



IAS 100

A Civil Services Chronicle Initiative

INVESTMENT MODELS



Add : D-108, Sec-2, Noida (U.P.), Pin - 201 301
Email id : helpdesk@campus100.in
Call : 09582948810, 09953007628, 0120-2440265

An investment model is constructed with certain objectives in mind. Investment is carried out in an economy for creation of infrastructure, industrialization and welfare. Some forms of investment are only financial in nature in so far as they are meant for maximizing returns in terms of capital gains, dividends, interest, etc. Therefore, we can say that investment is also done for speculative gains. In finance, investment is putting money into an asset with the expectation of capital appreciation, usually over the long-term future. This may or may not be backed by research and analysis. Most or all forms of investment involve some form of risk, such as investment in equities, property, and even fixed interest securities which are subject, inter-alia, to inflation risk. Thus, every model of investment is conceived according to the objectives it has to fulfil.

What is Investment?

In economic theory and macroeconomics investment refers to expenditure over goods, which are used for future production rather than present consumption. Examples of investment include expenditure on plant, machinery, equipments, expenditure on infrastructure such as power plants, irrigation dams, railroad or factory construction. Besides this, investment may be done in human capital in order to improve the capacity of labour force through better education, training, health and nutrition. Investment in human capital includes costs of additional schooling or on-the-job training. Inventory investment is the accumulation of goods inventories, which may be positive or negative, and it can be intended or unintended.

Investment is related to saving and deferring consumption. Investment is the amount purchased per unit time of goods which are not consumed but are to be used for future production (i.e. capital). In measures of national income and output, "gross investment"

(represented by the variable I) is also a component of gross domestic product (GDP), given in the formula $GDP = C + I + G + NX$, where C is consumption, G is government spending, and NX is net exports, given by the difference between the exports and imports, $X - M$. Thus investment is everything that remains of total expenditure after consumption, government spending, and net exports are subtracted (i.e. $I = GDP - C - G - NX$).

Different types of Investment

Gross and net Investment

Investment can be split up into gross and net investment. Gross investment is the total amount of investment that is undertaken in an economy over a specified time period (usually one year). Net investment is gross investment minus replacement investment or capital consumption (depreciation) i.e., investment which is necessary to replace part of the economy's existing capital stock, which is used up in producing this year's output. Sum total of non-residential fixed investment (such as new factories) and residential investment (new houses) combine with inventory investment to make up gross investment I . "Net investment" deducts depreciation from gross investment. Net fixed investment is the value of the net increase in the capital stock per year.

Real, financial and inventory Investment

In economics real investment means investment in plants, machinery, projects, industries or land development. It is different from ordinary parlance of real Investment used for investments made in real estate, properties, plots, apartments, land, etc. Real investment in economics means investment in economic activities that enhance GDP (creation of new goods and services) and create employment. Investment in real estate means investment in land and building which does both—both creations of assets as well as speculative transactions (subsequent sale and purchases),

which means transfer of already existing wealth for speculative reasons. Financial investment is the investment made in Mutual Funds, Insurance, Shares and many other where the money grows.

Inventory Investment

The stocks of finished goods, work-in progress and raw materials held by business constitute inventory. The investment in raw materials, work-in-progress, and finished stock is called inventory investment. Inventories, in contrast to fixed investment are constantly being 'turned over' as the production cycle repeats itself, with raw materials being purchased, converted first into work-in-progress, then finished goods, then finally being sold.

The level of inventory investment made by firm will depend upon:

- its forecasts about future demand and its resulting output plans, and the amount of stock it needs to allow for delivery delays on raw materials and production delays in serving customers, with appropriate buffer stocks to cover unforeseen contingencies.
- frequently firms find that actual levels of demand differ from their forecasts, so that demand is less than expected and firms find that stocks of unsold build up (unintended inventory investment); or demand exceeds expectations so that stocks run down (unintended inventory disinvestment).
- the cost of inventory investment includes order and delivery costs, deterioration and obsolescence of stock and interest charges on funds invested in stock.
- firms seek to minimize these costs by establishing economic order quantities and optimum stock holding.

What is Capital?

Goods meant for future production are called capital goods in contrast to the goods which are used to satisfy our current needs (consumption goods). There are broadly two types of capital- (1) tangible (material) capital and (2) intangible capital. Tangible capital refers to manufactured products or finance capital, which are meant for future production. Thus, capital goods, real capital, or capital assets are already-produced durable goods or any non-financial asset that is used in production of goods or services. Manufactured or physical capital is distinct

from land (or natural capital) in that capital must itself be produced by human labour before it can be a factor of production. At any given moment in time, total physical capital may be referred to as the capital stock. All other inputs than material capital to production are called intangibles in classical economics. This includes organization, entrepreneurship, knowledge, goodwill, or management (which some characterize as talent, social capital or instructional capital).

Difference between Capital and Investment

While capital is a stock concept, investment is a flow concept. There is a difference between capital and investment. Fixed investment, as expenditure over a period of time ("per year"), is not capital. As such, the value of capital can be estimated at a point in time. By contrast, investment, as production to be added to the capital stock, is described as taking place over time ("per year"), thus a flow. Although the two concepts depend on each other they are treated as different concepts in economics. However, the rate of capital formation is taken as a proxy measure of investment.

Importance of investment

- Investment is an important pre-requisite of economic growth and development. Economic growth crucially depends on capital formation whereas economic development requires investment on economic and social overheads. Some views of classical and neo-classical school are listed below, which emphasize the role of investment for economic growth and development.
- Adam Smith emphasized the role of thrift (read savings) to enhance capital formation and investment so that the cycle of economic growth continues in a sustainable way.
- Ragnar Nurkse is one of the founding fathers of Classical Development Economics. Together with Rosenstein-Rodan and Mandelbaum, he promoted a 'theory of the big push', emphasized the role of savings and capital formation in economic development, and argued that poor nations remained poor because of a vicious circle of poverty. Nurkse was of the view that it is important to raise productivity to break the vicious circle of poverty, which in turn was

only possible by raising the rate of capital formation.

- Investment is also important for pulling up a recession-hit economy. It was John Maynard Keynes who pointed out that the key to coming out of the great depression (a deep and prolonged recession) of 1930s lay in “autonomous investment” (investment by state) as the “induced investment” (investment by private sector) would not be coming at such time when the level of “expectations” is low.
- In normal conditions also investment helps the countries to industrialize and diversify their export baskets.
- Agricultural productivity could be raised only through investment in technology, inputs and land development because land being fixed in supply, diseconomies of scale sets in a little earlier in the production cycle of agriculture sector.
- Investment in social sector converts population into human resources. A. W. Lewis began the idea of human capital when he wrote in 1954 the "Economic Development with Unlimited Supplies of Labour." Theodore William Schultz, who was awarded the Nobel Prize in 1979 with Lewis for his work in development economics, promulgated the idea of educational capital, an offshoot of the concept of human capital, relating specifically to the investments made in education. According to Schultz post-World War II the miraculous recovery of Germany and Japan after the widespread devastation, in contrast to the United Kingdom (which was still rationing food long after the war) was due to a healthy and highly educated population; education makes people productive and good healthcare keeps the education investment around and able to produce. One of his main contributions was later called Human Capital Theory, and inspired a lot of work in international development in the 1980s. Schulz's prescriptions were later embraced by multilateral funding agencies and national governments for investments in vocational and technical education.

Determinants of Investment

1. Investment is a positive function of income and inverse function of interest. Thus

investment rises with rising income but falls with rising interest rate. Investment is often modeled as a function of Income and Interest rates, given by the relation $I = f(Y, r)$, where I is investment, Y is income and r is the rate of interest.

2. An increase in income encourages higher investment, whereas a higher interest rate may discourage investment as it becomes more costly to borrow money. Even if a firm chooses to use its own funds in an investment, the interest rate represents an opportunity cost of investing those funds rather than lending out that amount of money for interest.
3. Apart from the above factors, investment also increase or decreases due to institutional and structural problems.
4. A country or state, which has abundant minerals and other resources, cheap labour, skilled labour, robust infrastructure, including power, transport and telecommunication attracts more investment.
5. The size of the market and the purchasing capacity of the population are major determinants of investment.
6. Efficient institutions, good governance, quick decision, transparency and accountability, facilitation, etc. lead to an increase in investment.
7. Government's policies, controls and regulatory mechanisms, national treatment, good fiscal and monetary policies, especially modest taxes and strong financial sector attract more investment. It is also an established fact that foreign investment increases if a level playing field is available to investors.

Sources of Investment

The investment models could be considered from several points of view. Firstly, it depends who is the investor or what is the source of investment. Secondly it depends on the objective of investment. An economy can receive investment from domestic sources and/or from foreign sources, which have different objectives.

Domestic sources

1. **Government-** Government invests for creation of infrastructure, industrialization, human capital formation and welfare.

2. **Corporate sector-** Business or the corporate sector invests for maximizing profits and rates of return over investment through modernization and expansion of their firms and industries, technological innovations and Research and Development. Corporate sector invests in land, building, plant, machinery, equipments, inventories etc. Corporate sector may invest in financial instruments as well.
3. **Household sector-** Household sector invests for maximization of returns either by earning profits, dividends, and higher rates of return in the form of dividends, interest or capital gains. Households invest in land and building, in bank deposits, insurance schemes and other financial instruments such as bonds, debentures, equities etc.

Foreign sources

The other source of investment is foreign investment, which is of two types.

1. **Foreign Direct Investment-** includes investment in directly productive activities by setting up subsidiaries, joint ventures or any other arrangement and
2. **Portfolio investment-** includes investment in the capital market, i.e., shares, bonds, debentures, saving instruments, mutual funds etc. are other sources of foreign investment.

These two kinds of investment are motivated by profit motive, yet lead to increase in income output and employment.

Multilateral Agencies such as the World Bank and the ADB are the other sources of foreign investment. They usually provide finance for infrastructure and social overheads like schools and hospitals.

Models and Theories of Investment

There is no disagreement among the economist regarding the important role investment plays in economic development. However, the economists widely differ on models of investment. The investment models could be studied by categorizing them on the basis of who the investor is and what is the purpose of investment. The investment models of states are different from investment models for household and corporate sector. The investment models for states are meant for maximizing social advantage

or maximizing benefits over the costs of investment. The main difference among the economists regarding state level models of investment is whether they prefer balanced growth models or unbalanced growth models. Both of these models have their advantages and disadvantages.

Another difference of view arises because of difference on the role of state sector and private sector in investment. While state aims at maximum social advantage, the private sector wants to maximize profit. Both the models aim at increasing output, employment and income. However, the state investment policy focuses on growth and development of the economy, the private sector aims at maximizing its own profit. Both these processes are not mutually exclusive and these affect each other. For example, if state sector increases its public expenditure and invests in infrastructure, private investment “crowds in” to reap external economies. Make an irrigation dam, farmers would invest in constructing channels up to their farms. Make a power plant, improve roads and communication, private investment would follow or “crowd in”. But the opposite of this is also possible. If state has a massive plan for investment through deficit financing, the rate of interest would go up as there would be lesser funds available to the private sector, so private investment would “crowd out.”

Private investment- be it households or corporate sector- is always induced investment. This inducement comes from the expectations to earn more profit, earn interests, dividends or capital gains. The state sector investment does not depend on inducements. It is a policy determined decision. In fact state sector can alone take decisions for autonomous investment, investment that is free from profit expectations in the short run at least.

It has been now agreed that state sector can take care of investment in basic infrastructure, core industries and social sector including welfare activities. The private sector is expected to undertake all investments need for expansion and diversification of the industrial sector. While the essential services should be provided by the state sector, purely economic services should be largely provided by the private sector. Household’s investments are meant for maximization of returns or accumulation of private wealth and

assets.

Investment Models for States

Thus, investment decisions would depend on the perception of the planners- whether they favour balanced growth model or unbalanced growth model on the one hand and on the other whether investment should be undertaken by state sector or private sector.

Balanced Growth Models of Investment

Nurkse's model of balanced growth and investment to break the vicious circle of poverty

1. Ragnar Nurkse has given emphasis on investment and capital formation to enhance productivity, which would break the vicious circle of poverty in underdeveloped economies.
2. Nurkse was in favour of attaining balanced growth in both the industrial and agricultural sectors of the economy. He recognized that the expansion and inter-sectoral balance between agriculture and manufacturing is necessary so that each of these sectors provides a market for the products of the other and in turn, supplies the necessary raw materials for the development and growth of the other.
3. Nurkse's theory discusses how the poor size of the market in underdeveloped countries perpetuates its underdeveloped state.
4. Nurkse has also clarified the various determinants of the market size and puts primary focus on productivity.
5. According to him, if the productivity levels rise in a less developed country, its market size will expand and thus it can eventually become a developed economy.
6. Apart from this, Nurkse has been nicknamed an export pessimist, as he feels that the finances to make investments in underdeveloped countries must arise from their own domestic territory. No importance should be given to promoting exports.

Big Push theory of Investment: (Rosenstein-Rodan)

1. Rosenstein-Rodan's Big Push theory or investment model emphasizes that underdeveloped countries require large amounts of investments to embark on the path of

economic development from their present state of backwardness.

2. This theory proposes that a 'bit by bit' investment programme will not impact the process of growth as much as is required for developing countries. He opined that injections of small quantities of investments will merely lead to wastage of resources.
3. Rosenstein-Rodan argued that the entire industry which is intended to be created should be treated and planned as a massive entity (a firm or trust). He supports this argument by stating that the social marginal product of an investment is always different from its private marginal product, so when a group of industries are planned together according to their social marginal products, the rate of growth of the economy is greater than it would have otherwise been.
4. According to Rosenstein-Rodan, there exist three indivisibilities, namely indivisibility in the production function, indivisibility in the demand and indivisibility in the supply of savings in underdeveloped countries. These indivisibilities are responsible for external economies and thus justify the need for a big push.
5. The externalities that help to reap external economies include indivisibility in production function with respect to inputs, processes and outputs. These lead to increasing returns (i.e., economies of scale), and may require a high optimum size of a firm. This can be achieved even in developing countries since at least one optimum scale firm can be established in many industries.
6. Investment in social overhead capital comprises investment in all basic industries (like power, transport or communications) which must necessarily come before directly productive investment activities.
7. Investment in social overhead capital is 'lumpy' in nature. Such capital requirements cannot be imported from other nations. Therefore, heavy initial investment necessarily needs to be made in social overheads.
8. The large-scale programme of industrialization advocated by this model requires huge investments, which are beyond the means of the private sector. Even if the

private sector had the requisite resources to invest in such a programme, it would not do so since it is driven by profit motives. Many investments are profitable in terms of social marginal net product but not in terms of private marginal net product. Due to this there is no incentive for individual entrepreneurs to invest and take advantage of external economies.

9. The investment in infrastructure and basic industries (like power, transport and communications) is 'lumpy' and has long gestation periods. The role of the state in this theory is, therefore, critical for investment in social overhead capital.

Nevertheless, this model has been criticized for its several limitations, including difficulty in execution due to unexpected and unavoidable changes in implementation process, shortages of resources in an underdeveloped economy, lack of absorptive capacity because implementation of industrial programme may be constrained by ineffective disbursement, short-term bottlenecks, macro economic problems and volatility, loss of competitiveness due to Dutch disease effect. There is historical inaccuracy in the theory of big push because over the last two centuries, no country displayed any evidence of development due to massive industrialization programmes. Stationary economies do not develop simply by making large-scale investment in social overhead capital. Further, in a mixed economy, where the private and public sectors co-exist, the environment for growth may not be conducive. One of the biggest criticisms of this model is that it ignores agricultural sector. With its heavy emphasis on industry, the model finds no place for agriculture. This model has also potential to create inflationary pressure due to huge investment whose results would bring forth goods and services with a time lag and also due to shortage of foodgrains consequent upon lack of focus on agriculture. This theory is also criticized for its too much dependence on various indivisibilities.

Investment and Rostow's Stages of Economic Growth

The Rostow's Stages of Growth model is one of the major historical models of economic growth. It was developed by W. W. Rostow in 1960. The model postulates that economic growth occurs in five basic stages, of varying length:

1. Traditional society
2. Preconditions for take-off
3. Take-off
4. Drive to maturity
5. Age of High mass consumption

Main features:

1. Rostow's stages of economic growth have assumed vital role of investment for graduating from one level to the other level.
2. Rostow argued that economic take-off must initially be led by a few individual sectors. According to him a traditional society is characterized by subsistence agriculture and other primary economic activities.
3. In the second stage pre-conditions of take off are prepared with widespread and enhanced investment, which changes the physical environment of production (irrigation, canals, ports etc.). Technology also improves due to investment in research and development. Agriculture is commercialized and exports increase.
4. In the take -off stage there is an increase in investment in industry and manufacturing. The secondary sector expands.
5. In the maturity stage industrial sector is diversified and production shifts from capital goods to consumer goods. This stage is characterized by huge investments in transport and communication and social sector.
6. All this leads to an age of high mass consumption led by services sector and consumer goods.

The critical minimum effort theory: Harvey Leibenstein

Harvey Leibenstein's "critical minimum effort theory", expounded in his book Economic Backwardness and Economic Growth, relates to overpopulated and underdeveloped or developing nations. This theory is based on Malthusian theory of population. This theory is one of the balanced growth theories. In this theory Leibenstein essentially talks about how large doses of investments in an economy can help the economy in development. The theory assumes that output is subject to diminishing returns with respect to population growth, which is a function of per capita income. The rate of investment is a function of per capita income.

The theory asserts that for every disturbance, no matter how large it is, the long run population growth effects will be more significant than the effects of induced investment. The system is quasi-stable for small displacement but not large ones. Equilibrium is unstable to begin with.

Main ideas:

1. The critical minimum effort theory is more or less an extension of the Harrod-Domar model. Critical minimum effort theory is one of the balanced growth theories. It talks about how a minimum amount of push is required by an economy for it to be set on the path of development. This push can be in the form of investments. The "minimum" amount of effort that is required is "critical" for the economy to move towards development hence this theory is called critical minimum effort theory.
2. Because of the high population in underdeveloped countries the capital accumulation and labour supply are not sufficient to increase the per capita income. Nelson and Leibenstein have stressed on the importance of Social structure, Human capital, and Entrepreneurship, but they say that the development of these depend on investment in these.
3. The vicious circle needs to be broken and the per capita income should increase. This is possible by pushing investment in the economy to a certain critical minimum level. So it is necessary that the initial investment levels are sufficiently above a minimum magnitude.
4. Now since this type of investment sometimes becomes difficult for underdeveloped nations, Leibenstein stresses on the fact that the investment can be spread over a period of time and does not necessarily have to be made instantaneously.

The theory critical minimum effort is better than big push theory in the sense that it is more practical than the latter as critical minimum effort theory can be better timed and can be broken up into a series of smaller efforts. Critical minimum effort theory as opposed to big push theory does not stress on the fact that a lump sum amount of investment has to be made instantaneously. So it is more relevant for under developed nations. The theory is also consistent with the concept of decentralised democratic planning as

practiced in India. But the theory has been criticized for concluding that population would fall with a rise in per capita income and ignoring the role of the monetary and fiscal policies which are important factors in deciding the investment and income levels of an economy. The theory is true only for a closed economy. It does not take into consideration international trade, foreign capital, etc.

Unbalanced Growth Models and Investment

The two well known propounders of unbalanced growth investment models are O. Hirschman and Hans Singer. Supporters of the unbalanced growth doctrine include Paul Streeten and Marcus Fleming. These economists believed that unbalanced growth is a natural path of economic development. Underdeveloped countries start from a position that reflects their previous investment decisions and development. Accordingly, at any point in time desirable investment programmes that are not in themselves balanced investment packages may still advance welfare. Unbalanced investment can complement or correct existing imbalances. Once such an investment is made, a new imbalance is likely to appear, requiring further compensating investments.

Hirschman stressed the fact that underdeveloped economies are called underdeveloped because they face a lack of resources, maybe not natural resources, but resources such as skilled labour and technology. Thus, to hypothesise that an underdeveloped nation can undertake large scale investment in many industries of its economy simultaneously is unrealistic due to the paucity of resources. Hans Singer asserted that the balanced growth theory is more applicable to cure an economy facing a cyclical downswing. Cyclical downswing is a feature of an advanced stage of sustained growth rather than of the vicious cycle of poverty.

Main features of the theory

1. Hirschman contends that deliberate unbalancing of the economy according to the strategy is the best method of development and if the economy is to be kept moving ahead, the task of development policy is to maintain tension, disproportions and disequilibrium.
2. Balanced growth should not be the goal, but rather the maintenance of existing imbalances, which can be seen from profit and losses.

Therefore, the sequence that leads away from equilibrium is precisely an ideal pattern for development.

3. Balanced growth of DPA (Directly Productive Activities) and SOC (Social Overhead Cost) is not achievable in underdeveloped countries, nor it is a desirable policy, as it does not set up the incentives and the pressure that make for this dividend of induced investment decisions.
4. Unequal development of various sectors often generates conditions for rapid development. More-developed industries provide undeveloped industries an incentive to grow. Hence, development of underdeveloped countries should be based on this strategy.
5. These investments create a new imbalance, requiring another balancing investment. One sector will always grow faster than another, so the need for unbalanced growth will continue as investments must complement existing imbalance.
6. The path of unbalanced growth is described by three phases: complementarity, which induces investment and produces external economies as desirable investment programmes always exist within a country that represent unbalanced investment to complement the existing imbalance. The other two are Directly Productive Activities (DPA) and Social Overhead Costs (SOC).
7. Backward and forward linkage- Hirschman introduces the concept of backward and forward linkages. A forward linkage is created when investment in a particular project encourages investment in subsequent stages of production. A backward linkage is created when a project encourages investment in facilities that enable the project to succeed.
8. Normally, projects create both forward and backward linkages. Investment should be made in those projects that have the greatest total number of linkages. Projects with many linkages will vary from country to country; knowledge about project linkages can be obtained through input and output studies. Agriculture and primary economic activities may not have high backward and forward linkages due to several constraints.

9. Lead sector is one, which has the highest backward and forward linkage. An example of an industry that has excellent forward and backward linkages is the steel industry. Backward linkages include coal and iron ore mining. Forward linkages include items such as canned goods. While this industry has strong linkages, it is not a good leading sector. Any industry that has a high capital/output ratio and causes significant costs to other businesses has the potential to hurt the developing economy more than it helps it. A better leading sector would be the beer industry.
10. The development of an economy using the unbalanced method depends on the linkages between sectors. Hirschman suggests that the best strategy is induced industrialization. This type of development will create more backward and forward linkages and should be the first step taken. Industries that transform semi-manufactured goods into goods needed by final demand are called "last industries" or "enclave import industries".

The theory of unbalanced growth pays insufficient attention to the question of the precise composition, direction and timing of imbalances. What is the optimum degree to which imbalance should be created in order to accelerate growth? This theory leaves too much to chance. There is little discussion on how to overcome discrepancies between private and social profitabilities of development projects. It neglects agriculture. In heavily-populated countries with agricultural economies, neglect of agriculture could be suicidal. Shortage of agricultural goods can emerge as a serious constraint to industrialization; unless income from agricultural goods expands, the market for industrial products remains limited. Unbalanced growth can also lead to emergence of inflationary pressures in the economy, as a shortage of agricultural commodities will push up commodity prices. This theory is useful in those countries where there is significant state control. For instance, in socialist countries, this strategy is followed with some success. In a socialist society, the consumption of all people is maintained at a modest level, thus reducing demand for consumer goods.

Role of State in Investment

1. The role of state in investment is crucial, especially for the development of

Infrastructure, basic and core industries and social sector.

2. State, is, however, not considered to be efficient for investment in other industrial and commercial economic activities.
3. The lumpiness and long gestation period regarding investment in infrastructure and core/basic industries provides poor incentives for the private sector to take the lead in investment in these sectors.
4. On the other hand state is not considered to be a profit maximiser, hence it is not an efficient user of resources, so far investment in commercial activity is concerned.
5. State could enter into commercial activities only to provide competition to the private sector so as to tame monopolistic tendencies.
6. In social sector, market pricing of various social services, including public utilities would defeat the purpose of a welfare state; hence, in these areas the role of the private sector is limited.
7. State is concerned about generation of employment and welfare of labour.

Principle of Maximum Social Advantage

State is guided by the principle of maximum social advantage in its investment decisions. The 'Principle of Maximum Social Advantage (MSA)' is the fundamental principle of Public Finance. The Principle of Maximum Social Advantage states that public finance leads to economic welfare when public expenditure & taxation are carried out up to that point where the benefits derived from the MU (Marginal Utility) of expenditure is equal to (=) the Marginal Disutility or the sacrifice imposed by taxation. Marginal Social Sacrifice (MSS) refers to that amount of social sacrifice undergone by public due to the imposition of an additional unit of tax. Every unit of tax imposed by the government taxes result in loss of utility. While imposition of tax puts burden on the people, public expenditure confers benefits. The benefit conferred on the society, by an additional unit of public expenditure is known as Marginal Social Benefit (MSB).

A technical extension of this principle in state's investment decision in particular and for all investment decisions in general is Cost-Benefit Analysis.

Cost –Benefit Analysis

Cost benefit analysis (CBA) is a systematic process for calculating and comparing benefits and costs of a project, decision or government policy (hereinafter, "project").

Purpose of CBA

1. To determine if it is a sound investment/ decision (justification/feasibility),
2. To provide a basis for comparing projects. It involves comparing the total expected cost of each option against the total expected benefits, to see whether the benefits outweigh the costs, and by how much.

Main features

1. In CBA, benefits and costs are expressed in monetary terms, and are adjusted for the time value of money, so that all flows of benefits and flows of project costs over time (which tend to occur at different points in time) are expressed on a common basis in terms of their "net present value."
2. Closely related, but slightly different, formal techniques include cost-effectiveness analysis, cost-utility analysis, economic impact analysis, fiscal impact analysis, and Social return on investment (SROI) analysis.
3. Cost-benefit analysis is often used by governments and other organizations, such as private sector businesses, to evaluate the desirability of a given policy. It is an analysis of the expected balance of benefits and costs, including an account of foregone alternatives and the status quo. CBA helps predict whether the benefits of a policy outweigh its costs, and by how much relative to other alternatives (i.e. one can rank alternate policies in terms of the cost-benefit ratio).
4. Generally, accurate cost-benefit analysis identifies choices that increase welfare from a utilitarian perspective.
5. Assuming an accurate CBA, changing the status quo by implementing the alternative with the lowest cost-benefit ratio can improve Pareto efficiency.
6. An analyst using CBA should recognize that perfect evaluation of all present and future costs and benefits is difficult, and while CBA can offer a well-educated estimate of the best alternative, perfection in terms of economic efficiency and social welfare are not guaranteed.

Process of cost-benefit analysis

- List alternative projects/programs.
- List stakeholders.
- Select measurement(s) and measure all cost/benefit elements.
- Predict outcome of cost and benefits over relevant time period.
- Convert all costs and benefits into a common currency.
- Apply discount rate.
- Calculate net present value of project options.
- Perform sensitivity analysis.
- Adopt recommended choice.

CBA attempts to measure the positive or negative consequences of a project, which may include:

- Effects on users or participants
- Effects on non-users or non-participants
- Externality effects
- Option value or other social benefits.

For example, a similar breakdown is employed in environmental analysis of total economic value. Both costs and benefits can be diverse. Financial costs tend to be most thoroughly represented in cost-benefit analyses due to relatively abundant market data. The net benefits of a project may incorporate cost savings or public willingness to pay compensation (implying the public has no legal right to the benefits of the policy) or willingness to accept compensation (implying the public has a right to the benefits of the policy) for the welfare change resulting from the policy. The guiding principle of evaluating benefits is to list all (categories of) parties affected by an intervention and add the (positive or negative) value, usually monetary, that they ascribe to its effect on their welfare.

Role of Private Sector in Investment

Everywhere in the world, the corporate sector and the household sectors are major investors in industrial and commercial investment. The private investors are profit maximisers. They use resources efficiently. Their effort is to minimize cost and maximize profit. In the process of competition, they are able to provide better quality products at lower costs through innovations, research and development. They are

not directly concerned with generation of employment and condition of labour force. Private investment is guided by the rate of return from investment. J.M Keynes' concept of Marginal Efficiency of Capital is useful in such investment models.

Marginal Efficiency of Capital

The term "marginal efficiency of capital" was introduced by John Maynard Keynes in his General Theory, and defined as "the rate of discount, which would make the present value of the series of annuities given by the returns, expected from the capital asset during its life just equal its supply price". The marginal efficiency of capital (MEC) is that rate of discount, which would equate the price of a fixed capital asset with its present discounted value of expected income. The discount, or charge, is simply the difference between the original amount owed in the present and the amount that has to be paid in the future to settle the debt. . All future cash flows are estimated and discounted to give their present values (PVs)—the sum of all future cash flows, both incoming and outgoing, is the net present value (NPV), which is taken as the value or price of the cash flows in question.

Any investment decision depends not only on rate of interest but also whether or not the expected rate of returns on the investment is greater than cost of borrowing the funds. In these two factors, the MEC is an important factor because MEC is the expected rate of returns from the investment. If the returns expected are low, the investment is not profitable, because in short run, rate of interest is stable. In MEC, capital means the real productive assets. MEC depends on expected rate of returns of a capital asset over its life time which is also called Prospective Yield and the supply price of capital assets. Any business man will weigh the prospective yield with the supply price before investing. 'Investment and rate of interest: Rate of interest is considered the most important factor in investment will be low and vice-versa. This was a view given by classical economists. They considered rate of interest as the only factor determining investment. The businessmen will decide whether to purchase on the marginal unit of capital by comparing the prevailing rate of interest with the MEC. "If MEC is greater than the rate of interest, this additional investment will get profit and investment is profitable. There are many

factors that affect MEC. Some of the short term factors are: expected demand for future, level of income, change in consumption, business expectation. On the other hand there are long term factors that include population growth, economic policies of the government, infrastructure facilities, etc. There are some limitations of the MEC. Investment done by the Government for social purpose has no connection with the MEC. Practically it is difficult to estimate MEC. Whenever there is contractionary monetary policy, the firms may not find funds even if the projects or investments are profitable. Also every time the businessmen do not necessarily go for loans. Sufficient funds are gathered by the businessmen for some projects, which are planned for a long time.

Internal Rate of Return

Private investment is also guided by another similar concept called the internal rate of return. The internal rate of return (IRR) or economic rate of return (ERR) is a rate of return used in capital budgeting to measure and compare the profitability of investments. It is also called the discounted cash flow rate of return (DCFRR) or the rate of return (ROR). In the context of savings and loans the IRR is also called the effective interest rate. The term internal refers to the fact that its calculation does not incorporate environmental factors (e.g., the interest rate or inflation).

The internal rate of return on an investment or project is the "annualized effective compounded return rate" or "rate of return" that makes the net present value (NPV) of all cash flows (both positive and negative) from a particular investment equal to zero. It can also be defined as the discount rate at which the present value of all future cash flow is equal to the initial investment or in other words the rate at which an investment breaks even. In more specific terms, the IRR of an investment is the discount rate at which the net present value of costs (negative cash flows) of the investment equals the net present value of the benefits (positive cash flows) of the investment.

IRR calculations are commonly used to evaluate the desirability of investments or projects. The higher a project's IRR, the more desirable it is to undertake the project. Assuming all projects require the same amount of up-front investment,

the project with the highest IRR would be considered the best and undertaken first. A firm (or individual) should, in theory, undertake all projects or investments available with IRRs that exceed the cost of capital. Investment may be limited by availability of funds to the firm and/or by the firm's capacity or ability to manage numerous projects.

Foreign Investment

1. In a narrow sense, foreign direct investment refers just to building new facilities. The numerical FDI figures based on varied definitions are not easily comparable.
2. As a part of the national accounts of a country, and in regard to the national income equation $Y=C+I+G+(X-M)$, I is investment plus foreign investment, FDI is defined as the net inflows of investment (inflow minus outflow) to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. FDI is the sum of equity capital, other long-term capital, and short-term capital as shown the balance of payments. FDI usually involves participation in management, joint-venture, transfer of technology and expertise. There are two types of FDI: inward and outward, resulting in a net FDI inflow (positive or negative) and "stock of foreign direct investment", which is the cumulative number for a given period. Direct investment excludes investment through purchase of shares.
3. Foreign direct investment is a direct investment into production or business in a country by an individual or company in another country, either by buying a company in the target country or by expanding operations of an existing business in that country.
4. Foreign direct investment is in contrast to portfolio investment which is a passive investment in the securities of another country such as stocks and bonds.
5. Basically NGP (non government player) a foreign direct investment is allowing overseas markets for booming consumer in many forms. Broadly, foreign direct investment includes "mergers and acquisitions, building

new facilities, reinvesting profits earned from overseas operations and intra company loans". FDI is one example of international factor movements.

Types

- Horizontal FDI arises when a firm duplicates its home country-based activities at the same value chain stage in a host country through FDI.
- Platform FDI Foreign direct investment from a source country into a destination country for the purpose of exporting to a third country.
- Vertical FDI takes place when a firm through FDI moves upstream or downstream in different value chains i.e., when firms perform value-adding activities stage by stage in a vertical fashion in a host country.
- Horizontal FDI decreases international trade as the product of them is usually aimed at host country; the two other types generally act as a stimulus for it.

Greenfield Investment

Greenfield investment refers to fresh investment in any country by a foreign investor. A greenfield project has no constraints imposed by prior work. The analogy is to that of construction on greenfield land where there is no need to remodel or demolish an existing structure. In green field investment, a new plant is constructed. It is a form of foreign direct investment where a parent company starts a new venture in a foreign country by constructing new operational facilities from the ground up. In addition to building new facilities, most parent companies also create new long-term jobs in the foreign country by hiring new employees.

Brownfield investment

In a brownfield investment, a company or government entity purchases or leases existing production facilities, in order to launch a new production activity.

Turnkey Project

Sometimes investment is sought in turn key projects. A turnkey or a turnkey project (also spelled turn-key) is a type of project that is constructed so that it could be sold to any buyer as a completed product. This is contrasted with build to order, where the constructor builds

an item to the buyer's exact specifications, or when an incomplete product is sold with the assumption that the buyer would complete it. Turn key projects involve the sale of an established business, including all the equipment necessary to run it, or by a business-to-business supplier providing complete packages for business start-up. An example would be the creation of a "turnkey hospital" which would be building a complete medical center with installed high-tech medical equipment. In real estate, turnkey is defined as delivering a location that is ready for occupation. The turnkey process includes all of the steps involved to open a location, including the site selection, negotiations, space planning, and construction coordination and complete installation.

Mergers and Acquisition

Mergers and acquisitions (abbreviated M&A) is an aspect of corporate strategy, corporate finance and management dealing with the buying, selling, dividing and combining of different companies and similar entities that can help an enterprise grow rapidly in its sector or location of origin, or a new field or new location, without creating a subsidiary, other child entity or using a joint venture. The distinction between a "merger" and an "acquisition" has become increasingly blurred in various respects (particularly in terms of the ultimate economic outcome), although it has not completely disappeared in all situations.

Acquisition is also one of the ways of investment. It refers to takeover of a company by an investor. In business, a takeover is the purchase of one company (the target) by another (the acquirer, or bidder). In UK, the term refers to the acquisition of a public company whose shares are listed on a stock exchange, in contrast to the acquisition of a private company. There are broadly two types of acquisition. A "friendly takeover" is an acquisition which is approved by the management. Before a bidder makes an offer for another company, it usually first informs the company's Board of Directors. In an ideal world, if the Board feels that accepting the offer serves the shareholders better than rejecting it, it recommends the offer be accepted by the shareholders. On the other hand a "hostile takeover" allows a suitor to take over a target company whose management is unwilling to agree to a merger or takeover. A takeover is considered "hostile" if the target company's Board rejects the offer, but the bidder continues to

pursue it, or the bidder makes the offer directly after having announced its firm intention to make an offer. There are some other types as well.

A "reverse takeover" is a type of takeover where a private company acquires a public company. This is usually done at the instigation of the larger, private company, the purpose being for the private company to effectively float itself while avoiding some of the expense and time involved in a conventional IPO. An individual or organization, sometimes known as corporate raider, can purchase a large fraction of the company's stock and, in doing so, get enough votes to replace the Board of Directors and the CEO. With a new agreeable management team, the stock is a much more attractive investment, which would likely result in a price rise and a profit for the corporate raider and the other shareholders.

A "backflip takeover" is any sort of takeover in which the acquiring company turns itself into a subsidiary of the purchased company. This type of takeover can occur when a larger but less well-known company purchases a struggling company with a very well-known brand.

The terms merger and acquisition mean slightly different things. The legal concept of a merger (with the resulting corporate mechanics, statutory merger or statutory consolidation, which have nothing to do with the resulting power grab as between the management of the target and the acquirer) is different from the business point of view of a "merger", which can be achieved independently of the corporate mechanics through various means such as "triangular merger", statutory merger, acquisition, etc. When one company takes over another and completely establishes itself as the new owner, the purchase is called an "acquisition". From a legal point of view, in an acquisition, the target company still exists as an independent legal entity, which is controlled by the acquirer. However, in the pure sense of the term, a merger happens when two firms agree to go forward as a single new company rather than remain separately owned and operated. This kind of action is more precisely referred to as a "merger of equals". The firms are often of about the same size. Both companies' stocks are surrendered and new company stock is issued in its place. For the example, in the 1999 merger of Glaxo Wellcome and SmithKline Beecham, both firms ceased to exist when they merged, and a new company, GlaxoSmithKline, was created. In

practice, however, actual mergers of equals don't happen very often. Usually, one company will buy another and, as part of the deal's terms, simply allow the acquired firm to proclaim that the action is a merger of equals, even if it is technically an acquisition. Being bought out often carries negative connotations; therefore, by describing the deal euphemistically as a merger, deal makers and top managers try to make the takeover more palatable. An example of this would be the takeover of Chrysler by Daimler-Benz in 1999 which was widely referred to as a merger at that time.

Public Private Partnership Model

A public-private partnership (PPP) is a government service or private business venture, which is funded and operated through a partnership of government and one or more private sector companies.

In PPP the private party provides a public service or project and assumes substantial financial, technical and operational risk in the project.

Broadly there are two types of PPP. In the first type, the cost of using the service is borne exclusively by the users of the service and not by the taxpayer. In the second type (notably the private finance initiative), capital investment is made by the private sector on the basis of a contract with government to provide agreed services and the cost of providing the service is borne wholly or in part by the government.

In a PPP model there are various ways of government's contribution. It may be a funding and administrative partner. Government contributions to a PPP may also be in kind (notably the transfer of existing assets). 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 removing guaranteed annual revenues for a fixed time period.

Special Purpose Vehicle

Some of the PPP models are executed and administered by a special purpose vehicle. Typically, a public sector consortium forms a special company called a "special purpose

vehicle" (SPV) to develop, build, maintain and operate the asset for the contracted period. The consortium is usually made up of a building contractor, a maintenance company and bank lender(s). It is the SPV that signs the contract with the government and with subcontractors to build the facility and then maintain it. In cases where the government has invested in the project, it is typically (but not always) allotted an equity share in the SPV.

Viability Gap Funding

The Viability Gap Funding Scheme provides financial support in the form of grants, one time or deferred, to infrastructure projects undertaken through public private partnerships with a view to make them commercially viable. Government of India has established a Viability Gap Fund to aid the PPP infrastructure projects which face the viability gap due to inherent nature of the project. The Scheme is administered by the Ministry of Finance.

Build–operate–transfer (BOT) or build–own–operate–transfer (BOOT)

Build–operate–transfer (BOT) or build–own–operate–transfer (BOOT) is a form of project financing, wherein a private entity receives a concession from the private or public sector to finance, design, construct, and operate a facility stated in the concession contract. This enables the project proponent to recover its investment, operating and maintenance expenses in the project. Traditionally, such projects provide for the infrastructure to be transferred to the government at the end of the concession period.

BOT finds extensive application in the infrastructure projects and in public–private partnership. In the BOT framework a third party, for example the public administration, delegates to a private sector entity to design and build infrastructure and to operate and maintain these facilities for a certain period. During this period the private party has the responsibility to raise the finance for the project and is entitled to retain all revenues generated by the project and is the owner of the regarded facility. The facility will be then transferred to the public administration at the end of the concession agreement, without any remuneration of the private entity involved.

BOT involves the following types of parties:

The Host Government: Normally, the government is the initiator of the infrastructure project and decides if the BOT model is

appropriate to meet its needs. In addition, the political and economic circumstances are the main factors for this decision. The government provides normally support for the project in some form. (provision of the land/ changed laws)

The Concessionaire: The project sponsors who act as concessionaire create a special purpose entity which is capitalised through their financial contributions.

Lending Banks: Most BOT project are funded to a big extent by commercial debt. The bank will be expected to finance the project on “non-recourse” basis meaning that it has recourse to the special purpose entity and all its assets for the repayment of the debt.

Other Lenders: The special purpose entity might have other lenders such as national or regional development banks

Parties to the Project Contracts: Because the special purpose entity has only limited workforce, it will subcontract a third party to perform its obligations under the concession agreement. Additionally, it has to assure that it has adequate supply contracts in place for the supply of raw materials and other resources necessary for the project

Conclusion

The selection of investment model depends on the objectives before the investor and the funding requirements. The government usually takes up the bigger infrastructure projects, creation of public utility and social overheads. On the other hand the private investment is carried out with the profit motive. Government investment leads to creation of economic and social overheads and to reap the economies of these facilities private investment comes up that leads to industrial development. In the times of down turn of the business cycle it is the government which takes up autonomous investment or does pump priming to raise the expectations and increase the effective demand. Today there is an increasing trend of PPP investment models, which have many advantages. Apart from pooling together funds and expertise, these models are based more on the principle of economic rationality so that the funds invested are also covered by ensuring reasonable returns. However, success of the PPP models depends on creating sound institutional and regulatory mechanism based on the principles of transparency and accountability.



OECD defines FDI as cross-border investment by a resident entity in one economy with the objective of obtaining a lasting interest in an enterprise resident in another economy. The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence by the direct investor on the management of the enterprise. It may take the form of cash, securities, plant, equipment, and other factors of production, such as managerial skills, technology, or know-how.

Developed economies consider FDI as an engine of market access in developing and less developed countries vis-à-vis for their own technological progress and in maintaining their own economic growth and development. Developing nations look at FDI as a source of filling the savings, foreign exchange reserves, revenue, trade deficit, management and technological gaps. FDI is considered as an instrument of international economic integration as it brings a package of assets, including capital, technology, managerial skills and capacity and access to foreign markets. The impact of FDI depends on the country's domestic policy and foreign policy.

Types of FDI:

By Direction: Inward and Outward FDI

Inward foreign direct investment is when foreign capital is invested in local resources. Inward FDI is encouraged by tax breaks, subsidies, low interest loans, grants, lifting of certain restrictions. Inward FDI is restricted by Ownership restraints or limits and Differential performance requirements.

Outward foreign direct investment, sometimes called "direct investment abroad", is when local capital is invested in foreign resources. Outward FDI is encouraged by Government-backed insurance to cover risk. Outward FDI is restricted by tax incentives or disincentives on

firms that invest outside of the home country or on repatriated profits and subsidies for local businesses.

By Target: Greenfield Investment, Mergers and Acquisitions.

Green field investments are direct investment in new facilities or the expansion of existing facilities. Green field investments are the primary target of a host nation's promotional efforts because they create new production capacity and jobs, transfer technology and know-how, and can lead to linkages to the global marketplace. The Organization for International Investment cites the benefits of greenfield investment (or insourcing) for regional and national economies to include increased employment (often at higher wages than domestic firms); investments in research and development; and additional capital investments. Criticism of the efficiencies obtained from greenfield investments include the loss of market share for competing domestic firms. Another criticism of greenfield investment is that profits are perceived to bypass local economies, and instead flow back entirely to the multinational's home economy. Critics contrast this to local industries whose profits are seen to flow back entirely into the domestic economy.

Whereas in Mergers and Acquisitions transfers of existing assets from local firms to foreign firms takes place; the primary type of FDI. Cross-border mergers occur when the assets and operation of firms from different countries are combined to establish a new legal entity. Cross-border acquisitions occur when the control of assets and operations is transferred from a local to a foreign company, with the local company becoming an affiliate of the foreign company. Unlike greenfield investment, acquisitions provide no long term benefits to the local economy--even in most deals the owners of the local firm are paid in stock from the acquiring firm, meaning that the money from the sale could never reach the local economy. Nevertheless,

mergers and acquisitions are a significant form of FDI and until around 1997, accounted for nearly 90% of the FDI flow into the United States. Mergers are the most common way for multinationals to do FDI

Brief History of FDI in India

The early nineties was a period when the Indian economy faced a severe Balance of Payment crisis. Exports began to experience serious difficulties. The crippling external debts were putting pressure on the economy. In view of all these developments there was a serious threat of the economy defaulting in respect of external payments liability. It was in the light of such adverse situations that the policy makers decided to adopt a more liberal and global approach thereby, opening its door to FDI inflows in order to restore the confidence of foreign investors. FDI provides a situation wherein both the host and the home nations derive some benefit. The home countries want to take the advantage of the vast markets opened by industrial growth. Whereas the host countries get to acquire resources ranging from financial, capital, entrepreneurship, technological know-how and managerial skills which assist it in supplementing its domestic savings and foreign exchange.

The evolution of Indian FDI can broadly be divided into three phases classified on the premises of the initiatives taken to induce foreign investments into the Indian economy:

- (a) **The first phase**, between 1969 and 1991, was marked by the coming into force of the Monopolies and Restrictive Trade Practices Commission (MRTP) in 1969, which imposed restrictions on the size of operations, pricing of products and services of foreign companies. The Foreign Exchange Regulation Act (FERA), enacted in 1973, limited the extent of foreign equity to 40%, though this limit could be raised to 74% for technology-intensive, export-intensive, and core-sector industries. A selective licensing regime was instituted for technology transfer and royalty payments and applicants were subjected to export obligations.
- (b) **The second phase**, between 1991 and 2000, witnessed the liberalisation of the FDI policy,

as part of the Government's economic reforms programme. In 1991 as per the 'Statement on Industrial Policy', FDI was allowed on the automatic route, up to 51%, in 35 high priority industries. Foreign technical collaboration was also placed under the automatic route, subject to specified limits. In 1996, the automatic approval route for FDI was expanded, from 35 to 111 industries, under four distinct categories (Part A-up to 50%, Part B-up to 51%, Part C-up to 74%, and Part D-up to 100%). A Foreign Investment Promotion Board (FIPB) was constituted to consider cases under the government route.

- (c) **The third phase**, between 2000 till date, has reflected the increasing globalisation of the Indian economy. In the year 2000, a paradigm shift occurred, wherein, except for a negative list, all the remaining activities were placed under the automatic route. Caps were gradually raised in a number of sectors/activities. Some of the initiatives that were taken during this period were: In the insurance sector, it was decided to raise the sectoral FDI cap from 26 per cent to 49 per cent under automatic route under which companies investing do not require prior government approval; allowed 49 per cent FDI in single brand retail under the automatic route and beyond through the Foreign Investment Promotion Board (FIPB), etc. Sector-wise, moderation in outward FDI was observed in agriculture, hunting, forestry & fishing, financial insurance, real estate & business services, manufacturing and wholesale, retail trade, restaurants & hotels. Furthermore, sectors, viz. financial, insurance, real estate & business services and manufacturing continued to account for more than 50 per cent of total outward FDI during 2011-12. Net FDI (inward FDI minus outward FDI) at US\$ 22.1 billion in 2011-12 showed a significant increase of about 87.0 per cent as against US\$ 11.8 billion in 2010-11.

Ways of receiving Foreign Direct Investment by an Indian company:

1. Automatic route.

FDI up to 100 per cent is allowed under the automatic route in all activities/sectors except

where the provisions of the consolidated FDI Policy, paragraph on 'Entry routes for Investment' issued by the Government of India from time to time, are attracted. FDI in sectors / activities to the extent permitted under the automatic route does not require any prior approval either of the Government or the Reserve Bank of India.

2. Government route.

FDI in activities not covered under the automatic route requires prior approval of the Government which are considered by the Foreign Investment Promotion Board (FIPB), Department of Economic Affairs, Ministry of Finance. Indian companies having foreign investment approval through FIPB route do not require any further clearance from the Reserve Bank of India for receiving inward remittance and for the issue of shares to the non-resident investors

The Indian company having received FDI either under the Automatic route or the Government route is required to comply with the provisions of the FDI policy, including reporting the FDI to the Reserve Bank.

FDI in RETAIL : An Analysis:

The term 'retail' has been defined as a sale for final consumption in contrast to a sale for further sale or processing (i.e. wholesale). Thus, retailing can be said to be the interface between the producer and the individual consumer buying for personal consumption.

Retail industry in India is divided as:

1. **Organized Retailing:** Organized retailing refers to trading activities undertaken by licensed retailers, that is, those who are registered for sales tax, income tax, etc. These include the corporate-backed hypermarkets and retail chains, and also the privately owned large retail businesses.
2. **Unorganized Retailing:** Unorganized retailing, on the other hand, refers to the traditional formats of low-cost retailing, for example, the local kirana shops, owner manned general stores, paan/beedi shops, convenience stores, hand cart and pavement vendors, etc.

Single Brand Retail and Multi Brand Retail:

DIPP guidelines for the companies coming under the purview of single brand retail:

- (a) Only single brand products would be sold (i.e., retail of goods of multi-brand even if produced by the same manufacturer would not be allowed).
- (b) Products should be sold under the same brand internationally.
- (c) Single-brand product retail would only cover products which are branded during manufacturing.
- (d) Any addition to product categories to be sold under "single-brand" would require fresh approval from the government.

Examples are Brands like Nike, Gucci, Lotto, Levis, etc.

Multibranding is basically the process of marketing of two or more widely similar and competing products by the same firm under different brands. Multi-brand retail comes in different formats like supermarket, hypermarket, and the shopping malls. While these brands effect each others' sales, multi-brand strategy does have some advantages as a means of (1) obtaining greater shelf space and leaving little for competitors' products, (2) saturating a market by filling all price and quality gaps, (3) catering to brand-switchers users who like to experiment with different brands, and (4) keeping the firm's managers on their toes by generating internal competition.

Government policy related to FDI in Retail:

Single Brand Retail

Government had permitted FDI, up to 100%, in single brand product retail trading, subject to specified conditions, including, inter alia, the conditions that:

- (a) Only one non-resident entity, whether owner of the brand or otherwise, shall be permitted to undertake single brand product retail trading in the country, for the specific brand, through a legally tenable agreement, with the brand owner for undertaking single brand product retail trading in respect of the specific brand for which approval is being sought. The onus for ensuring compliance with this condition shall rest with the Indian entity carrying out single-brand product retail trading in India. The investing entity shall provide evidence to this effect at the

time of seeking approval, including a copy of the licensing/franchise/sub-licence agreement, specifically indicating compliance with the above condition.

- (b) In respect of proposals involving FDI beyond 51%, sourcing of 30%, of the value of goods purchased, will be done from India, preferably from MSMEs, village and cottage industries, artisans and craftsmen, in all sectors, where it is feasible.

‘Small industries’ would be defined as industries which have a total investment in plant & machinery not exceeding US \$ 1.00 million. This valuation refers to the value at the time of installation, without providing for depreciation. Further, if at any point in time, this valuation is exceeded, the industry shall not qualify as a ‘small industry’ for this purpose. The compliance of this condition will be ensured through self-certification by the company, which could be subsequently checked, by statutory auditors, from the duly certified accounts, which the investors will be required to maintain.

Regarding the condition that 30% sourcing be mandatorily done from Indian small industry, investors have pointed out that it would be difficult to comply with this condition in the case of very specialized/high technology items. Global single brand retailers are often engaged in the business of retailing specialty/high-tech products. Such products are niche products, wherein it may not be viable for the foreign investors to build capacities wherever they engage in retailing, owing to the specialized requirements of quality and precision which the local small industry may not be able to provide.

Investors are, therefore, of the view that the condition of 30% mandatory sourcing from Indian small industries/ village and cottage industries, artisans and craftsmen, is acting as a deterrent to the desired foreign investment in this activity.

The other category of products relate to the entire range from household appliances, utensils, furniture, crockery to furnishings, etc. These products are far more amenable to sourcing from MSMEs, village and cottage industries, artisans and craftsmen.

Therefore, the proposed modification of the condition is envisaged to take into account the

circumstances of both the specialized/high technology niche products, as well as the general category, covering a wide range of items. The fact that 30% domestic sourcing is being mandated would imply that the single brand retailers would have to build production capacities in the country, either in existing units, or set up new ones, catering specifically to their sourcing requirements. Hence, even the 30% domestic sourcing is expected to develop production capacities in the country, with the attendant global best practices, relating to design, production and quality. Since single brand retailers are global players, Indian suppliers and vendors to these retailers would have an opportunity of becoming a part of their global supply chains. Thus, Indian products could find their way in the stores of these single brand retailers located in other countries, thereby augmenting exports from India as well. "Thus, the amended condition relating to sourcing of 30%, of the value of goods purchased, being done from India, preferably from MSMEs, village and cottage industries, artisans and craftsmen, in all sectors, where feasible, is expected to benefit Indian producers, including the Indian handicrafts sector, which provides livelihood to millions and is important from the point of low capital investment, high value-addition and high potential for export, as also to meet the critical need to integrate Indian producers with the domestic and global markets. Skill integration with craftsmen abroad is likely to help develop synergies with international brands and generate more employment. The consequential benefits, arising from the integration of global best practices in management, along with global standards in quality, design, packaging and production, would help build capacities of local producers, by making it worthwhile for them to scale-up their production, thereby creating a multiplier effect on employment and income generation. This would also lead to upgradation of technology, which, in turn, would have a further multiplier effect on the economy.

Multi Brand Retail

Government announced the decision to permit FDI, up to 51%, in multi-brand retail trading subject to the following conditions:

1. FDI in multi brand retail trading upto 51% shall be allowed through the Government approval route.

2. Minimum amount to be brought in, as FDI, by the foreign investor, would be US \$ 100 million.
3. At least 50% of total FDI brought in shall be invested in 'backend infrastructure' within three years of the first tranche of FDI, where 'back-end infrastructure' will include capital expenditure on all activities, excluding that on front-end units; for instance, back-end infrastructure will include investment made towards processing, manufacturing, distribution, design improvement, quality control, packaging, logistics, storage, warehouse, agriculture market produce infrastructure etc. Expenditure on land cost and rentals, if any, will not be counted for purposes of backend infrastructure.
4. At least 30% of the value of procurement of manufactured/processed products purchased shall be sourced from Indian 'small industries' which have a total investment in plant & machinery not exceeding US \$ 1.00 million. This valuation refers to the value at the time of installation, without providing for depreciation. Further, if at any point in time, this valuation is exceeded, the industry shall not qualify as a 'small industry' for this purpose. This procurement requirement would have to be met, in the first instance, as an average of five years' total value of the manufactured/ processed products purchased, beginning 1st April of the year during which the first tranche of FDI is received. Thereafter, it would have to be met on an annual basis.
5. Self-certification by the company, to ensure compliance of the conditions at serial nos. (2), (3) and (4) above, which could be cross-checked, as and when required. Accordingly, the investors shall maintain accounts, duly certified by statutory auditors.
6. Retail sales outlets may be set up only in cities with a population of more than 10 lakh as per 2011 Census and may also cover an area of 10 kms around the municipal/urban agglomeration limits of such cities; retail locations will be restricted to conforming areas as per the Master/Zonal Plans of the concerned cities and provision will be made for requisite facilities such as transport connectivity and parking. In States/ Union Territories not having cities with population

of more than 10 lakh as per 2011 Census, retail sales outlets may be set up in the cities of their choice, preferably the largest city and may also cover an area of 10 kms around the municipal/urban agglomeration limits of such cities. The locations of such outlets will be restricted to conforming areas, as per the Master/Zonal Plans of the concerned cities and provision will be made for requisite facilities such as transport connectivity and parking.

7. Government will have the first right to procurement of agricultural products.
8. The above policy is an enabling policy only and the State Governments/Union Territories would be free to take their own decisions in regard to implementation of the policy. Therefore, retail sales outlets may be set up in those States/Union Territories which have agreed, or agree in future, to allow FDI in MBRT under this policy. Such agreement, in future, to permit establishment of retail outlets under this policy, would be conveyed to the Government of India through the Department of Industrial Policy & Promotion and additions would be made to the annexed list accordingly. The establishment of the retail sales outlets will be in compliance of applicable State/Union Territory laws/regulations, such as the Shops and Establishments Act, etc.
9. Retail trading, in any form, by means of e-commerce, would not be permissible, for companies with FDI, engaged in the activity of multi-brand retail trading.

Advantages of opening up of Multi-Brand Retail:

1. With FDI in multi-brand retail trading, the farmers will receive better remuneration for their produce. The farmers will also get better prices from the heavy reduction in post-harvest losses. It will also result in the strengthening of the backend infrastructure and lead to direct purchase by the retailers. Organised retail would also drastically reduce the number of needless middlemen.
2. Large-scale investment in the retail sector especially in backend infrastructure will provide substantive gainful employment opportunities in the entire range of activities

from the backend to the frontend retail business. Also grant employment opportunities for over 1 crore youth.

3. Improvement in product quality as a result of strengthening of backend infrastructure due to technological upgradation, efficient grading, sorting and packaging; efficient testing; quality control and product standardization resulting in better quality products not only for domestic consumers but also for exports.
4. Lower prices and give more choice for consumers.
5. The safeguard pertaining to a minimum of 30% procurement from Indian small industries would provide the necessary scales for these entities to expand capacities in manufacturing, thereby creating more employment and also strengthening the manufacturing base of the country.
6. Implementation of the policy will facilitate greater FDI inflows, additional and quality employment, global best practices and benefit consumers and farmers in the long run, in terms of quality, price, greater supply chain efficiencies in the agricultural sector and development of critical backend infrastructure.

The drawbacks of FDI in retail are:

- It would lead to unfair competition and ultimately result in large-scale exit of domestic retailers, especially the small family managed outlets, leading to enormous displacement of persons employed in the retail sector. Further, as the manufacturing sector has not been growing fast enough, the persons displaced from the retail sector would not be absorbed there.
- The entry of large global retailers such as Wal-Mart would eradicate local shops and millions of jobs, since the unorganized retail sector employs an enormous percentage of Indian population after the agriculture sector;
- The global retailers would conspire and exercise monopolistic power to raise prices and monopolistic (big buying) power to reduce the prices received by the suppliers;
- It would lead to asymmetrical growth in cities, causing discontent and social tension elsewhere.

Hence, both the consumers and the suppliers would lose, while the profit margins of such retail chains would go up.

Liberalization of FDI norms

Foreign Direct Investment (FDI) is preferred to the foreign portfolio investments primarily because FDI is expected to bring modern technology, managerial practices and its long term in nature investment. The Government has liberalized FDI norms overtime. As a result, only a handful of sensitive sectors now fall in the prohibited zone and FDI is allowed fully or partially in the rest of the sectors.

FDI in important sectors are as follows:

- In the insurance sector, it was decided to raise the sectoral FDI cap from 26 per cent to 49 per cent under automatic route under which companies investing do not require prior government approval.
- Allowed 49 per cent FDI in single brand retail under the automatic route and beyond through the Foreign Investment Promotion Board (FIPB).
- FDI cap in defence sector is at 26 per cent but higher limits of foreign investments in 'state-of-the-art' technology manufacturing will be considered by the Cabinet Committee on Security.
- In case of PSU oil refineries, commodity bourses, power exchanges, stock exchanges and clearing corporations, FDI will be allowed up to 49 per cent under automatic route as against current routing of the investment through FIPB.
- In basic and cellular services, FDI was raised to 100 per cent from current 74 per cent. Of this, up to 49 per cent will be allowed under automatic route and the remaining through FIPB approval.
- FDI of up to 100 per cent was allowed in courier services under automatic route.
- In credit information firms 74 per cent FDI under automatic route are allowed.

Despite successive moves to liberalize the FDI regime, India is ranked fourth on the basis of FDI Restrictiveness Index (FRI) compiled by OECD. FRI gauges the restrictiveness of a country's FDI rules by looking at the four main

types of restrictions viz. foreign equity limitations; screening or approval mechanism; restrictions on the employment of foreigners as key personnel; and operational restrictions. A score of 1 indicates a closed economy and 0 indicates openness. FRI for India in 2012 was 0.273 (it was 0.450 in 2006 and 0.297 in 2010) as against OECD average of 0.081. China is the most restrictive country as it is ranked number one with the score of 0.407 in 2012 indicating that it has more restrictions than India.

FDI and Public Private Partnership

The Public-Private Partnership (PPP) Project means a project based on contract or concession agreement between a Government or statutory entity on the one side and a private sector company on the other side, for delivering an infrastructure service on payment of user charges.

The link of FDI and PPP is analyzed sector-wise as follows:

a) Infrastructure sector

It is being increasingly recognised in India that lack of good quality infrastructure is a bottleneck that must be removed in order to maintain the growth rate. To meet this challenge, the Government of India is committed to raising investment in infrastructure from its existing level of below 5% of GDP to almost 9%. This suggests that more than \$450bn will be required to fund infrastructural development in India over the next five years. However, the scope for making improvements on this scale is fundamentally constrained by the state of public finances. The combined deficit of the central and state governments is roughly 10% of GDP and government borrowing is capped through the Fiscal Responsibility and Budget Management Act. This necessarily limits the capacity of the State to finance as much infrastructural development as is required.

Thus responding to this challenge, the Government of India is actively promoting the expansion of Public Private Partnership (PPP) activities across all key infrastructure sectors, including highways, ports, power and telecoms.

Highways are a critically important infrastructure for an emerging nation. And the design of appropriate contracts is the critical instrument for meeting the challenge of highways. What are these challenges? To put it

in one sentence, the challenge is to maximize the difference between:

- (a) The additional welfare that our citizens get from having more and better roads and,
- (b) The present value of the cost of building (building should be taken to mean building or renovating) those roads.

The involvement of private sector will bring 3Es to the system: Efficiency, Economy and Effectiveness; thus in present scenario where fast pace economic development is transiting from a developing world to emerging world; slow pace of transport sector can act as obstacle. So PPP model is the need of the hour.

Different forms of PPP model in India are:

While there are a number of forms of Public Private Partnership, the common forms that are popular in India and have been used for development of National Highways are:

- **Build Operate and Transfer (BOT) Toll basis:** The concessionaire (private sector) is required to meet the upfront cost and the expenditure on annual maintenance. The concessionaire recovers the entire upfront cost along with the interest and a return on investment out of the future toll collection.
- **Build Operate and Transfer (BOT) Annuity basis:** In BOT (Annuity) Model, the Concessionaire (private sector) is required to meet the entire upfront/construction cost (no grant is paid by the client) and the expenditure on annual maintenance. The Concessionaire recovers the entire investment and a pre-determined cost of return out of the annuities payable by the client every year. The selection is made based on the least annuity quoted by the bidders (the concession period being fixed). The client (Government/NHAI) retains the risk with respect to traffic (toll), since the client collects the toll.
- **Design-Build:** It is a traditional public sector procurement model for infrastructure facilities. Generally, a private contractor is selected through a bidding process. The private contractor designs and builds a facility for a fixed fee, rate or total cost, which is one of the key criteria in selecting the winning bid. The contractor assumes risks involved in the design and construction

phases. The scale of investment by the private sector is generally low and for a short-term. Typically, in this type of arrangement there is no strong incentive for early completion of a project. This type of private sector participation is also known as turnkey.

Advantages of PPP model in infrastructure sector

Implementation of projects under Public Private Partnership (PPP) has the following advantages-

- (a) Better quality since the concessionaire (private sector) is to maintain the road for the period of concession.
- (b) Early completion of the project, since the concessionaire could save interest and earn early toll (in the case of BOT project) / additional annuity installments (in the case of Annuity project).
- (c) No costs overrun (price escalation).
- (d) The Client (Government/NHAI) does not have the burden of maintaining the highways.
- (e) Involving the private sector leads to greater efficiency.
- (f) The private sector has more flexible procurement and decision-making procedures and therefore, it can speed up implementation efforts.

As seen availability of good quality physical and social infrastructure is one of the key determinants of economic growth and it also helps in attracting foreign direct investment (FDI) in a country like India which is standing on the threshold of becoming an economic power in the world. The President of Asian Development Bank has rightly observed that "Infrastructure development offers the foundation on which a country can seize and capitalize on the opportunities ushered in by globalization and regional integration. Experiences across the region show that FDI and new technologies are most likely to bypass countries with inadequate and poor infrastructure investment climate". In light of the above, it is a clear fact that despite India's significant achievements in industrial development and economic growth, there is a wide gap between the potential demand for infrastructure for high growth and the available supply.

Currently International developers play an insignificant role in the development of infrastructure in India. The exceptions are a few instances of investment by international developers like Dubai Ports mainly in the ports sector. However, an increased role for such players will help, as these players will be able to tap project equity from their global operations. International developers look for various comfort factors in a market before entering and investing in it. These comfort factors generally include the following:

- Legal and Regulatory framework i.e. the BOT Legislation, Road Fund Governance, NHAI autonomy and authority, Regulation of Traffic, etc. In India while a lot of the legislation exists there is still ambiguity in terms of Road Fund Governance and NHAI's autonomy and authority.
- Currency risk, Local Financial markets and Taxation issues: i.e. infrastructure projects will have Rupee revenues which are very volatile and Bond market which is not well developed in India.
- Size of the projects: In India NHDP has individual project sizes that are generally too small to attract international investors.
- Return expectations of international developers vary with risk perceptions of a country. Risk perception of Foreign Investors increases as they venture out of familiar markets and increases exponentially in case of emerging markets like India because of greater uncertainty. Despite some uncertainty about certain factors for India, lot of international developers (including UK and Spanish developers) have shown interest in investing in India. NHAI is also looking to bring out larger projects and this is likely to encourage international investors to invest in Roads sector.

The Government of India has recognized the imperative need for the infrastructure sector and has taken several initiatives like sector specific policies, providing incentives and tax holidays to attract private investments, permission of 100% FDI in the infrastructure sector, special provision of Viability Gap Funding (VGF) and Public Private Partnership (PPP) approach.

b) Healthcare Sector

With the rapid growth of the Indian economy in recent times and the changing demographics and socio-economic mix of the Indian population, there has been an immense change in the healthcare requirements of the country. Over the years, the public and private sectors have helped in addressing the health needs of the country and made good India's progress on key health indicators like life expectancy and infant mortality. Today, the healthcare system in India faces a challenge in raising the service quality and ensuring equitable access to people while simultaneously gearing up its capabilities to tackle the changing disease incidence profiles. This challenge needs to be addressed through a concerted effort of both public and private sectors by their agreeing on suitable public policy initiatives which incentivize financing and provision of healthcare, and thereby increase healthcare access to the people. Along with PPP, Foreign investors can play significant role in the development of the hospital sector. This is evident from the fact that private equity funds have invested over \$ 2 billion in healthcare and life science sector over the past five years. Further, India has received USD 1, 32,837 million as aggregate FDI from April 2000 to April, 2011 and specifically hospital and diagnostic centres have received FDI of USD 1030.05 million from April 2000 up to April 2011 constituting 0.78% of the total FDI into India.

The areas where PPP+FDI contribution can prove very beneficial are:

- **Infrastructure Development:** Development and strengthening of healthcare infrastructure that is evenly distributed geographically and at all levels of care.
- **Management and Operations:** Management and operation of healthcare facilities for technical efficiency, operational economy and quality.
- **Capacity Building and Training:** Capacity building for formal, informal and continuing education of professional, para-professional and ancillary staff engaged in the delivery of healthcare.
- **Financing Mechanism:** Creation of voluntary as well as mandated third-party financing mechanisms.

- **IT Infrastructure:** Establishment of national and regional IT backbones and health data repositories for ready access to clinical information.
- **Materials Management:** Development of a maintenance and supply chain for ready availability of serviceable equipment and appliances, and medical supplies and sundries at the point of care.

Foreign Direct Investment in Indian Healthcare industry can deliver affordable healthcare to India's billion of population. The investors can ensure the availability of healthcare infrastructure in India through foreign direct investment. FDI can present enormous opportunities for the medical community and other service providers. Multinational players can focus on the Indian healthcare market landscape and try to enlarge their presence through partnerships and investments. The cost of the medical treatments are much lower in India than in other developed countries. So, the Indian people can get better treatment facilities at low cost without going abroad. Finally, there is a great economic impact of Foreign Direct Investment in Indian healthcare sector which leads to the Indian economic development

Whereas on the negative side PPP+FDI may lead to:

- **Corporatization of Healthcare sector:** PPP model could make the healthcare industry a simple profit and loss one which could leave out the most vulnerable sections of society – those who can't afford it.
- **Corruption:** Corruption is one of the biggest problems like NRHM scam in UP.
- **Government could completely get out of the healthcare sector:** This would mean that the government would over a period of time confine itself to providing small package services and would be primarily just a purchaser of virtually all clinical services from the corporatized private sector. The government would, thus, finance (with public money), strengthen and bolster an already resurgent corporate sector providing medical services,



