

MCQ/S1Q

## CAPITAL RESOURCES

To produce goods and services, along with land (natural resources) and human labour, capital is also required. It is an essential part of every production process. Capital makes the task of production easier and faster and raises the productivity of land and labour.

### WHAT IS CAPITAL

Capital means:

*use used for further Production*

All man-made resources which help in production of goods and services and are available in the form of buildings, machinery, tools, equipment, rail-road networks, powerhouses computers materials etc. Capital does not include natural resources.<sup>1</sup>

Capital can also be described as:

'Capital is that part of wealth, other than natural resources, which can be used for further production of wealth'.

In the present context, we are more interested in physical forms of capital. But sometimes economists also talk of financial capital. If a person saves a part of his income and lends it to get interest, the amount loaned will be called capital. If a person lives in his own house, it is a consumer good but if the same house is given on rent, it will be treated as capital. Similarly a car is a consumer good, but the same car when converted into taxi becomes capital.<sup>2</sup>

Capital performs four basic functions, (i) it provides machines, tools, equipment (ii) it is needed to pay wages, (iii) it is used to construct buildings, (iv) it is required to provide raw materials.<sup>3</sup>

Marshall said

'Capital consists of all kinds of wealth, other than free gifts of nature, which yield income.'

To be clear about the meaning of capital, we have to remember that:

(i) All money is not capital. Only that part of money, which is available for investment and for earning income, is called capital.

(ii) All wealth is not capital. A house lying vacant or self occupied is wealth but not capital. When the same house is rented it is included in capital.

(iii) Land is not capital, since it is free gift of nature and not a man-made resource.

(iv) Income and capital are different things. Only that part of income becomes capital, which is saved and put into some productive work. Capital is like a tree and income is its fruit.

<sup>1</sup> Capital goods: machinery, tools, equipment, laboratories, raw materials, computers, factories, shops, office buildings, hotels, schools, roads, canals, bridges, dams, railway lines, stations, ships, bus stops, petrol pumps, power houses, telephone exchanges, sewerage, airports, sea ports, tractors, trucks, aircraft, gas pipe lines,

<sup>2</sup> water supply schemes T.V. stations, satellites etc.

<sup>3</sup> Consumer durables: In modern economics, consumer durables such as houses, furniture, cars and appliances are also regarded as a category of capital. These items go on providing services for a long time in future.

Technology and capital: Every capital item embodies some technology. Improvement in technology may change the form, use and productivity of the capital good.

## Characteristics

Capital has the following characteristics.

- (i) Capital is the *result of human labour*. It is not a natural resource. (It never happens that a building comes up itself or a computer falls from a tree).
- (ii) Capital is *passive factor*. It can produce something only when combined with labour.
- (iii) Capital helps in production. It raises productive capacity of labour.
- (iv) Capital *depreciates* e.g. a machine loses value with the passage of time.
- (v) Capital is *more mobile than other factors* e.g. land has no geographical mobility. Labour and organization have less mobility. But capital is easily transferred to a place where it is secure and expects higher returns.
- (vi) Capital goods are not wanted for their own sake. They do not satisfy human wants directly like consumer goods (shoes, food, TV set). They are needed because they help to produce consumer goods.
- (vii) Capital is created when savings are invested.

## Forms of Capital

There are various forms of capital.

### Capital Vs Labour

A bus without a driver cannot work but a driver without a bus can do many useful jobs.

1. *Fixed capital* — buildings and machines which are not used up in the process of production.
2. *Working capital (or Circulating capital)* — stocks of raw materials which are changed into finished goods and sold for money. New raw materials are bought with the same money.
3. *Sunk capital and floating capital* the part of capital which in no way can be recovered or changed into a new form e.g. foundation of a building or road is called **sunk capital**. Floating capital is that part of capital that can be used for different purposes e.g. share certificates of a firm, deposits in the bank and raw materials that can be sold.
4. *Private capital* is owned and used for private benefit e.g. factory of an individual. *National Capital* includes those things which are used for the benefit of all and are owned by the government e.g. roads, railways.
5. *Local and foreign capital* Local capital is the result of savings of the people of a country. *Foreign capital* is the foreign loan or private foreign investment in a country e.g. Phillips property in Pakistan.
6. *Material or physical capital and Human Capital* Material things which help in production, such as machines, etc. are material capital. Skill and human experience, which help to increase production, are called human capital.
7. *Money capital and Real Capital* Surplus money meant for investment is called **money capital**. Capital in the physical forms of goods, materials, machinery, equipment and building structures is called **real or physical capital**.

## Functions of Capital

1. **Provision of machines, tools and equipment** e.g. bus, tractor, computer, petrol pump etc. These goods increase productivity of labour.

**2. Payment of wages:** The goods produced by labour may not be immediately sold. So the employers need some capital to pay wages of the workers.

**3. Provision of raw materials:** The entrepreneur uses capital to purchase necessary raw materials. e.g. to make a shirt cotton is required.

**4. Building:** Most of the businesses need some kind of building or structures e.g. shop, factory, office etc. Capital is used for their purpose.

**5. Transportation of goods:** The produced goods have to be sent to markets where buyers are available. The producer needs capital in the form trucks, wagons etc.

**6. Advertisement and publicity:** In modern large scale business, advertisement and publicity are undertaken to inform and introduce goods to buyers. Capital is needed for this purpose. e.g. to sell a new medicine or a new model of TV, the companies have to advertise.

### Role and Importance of Capital

In modern economic systems capital has a basic and key role. Labour converts **natural resources** into goods with the help of capital. Tools are needed for mining, farming and manufacturing. There was a time when a small amount of capital was enough for productive activities e.g. a saw could provide fuel for home. But advancement of science and technology has made possible to produce a large number of new goods. Huge amounts of capital are needed for their production. **More use of capital means higher production.** For example, a labourer with the help of a tractor produces much more than with a plough. A bus driver transports many passengers more than a car driver. To provide fuel or gas to the people, huge machines for extraction and long pipelines for distribution are required. Thus, **large quantity of capital is synonym with the greater capacity to produce goods, rapidly and cheaply.** Economic development is mostly a process of accumulating capital for greater national output. The use of more capital goods i.e. machines, tools and equipment is ever increasing in agriculture, industry, construction and transport. Even education is not a simple lecturing now. It involves huge amounts of capital in the form of machines, labs, libraries, buildings, stationery and computers. With passage of time and advancement of scientific knowledge, new machines and equipment come into use. In brief, **capital increases the productivity of land and labour and is the essence of economic development.** Japan is a smaller country than India but it has larger national production of goods and services mostly due to extensive use of capital.

## PRODUCTIVITY OF CAPITAL

**Productivity of capital refers to the ratio between the quantity of output and the amount of capital used.**

Capital has two general forms:

- (i) physical or real capital e.g., machinery, equipment, tools, <sup>4</sup> office and factory buildings, (a truck is a piece of capital).

<sup>4</sup> Such as buses, trucks, tractors, railways, lifters, cutters, grinders, moulders, telephone exchanges, computers, printers, pumps, freezers, looms.

## (ii) money capital. (bonds and stock certificates)

- When referring to physical capital, *productivity of capital* means the total quantity of goods and services that is possible to get from a unit of capital input.
- When referring to money capital, productivity means return to capital invested.

The following factors affect productivity of physical capital.<sup>5</sup>

**Indicators of productivity**

The following indicators are useful guide to productivity.

- Speed of work
- Quantity of output
- Quality of goods and services produced.
- Less wastage of raw material
- Saving of energy

**1. Combination of factors** Capital cannot work without labour. To get maximum output, capital asset should be combined in right proportions with labour. For a given quantity of capital, if we use too much or too little labour, its productivity will fall.<sup>6</sup>

**2. Quality of labour** Productivity of capital depends upon human efficiency. A machine can be more productive if operated by more efficient labour. Education, training, skill and motivation of workers play key role to determine how much output can be obtained from a piece of capital.<sup>7</sup>

**3. Proper use of capital** Physical capital is more productive if it is used for the purpose for which it was made. A truck will be more productive if it is used for carrying goods than for carrying passengers. (A saw is more productive for cutting wood than for cutting fruit).

**4. Use of complementary goods and equipment** Some capital goods require complementary goods to work. Productivity of a bus will be higher if run on a good quality road.

**5. Quality of raw materials** High quality raw material increases the productivity of capital. The efficiency of a printer will be greater if a good quality paper is used in it.

**6. Better technology** Improved technology can bring more output per unit of capital.<sup>8</sup>

**7. Research for adaptation to local conditions** Through research, if capital good like machinery is adapted to local conditions, efficiency of capital will improves.

**8. Maintenance and repair facilities** keep the productivity of a capital asset intact.

**9. Management and supervision** The efficiency of managers and administrators of firms has direct effect on the productivity of capital, which is used under their supervision. Experienced, motivated and careful managers will use capital more efficiently and get higher returns.

Much of the economic progress in modern world is the result of rise in productivity of capital; made possible by higher human skills and advanced technology.

<sup>5</sup> Growth in national output occurs because of growth in quantity and quality of capital. It largely depends on the progress of knowledge and skills that make both capital and labour more productive. As a result, output increases at a higher rate than increase in inputs. If inputs grow at 1% per year, while output grows at three 3%, then total factor productivity rises at 2% per year—the factors have become 2% more productive.

<sup>6</sup> If a single bus or a single photo copy machine is operated by 5 persons or if there are 2 buses and only one driver, the productivity of buses and machine will be quite low.

<sup>7</sup> An untrained worker cannot make best use of a computer.

<sup>8</sup> Technology is embodied in the form of capital itself. As technology changes new forms of capital are produced and installed, replacing the old.

## CAPITAL FORMATION

**Capital formation or capital accumulation means increase in the stock of capital in a country.** Capital has many forms i.e. machines, buildings, materials etc. So capital formation refers to increase in stock of machines, tools, equipment, construction of roads, dams, canals, factories, educational institutions, powerhouses and laying of pipelines.

### Process of Capital Formation

**Capital formation takes place when individuals and nations do not consume the whole of their current income.** They save a part and invest it. When as a result of investment, machinery, equipment or buildings are produced it is capital formation or capital accumulation. Increase in stock of money is not capital formation. **Capital formation also refers to increase in the material and physical stock of capital.**

New capital assets can be created only if the people make sacrifice by reducing present consumption. They save a part of their current income in order to enjoy a higher level of future consumption. So we can conclude that saving is essential for capital formation. [But saving itself is not capital formation unless it is invested]

Prof. Nurkse defines capital formation as:

"The meaning of capital formation is that society does not apply the whole of its current production activity to the needs and desires of immediate consumption, but directs a part of it to the making of capital goods, tools and instruments, machines and transport facilities, plant and equipment – all the various forms of real capital that can so greatly increase the efficacy of productive effort and to make possible an expansion of consumable output in the future."

### Importance

**Capital formation is the very core of economic development.** What is economic development? It is building of roads, railways, airports, provision of transport vehicles, establishment of business firms, increase in production of industrial goods, use of machinery in agriculture to raise its productivity, establishment of educational and training institutions, hospitals and generation of energy. None of these activities is possible without capital. Thus, capital formation is actually another name for economic development of a country.

**Use of capital equipment greatly increases labour's productivity. So capital accumulation becomes a pre-requisite for increasing the production capacity of a country and raising living standards.** A country's natural resources like minerals, forests, agricultural lands, oil, gas, water resources and even human resources, can be fully utilized only if enough capital is available. The problem of unemployment and underemployment can be solved if through capital formation opportunities for jobs expand. Application of modern technology also requires huge amounts of capital e.g. computers. **Capital formation makes it possible to produce goods on larger scale and at lower costs.** Since capital formation leads to expansion in national output, income and employment, the problem of overpopulation is also overcome. When it is said that *poverty breeds on itself*, it means that a poor person is unable to save out of low current income and accumulate capital. He has no chance to raise the level of his future income. The result is that he remains poor. This highlights a basic fact about poor and less developed economies. They need

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accumulation of capital at the fastest possible rate, but they do not have means to do so because of their poverty. They are caught in a *poverty trap*, which is also called *vicious circle of poverty*. These countries then look towards developed nations to provide them capital in the form of foreign loans.

### Sources of capital formation

**Capital comes into existence as a result of savings. This requires three steps.**

- (i) **Act of saving** people must cut current consumption to have saving.
- (ii) **mobilization of savings** i.e. utilization of savings through banks and credit institutions.

(iii) **investment of savings.** Idle savings become hoarding and non-productive. Banks play the role of middleman in putting savers' money into the hands of investors and make it productive.<sup>9</sup>

**Savings** depend upon two factors e.g. power to save and will to save. Power to save, besides income level, is affected by tax system, availability of credit and rate of interest. Will to save depends upon consumption attitude of individuals. People desire to save for many reasons such as family care, ambitions about future, old age, marriage, social status and expansion of business.

#### (A) Domestic Sources

Domestic savings are of three types (i) individual savings (ii) corporate savings of joint stock companies (iii) public savings or government savings.

(i) *Individual savings* can be increased by providing fair return to the savers and by establishing banks in ~~urban~~ and ~~rural~~ areas.

(ii) *Corporate savings* can be increased by allowing tax concessions to firms.

(iii) *Public savings* can be increased by ~~austerity~~ campaigns, increased taxation and public borrowing. Tax is a compulsory saving out of peoples' incomes.

(iv) *Deficit financing* is also a convenient method used by modern governments for capital formation. Deficit financing means printing of money and increase in money supply.

#### (B) External Sources

(i) *Foreign loans* from governments and international financial institutions like World Bank, Islamic Development Bank, Asian Development Bank etc.

(ii) *Direct private investment by foreign firms* can be encouraged. Countries like Malaysia, Thailand and Indonesia are developing rapidly because they have obtained huge amount of investment by foreign firms. Pakistan is also offering concessions to foreign firms for investing in Pakistan. But due to political disturbances and poor security situation, foreign investors are not attracted.

<sup>9</sup> **Capital consumption (or Depreciation):** All economies produce some amount of capital goods. But all of this does not add to the national stock of capital. The existing capital goods are continually wearing out or becoming obsolete. Repairs and replacements are required as capital depreciates. The value of output used for replacements is known as *depreciation*. Total production of capital goods is called *gross investment*. By deducting depreciation from gross investment, we get net investment. Only net investment is called *capital formation*.

$$\text{Net Investment} = \text{Gross Investment} - \text{Depreciation}$$

## CAPITAL FORMATION IN PAKISTAN

[An introductory paragraph for meaning and importance of capital formation may be included from the preceding discussion].

The rate of capital formation, which involves accumulation of stock of capital goods, has been very slow in Pakistan. In spite of efforts for economic development through various plans, our country still remains poor with serious shortage of capital. We have not been able to construct sufficient roads, establish large number of factories, open enough schools in all areas of the country and generate electricity to light every house and run factories. A large number of our people are unemployed because of lack of capital. Our experienced labour is working abroad, because at home they do not have enough capital to arrange some business. Increase in capital stock requires savings. But unfortunately our saving rate is very low— it is less than 13% of our national income. Enough capital formation cannot take place on the basis of such low savings. Saving rate in developed countries is more than 20%.

### Causes for slow capital formation and poor performance in saving.

1. *Consumption attitude* of our society is unfavourable. Due to low incomes most people have no choice but to spend the whole income. The attitude of the new rich class mostly having illegal sources of income through misuse of official or political position is especially deplorable. They indulge in wasteful consumption such as expensive marriages.
2. *Poverty* itself is a cause. Majority of our population finds it difficult to buy the minimum necessities of life. How can they save?
3. *Lack of financial institutions* especially in rural areas. Many a time, a villager finds that the bank is several miles away from his home. Moreover due to ignorance, particularly of womenfolk, people do not open an account at some bank.
4. *Lack of incentives* The incentives i.e. the return offered on saving has not been sufficient.
5. *Failure of financial institutions* in the past also discouraged people to save and invest.
6. *Lack of education* renders people unable to properly plan their incomes, expenditure, saving and investment. Majority of savers instead of using the money for expansion in productive activities prefer to put the savings into gold and land.
7. *Rapid increase in population* is eating away our resources. Feeding of this huge number of mouths is a serious problem for Pakistan.
8. *Less use of modern technology* and sticking to old traditional methods of production also retards the pace of capital formation.
9. *Tax revenue* collected is spent lavishly and carelessly by government.

### **Steps for Raising Saving Level or Increasing Rate of Capital Formation**

1. Saving schemes are needed to accelerate the rate of capital formation. For this purpose the government runs many saving schemes such as Prize Bonds, Pakistan Investment Bonds, Defence Saving Certificates, NIT units etc.
2. Tax evasion should be reduced because the evaded amount is mostly spent for consumption.
3. Control of corruption in public funds should be severely dealt with. The careless spending of public money by government agencies and departments should be stopped.
4. Publicity The government and banks should undertake periodic publicity to impress upon people to have less consumption and more savings.
5. Proper use of deficit financing deficit financing means that the budget deficit is met by printing new money. Our government is already doing this on large scale.
6. Private sector should be encouraged to establish new industries. The policy of privatization of government enterprise is a correct approach.
7. Proper utilization of foreign remittances Pakistanis working abroad send about 4 billion dollars each year. Through various steps and policies these funds should be diverted to productive channels instead of wasting on consumer items.
8. Improving law and order situation Investment takes place only if there is peace and security in the country. It is a basic requirement for encouraging investment.
9. External loans Loans from international organizations should be obtained on easy terms i.e. lower rate of interest and longer period of repayment.
10. Direct Investment by foreign firms should be encouraged. China, India and Indonesia have increased the rate of capital formations through huge foreign direct investment in the private sector. However only political stability and peaceful atmosphere in the country can attract foreign capital.

## SUPPLEMENTARY NOTES

- **Capital Vs. Labour — The Socialist Concept:** Marx and other communist writers laid great stress to explain that capital is nothing more than accumulated labour done in the past. The whole theory of socialism is based on this concept. What is a house? It is accumulated labour. Some people made bricks, some grew and cut trees, some worked on mountains to get stones, some transported it. In this way every machine can be thought as components. These components were made from labour and natural resources.
- **Use of Machines:** Capital is used mostly in the form of machines. Machinery supplements labour. The labourers can do work quicker. Besides, through machines man is able to do unpleasant work or heavy type work. The net result is that with the help of machinery a man has become capable to do many things, which he was unable to do previously when machines were not available. e.g. fly in the air, reach the so far inaccessible parts of the world, dig, dive, transport, communicate, control the direction of rivers, reach outer space, generate electricity and perform electronic magic.
- **Assets** An asset is something that provides a flow of income or services to its owner. A home, a shop, a saving account or shares of a company. The return on an asset is the total monetary flow it yields —including capital gains or losses—as a fraction of its price.