on top of a substantial expansion in market borrowing in 2008-09, it was important for the RBI to provide comfort to the market so that the borrowing programme is conducted in a non-disruptive manner. Accordingly, the RBI simultaneously indicated its intention to purchase government securities under open market operations (OMO) for an indicative amount of Rs.80,000 crore ($16 billion) during the first half of 2009-10.

The distribution method for the primary issuances was also shifted to uniform price auction in view of the uncertain market conditions. Off ers of shor ter term bonds and be nchmark securities have also helped meet investor preference and stabilise yields.

The general easing of monetary c onditions, in addition to the above measures have also ensured that the additional borrowing needs of the government do not result in crowding out of credit to the private sector and helped in maintaining sta ble conditions in the government securities markets.

Factors that helped in responding swiftly and effectively

In concluding my prese ntation on the impact of the global crisis on the RBI, I woul d like to briefly touch upon the f actors that enabled the RBI to respond swiftly and effectively to the unfolding crisis.

The single most import ant concern that needed to be addressed in the global crisis was the liquidity issue. The RBI had in its arsenal a variety of instruments to manage liquid ity, viz., CRR, SLR, LAF, Refinance, OMO and MSS. T hrough a judicious combination of all these instruments, the RBI wa s able to ensure more t han adequate liquidity in the system. At the same time it was ensured that the growth in primary liquidity was not excessive.

The inherent synergies in its multiple roles enabled the RBI to ensure orderly functioning of money, forex and government securities market s while dea ling with cap ital flows, managing additional g overnment market borrowing and ensuring ad equate cred it to re store growth momentum.

As regulator and forex manager, the RBI was able to build reserves, calibrate capital controls and take prudential countercyclical measures which could be reversed when the need arose.

Both, macro prudential and micro prudential policie s adopted by the RBI have ensured financial sta bility and resilien ce of the banking system The timely p rudential measures instituted during the high growth pe riod especially in regard to securitisation, additional risk weights and provisioning for specific sectors, measures to curb dependence on borrowed funds, and leveraging by syste mically important NBFCs ha ve stood us in good stead. The reserve requirements – both cash and liquidity – acted as natural buffers preventing excessive leverage.

While credit expansion by private s ector and foreign banks was signif icantly lower during 2008-09 especially to retail and SME borro wers, public sector banks (covering nearly 70 pe r cent of banking assets) maintained their credit growth to employment impacting sectors such as SME, agriculture, real estate and infrastructure, even as regulatory policies have ensured that prudential norms and financial soundness were not compromised.

Finally, the close coordination and interaction between the Government and the RBI ensured that appropriate packag e of measures were put in place promptly to deal with the crisis and restore the growth momentum. Thank you.

Indian Economy: Post Globalisation Scenario

By Dr Narendra Jadhav

Speech delivered by Dr Narendra Jadhav, Principal Adviser, Department of Economic Analysis and Policy , Reserve Bank of India at Brihan Maharashtra College of Commerce , Pune on the Occasion of Principal Dr T M Joshi Memorial Lecture .

About BMCC

It is indeed a great pleasure as well as an honour to be here before this learned audience. I am particularly delighted to be here at the Deccan Education Society's BMCC, which represents the best traditions of Indian enlightenment - from Lokmanya Tilak, Gopal Ganesh Agarkar, Gopal Krishna Gokhale, Maharshi Dhondo Keshav Karve and so on. This college, I was told, was set up sixty years ago to provide leadership and trained manpower in the field of commerce and business and this is the Diamond Jubilee Year - an excellence they have established in the best traditions.

About In-house Journals

I just had the privilege of releasing three of the latest outstanding products - Vanijya Vichar, ArthaVichar and the Think Track - which bears testimony to the excellence has been achieved. As Principal Aniruddha Deshpande has rightly pointed out, people always mistake the word 'Tank' this is not a Tank but a Track. Well, I think that all these three represent the Think Tank, which this institution is creating on an ongoing basis . I want to congratulate all the Student Editors, contributors and the faculty members, who have been instrumental in guiding the students to achieve this excellence.

About Principal Dr T M Joshi

Two or three things which stand right in my mind about Principal Joshi's personality are - that at a time when everyone in India was going to the United Kingdom for Ph.D., he was one of the earliest ones to think positively of going to the United States for his Ph.D. He studied under the guidance of well-known legendary Dr. Simon Kuznets. I had the opportunity to complete my Doctorate under the guidance of his son. Dr T. M. Joshi was not only a great scholar but a great teacher and was a very popular personality among the students. What strikes me most is that he was a great institution builder. During the years of principalship of this great Institution, the foundations that he has laid have I think, given this institution a headstart that was needed in an early stage. I think we all should be grateful to him for his contribution and I feel greatly honoured for being invited to deliver a lecture in his honour. I thought it would be a fitting tribute to this great soul that I will be discussing the challenges of globalisation - challenges of excellence in the future and therefore it is in the fitness of things that in this institution of excellence, we should be talking of challenges and excellence in future in the form of globalisation.

Historical Review of Global/Indian Economic Environment

We all know that any national story is often a tale of turning points. When a catastrophe takes place, the mindset of a nation changes and it decides the course its of destiny. If August 15, 1947 marked the Indian Independence - from political slavery to colonial power, then I think the August of 1991 could be marked as the beginning of Indian Economic Freedom.

Many of us are alive to see the historical realities of the rise and fall of nations. We realise that it is those who had the ability to innovate have always won the day. If you look at the history of human civilisation, we see that those who had the ability to innovate, may be a war horse, may

be a cannon or may be a steam engine, have won the day. In that sense, Modern Indian history, I am afraid, is a story of missed opportunities of the various waves of industrial revolution that took place in the 18th century. I think in the 17th century, it was Sir Thomas Row, who I believe said that James I was looking like a ruler of a provincial hamlet as compared to Jehangir in India and as per data now available from Madison, you will be surprised that in the year 1700 that India's share in the world production was 22.6 %. The other super power at that time was China and its share was better than India at 23.1%. The US had no prominent share in world trade. In 1880, China's share has gone up to 32.4 %, while India's share began to come down to 15.7 % while the USA emerged with a share of just 1.8 %. So India's share that time was larger than the USA and then there is a progressive deterioration in our share till 1995. The latest data, consistent with Madison is that China as account for 11 %, India is less than 5 % and USA 21 %. We had in 1700 a proportion of global production, which was larger than the USA's share of global production today. I want to impress upon your mind that this **globalisation concept is not new to India.** In fact the point I want to underscore right now is that Indian share in the world's production was as large as the USA at a time when India was a highly globalised nation. This is not an accident and this should be an eye opener to many those who have fears and apprehensions about the way we are globalising now. Note that we were at our best in the comity of nations when we were fully globalised and when we closed ourselves, where did we stand, when we had a crisis in 1991? 15 % of the world population, 7.5 % of the world's land and what was our share of contribution to the world trade? It was less than half a per cent.

Indian Economy-Post 1991

The most important thing that happened in 1991 is that we started increasingly integrating into the world economy. India certainly will be not left out in the way side in the industrial revolution of our time. Sure enough Indian is already in the forefront of Information Technology which is beginning to change our lives so dramatically.

Globalisation, of course, is as much as an opportunity as it is a challenge.

First and foremost, an opportunity of specialising in areas of comparative advantage and thus achieving the benefits of skill especially as there is now increasingly the possibility of gradual access to world's best technology determined by commercial terms of trade rather than patronising the terms of aid. Throughout 1970s/1980s, there was a debate on the appropriate transfer of technology from the West and today we have a situation that we boast of developing technology in the world - sometimes we do it here in India or sometimes in the Silicon Valley. This is the change that has taken place. In fact, I was reminded of a small incident and this is like what we have in India. ***One American wanted to know the exact address of his friend in Silicon Valley which is dominated by Indians. Few Indians who were sitting in the Coffee House. One of them said that all foreigners stay at the other end of the road. In America, especially at Silicon Valley, the Americans are now foreigners. He further stated that it was our dream to turn Konkan Area into California. Now exactly the picture has changed Now California might change to Konkan. These are the changes of time and I think we should fully understand this process.***

A major **turning point** came in India in 1991 when we all recall that for the first time we had a situation where the Indian economy was almost a marginalised one. Our people had forgotten about the glories of the Indian economy, foreign exchange reserves dwindled to a level of less than one billion dollars and the nation was on the verge of bankruptcy. We were very close on the brink of default and that was the time when finally changes started taking place in a positive manner. Economic reforms started taking place in a big way. If you look at the Indian economic reforms, you can think of two distinct facets - technically we call them micro economic stabilisation and structural adjustments. Micro economic stabilisation is basically meant to stabilise the economy, whereas structural advantage essentially involved re-structuring of the

whole economy and that process is divided into three core areas - i) liberalisation ii) privatisation and iii) globalisation. These three are popularly known as LPG. Although LPG (Liquid Petroleum Gas) is explosive this LPG combination has been a welcome sign.

Now essentially what is LPG?

During the last thirty years we had adopted economic strategy of planned growth. This policy continued up to 1991 in which the State had to play a major role. Over a period of time, the whole entrepreneurial abilities of a people were tied down to the myriad of all controls with a set of regulations and licenses - so much so that the Indian economy was called a **"License Raj".** When you want to produce something, you needs a licence, to increase production you needs a licence, to re-allocate your resources, you needed a licence - every decision was taken by the Babus (Bureaucrats)) rather than the entrepreneurs themselves. And to these myriads of controls and regulations, the entire productive potential was tied down. Liberalisation basically meant unleashing the productive potential of people in terms of reducing the kind of constraints imposed over a period of time upon the entrepreneurs. This is the true meaning of liberalisation.

Over a period of time in the 1950-60s when the private sector was not developed enough, it was only to be expected that the Government would need to come in a big way and take a lead in the industry as a producer. But in the spate of enthusiasm, I think, we overdid it so much so that by 1991 we were boasting of PSUs commanding heights in the Indian economy over the private sector. It turned out that, if you looked at the total investment made. is above Rs.4,00,000 crore in the Public Sector Undertakings, Rs.2,50,000 crores for the State level Public Sector Undertakings and what is the rate of return that the country has given on this, it is really 2.5%. So we had to face a very strange situation in 1991 where the Government was borrowing from the market at the rate of 14 % and was investing where the rate of return was only 2.5 %. But this just could not go on. This was a sure recipe for disaster and indeed it did strike us. No matter you think how special you are, you are not immune from the basic laws of economics and we were made to realise that in terms of a crisis which started in 1991. And it was from then onwards.that we started changing our policies and have now come a long way.

Successes and Failures before 1991

But this does not mean that we have totally failed before 1991. We achieved a lot of things before 1991. There were successes as well as failures. On the whole however there are a few good things that we had achieved. First of all, the industrial production base was widened. We succeeded in developing a pool of technically trained manpower on a scale, which has no parallel in the world. We certainly can take pride in the opportunities availed for us for higher education which we have created in terms of IITs and IIMs. You will recall that I have heard our students in USA saying I did not get admission to the IIT , that is why I have came here. This is the kind of qualitative change that has taken place in the outlook of the people. That if we don't get admission to the IIT, at least we can get to universities aboard.

While there are very remarkable achievements in terms of foundation, I think what happened was that the economy was not able to achieve a higher level of efficiency and the Public Sector Undertakings example is very obvious. And whose money is it? It is all your money and if they are going to get a return of 2.5 %, there is no reason to pump in more money in such activities. That is why we have to come back and change and we also realised that just the Government's intervention in economic theory was justified because of the failure of the market. But we also saw that just as markets fail, there is also failure on the part of the Government. So to correct market failure, you have the Government but when the Government fails you have to bring in the market. Therefore, we have to have a combination of intervention plus free flow of market forces and I think these kind of things that are emerging.

The most striking example - is that of the **finance sector**. If you look at the finance sector after nationalisation in 1969 and 1980, there was enormous branch expansion but with this expansion,

we also needed to raise low interest loans for the Government to finance its fiscal deficit which was growing at a rapid pace and when finally we had to have a regime of administrative interest rates, a regime of directed credit and allied schemes which finally began eating into the efficiency of banking system . So we are now increasingly realising that it is not only the scale of financial system that matters, but it is also efficiency which is necessary for better economic growth.

What have we achieved in terms of reforms?

These reforms as I have said had two factors - micro economic stability and structural adjustment. Last year, the RBI produced a Report on Currency and Finance, which I strongly recommend to the students to have a deep look at it. That is the only document where we have taken comprehensive and objective assessment as to see what are our failures and what are our achievements in terms of ten years of economic reforms. To my mind, there are two very major achievements of reforms and I am going to talk about achievements as well as failures and how we will be proceeding from here onwards. The most important achievement, I think, of 12/13 years of reforms is the degree of resilience that India's economy has earned. Just look at what has happened in the last few months, the Indian economy has been subject to a series of shocks - both domestic as well as external. First and foremost, after 14 years, we have unprecedented drought - a major drought two years back and in Western Maharashtra, the drought continued for three years in a row. Our food grain production which was growing, crashed from 212 million tonnes to 183 million tonnes and this has been a major setback. This was the first shock. The second shock was the Kargil war and border tensions. The third domestic shock was sanctions imposed by others on us - post pokharan. We all remember these incidents. The external shocks were even bigger. First and foremost blow from the external side was the synchronised global slowdown. Typically, if you see after the 2nd World War the kind of pattern that was involved in the world economy. At least, one of the three big nations, *i.e.*, the US, Euro Area and Japan have taken upon themselves the responsibility of keeping the momentum of growth. If two of them fail, the third will come forward to maintain the momentum of world economy. In the last ten years, the Japanese economy has been going down the drain. So the responsibility primarily falls on the USA and the Euro Area. After the longest expansion recorded in the economic history of the USA, started slowing down in 2001/2002. Now it was the responsibility of the Euro area to keep up the momentum of the world economy but it failed. The European growth has been less than 1 %, in some areas it is even 0 % and in some, it is negative which means that we have had this unprecedented situation that all the three powers which have been keeping the momentum of growth of world economy at large, all of them went down. No matter how much you criticise the USA, you have to recognise that if US catches cold, many small countries catch pneumonia. Whether you like it or not, this is a matter of fact. When these three slow down, this should have had a major effect on all the developing countries. It did have very serious effect on all of them but it did not have any effect on India. Now this is symptomatic of the resilience that I was talking about.

Another shock is the sharp increase in prices of oil in the international market When was last time there was crisis in the international markets that we did not have economic crisis at home? Never. In 1974, the first world oil crisis, in 1975 we had a crisis in India. The second shock was in 1979 when the oil prices shoot up, India had the crisis in 1980/81 and we had to go the IMF with a begging bowl. In 1991 due to the major Gulf War and the Iraq-Iran War situation again oil prices shot up and in 1991 we had the biggest crisis at home. Every time in the past whenever oil prices have shot up, India has had to face crisis. This time the world oil prices shot up, you and me did not even notice. This is not automatic, this is not natural.

Please understand this is symptomatic of the kind of resilience that Indian economy has earned over the years and I think that is the most important of the achievement of our reforms. Let us

look at the sectoral achievements we had achieved .in our performance ? After 30 years of independence, we started our planning economic growth in 1951. If you look at the first 30 years, 1951-1980, what is the growth rate of India ? The real GDP growth of India was at 3.5 %. Whichever way you take an average, it comes to 3.5 %, so much so that this rate of growth has been called the Indian Rate growth or the Hindu Growth Rate. So this 3.5% rate of growth has almost become an endemic with India's economic performance. Now if you are going at the rate of 3.5 %, if your population is growing at 2.2 %, it means that your per capita income is growing at the rate of just 1.3 % per year. If your rate of growth is growing at 1.3 % it would have taken 57 years for you to simply double your per capita income. In the recent past, South Korea could double its per capita income in 11 years. At the rate at which we were growing, we would have taken 57 years. So obviously that is not acceptable you have to therefore rethink about the developmental strategy. In the 1980s the growth rate tried to accelerate but that was not sustainable and let to a crisis in 1991. What has happened in the last 10 years, from 1992/2002? In these ten years, the overall real GDP growth is more than 6% and the population growth rate came down to below 2 %. which means that in the last 10 years, the average works out a little less than 6 % which means 4 % per capita growth per year , which is very remarkable by way of probable heights in the world, next only to China. So 4% growth would mean that in the last 16/17 years we could double the per capita income. This is the pace we need to maintain. So the first achievement of this reform is that we are on high growth profile.

This also means that we have made a very major dent in **poverty alleviation**. What have we achieved and where do we need to go? If you look at our performance, there are technical problems about the numbers and the debates are on one can say as a rule of thumb that before the reforms the proportion of population below poverty line was about 36 % and today that ratio has come down to 26 %. This is quite an impressive achievement at a time when the population is growing, if you can reduce the proportion of population below the poverty line by as much as 10 %, it is indeed a remarkable contribution. In absolute terms it means that more than 100 million people have been pushed above the poverty line. Now this is certainly an achievement that we should be proud of. But there is certainly no room for complacency because the flip side of this argument is that even today we have more than 26 % of our population, which is below the poverty line and what does that mean It translate into numbers will be mind boggling. About 260 million people are below the poverty line in India. By the way, the word poverty line was defined in Pune itself by veteran economist and Prof. V M Dandekar and Prof. Neelkanth Rath. According to them, 2250 calories was the minimum necessary. But with the old definition it would mean that we have still about 260 million people below the poverty line and therefore we still have the dubious distinction of housing the largest number of poor people in the world and this is not certainly a thing to be proud of. This is something which is symptomatic a kind of challenge we are going to face.

Some of you will undoubtedly recall that in the late 1960s when we had actual shortage of food grains, they were saying that India is living from ship to mouth and not hand to mouth as whether we get our food or not was dependent on the shipload of food grains coming from USA under PL 480 programme and whether the ship reaches the Bombay port or not. In the 1970s we able to achieve self-sufficiency in India and then we did not look back. Our food grains have nearly scaling a new peak every year. In fact after the last year drought, this year we are talking of 212 millions tonnes plus again. The food grain stocks are growing very rapidly. We used to have acute shortages every year, now we have just the opposite problem, we have too much of food stocks. This is also very costly as you have to maintain these stocks and incur fiscal cost. This situation is changed now because during the last year in drought situation the food grain stock was used effectively as a tool of supply management and therefore it did not have any effect on inflation - the inflation which was at the rate of 3.7 % before the drought shot up to 6.5 % and

then it has subsequently come down. Earlier, we used to have for every drought, a double-digit inflation. But our inflation rate has recently come down and we could use these food stocks as a tool of effective supply management.

The most striking feature is, of course, the **foreign exchange reserves**. Foreign exchange as you know, as I have mentioned to you earlier, had dwindled to a level of less than one billion dollar in July 1991 and over the years, now they are growing at a rapid pace and to day we have 108 billion dollars of foreign exchange reserves. So we have come a long way. In fact India today is the 7th largest holder of foreign exchange reserves in the world.

We have demonstrated that we had acquired the high amount of foreign exchange reserves at a time when our external debt has actually gone down as a proportion of GDP. In fact, the ratio of our external debt to the GDP is as low as it is now and the World Bank, for your kind information, has re-classified India. Earlier we were told, India is a highly indebted country in the first twelve years and now there is a positive change and now we are among the least indebted countries in the world. So you cannot say that the reserves, you have acquired or accumulated are reserve because you have borrowed. So that argument falls flat. Then there was the argument about arbitrage that a large number of people are bringing money, this is hot money and it will go back at any time. Look at the numbers. Our policy has been to encourage non-debt creating flows and the cleverest thing that we have done is that the short term debt as a ratio to the total debt has been systematically brought down so that the roll-over problem did not arise . We learned this well before others did. Our short-term debt as a ratio to the total debt today is 4%. Thailand and South Korea did not understand this and so therefore in 1997 there was a major crisis in East Asia and these countries went down very fast because a large number of their debt were short term so the moment creditors decided not to allow roll-over, these countries were in trouble. We did not face that kind of vulnerability. It is a matter of a conscious policy decisions; we have systematically brought down the ratio of short-term debt to the total debt.

So the new argument which has been made is that what is the **use of all this Foreign Exchange Reserves?** There is a lot of debate going on. One view is that they are only for the rich people. Nonsense! First of all they say these are not being used. You know nothing can be far from the truth. It is like this. It is like an insurance. You would not argue that it is better to die in order to get the benefit of the insurance . But this is a cost that you have to incur and that is the cost we are incurring. You see, the opportunity costs. Just think what would have happened if we would not have such a large foreign exchange reserve - then an attack on our currency would have been common and we would not have been able to defend. The fact that you have such a large reserve and it means that nobody can dare attack on Indian currency. It is no wonder that Indian currency has been so remarkably stable. So we were paying the cost of our insurance. We are glad we have come out of this with benefits. India and China are the only two countries which came out relatively unscathed from the Asian crisis and it is because this kind of policy to maintain the reserve. We should not forget that fact. The other argument is that how it is the RBI is sitting over all these reserves and not using it for the benefit of the country. Now please understand that when the RBI absorbs foreign exchange, we put out the liquidity in the system, which can be used for consumption, or investment or what you have. So there is no question of fresh use of this. You know, this is an accounting thing that you have to understand that when entries received in our books, when the foreign exchange accrues to our country, we simultaneously put out in Rupee counterpart which are there in the system. That is why the system is flush with funds today.

In the early 1970s, remember there was a debate in India and other countries as to whether we should go for export promotion or import substitution. All the Asian countries opted for export promotion while we opted for import substitution and I think that was a very costly mistake we had committed. I can certainly say, because in the name of protecting the domestic industry, we

created a whole range of controls, all kinds of restrictions, barriers to trade to protect the Indian consumer. We were really and actually protecting the big producers because they did not have to face any competition, they did not have to perform so it was not for the ultimate consumer. This was a very clever strategy. If you had some connections with the Government, what would you do if you are a cement producer and have a capacity for producing two million tonnes and you want to earn money. The easiest way was not to produce more but to apply and get a new licence not for producing more but preventing others from producing and thus creating an artificial shortage to get higher prices for the same quantity and quality produced. So you get all kinds of money. So this is what had happened in the Soviet Union and other countries and therefore the cause of production processes of private enterprises was killed. We came out of that and now we are ready to take on the world.

The lesson that we learned is that **controls** do not really work. When we had the severest of the controls, please understand, a lot of money was going out. You close the doors, then it will go out through the window. If you open the doors, the money will come in and will stay in. This is a strangely ironical thing but it is a fact. If you close the doors, the money, which was got to go out, will be going any way. Every year five billion dollars worth of money was going abroad through the *hawaala* routes. Now we have opened it in a very calibrated, gradual and well thought out manner. The result is, there is so much confidence now, that the same money that was going out stays in because we kept the options open, and besides, money is coming in and is choosing to stay in. In 1991, the dream was to have ten billion dollar worth of foreign exchange, now every year we add 20/25 billion dollars to our reserve.

Our real challenge is now to cope with this flood of money that is coming in. **Opulence** also creates problems and they are all kinds of them. This large amount of money, for example, has a bearing on the monetary policy of the RBI. When we take large amount of foreign exchange, we have to put Indian liquidity and have to suck it back because if we did not do that, inflation will go out of hand and everybody, especially the poor, will be hurt. In fact, inflation is the most vigorous form of taxation, which hurts the poor most. We understand this and what we did is that that we sucked back liquidity the so called sterilisation process - though there are serious problems, limits to sterilisation right now in India.

So that is where we are now and we have remarkable strides in globalisation. If you look at the share of exports and imports and the ratio to the GDP in 1991/2 it was less than one-fifth. Today it is something like a two fifth of GDP. This is a remarkable penetration that we have achieved. Similar is the case of services. If you look at exports of goods from India in the last 10 years, - the decadal figures like minerals by 230%, leather goods (112%), chemicals (634%), agriculture and allied sectors (146%), engineering (326%), garment and textiles (245%), other manufacturing (167%). Regarding Two wheelers automobiles, last year alone 55 % exports of automobiles. In 2003 we exported - could we have imagined that we would be exporting cars ? 72,000 cars, which represent a growth of 69 % in one year and if all goes well, next year we would be exporting something, like 1,50,000 cars per year . This is something, which is positive is happening. Two wheelers last year we exported to the tune of 1,63,000 which represents a of growth 50 %. There is similar growth not only in automobiles but spectacular growth in auto-components too.

Everybody knows about the IT services. Now we have almost reached soft ware exports target to 7.6 billion dollars in 2001/2 It is growing at an average rate of 46 % per year.

We all know of call centres, data base production , financial accounting , foreign connectivity in the field of insurance, medical transcription, database production, financial accounting *etc.* There is a whole range of services where India is making very major breakthrough. There was a talk that while China is becoming a manufacturing hub; India is nothing but a hub for services. It is not true, India is not lagging behind in manufacturing and the examples that I had narrated

shows that we are doing exceedingly well and we will continue to offer the services. I want to give you some examples of services where India is being used as a venue for services production at the Global level. At the global level in banking, we have a number of foreign banks coming to India, *e.g.*, HSBC, CitiBank, Standard Chartered, ABN-Amro; in Insurance, GE, AIG, Alliance, Aviva, Metlife , in IT, Yahoo, Sun Micro Systems, Oracle, Amazon; in communications, ATT; in Engineering Ford, Bechtel, Beck, Cemens, GE, in business services, airlines like Swissair, British Air, American Express. The World Bank has the second largest office, outside USA, in India. Do we know we are coming also a "preferred back office". We are also emerging as a "preferred destination" for global investment because of our strong growth outlook. We have new co-relation with global perspectives, we are therefore providing ideal opportunity for diversification. We have very sophisticated security infra structure in equities, equity-derivatives, debt-instruments. We have sound law accounting firms and all this augurs very well for our future and a lot of companies abroad, multi nationals have increased their R & D facilities in India. For example, GE's 1600 staff, of which I am happy to say that 31 are Ph.Ds and 44 are masters. There is a major change taking place in front of our eyes into the private and public sector partnerships with Telecom, Roads ,Ports, all these sectors are doing extremely well and what is happening there augurs very well for the future. Remember for the first time of the Indian history, the President and the Prime Minister started talking about, India becoming a super power. Never before.

Conclusion

Reforms started in India in 1991. If you look at these changes that are taking place. for the first time the President and the Prime Minister of India say India becoming a super power, which is also not an accident. A major firm - Goldeman Sachs - has come out with a report in which it states that by 2050 India will be the 3rd largest country in the world. This is not stated by our people but is stated by a foreign firm. We in the RBI took a close look at this report, analysed it threadbare and discussed it and judged that we need not have to wait till 2050 but it can happen well before the year 2030 or 2025. There are many reasons, some of them are mentioned to you by me but there is a very **unusual strange reason**, I want to highlight to you. This is coming as a gift of God, you can say because this is some thing of a demographic transition through which our country is going right now. Let me explain this argument. For any country at the beginning, there is a large proportion of young people and when these get matured, the proportion of old people becomes largest. Between these two extremes, there is a time when the proportion of productive population to the total population is the maximum. So this is a **Bell shaped graph**. So at the beginning the proportion of young people to the total is very large, after maturity the proportion of old people to the total will be the maximum, somewhere in between the productive population between the age group 18 to 60 would be maximum. All countries of the world - especially industrial countries have reached their peak and they are down. East Asian tigers have reached their peak and are down. Only two important countries who have not reached their peak, and you need not offer any cigars for getting me right -those countries are India and China. This means that India is expected to reach its peak of productive population to the total population being maximum in 2018 whereas China is expected to reach its peak one year later *i.e.* in 2019. This means that your proportion of productive population to the total is at the peak and that is the time when your saving rate is maximum. Your productivity as a nation is maximum and therefore this is time when you are best suited to achieve the highest possible growth rate. This by all means is not automatic. **What does this mean for India**? It means that as we go towards 2018 where we have God smiling at us because productive population of young can be maximum, savings of the country could be maximum, which can easily be translated into an unprecedented increasing growth rate, if we have a right kind of policy, mixed with

implemented at that particular period. It is an enabling provision, these things do not happen automatically but that would be an opportunity for us to realise our potential. Remember as I told you that many years we were stuck to the low-level equilibrium trap and we could not think to achieve a growth rate of higher than 3.5 %. In 1993/94/95 , for the first time in our history, we have 7 % growth in a row. 3 years in a row, 7 % plus growth rate, the first time in our history that was the time when we opened our eyes and we realised. Actually we can think of a much higher growth rate. We can think higher in terms of doing better. Earlier, having a target of 8 % growth rate was unbelievable, and we are routinely assuming that we will be having under the 10th Plan, a growth rate of 8 %. This is what is the difference. This is what is going to guide us from now on till 2018. This is a time when our productivity will be maximum, productive population can be maximum, saving can be maximum and we can have highest possible growth and give a serious dent to the poverty situation. This is what we should be. We have one more advantage, particularly *vis-a-vis* China after we reach the peak we will go down slowly but there will be 4/5 years before 2018 and another 4 and 5 years after 2018. So these eight years period is the most fertile period in terms of productivity. Whereas in China's case, it will reach its peak *i.e.*, one year after us, their curve suddenly crashes because of their "one child" policy that was adopted by China some 30 years ago. This is not going to haunt us. We can achieve highest possible growth rate and solve our problems and emerge as an economic super power, as all our dreams are playing a role in the comity of nations that we will be able to do it in 20 years if we could stay on course and develop policy combination, which would help rather than impede. If we do not take advantage of all these opportunities, then we would mean to be most unfortunate.

Thank you very much!

Agriculture: Absence of a Big Push

S MAHENDRA DEV

What are the implications of the loan waiver announced in the budget 2008-09? How well has the budget tackled the core issues in agriculture?

The average growth rate of agriculture during the Ninth and Tenth Plan periods (1997-98 to 2006-07) was 2.5 per cent per annum, while the growth of non-agriculture during this period was around 8 per cent per annum. The gap in per worker productivity between agriculture and non-agriculture has increased significantly. Farming has become an unviable activity, particularly for small and marginal farmers. On an average, there has been one farmer suicide every 30 minutes since 2002 [Sainath 2008a]. Apart from short-run problems, there are many long-term structural problems in Indian agriculture. Against this background, one expected a "big push" in the budget for the overall revival of agriculture.

It may be noted that no one should quarrel with the sentiment that agriculture and small farmers need help because the agrarian economy has been neglected by policymakers. The issue is what type of policies and instruments are needed to revive agriculture. The decision to waive farm loans and debt relief of around Rs 60,000 crore announced in the budget received widespread attention and hogged the media limelight. In this article, we discuss implications of loan waivers for farmers and other proposals relating to core agricultural issues. As shown below, one can be critical of the budget proposals by focusing attention on what the loan waiver scheme does not do. First, there are many exclusions and limitations of the loan waiver scheme. Second, the budget has not given a big push to other core issues like public investment and infrastructure, water management, research and extension, price stabilisation, long-term issues, etc.

1 Loan Waiver Scheme

It was announced in the budget that the total value of overdue loans being waived for marginal (up to 1 ha) and small farmers (1-2 ha) was estimated at Rs 50,000 crore, and the one-time settlement relief for other farmers was estimated at Rs 10,000 crore. Initially, there was lot of criticism that the finance minister (FM) did not make provisions for the loan waiver scheme in the budget. The FM, however, later announced in the Lok Sabha that in order to settle the burden fully, the entire amount would be provided over three years. It will be releasing Rs 25,000 crore by July 2008. It includes Rs 10,000 crore announced as a part of the third supplementary. The rest will be released as follows: Rs 15,000 crore in the 2009-10 budget, Rs 12,000 crore in the 2010-11 budget, Rs 8,000 crore in the budget for 2011-12. In terms of institutions, an estimated 55 per cent of the package will be for borrowers from cooperative institutions, 35 per cent for borrowers from scheduled commercial banks and 10 per cent for borrowers from regional rural banks.

Granting that this is mainly a political exercise, there can be some positive outcomes of the loan waiver, if implemented properly. There is a need to help small and marginal farmers regarding indebtedness. As mentioned by many people, the cost to the exchequer is not a big issue today. With buoyant tax revenues, the government can afford Rs 60,000 crore for a good cause. In fact, some noted that the burden will be only half the announced amount [Bhalla and Jain 2008]. The supporters of the scheme also indicate that this is not much compared to the write-off of non-performing assets to rich industrialists every year. The loan waiver is supposed to bring great relief to almost four crore farmer households (around 20 crore people). Since the government will bear the cost of the scheme, banks will be strengthened and would have cleaned up their books. Small and marginal farmers will be automatically eligible for fresh loans and they will be encouraged to stay with the banking system. Consumption demand due to the loan waiver will have a positive impact on the economy.

However, the negatives in the form of exclusions and limitations outweigh any positive outcomes of the scheme.

According to National Sample Survey (NSS) 59th round data, only 27 per cent of the total farmer households have access to

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formal institutional credit (one-third of this group also borrows from non-formal sources). In other words, only 2.4 crore farmer households out of the total 8.9 crore farmer households have access to formal credit. This implies that 73 per cent of the farmers either take loans from moneylenders or are financially excluded. Among marginal farmers and scheduled castes and scheduled tribes, only 20 per cent take loans from banks. Therefore, the majority take loans from moneylenders and other informal sources of credit.

The Radhakrishna Committee on indebtedness also indicated that major problem was indebtedness due to informal sources. The committee has not recommended the present loan waiver scheme announced by the government. It underlines the need for mitigating farmers' indebtedness to moneylenders [GOI 2007]. On the moneylender problem, the prime minister and FM mentioned that those who are outside the institutional credit system could avail of the scheme initiated in 2004 that would allow them to swap their debt with public sector banks. However, it is not clear whether anything has happened to this scheme since 2004. Kerala established a debt relief commission to identify the areas and categories of severe agrarian distress in order to provide relief to all indebted farmers [Ghosh 2008]. The government should have established such a debt relief commission at the national level.

Another exclusion relates to limiting the loan waiver to farmers with holdings up to 2 ha, which excludes many dry land farmers. The agrarian distress is acute in these dry land areas, where the maximum number of suicides has taken place [Swaminathan 2008]. Moreover, the quantum of loans to dry land farmers is much lower compared to irrigated farmers. The cotton farmer in Vidarbha gets a loan of around Rs 5,000 per acre while the grape and sugar cane farmers in western Maharashtra get a loan of Rs 40,000 to Rs 1 lakh. In fact, a large part of the institutional credit is cornered by the medium to large farmers while marginal farmers depend on moneylenders [EPW Research Foundation 2008]. In this way, the present loan waiver scheme is somewhat regressive and skewed in favour of irrigated and big farmers. One suggestion is that instead of putting a cap in terms of hectares, the government should announce a loan waiver to all including moneylender loans and put a cap in terms of money. For example, one can give Rs 5,000 to Rs 10,000 to all indebted farmers from all sources. Thus, even if one were to accept a loan waiver, it could have been done in a much more equitable manner and would have fetched more votes. Such an alternative plan could have helped almost 10 crore farmers [Mahajan 2008].

Other excluded people in the present scheme are tenants, those who have taken loans by pledging gold and those who have already repaid loans. Another problem is that those who will benefit from the loan waiver will not be eligible for fresh bank borrowing until after June 30. In other words, they cannot take fresh loans for the next kharif sowing.

International Conference on *Water Resources Policy* in South Asia

First Announcement and Call for papers

SaciWATERs, the South Asian Consortium for Interdisciplinary Water Resources Studies, Hyderabad, India announces its first **International Conference *on Water Resources Policy in South Asia***, to be held in **Colombo, Sri Lanka, 18-20 December 2008**. The conference is organised as part of the *Crossing Boundaries* project that focuses on education, research/innovation, knowledge base development and networking, in a combined effort to contribute to a paradigm shift in water resources management in South Asia. Its main foci are a critical and constructive engagement with the notion of Integrated Water Resources Management (IWRM), gender and water issues. Researchers from all the countries in South Asia are requested to send their abstracts in the following themes to **sreoshi@saciwaters.org**

1. Sectoral Assessment of policy processes/reforms (irrigation, water supply and sanitation, hydropower, flood management, ecological water management etc.)
2. Rent Seeking Behaviour in Water management and Infrastructure Development
3. Success, Value and Limitations of Participatory Processes in the Water Sector
4. International and Federal Hydropolitics
5. Inter-sectoral Water Allocations, Negotiations and Conflicts
6. Gender Dimensions of Water Governance and Management
7. Water Management in the peri-urban areas
8. Approaches to Urban Water Provision and Management
9. Privatisation in the water sector
10. Impact of Global Policy Discourses on National Water Policy Making
11. Watershed Management Policies and Programmes
12. Water Policy and Climate Change
13. Dying wisdom or myth making: exploring the meaning and value of local water management practices
14. Approaches to water policy analysis
15. Civil and political society in water management
16. Water rights and water rights reform.
17. Private sector boom and public sector malaise in water resources development

Deadline for submission of abstracts and session proposals

Abstracts (not more than 400 words): 31 May 2008
Final Papers (within 8000 words including references): 30 September 2008

Please refer to **www.saciwaters.org** for more details.

The NSS data presented in Table 1 shows that only 4 per cent of households in the north-eastern, and 19 per cent of households in the eastern region and 22 per cent of households in the central region have access to formal institutional credit. On the other hand, more than 40 per cent of farmer households in the western and southern regions have access to institutional credit. In other words, the loan waiver scheme will benefit states in western and southern regions compared to other poor regions.

Table 1: Indebtedness across Regions (2003, in lakh)

Region	Total Farm Households	Indebted (Formal and Informal) Farm Households	% to Total Farm Households	Indebted Farm Households to Formal Sources	% to Total Farm Households
Northern	109.46	56.26	51.40	27.42	25.05
North-eastern	35.40	7.04	19.90	1.45	4.09
Eastern	210.61	84.22	40.00	39.47	18.74
Central	271.33	113.04	41.60	60.81	22.41
Western	103.66	55.74	53.70	45.59	43.98
Southern	161.56	117.45	72.70	69.07	42.75
Group of Union Territories	1.48	0.49	33.10	0.15	10.14
All-India	893.50	434.24	48.60	243.96	27.30

Source: GoI (2008a).

Moral Hazard Problem

The main criticism of the loan waiver scheme relates to its impact on future loans and financial inclusion. The real issue is the weakening of credit repayment discipline. Of course, we say "moral hazard" and "credit culture" when a loan waiver is given to farmers. We do not say this when it is given to industrialists. However, as the EPW Research Foundation (2008) aptly says, "The loan waiver policy is thus antithetical to the very essence of promoting a healthy and strong financial system" (p 29). It took almost nine years for banks to recover from the 1990 loan waiver of Rs 10,000 crore given by the V P Singh government [Alagh 2008]. Even if the government foots the bill, there will be a moral hazard problem and future loans and financial inclusion will be affected. The borrowers from cooperative banks get around 55 per cent of the share from the package. As Vaidyanathan (2008) mentions, it may adversely affect the reform process already undertaken for cooperative banks [GOI 2004]. Political interference may further increase.

Table 2: Growth Rates of Agriculture NSDP (in %)

State	Growth Rate in NSDP Agriculture 1984-85 to 1995-96	Growth Rate in NSDP Agriculture 1995-96 to 2004-05	Rainfed %	State	Growth Rate in NSDP Agriculture 1984-85 to 1995-96	Growth Rate in NSDP Agriculture 1995-96 to 2004-05	Rainfed %
Punjab	4.00	2.16	3	Gujarat	5.09	0.48	64
Haryana	4.60	1.98	17	Rajasthan	5.52	0.30	70
Uttar Pradesh	2.82	1.87	32	Orissa	-1.18	0.11	73
Tamil Nadu	4.95	-1.36	49	Madhya Pradesh	3.63	-0.23	74
West Bengal	4.63	2.67	49	Karnataka	3.92	0.03	75
Bihar	-1.71	3.51	52	Maharashtra	6.66	0.10	83
Andhra Pradesh	3.18	2.69	59	Kerala	3.60	-3.54	85
All-India	3.62	1.85	60	Assam	1.65	0.95	86

States are ranked by per cent of rainfed area
Source: Planning Commission (2007a).

Political Economy

The United Progressive Alliance (UPA) government won the first round over the opposition. The opposition parties were demanding writing-off farm loans. The FM stunned the opposition by announcing a loan waiver scheme of an unprecedented scale. Then the opposition started saying that there was no provision for funds in the budget. The FM recently announced in the Lok Sabha the manner in which the government was going to finance banks. There is also a criticism regarding the limit of the waiver only for farmers with up to 2 ha holdings. The government may consider raising the limit and have limits to dry land and irrigated land separately.

But the initial victory may be short-lived for two reasons. First, the prime minister may have overstated his defence when he indicated that the write-off was a correction of the previous government's failure. But the opposition can say that the present government had four years to rectify the previous government's failures. Why was it done now and not earlier? Second, as mentioned above, there are many exclusions in the scheme. Only a part of the 27 per cent of the farmers who are indebted to formal sources will benefit, if the waiver is implemented properly. In other words, it is going to create discontent among 80 per cent of the farm households. This may backfire for the government if steps are not taken to help them.

2 Big Push Needed

The loan waiver cannot be expected to automatically enhance farmers' capacity to increase production and incomes. What farmers need most are measures for raising output and good prices for production rather than more credit which, in the absence of viable agriculture, push them back into a debt trap. As several committees mentioned, indebtedness is only a symptom and not the cause of widespread agrarian distress, which should be addressed in its totality. As Sainath (2008b) mentions, "The UPA government's waiver is no solution to even the immediate crisis, let alone long-term agrarian problems".

Similar to earlier budgets, some proposals other than loan waivers have been announced in this budget. Agriculture credit is supposed to reach Rs 2,80,000 crore in 2008-09. Every year, the FM announces that credit is doubling or trebling. Even some of the bank officials admit that ground realities are different. There is a lot of book adjustment to fulfil the targets. Small and marginal farmers' share is less than that of other farmers.

On other proposals, it provides Rs 31,280 crore for Bharat Nirman as against Rs 24,603 crore in 2007-08. Under the accelerated irrigation benefit scheme, a provision is made for Rs 20,000 crore in 2008-09 against Rs 11,000 crore in 2007-08. Other proposals for agriculture are: Continuation of crop insurance, horticulture mission, irrigation and water resources finance corporation, Rs 14,000 crore under a rural infrastructure development fund. These are all positive measures.

In the last one year, several committees, commissions and working groups have examined the core issues and given several recommendations for the revival of agriculture. The budget proposals did not reflect these recommendations. Some of these committees are: The National Commission on Farmers, National Development Council Subcommittee on Agriculture, Eleventh Plan working groups, steering group on agriculture for Eleventh Plan, Rangarajan Committee on financial inclusion and, Radhakrishna Committee on agricultural indebtedness.

For example, the steering group chaired by Hanumantha Rao indicates that there are five sectors that contributed to a decline in agricultural growth since the mid-1990s. These are: Technology, public investment, private investment, area under fruits and vegetables and fertilisers. The group suggests that there is a need for improvement in all these areas in order to achieve 4 per cent growth in agriculture [Planning Commission 2007b].

There are significant regional disparities in agricultural growth. Table 2 (p 35) shows that growth rates in all the states declined during 1995-96 to 2004-05 except in Bihar. The deceleration is the highest in the states with greater proportion of rainfed areas. Agriculture growth in these states was less than one per cent per annum in the last decade. Apart from other centrally sponsored schemes, funds under Rashtriya Krishi Vikas Yojana and National Food Security Mission and state-level funds should be used for reducing regional disparities.

One of the recommendations of the Radhakrishna Committee relates to risk mitigation measures. To mitigate the impact of price collapse in cases of commodities not covered by minimum support prices, the expert group recommends a price risk mitigation fund. The expert group also recommends establishing an appropriate regulatory framework and rules to ensure quality inputs to the farmers. Similarly, the M S Swaminathan Commission also provides several recommendations including a price stabilisation fund.

Economic Survey [GOI 2008b] clearly says that "besides weather-induced fluctuations, output of this sector has been affected due to reduced capital investment and plateauing of yield levels in major crops" (p 181). The National Commission on Farmers also indicates that there is a large knowledge gap between the yields in research stations and actual yields in farmers' fields. There seems to be a technology fatigue in Indian agriculture. Surprisingly, the budget is silent on research and extension.

Another concern relates to rising food prices in the country. Prices of food articles led by wheat and other cereals, pulses, milk, edible oils are increasing at fast rates in many parts of the country. This is due to both internal and global factors. The budget has not given any indication for controlling food price inflation. There is an urgent need to revive and strengthen the public distribution system.

Public and private investments are crucial for agriculture. During the UPA government's tenure, investment increased from 10 per cent to only 12 per cent of agricultural GDP. Given a low base, a dramatic improvement is needed to enhance income generating capacities. The PM himself mentioned that 16 per cent of investment is needed to attain 4 per cent growth in agriculture. Deficiency in agriculture and rural infrastructure is the biggest problem for agricultural development. Of late, there is some improvement in road connectivity and communications but progress in respect of irrigation, technology and markets and other institutions is far from satisfactory. Bharat Nirman is a good programme. Funds are small compared to the needs. There should have been massive increase in outlays for agriculture and rural infrastructure by simultaneously improving the delivery systems.

In fact, with large increase in tax revenues and with a budget of Rs 7,50,000 crore, Chidambaram should have given a huge push to the agriculture sector and addressed core issues in much more aggressive way than the measures given in the budget.

3 Conclusions

The farm loan waiver must be seen as purely temporary relief and there must be programmes to improve agriculture. There are many exclusions and limitations to the loan waiver scheme. It is possible that there may be discontent among 80 per cent of the farmer households who are excluded from the scheme. Many farm households are dependent on moneylenders for loans and they need help from the government. Of course, one plus point is that the farm loan waiver at least brings the whole issue of agriculture to the centre stage. Given the short-run and structural long-term problems in agriculture, the budget should have given a large push to core issues like public investment in infrastructure, land and water management including rain water conservation and watershed development, research and extension, price stabilisation etc, to make cultivation viable and profitable. This huge thrust is needed for other core issues so that the farmers do not fall back into a debt trap, needing another loan waiver in the next few years. The finance minister could have attempted this big push to agriculture on the back of buoyant tax revenues.

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