PART 1

FOUNDATIONS FOR FINANCE

BASICS OF ECONOMICS

CHAPTER 1

LEARNING OBJECTIVES

- Grasp key economic terms and concepts
- Differentiate between macro and micro factors affecting investments

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INTRODUCTION

The word "economics" is derived from the ancient Greek word "oikonomikos" or "oikonomia." Oikonomikos literally translates to "the task of managing a household."

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> Adam Smith, considered as the father of modern economics, defined economics as **"an inquiry into the nature and causes of the wealth of nations."**
>
> British economist Alfred Marshall defined economics as **"the study of man in the ordinary business of life"**.

The modern definition, attributed to the 20th-century economist Paul Samuelson, builds upon the definitions of the past and defines the subject as social science.

> According to Samuelson, **"Economics is the study of how people and society choose, with or without the use of money, to employ scarce productive resources which could have alternative uses, to produce various commodities over time and distribute them for consumption now and in the future among various persons and groups of society."**

Economics seeks to determine the most logical and effective use of resources to meet private and social goals. Production an employment, investment and savings, health, money and the banking system, government policies on taxation and spendin international trade, industrial organization and regulation, urbanization, environmental issues and legal matters (such as t design and enforcement of property rights) are some of the concerns at the heart of the science of economics.

Given the above context, it is imperative to understand key economic terms in order to appreciate the various investme and saving alternatives available for *the common investor*.

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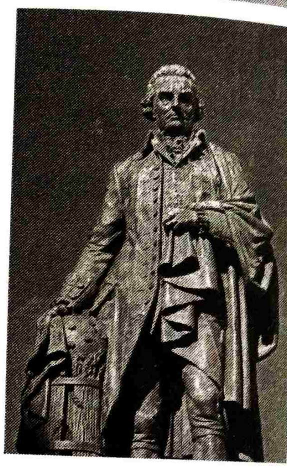
Let's warm up

Adam Smith was an 18th-century Scottish philosopher. He is widely regarded as the father of modern economics. Smith is is primarily known for his book, An Inquiry into the Nature and Causes of the Wealth of Nations, published in the year 1776. Smith's writings were studied by 20th-century philosophers, writers, and economists.



Some of his popular quotes are as under:

"It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest."

"Whatever part of his stock a man employs as a capital, he always expects is to be replaced to him with a profit. He employs it, therefore, in maintaining productive hands only; and after having served in the function of a capital to him, it constitutes a revenue to them"

"No Society can surely be flourishing and happy, of which the far greater part of the members are poor and miserable."

KEY ECONOMIC TERMS

Income

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In tsimple terms, income refers to the money that a person or entity receives in exchange for their labour or products However, income does not have a standard definition. Its definition varies according to the context in which it is used.

For businesses, income refers to the revenue a business earns from selling its goods and/or services. For individuals, income refers to the compensation received for their labour, services or investments.

For example, when you save money in your savings account, the interest generated is also considered income. Broadly, income can be classified as business income, personal income and income, from investments.

Some of the types of income include::

- Wages
- Salaries
- Commission
- Revenue

- Interest
- Investment returns
- Allowance/Pocket money
- Government pensions/gratuity payments

Fun Learning with English Idioms

Idiom: *Bread and butter*

The idiom *bread and butter* refers to one's source of **income**. A person makes bread and butter with their jobs, businesses or other sources of earnings.

Example: *Teaching classical music to young boys and girls is her bread and butter.*

Expenditure

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In plain terms, an expenditure (or expense) is referred to as the act of spending time, energy or money on something. In economics, it means money spent on purchasing goods or services.

Like income, the meaning of expense is contextual.

For a business, an expense is the cost of operations that a company incurs to generate revenue or income.

Some common examples of business expenses include:

- Payment of wages/salaries
- Factory/office lease/rental payments
- Payment made to vendors for services (advertising agents, website maintenance, etc.)

Expenses can be further classified as revenue expenses and capital expenses.

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Parameter	Revenue Expenses	Capital Expenses
Meaning	Revenue expense refers to the expenditure that does not create any assets	Capital expense refers to the expenditure that creates an asset
Nature	Regular and recurring	Irregular and non-recurring
Term	Usually short-term	Long-term
Example	Payment of salaries, maintenance of machinery, etc.	Purchase of machinery

On an individual front, expenses include the basic cost-of-living expenses like housing, food, transportation, child care, health care, and other necessities. Of course, the size of these expenses vary from person to person due to factors like life-style and family size.

Some of the basic expenses that are part of a family budget include:

- Housing loan repayment or rent
- Utilities expenses – gas, electricity, water, phone, internet/wi-fi, etc.

- Property taxes
- School/college fees
- Health, car, and household insurance payments
- Fuel/transportation expenses
- Entertainment expenses – Dining, movies, concerts, etc.

Fun Learning with English idioms

Idiom: *at (one's) expense*

The idiom *at (one's) expense* refers to something that is done in a way that harms someone or something.

Example: *I was furious when I heard the other kids telling jokes at my little brother's expense.*

Savings

In the simplest form of understanding, Savings refers to an individual's unspent earnings. It is the amount that remains after meeting the household and other personal expenses over a given period, for example, on a monthly basis.

In other words, savings is the portion of income not spent on current expenditure. It is the money set aside for future use and not spent immediately.

Savings (a.k.a. unspent income) = Income – Expenditure

Why should we save money? Savings can be used to accomplish goals/objectives in the short term, such as buying a mobile phone, or in the longer run, such as for higher education, buying a house, or purchasing a car.

Saving money can also help us cover unexpected expenses, such as an illness, replace an appliance that cannot be repaired or make an emergency trip.

Saving is a good practice, not only for individual households, businesses, and entrepreneurships, but also for a nation's economy as a whole.

In addition, savings can be invested yield profitable returns over a period of time. That is to say, not only will you have the funds available to spend later, but you will also earn money in the process.

Fun Learning with English Idioms

Idiom: *Penny wise and pound foolish*

The idiom *penny wise and pound foolish* is used to say that somebody is very careful about small matters but much less sensible about larger, more important things.

Example: *When it comes to a used car, don't be penny wise and pound foolish. Spend the money to have the vehicle checked out.*

Factors of Production

Factors of production are resources that are the building blocks of the economy; they are what people use to produce goods and services.

Traditionally, economists have divided the Factors of Production into **four** categories:

- **Land** – It includes anything that is considered a natural resource. The definition of land can be extensive and includes the different forms of what the land yields – like oil, coal, timber, or gold.
- **Labour** - Labour is the effort that people contribute to the production of goods and services. Any person who is being paid a wage to do a job is contributing to the Labour Factor of Production.
- **Capital** – Though capital refers to money in the economic context, as a Factor of Production it means the created items that are used to produce the goods or services for wider use. One way to think about capital, is that it is the machines and equipment that complement humans in exerting their labour in order to produce a marketable good or service. Neo eeconomists also include technology as a Factor of Production.
- **Entrepreneurship** – Last, but not the least, entrepreneurship details an individual's ideas, concepts, and emotional efforts to produce a product or service to introduce in the economy. The individual who is utilising this Factor of Production has combined the first three factors, along with an original idea or pioneering spirit to create a profit.

As goods and services make up a country's economy, the Factors of Production have a direct connection to how the economy functions.

If any of the Factors of Production are scarce or in high demand, it effects and impacts the economy, because the product will then be sold for a higher price or consumed at a greater rate.

Of course, it is important to remember that the Factors of Production do not necessarily produce the final goods and services that get sold. Often, the Factor of Production will produce an intermediate good or service, or something that gets translated into a final product in later stages.

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Fun Learning with English Idioms

Idiom: ***labour away (at something)***

The idiom *labour away (at something)* means to work very hard or diligently (to accomplish something).

Example: *I've been labouring away at my Ph.D for nearly four years now.*

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Gross Domestic Product (GDP)

GDP is a common economic term in the context of measuring the growth of an economy. GDP measures the monetary value of final goods and services —that is, those that are bought by the final user—produced in a country in a given period of time (usually measure for one year period).

It counts all of the output generated within the borders of a country.

One of the most commonly used formula for calculating the GDP of a country is by using the Expenditure Method, as given below:

$$GDP = C + G + I + NX$$

Where
C = Consumption Expenditure
G = Government Expenditure
I = Investments
NX = Net Exports (Exports – Imports)

Time Value of Money

The money available at the present time is worth more than the same amount in the future since it has the potential to earn returns. Consider the following options, assuming there is no uncertainty associated with the cash flow:

- Receiving Rs.100 now
- Receiving Rs.100 after one year

All investors would prefer to receive the cash flow now, rather than wait for a year, though the amount to be received has the same value.

This preference is attributed to the following reasons:

- Instinctive preference for current consumption over future consumption.
- Ability to invest the amount received and earn a return so that it grows in value to more than Rs.100 after one year.

Clearly, Rs.100 available now is not equivalent to Rs.100 received after a year. The value associated with the same sum of money received at various points on the timeline is called the **time value of money**.

Since money has time value, it is not possible to compare cashflows received in different time periods.

Consider the above example: Suppose the Rs.100 received now is placed in a one-year bank deposit yielding 6.5 % p.a. After a year, the value would grow to Rs.106.50.

When time values are taken into account, the following points need to be noted:

- Future inflows are discounted by a relevant rate to reach their **present value** (PV); this rate is known as the **discount rate.**
- Present inflows are increased at a relevant rate to reach their **future values** (FV): this rate is known as the **compound rate.**

To find out the amount at the end of the period, on compound interest basis, the following formula is used:

$$A = P\{1 + (R/100)\}^N$$

Where
A = Amount at the end of the period when interest is compounded annually
P = Principal at the beginning of the period (also the original investment amount)
R = Rate of interest
N = No. of periods

nce the amount is calculated, we can then calculate the Compound Interest (CI) using the following formula:

$$CI = A - P$$

Test Your Understanding 1

What is the compound interest (CI) on Rs. 10,000 for 2 years at 10% per annum compounded annually?

a) 2,100
b) 12,100
c) 2,000
d) 12,000

Compounding & Discounting, CAGR

In continuation to the previous concept, **compounding** is a technique used to calculate the future value of the present cash flows while **discounting** is a technique used to calculate the present value of the future cash flows.

Discounting technique is extensively used while evaluating capital budgeting decisions.
Compounding is used in the context of evaluating your financial goal needs at a future date.

Did you know?

Rule of 72

The rule of 72 is a shortcut to estimate the number of years required to double your investment at a given annual rate of return. The rule states that you divide the rate (*expressed as a number and ignoring the percentage sign*), by 72.

$$\textbf{Number of years required to double the investment} = \frac{\textbf{Rate of Interest}}{\textbf{72}}$$

Test Your Understanding 2

If you invest Rs.1,00,000/- at an interest rate of 8% p.a. compounded annually, how many years will it take for the investment to double?

a) 4
b) 8
c) 16
d) 12

CAGR - In financial markets, the time value of money is always taken into account. It is assumed that if an investment provides a series of cash inflows, a can be re-invested to earn a positive return. Alternatively, an investment that does not have intermediate cash flows, it is assumed to grow at an annual rate each year, to be compounded every year to reach the final value.
The **compounded annual growth rate (CAGR)** of an investment is the underlying compound interest rate that equates the end value of the investment with its beginning value.

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The formula for CAGR (in decimals, not %) can be written as:

$$\text{CAGR} = \left(\left(\frac{\textbf{End Value}}{\textbf{Beginning Value}}\right)^{\left(\frac{1}{n}\right)}\right)^{-1}$$

For example,

Consider an investment of Rs.100 that grows to Rs.120 in 2 years. In this case,

End Value (or FV) = 120

Beginning Value (or PV) = 100

No. of years 'n' = 2

Substituting in the formula for CAGR we have $\rightarrow 120 = 100 * \left(1 + \frac{r}{100}\right)^2$

We consider that Rs.100 has grown to Rs.120 over a 2-year period at CAGR of r.

Rearranging the terms and writing CAGR instead of r we get $\rightarrow \frac{120}{100} = (1 + \text{CAGR})^2$

$$\text{CAGR} = \left(\left(\frac{120}{100}\right)^{\left(\frac{1}{2}\right)}\right) - 1\text{CAGR} = \left((1.2)^{\left(\frac{1}{2}\right)}\right) - 1 = 1.095 - 1 = 0.095 = 9.5\%$$

CAGR is the accepted standard measure of return on investment in financial markets, except in case of returns that involve periods of less than one year.

Taxation – Direct & Indirect

Taxation is the levy or financial obligation imposed by the government on its citizen or residents.

The tax structure in India is divided into **direct** and **indirect** taxes.

While **direct taxes** are levied on taxable income earned by individuals and corporate entities, the burden to deposit taxes is on the assessees themselves. **Income tax** is one of the examples of direct taxes. For example, when you start earning your salary, you will have to assess your yearly tax liability and file it using an appropriate **Income Tax Return (ITR)**. The government exempts a basic limit of annual income from taxation. Only once your income crosses the exemption limit, you will be liable to pay taxes.

Though the burden to deposit taxes is on the assessees, the Income Tax Act has mandated the originator of the payments to deduct tax at source and remit to the appropriate tax account of the government. This is called **Tax Deducted at Source (TDS).**

On the other hand, **indirect taxes** are levied on the sale and provision of goods and services respectively and the burden to collect and deposit taxes is on the sellers instead of the assessees directly. **Goods & Services Tax (GST)** is one of the **examples of indirect taxes.**

Fun Learning with English idioms

Idiom: ***have your cake and eat it (too)***

The idiom ***have your cake and eat it (too)*** means to have or do two good things at the same time that are impossible to achieve together.

Example: *You can't have your cake and eat it – if you want more local services, you can't expect to pay less tax.*

FACTORS INFLUENCING DECISION MAKING IN INVESTMENTS

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Business environment factors impact how a business/industry operates and generates returns. These factors have an impact on the investments and their returns.

In broad terms, this environment can be divided into two categories—**macro-environment** and **micro-environment.**

Macro-environment affects the operation of all existing business entities out there, while **micro-environment** influences the functionality of a particular business itself.

Macro-environment factors

The macro environment comprises a range of external factors—demographic, physical, natural, economic, technological, political, legal, and socio-cultural conditions.

Neither businesses nor governments can entirely control external factors. However, diligent decision-making and strategies can reduce the impact that these external factors can have on the economy.

The external environment has an *indirect* impact on financial markets. This is not evident immediately but can result in huge losses later on—in the absence of a strategic move. On the other hand, a favourable environment presents a variety of profitable opportunities. The economic development of a country depends on these macro-environment factors.

Demographic factors

Demographics refers to age, language, lifestyle, income distribution, cultural differences, etc. Financial literacy depends on demographics.

Technology factors

Technological growth and advancement within a nation greatly influences the production and sale of goods or services. Innovation, automation, and internet facilities are some examples of technological factors.

Natural and physical factors

Business performance depends on various geographical and ecological forces—availability of natural resources, climate change, weather conditions, biological balance, pollution, etc.

Political and legal factors

The government imposes various regulations on businesses—employment laws, import/export laws, copyright laws, labour laws, health and safety laws, and discrimination laws. These are known as political and legal factors.

Social and cultural factors

A business needs to be socially responsible and culturally aware. Socio-cultural factors comprise education, population growth rate, life expectancy rate, social status, buying habits, religion, etc.

Economic factors

Consumer buying decisions are significantly impacted by macro-economic factors—demand-supply, inflation, interest rates, taxes, exchange rates, and recession.

As investments are largely impacted by the macro-economic factors, let us discuss some of these factors in detail.

Inflation

Inflation is the rate of increase in prices over a given period of time. Inflation is typically a broad measure, such as the overall increase in prices or the increase in the cost of living in a country.

Inflation highly impacts the purchasing power, thus affecting the quantum of savings/investments.

While it is easy to measure the price changes of individual products over time, human needs extend beyond just one or two products. Individuals need a big and diversified set of products as well as a host of services for living a comfortable life. They include commodities like food grains, metal, fuel, *utilities* like electricity and transportation, and services like health care, entertainment, and labour.

Inflation aims to measure the overall impact of price changes for a diversified set of products and services. It allows for a *single value* representation of the increase in the price level of goods and services in an economy over a period of time.

There are two main indicators of inflation in India – **Wholesale Price Index (WPI)**, which tracks inflation at the producer level; and **Consumer Price Index (CPI)** captures changes in prices levels at the consumer level.

Interest rates

At a very basic level, we can define interest as the money amount charged by a lender (over and above the principal) to the borrower for the use of assets/loaned amount. Interest is also the amount of money earned by depositing the money in bank savings account or term deposit account.

Demand for and supply of money, government borrowing, inflation, Central Bank's monetary policy objectives affect the interest rates.

Reserve Bank of India (RBI), being the Central Bank of our country, chooses to focus on various objectives while preparing its monetary policy.

In a boom phase, the central bank may focus to contain inflation and hence may choose to hike interest rates. That curtails the consumption and investments driven by borrowed money.

In a recessionary period, the central bank may want to induce growth by incentivising consumption and investments by reducing the interest rates.

Central bank's monetary policy objectives thus influence the interest rates and becomes a critical factor in terms of investment decisions.

Central banks use various tools to regulate the money supply in the country. Some of the key rate decisions taken by RBI relates to Cash Reserve Ratio (CRR), Statutory Liquid Ratio (SLR), Policy Repo Rate, Bank rate, Marginal Standing Facility Rate, etc.

Did you know?

We can easily assess the current policy rates, liquidity rates, exchange rates, etc. from a singular source. The home page of RBI's website contains all these information, which can be a ready reckoner for all of us. RBI's website: www.rbi.org.in

Micro-environment factors

The micro environment of the organisation consists of those elements which are controllable by the management. However, the micro environment does not affect all the companies in an industry in the same way, because the size, capacity, capability, and strategies are different.

Some of the key micro-environment business factors are listed below:

1. Customers
2. Suppliers
3. Competitors
4. The general public

When it comes to investment decisions, the micro factors are focussed on the individual's attributes like:

1. Desire, want, and demand
2. Disposable personal income (DPI)
3. Financial goals & their timing

Test Your Understanding 3

Which of these is not considered as a technological factor under the macro-environment factors?

a) Wireless charging
b) Engine efficiency
c) Security in cryptography
d) None of these

Desire, want, and demand

Desire refers to the ambition or aspiration of a person. Want is a strong feeling, craving or demand of a person to possess some things. Demand refers to the claim, interest, order or ability to purchase that commodity at a given price.

Demand for any product or service, reduces the amount of money available with the individual for savings/investments and hence impacts the investment decision making.

Disposable personal income

An individual's disposal income is an essential component in deciding the quantum of savings/investments. Disposable Personal Income (DPI) is defined as the amount of money that an individual or household has to spend or save after income taxes have been deducted.

The higher the DPI, the higher will be scope for savings & investments.

The interest/returns earned on the investments can be re-invested, which will further provide more returns on a cumulative basis.

Financial goals & their timing

It is very essential that we identify our financial goals (for example, wanting to study abroad for your higher education or buying a car in 2 years time). Our financial goals become aspirations for saving and spending money.

It can be helpful to visualize how you want to handle your finances for your personal and professional interests. Learning how finance goals manifest can help you identify areas of your life where you want to monitor your spending. We will discuss in detail about financial goals and financial planning in other chapters/modules.

Fun Learning with English Idioms

Idiom: ***money doesn't grow on trees***

The idiom ***money doesn't grow on trees*** serves to warn someone that money is a limited resource and it shouldn't be spent in a careless manner.

Example: *Raj, turn off the lights when you leave your room. I have to pay the light bill and money doesn't grow on trees, you know!*

Test Your Understanding 4

Bank rate is the rate at which banks can borrow money from RBI without any collateral. True or false?

a) True

b) False

Test Your Understanding 5

Customs duty comes under which type of tax in India?

a) Direct tax

b) Indirect tax

c) Provisional

d) None of these

Test Your Understanding Solutions

TYU 1

What is the compound interest (CI) on Rs. 10,000 for 2 years at 10% per annum compounded annually?

a) 2,100
b) 12,100
c) 2,000
d) 12,000

Correct Answer: a. 2,100

Solution:

A = P {(1 + (R/100))N → A = 10,000 {(1 + (10/100))2 → A = 12,100

CI = A – P → CI = 12,100 – 10,000 → CI = 2,100

TYU 2

If you invest Rs.1,00,000/- at an interest rate of 8% p.a. compounded annually, how many years will it take for the investment to double?

a) 4
b) 9
c) 16
d) 12

Correct Answer: b. 9

Solution:

Using the Rule of 72,

number of years required to double the investment = 72 / Rate of interest

Number of years required = 72 / 8 → 9 years

TYU 3

Which of these is not considered as a technological factor under the macro-environment factors?

a) Wireless charging
b) Engine efficiency
c) Security in cryptography
d) None of these

Correct Answer: d. None of these

TYU 4

Bank rate is the rate at which banks can borrow money from RBI without any collateral. True or false?

a) True
b) False

Correct Answer: a. True

Remarks: The bank rate is the lending rate at which commercial banks can borrow from RBI without any security. Repo rate, on the other hand, is the rate at which RBI lends to commercial banks by purchasing securities.

TYU 5

Customs duty comes under which type of tax in India?

a) Direct tax
b) Indirect tax
c) Provisional tax
d) None of these

Correct Answer: b. Indirect tax

BANKING IN INDIA

CHAPTER 2

LEARNING OBJECTIVES

- Discuss various types of banking products

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INTRODUCTION

For those of you who have watched the HBO series, "The Game of Thrones", this chapter is sure to bring back memories of the Iron Bank of Braavos.

Imagine a situation where you have a 100-rupee note in the inner fold of your wallet and forget it for 1 year. When you take it out of the wallet, you will still have the same 100-rupee note without any value being added to it.

Instead, if you had deposited the money in your savings account, even at the current low interest rate regime, you would have still made about 3 or 4 rupees as interest on the 100 that you had deposited a year ago. This is a simple example, but a very powerful reason why banks exists.

Modern-day banks have been in existence since the 15th century, though the very concept of banking dates way back. In the Indian context, banking has been in existence even before Independence. The Imperial Bank of India, which was established in 1921, became the State Bank of India in the year 1955.

With the nationalisation of banks during the period between 1969 and 1991 there were 25+ nationalised banks that were in existence.

In 1991, major financial sector reforms were introduced and this led to opening up of the banking industry to the private sector once again. In this post-financial sector phase, the performance and strength of the banking structure improved perceptibly.

The banking industry in India is governed and regulated by the Reserve Bank of India (RBI). RBI was set up under the Reserve Bank of India Act, 1934.

Banks in India are regulated under the Banking Regulation Act, 1949. The Act provides for the framework under which commercial banking in India is supervised and regulated.

Let's warm up

Banca Monte dei Paschi di Siena is the oldest surviving bank in the world.

It was founded in 1472 in the Tuscan city of Siena, which at the time was a republic.

In 1624, as a result of a reform, the bank changed its name to Monte dei Paschi, by which it is still known today.

The bank was established to offer loans to "poor or miserable or needy persons", and it soon expanded its operations across the country after Italy was unified.

While it has managed to survive all these years, the bank has had mounting problems since the 2008 financial crisis, when it was forced to recapitalise.

Like many banks, it has scrambled to raise capital to avoid getting shut down.

Today, ***Banca Monte dei Paschi di Siena*** is the fourth largest commercial and retail bank in Italy.

DEFINITION OF BANKING

Banking Company: The Banking Regulation Act, 1949 defines "a banking company as a company which transacts the business of banking in India (Section 5 (C)".

Banking: Section 5(b) defines banking "as accepting for the purpose of lending or investment of deposits of money from the public, repayable on demand or otherwise and withdraw able by cheque, draft, order or otherwise".

Banking is considered to be the nerve centre of trade, commerce, and business in a country. It plays a vital role in distributing the capital required for the development of trade, industry and commerce. In other words, we may say that banking is the life-blood of modern commerce. Bankers are not only dealers in money but also leaders in the economic development of a country.

The term bank is derived from the French word "BANCO" which means a Bench or Money exchange table. In old days, European money lenders or money changers used to display (show) coins of different countries in big heaps (quantity) on benches or tables for the purpose of lending or exchanging.

A **commercial bank** is a profit-seeking business firm, dealing in money and credit. It is a financial institution dealing in money in the sense that it accepts deposits of money from the public to keep them in its custody for safety. So also, it deals in credit, i.e., it creates credit by making advances out of the funds received as deposits to needy people. It thus, functions as a mobiliser of saving in the economy.

A bank is, therefore, like a reservoir into which flow the savings, the idle surplus money of households and from which loans are given on interest to businessmen and others who need them for investment or productive uses.

Simply speaking, a bank is a financial institution which deals with deposits and advances and other related services. It receives money from those who want to save in the form of deposits and it lends money to those who need it.

FUNCTIONS OF BANKS

Need for Banking

A sound banking system is necessary to achieve the following objectives:

1. **Savings and Capital Formation:** Banks play a vital role in mobilizing the savings of the people and promoting the capital formation for the economic development of a country.
2. **Channelization of Savings:** The mobilized savings are allocated by the banks for the development of various fields such as agriculture, industry, communication, transport, etc.
3. **Implementation of Monetary Policy:** A structured banking system can easily implement the monetary policy because development of the economy depends upon the control of credit given by the banks. So, banks are necessary for the effective implementation of monetary policies.
4. **Encouragement of Industries:** Banks provide various types of financial services such as granting cash credit loans, issuing letter of credit, bill discounting, etc., which encourages the development of various industries in the country.
5. **Regional Development:** By transferring surplus money from the developed regions to the less developed regions, banks reduce regional imbalances.
6. **Development of Agriculture and Other Neglected Sectors:** Banks are necessary for the farmers. It also encourages the development of small-scale and cottage industries in rural areas.

Functions of Banks

1. **Acceptance of Deposit:** A bank accepts money from the people in the form of deposits which are usually repayable on demand or after the expiry of a fixed period. It gives safety to the deposits of its customers. It also acts as a custodian of funds of its customers.
2. **Giving Advances/Loans:** A bank lends out money in the form of loans to those who require it for different purposes. These loans can be in the form of retail loans (loans given to individuals) or corporate loans (loans given to businesses).
3. **Payment and Withdrawal:** A bank provides easy payment and withdrawal facility to its customers in the form of cheques, drafts, debit cards, Automated Teller Machines (**ATMs**), etc. It also brings bank money in circulation. The new age banking focusses on providing payment services using mobile technology to enable faster transfers, using Unified Payment Interface (UPI), etc.
4. **Ever increasing Functions including agency and utility services:** Banking is an evolutionary concept. There is continuous expansion and diversification as regards the functions, services and activities of a bank, which includes wealth/portfolio management services, utility services, agency services, insurance/mutual fund advisory services, etc.

Did you know?

What is a Scheduled Commercial Bank?

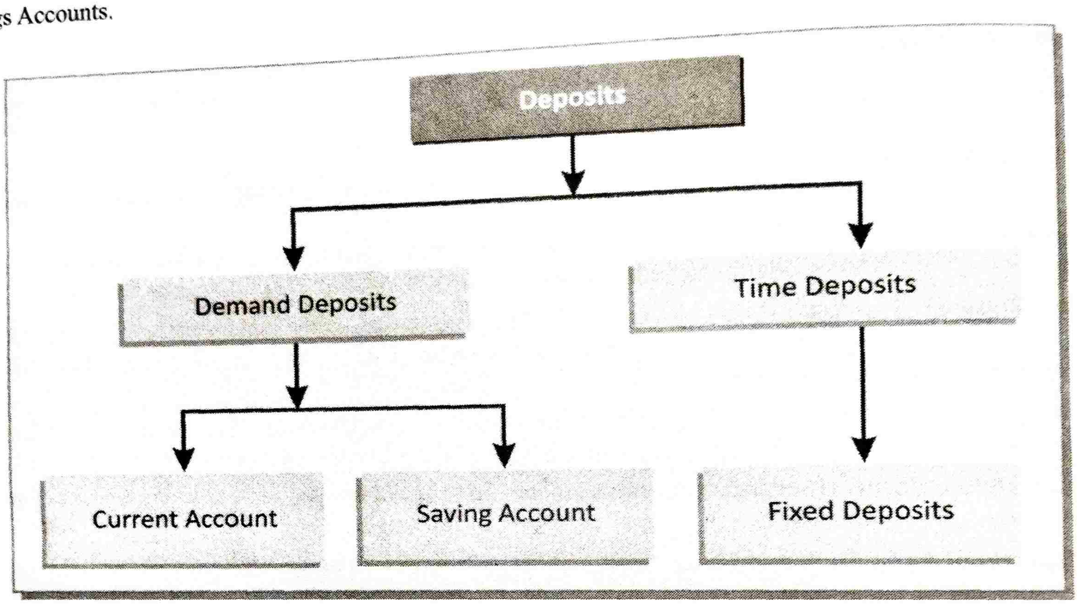
The scheduled commercial banks are those banks which are included in the second schedule of RBI Act, 1934 and which carry out the normal business of banking such as accepting deposits, giving out loans and other banking services.

These include Nationalised/public sector banks, private sector banks, foreign banks and regional rural banks.

TYPES OF BANK DEPOSITS

Deposits are normally classified into "Demand Deposits" and "Time Deposits".

Demand deposits are those that can be be withdrawn or transferred by the customer without previous notice to the bank. The deposits are maintained to meet liquidity and transaction needs.There are two types of demand deposits. Current Accounts and Savings Accounts.



Term/Time Deposits are also called **Fixed Deposits**. These are repayable after the expiry of a specified period varying from 15 days to 120 months. The period is fixed at the time the deposit is made. Banks in india offer facilities for opening different types of accounts to their customers. A variation of this type is the '**Recurring Deposit**'.

Current Account

A Current Account or Demand Deposit Account is a running and active account which may be opened with a bank by a businessman or an organisation. This account can be operated any number of times during a working day.

A current account is a business account and can be opened by individuals, firms (proprietorship or partnership), Hindu undivided family (HUF), trusts, companies (Private Ltd. or Public Ltd.), societies, clubs, and associations who operate for profit.

One of the key points to remember about current accounts is that they do not carry any interest payments.

Also, based on the dealings of the customer and the discretion of the bank, **overdraft facility** can be allowed in these accounts.

Savings Account

Savings bank account is very popular among the general public.

Savings account is meant for small businessmen and individuals who wish to save a little out of their current incomes to safeguard their future and ***also to earn some interest on their savings***. A savings account can be opened with as a small sum of Rs. 500.

Savings account holders are allowed to deposit cheques, drafts, dividend warrants, etc., which stand in their name only. Earlier Banks were allowed to pay interest on deposits maintained in savings accounts according to the rates prescribed by the Reserve Bank of India but now banks are free to pay any rate of interest on the savings account balances.

A savings account is a basic account that can be opened by any major, sane, and solvent individual singly or jointly, HUF through karta of the family, Minor directly or through guardian, trust or society, club or associations not operating for profits.

Joint accounts can be operated singly, jointly or on the basis of Former or survivor basis and either or survivor basis.

The minimum amount of deposit for opening a savings account is Rs. 500/- but different banks have specified different amounts for their different branches. A minimum balance is also prescribed to be maintained in the account by banks, and a penalty is levied if the prescribed is not maintained. Recently, the RBI has issued guidelines to open No-Frill accounts with zero balance, but these accounts have certain restrictions with regard to operations in the account.

Generally, banks do not allow overdraft, i.e., withdrawal of money without sufficient balance in the account, but under special circumstances banks may allow this.

Auto sweep facility has also been allowed by some banks, in which the amount exceeding a certain limit is transferred automatically to Fixed Deposit and earns higher interest.

Fixed Deposit Account

Money in this account is accepted for a fixed period, say one, two, or five years. The money thus deposited cannot be withdrawn before the expiry of the fixed period, unless the depositor is willing to pay a pre-closure penalty.

The rate of interest on this account is higher than that on other accounts. The longer the period of fixed deposit, the higher is the rate of interest. Fixed deposits are also called "time deposits" or "time liabilities." Fixed deposits have grown in popularity and importance in recent years in India. These deposits constitute more than half of the total bank deposits.

The banker may also grant a loan to the depositor on the security of the fixed deposit receipt.

Recurring Deposit Account

The recurring deposit account has gained wide popularity these days. Under this, the depositor is required to deposit a fixed amount of money every month for specific period of time. After the completion of the specified period, the customer gets back all his deposits along with the cumulative interest accrued on them.

Recurring deposit accounts provide a good way to save in small amounts for use in the future, e.g., education of children, marriage of children, etc.

Non Resident Accounts

NRI can open following types of accounts with banks in India, which hold authorized dealer licenses and with other banks, specifically authorized by the Reserve Bank of India (RBI) to maintain accounts of NRIs.

A. **Rupee Accounts:** NRIs can open following types of rupee accounts:
   i. Non-resident (Ordinarily) Account or Ordinary Non-resident Rupee Account **(NRO A/c)**
   ii. Non-resident (External) Rupee Account **(NRE A/c)**

B. **Foreign Currency Account: Non**-Resident (Foreign Currency) Account **(FCNR A/c)**

A quick comparison between NRE and NRO accounts

	Non-Resident External (NRE) Account	Non-Resident Ordinary (NRO) Account
Currency	Rupee denominated	Rupee denominated
Type	Savings, Current or a Fixed/Term Deposit	Savings, Current or a Fixed / Term Deposit
Who can open?	NRI	NRI, Resident before becoming an NRI
Is repatriation allowed?	Yes	Usually no
What can be the source of funds?	Funds remitted from abroad, Funds from another NRE / FCNR account	Funds received from within India
Can funds be transferred to another account?	Funds can be transferred from an NRE account to an NRO / NRE / Resident account	Funds can be transferred from an NRO account to an NRO / Resident account
Can it be opened jointly with an NRI?	Yes	Yes
Can it be opened jointly with a resident?	No	Yes
What is the income tax of the interest earned?	Tax free	Taxed as per applicable slab rate
Can power of attorney holder open the account?	No	No
Can power of attorney holder operate the account?	Yes, can make local rupee payments	Yes, can make local rupee payments

Foreign Currency (Non-Resident) Accounts (Banks) Scheme (FCNR Accounts)

These are accounts where the NRIs hold the balances in foreign currency.

These types of accounts are maintained in British Pound, USD, DM, Japanese Yen, EURO or other currencies as may be designated by the RBI from time to time. Interest rates are linked to the international rates of interest of the respective currencies as determined and notified by the RBI to Authorized Dealers (ADs) from time to time.

Did you know?

How to determine whether an individual is NRI or not?

'Non-resident Indian' (NRI) is an individual who is a citizen of India or a person of Indian origin but who is not a resident of India.

In order to determine whether an individual is a non-resident Indian or not, his **residential status** is required to be determined under Section 6 of the Income Tax Act, 1961. As per Section 6 of the Income Tax Act, an individual is said to be non-resident in India if he is not a resident in India and an individual is deemed to be resident in India in any previous year if he satisfies any of the following conditions:

1. If he is in India for a period of 182 days or more during the previous year; or
2. If he is in India for a period of 60 days or more during the previous year and 365 days or more during 4 years immediately preceding the previous year.

However, in respect of an Indian citizen and a person of Indian origin who visits India during the year, the period of 60 days as mentioned in (2) above shall be substituted with 182 days. The similar concession is provided to the Indian citizen who leaves India in any previous year as a crew member or for the purpose of employment outside India.

The Finance Act, 2020, w.e.f., Assessment Year 2021-22 has amended the above exception to provide that the period of 60 days as mentioned in (2) above shall be substituted with 120 days, if an Indian citizen or a person of Indian origin whose total income, other than income from foreign sources, exceeds Rs. 15 lakhs during the previous year. Income from foreign sources means income which accrues or arises outside India (except income derived from a business controlled in or a profession set up in India).

Test Your Understanding

Which of these is/are scheduled commercial bank(s)?

a) Union Bank of India
b) IndusInd Bank
c) Standard Chartered Bank
d) All of these

Test Your Understanding

In India, current accounts carry interest earning for balances maintained in these accounts. True or false.

a) False
b) True

DEPOSIT INSURANCE (PMJDY)

Insurance of Bank Deposits

To assure the depositor about the security of their deposit in any type of account with banks, the Deposit Insurance and Credit Guarantee Corporation was created by the Government of India in 1961, through an act of parliament.

Under this scheme, which came Into effect from 1st January 1962, a depositor having a deposit in any bank, which is not able to meet its liability of paying back the deposit amount to its depositors due to bankruptcy, can approach the corporation for remedy.

As per the provision of the act, the corporation will pay the aggrieved depositor a sum of Rs. 5 lac per account in the same capacity.

Pradhan Mantri Jan-Dhan Yojana (PMJDY)

Pradhan Mantri Jan-Dhan Yojana (PMJDY) is National Mission for Financial Inclusion to ensure access to financial services, namely, a basic savings & deposit accounts, remittance, credit, insurance, pension in an affordable manner. Under the scheme, a basic savings bank deposit (BSBD) account can be opened in any bank branch or Business Correspondent (Bank Mitra) outlet, by persons not having any other account.

Benefits under PMJDY

a) One basic savings bank account is opened for unbanked person.
b) There is no requirement to maintain any minimum balance in PMJDY accounts.

c) Interest is earned on the deposit in PMJDY accounts.
d) RuPay debit card is provided to the PMJDY account holder.
e) Accident insurance cover of Rs.1 lakh (upgraded to Rs. 2 lakh to new PMJDY accounts opened after 28.8.2018) is available with RuPay card issued to the PMJDY account holders.
f) An overdraft (OD) facility up to Rs. 10,000 to eligible account holders is available.
g) PMJDY accounts are eligible for Direct Benefit Transfer (DBT), Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), Pradhan Mantri Suraksha Bima Yojana (PMSBY), Atal Pension Yojana (APY), Micro Units Development & Refinance Agency Bank (MUDRA) scheme.

Fun Learning with English idioms

Idiom: *stay on (one's) toes*

The idiom *stay on (one's) toes* refers to be and remain alert and focused.

Example: *There will be random testing on this, so stay on your toes.*

TRADITIONAL AND NEW-AGE BANKING

Traditional and Neo Banking Models

Neo-banks are changing the face of fin-tech by bridging the gap between the services that traditional banks offer and the evolving expectations of customers in the digital age.

What are Neo-banks?

- Neo-banks are **online-only** financial technology (fin-tech) companies that operate solely digitally or via mobile apps.
- Neo-banks are digital banks without any physical branches offering services that traditional banks don't.
- In India, these firms **don't have a bank licence of their own**, but rely on partner banks to offer licensed services as the RBI doesn't allow banks to turn 100% digital yet (though some foreign banks offer digital-only products through their local units).

How are they different from other types of banks?

- **Neo-bank vs Traditional bank-** Neo-banks leverage technology and artificial intelligence (AI) to offer a range of personalised services to customers while traditional banks follow an omni-channel approach through both physical (branches and ATMs) and digital banking presence.
- While neo-banks don't have the funds or customer base to overthrow traditional banks, they are powered by innovation to launch features and develop partnerships to serve their customers more quickly than traditional banks.
- Neo-banks cater to retail customers, and small and medium businesses, which are generally underserved by traditional banks.
- Venture capital and private equity investors have been keeping a keen eye on the market opportunities for Neo-banks and are taking an increasing interest in them over traditional banks.
- **Neo-bank vs Digital bank-** A digital bank and a neo-bank aren't quite the same.
- Digital banks are often the online-only subsidiary of an established and regulated player in the banking sector while neo-banks exist solely online without any physical branches independently or in partnership with traditional banks.

DEBIT AND CREDIT CARDS

What is a debit card?

Debit cards are issued by banks against current or savings accounts. When the cardholder swipes his/her debit card to make a payment or withdraw money from an ATM, the money is directly deducted from the cardholder's account. This could pose a problem during emergencies, in case the account holder does not have sufficient balance in the account.

What is a credit card?

A credit card gives the cardholder a credit limit from where he/she can borrow funds to make payments as and when required. The cardholder needs to pay back the borrowed amount within a stipulated time, following which the limit is restored. Interest is charged on the outstanding amount only in case of delayed payments.

DIGITAL PAYMENT SYSTEM

Payment and Settlement Systems in Indian Banking Sector

In India, the RBI oversees the payment systems. The Board for Regulation and Supervision of Payment and Settlement Systems (BPSS), chaired by the Governor, RBI, spearheads this responsibility.

The creation of a new department viz., Department of Payment and Settlement Systems (DPSS) by RBI in the year 2005 to focus exclusively on payment and settlement systems, and subsequent legislation of the Payment and Settlement Systems Act, 2007 (PSS Act) set the stage for a new era in the history of payment systems in the country.

The Bank for International Settlements' (BIS) Committee on Payments and Market Infrastructures (CPMI) defines payment systems transactions to include the total transactions undertaken by all payment systems in the country.

Considering this definition, payment systems transactions in India would comprise of transactions processed and settled through:

a) Paper Clearing [Magnetic Ink Character Recognition (MICR), Non-MICR, Cheque Truncation System (CTS), Express Cheque Clearing System (ECCS)];

b) Bulk electronic transaction processing systems like Electronic Clearing Service (ECS), with its variants Regional ECS and National ECS; National Automated Clearing House (NACH) – Debit and Credit; NPCI

c) Card Payments (Debit, Credit and Electronic);

d) Large Value [Real Time Gross Settlement (RTGS)];

e) Retail [National Electronic Funds Transfer (NEFT)];

f) Fast Payments [Immediate Payment Service (IMPS), Unified Payments Interface (UPI)]; and NPCI

g) e-Money [Prepaid Payment Instrument (PPI) Cards and Wallets). Phonepay, Amazonpay.

Except (a) above and cash transactions, all other payments constitute **digital transactions**

In addition to the above payment and settlement systems, RBI has also institutionalised a well-established clearing and settlement system for Government Securities.

Fun Learning with English idioms

Idiom: *all that glitters is not gold*

The idiom *all that glitters is not gold* means that things that have an outward appeal are often not as beautiful or valuable as they seem.

Example: *My father advised me to be careful about making new friends because all that glitters is not gold.*

ROLE OF RBI AS BANKING REGULATOR

The Reserve Bank of India was established on April 1, 1935 in accordance with the provisions of the Reserve Bank of India Act, 1934.

The **Preamble** of the Reserve Bank of India describes the basic functions of the Reserve Bank as under:

> *"to regulate the issue of Bank notes and keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage; to have a modern monetary policy framework to meet the challenge of an increasingly complex economy, to maintain price stability while keeping in mind the objective of growth."*

Board for Financial Supervision

The Reserve Bank of India performs the supervisory function under the guidance of the Board for Financial Supervision (BFS). The Board was constituted in November 1994 as a committee of the Central Board of Directors of the Reserve Bank of India under the Reserve Bank of India (Board for Financial Supervision) Regulations, 1994.

The primary objective of BFS is to undertake consolidated supervision of the financial sector comprising Scheduled Commercial and Co-operative Banks, All India Financial Institutions, Local Area Banks, Small Finance Banks, Payments Banks, Credit Information Companies, Non-Banking Finance Companies, and Primary Dealers.

Main Functions of Reserve Bank of India

Monetary authority:

Formulates, implements, and monitors the monetary policy.

Objective: Maintaining price stability while keeping in mind the objective of growth.

Regulator and supervisor of the financial system:

Prescribes broad parameters of banking operations within which the country's banking and financial system functions.

Objective: Maintaining public confidence in the system, protect depositors' interest and provide cost-effective banking services to the public.

Manager of Foreign Exchange

Manages the Foreign Exchange Management Act, 1999.

Objective: Facilitating external trade and payment and promote orderly development and maintenance of foreign exchange market in India.

Issuer of currency:

Issues, exchanges and destroys currency notes as well as puts into circulation coins minted by Government of India.

Objective: to give the public adequate quantity of supplies of currency notes and coins and in good quality.

Developmental role

Performs a wide range of promotional functions to support national objectives.

Regulator and supervisor of payment and settlement systems:

Introduces and upgrades safe and efficient modes of payment systems in the country to meet the requirements of the public at large.

Objective: Maintaining public confidence in the payment and settlement system.

Related Functions

Banker to the Government: performs merchant banking function for the central and the state governments; also acts as their banker.

Banker to banks: maintains banking accounts of all scheduled banks.

KEY POLICY RATES

Liquidity Rates/Ratio

Cash Reserve Ratio (CRR)

at RBI

CRR is the **percentage of a bank's total deposits that it needs to maintain as liquid cash.** This is an RBI requirement, and the cash reserve is kept with the RBI. A bank does not earn interest on this liquid cash maintained with the RBI and neither can it use this for investing and lending purposes.

Statutory Liquidity Ratio (SLR)

In Indian banking terms, statutory liquidity ratio (SLR) refers to the minimum reserve requirement that needs to be maintained by commercial banks in the nation. By com. Bank.

The Reserve Bank of India (RBI) Act states that every commercial bank in India has to keep a certain amount of time deposits as well as demand deposits as liquid assets in its independent and own vault.

In the case of statutory liquidity ratio, these assets can be gold, cash, and securities that are approved by the Indian government, etc. Apart from these assets, securities that are sanctioned under market stabilisation schemes (MSS) as well as market borrowing programmes, and treasury bills are included in the statutory liquidity ratio. Every bank must maintain this particular SLR as it assists in the process of increasing bank credit.

Bank rate

RBI → com bank.

Bank rate is the rate charged by the central bank for lending funds to commercial banks. Bank rates influence lending rates of commercial banks. Higher bank rate will translate to higher lending rates by the banks.

Repo rate

Repo rate is the rate at which the central bank of a country (Reserve Bank of India in case of India) lends money to commercial banks in the event of any shortfall of funds. These funds are lent against securities. Repo rate is used by monetary authorities to control inflation.

Marginal Standing Facility (MSF)

Marginal standing facility (MSF) is a window for banks to borrow from the Reserve Bank of India in an emergency situation when inter-bank liquidity dries up completely.

Lending/Deposit Rates

1.75 %

Base rate : It is the minimum rate set by the Reserve Bank of India below which banks are not allowed to lend to its customers. Description: Base rate is decided in order to enhance transparency in the credit market and ensure that banks pass on the lower cost of fund to their customers.

Savings deposit rate: This is the rate at which commercial banks give interest to the savings account holders on their balances. However, RBI has given the freedom to commercial banks to fix their own interest rates on domestic term deposits of various maturities with the prior approval of their respective Board of Directors/Asset Liability Management Committee (ALCO), ***RBI regulates interest rates on savings bank accounts.***

Did you know?

Current rates:

As on 07th August, 2022, the following are the applicable rates:

Particulars	Rate (per annum)
CRR	4.50%
SLR	18.00%

Bank rate	5.65%
Repo rate	5.40%
MSF rate	5.65%
Base rate	7.75% - 8.80%
Savings deposit rate	2.70% - 3.00%

In which year was the RBI Act enacted?

a) 1934
b) 1947
c) 1950
d) 1881

ATM stands for Any Time Money. True or false?

a) True
b) False

An overdraft (OD) facility up to Rs. 10,000 is available to eligible account holders of PMJDY. True or false?

a) True
b) False

Test Your Understanding Solutions

TYU 1

Which of these is/are scheduled commercial bank(s)?

- **a)** Union Bank of India
- **b)** IndusInd Bank
- **c)** Standard Chartered Bank
- **d)** All of these

Correct Answer: d. All of these

TYU 2

In India, current accounts carry interest earning for balances maintained in these accounts. True or False.

- **a)** True
- **b)** False

Correct Answer: b. false

TYU 3

In which year was the RBI Act enacted?

- **a)** 1934
- **b)** 1947
- **c)** 1950
- **d)** 1881

Correct Answer: a. 1934

TYU 4

ATM stands for Any Time Money. True or false?

- **a)** True
- **b)** False

Correct Answer: b. false

Remarks: While it is true that using ATM, one can withdraw money at any time, ATM stands for Automated Teller Machine.

TYU 5

An overdraft (OD) facility up to Rs. 10,000 is available to eligible account holders of PMJDY. True or false?

- **a)** True
- **b)** False

Correct Answer: a. True

ORIENTATION TO FINANCIAL STATEMENTS

CHAPTER 3

LEARNING OBJECTIVES

- Interpret financial statement and analyse key financial ratios

CHAPTER TABLE OF CONTENT

INTRODUCTION

Before making decisions regarding investments—either debt investments or equity investments— we need to understand the risks related to them. While we will learn about the various types of investments and their risk perception in the next module, we to understand— *how to evaluate the performance of a business.*

Every business—small or large—maintains books of accounts. Accounting is the system of recording financial transactions. Using this recorded data, the management/owners of the business try to understand if the business has made profits or incurred losses is a given period of time. They are also able to assess their financial standing at a particular point of time. The summarisation of these accounts leads to preparation of the financial statements.

In this chapter, we will try to understand the various financial statements and how they are analysed by various stakeholders.

Who are the stakeholders of a company?

A stakeholder is an individual or group who has a vested interest in your business.

There are different stakeholders who have vested interest in your business. These are:

1. Owners/shareholders
2. Investors/potential shareholders
3. Suppliers
4. Creditors (including banks)
5. Employees and trade unions
6. Communities, society, and media
7. Government agencies
8. Customers

WHAT ARE THE KEY FINANCIAL STATEMENTS & THEIR PURPOSE

Financial statements are basic and formal means through which the management of an enterprise makes public communication of financial information along with select quantitative details.

They are structured financial representation of the financial position, performance, and cash flows of an enterprise.

Many users rely on the general purpose financial statements as the major source of financial information. Therefore, financial statements should be prepared and presented in accordance with their requirement.

Financial statements are a compilation of financial data, collected and classified in a systematic manner according to the accounting principles, to assess the financial position of an enterprise as regards to its profitability, operational efficiency, long- and short-term solvency, and growth potential.

Income Statement (Profit and Loss Statement)

The profit and loss account (income statement) shows the financial performance of the company/firm over a period. It indicates the **revenues** and **expenses** during that particular period. The period is an accounting period/year, April-March.

The accounting report summarizes the revenue items, the expense items, and the difference between them (net income) for an accounting period.

A company prepares statement of profit and loss to show the net result (profit or loss) from the revenue earned and expense incurred. In case of a company carrying on activity not for profit, income and expenditure account is prepared for the financial year which shows the income earned and expense incurred during the year, showing surplus (when income is more than expense) or deficit (when expense is more than income).

The main purpose is to know how much profit or loss the entity has made during a particular year.

Balance Sheet

A balance sheet is a financial statement that reports a company's assets, liabilities, and shareholder equity. The balance sheet is one of the three core financial statements that are used to evaluate a business. It provides a snapshot of a company's finances (what it owns and owes) as of the date of publication.

The balance sheet adheres to the following formula:

Assets = Liabilities + Shareholders' Equity

A balance sheet contains the following:

- **Assets:** Assets in a balance sheet shows the amount of assets an entity holds on the date of the balance sheet.
- **Liabilities:** Liabilities in balance sheet shows the amount of liability an entity is liable to pay in future (determined on the date of balance sheet).
- **Equity & Reserves:** Equity and reserves is the amount of capital the entity has including reserves balances, if any. Higher amount of equity and reserves indicates higher net worth of the entity.

Cash Flow Statement

The last part of a company's finances is its cash flow statement. Cash flow statement (also known as statements of cash flow) shows the flow of cash and cash equivalents during the period and breaks the analysis down to operating, investing, and financing activities. It helps in assessing liquidity and solvency of a company and to check efficient cash management. There are three key components of Cash flow statements:

O
- **Cash from operating activities:** This includes all the cash inflows and outflows generated by the revenue-generating activities of an enterprise like sale & purchase of raw materials, goods, labour cost, building inventory, advertising, shipping the product, etc.

I
- **Cash from investing activities:** These activities include all cash inflows and outflows involving the investments that the company made in a specific time period such as the purchase of new plant, property, equipment, improvements capital expenditures, cash involved in purchasing other businesses or investments.

F
- **Cash from financial activities:** This activity includes inflow of cash from investors such as banks and shareholders by getting loans, offering new shares etc, as well as the outflow of cash to shareholders as dividends as the company generates income. They reflect the change in capital & borrowings of the business.

  – Cash Flow Statements

UNDERSTANDING ACCOUNTING EQUATION

Before we understand the components, let's list down the **key formulae** for this section:

Accounting Equation: Assets = Liabilities + Shareholder's Funds 1
Shareholder's Funds = Equity + Reserves & Surplus + Retained Earnings of the year (Profit) – Debit balance in P&L a/c (losses, if any) 2
Retained Earnings = Earnings After Tax – Dividend 3
Earnings After Tax = EBITDA – Interest – Taxes - Depreciation - Amortisation 4

Assets

Assets are resources owned by a business with the purpose of using them for generating future profits. Assets can be tangible and intangible.

Tangible Assets are the capital assets which have some physical existence. These assets can be seen, touched, and felt, e.g., plant and machinery, furniture and fittings, land and buildings, books, computers, and vehicles.

The capital assets which have no physical existence and whose value is limited by the rights and anticipated benefits that possession confers upon the owner are known as **intangible assets**. These cannot be seen or felt although these help to generate revenue in future, e.g., goodwill, patents, trademarks, copyrights, brand equity, designs and intellectual property, etc.

Assets can also be classified as **Current Assets** and **Non-Current Assets**.

Current Assets – An asset can be classified as Current if it satisfies any of the following:

- It is expected to be realized in, or is intended for sale or consumption in the company's normal operating cycle;
- It is held primarily for the purpose of being traded;
- It is due to be realized within 12 months after the Reporting Date; or
- It is cash or cash equivalent unless it is restricted from being exchanged or used to settle a Liability for at least 12 months after the reporting date.

Non-Current Assets – All other assets are classified as Non-Current Assets, e.g., Machinery held for a long term, etc..

Liabilities

These are obligations of financial nature to be settled at a future date. Liabilities represent the amount of money that the business owes to the other parties.

For instance, when goods are bought on credit, the firm will create an obligation to pay to the supplier the price of goods on an agreed future date, or when a loan is taken from bank, an obligation to pay the interest and principal amount is created.

Depending upon the period of holding, these obligations could be further classified into long term or non-current liabilities, and short-term or current liabilities.

Current Liabilities – A liability is classified as current when it satisfies any of the following:

- It is expected to be settled in the company's normal operating cycle
- It is held primarily for the purpose of being traded;
- It is due to be settled within 12 months after the reporting date or
- The company does not have an unconditional right to defer settlement of the liability for at least 12 months after the reporting date (Terms of a Liability that, at the option of the counterparty, result in their settlement by the issue of Equity Instruments which do not affect its classification).

Non-Current Liabilities – All other liabilities shall be classified as Non-Current Liabilities. For example loan taken for 5 years, Debentures issued etc.

Income/Revenue

Revenue is the money generated from normal business operations, calculated as the average sales price times the number of units sold. It is the top line (or gross income) figure from which costs are subtracted to determine net income. Revenue is also known as sales on the income statement.

Expenses

Expenses are basically amount spent by the business. Expenses are of two types – Revenue Expenditure and Capital Expenditure

Revenue Expenditure

These represents expenditure incurred to earn revenue of the current period. The benefits of revenue expenses get exhausted in the year of the incurrence. For example repairs, insurance, salary and wages to employees, travel, etc. The revenue expenditure results in the reduction in profit or surplus. It forms part of the **income statement.**

Capital Expenditure

This represents expenditure incurred for the purpose of acquiring a fixed asset which is intended to be used over the long term for earning profits therefrom, e.g., amount paid to buy a computer for office use is a capital expenditure. At times expenditure may be incurred for enhancing the production capacity of the machine. This will also be a capital expenditure. Capital expenditure forms a part of the **Balance Sheet.**

Shareholders' Funds

Shareholders' funds consist of equity share capital, reserves & surplus, retained profits of the year, and/or adjusted for any debit balance (loss) in the P&L a/c.

Profit

The excess of revenue income over expenses is called profit. It could be calculated for each transaction or for the business as a whole.

Loss

The excess of expense over income is called loss. It could be calculated for each transaction or for business as a whole.

IMPORTANT RATIOS

Ratio is a meaningful relationship between two financial parameters.

Ratios are best interpreted in comparison with:

- Historical data
- Competition
- Industry norms

Some of the key ratios that are used in financial analysis are given below:

Current Ratio

This ratio is used to assess a firm's ability to meet its current liabilities. The relationship of current assets to current liabilities is known as current ratio. The ratio is calculated as:

Current Ratio = Current Assets / Current Liabilities

Current Assets are those assets, which are easily convertible into cash within one year. This includes cash in hand, cash at bank, sundry debtors, bills receivable, short term investments, closing stock and prepaid expenses.

Current Liabilities are those liabilities which are payable within one year. This includes bank overdraft, sundry creditors, bills payable and outstanding expenses.

Liquid Ratio

This ratio is used to assess the firm's short-term liquidity. The relationship of liquid assets to current liabilities is known as liquid ratio. It is also called the acid test ratio or quick ratio. The ratio is calculated as:

Liquid Ratio = Liquid Assets / Current Liabilities

Liquid assets means current assets less closing stock and prepaid expenses.

Debt Equity Ratio

This ratio helps to ascertain the soundness of the long-term financial position of the concern. It indicates the proportion between total long-term debt and shareholders' funds. This also indicates the extent to which the firm depends upon outsiders for its existence. The ratio is calculated as:

Debt-Equity Ratio = Total long term Debt / Shareholders Funds

Long term debts include debentures, long term loans from banks and financial institutions. Shareholders' funds include equity share capital, preference share capital, and reserves and surplus.

Return on Equity Ratio

It measures the returns the company is generating on shareholders' equity. More the better.

Return on Equity = Profit After Tax / Equity share capital

Return on Capital Employed (ROCE)

The comparison is between operating profit and total capital employed including debt.

ROCE = Profit before interest and tax / Total capital employed

Inventory Turnover Ratio

The inventory turnover ratio is an efficiency ratio that shows how effectively inventory is managed by comparing cost of goods sold with average inventory for a period. This measures how many times average inventory is "turned" or sold during a period.

Inventory Turnover Ratio = Cost of Goods Sold / Average Inventory

Average Inventory is calculated by adding the opening and closing inventory and dividing by two.

Earnings Per Share (EPS)

It measures the amount of net income earned per share of stock outstanding. In other words, this is the amount of money each share of stock would receive if all of the profits were distributed to the outstanding shares at the end of the year.

EPS = Net Income after tax / No. of common shares outstanding

Dividend paid to preference shareholders is removed from the net income.

Gross Margin Ratio

Gross margin ratio is a profitability ratio that compares the gross margin of a business with the net sales. This ratio measures how profitably a company sells its inventory or merchandise. This is the pure profit from the sale of inventory that can go to paying operating expenses.

Gross Margin Ratio = Gross Margin / Net Sales

Gross Margin = Net Sales – Cost of goods sold
Net Sales = Gross Sales – Returns/Refunds

Net Margin Ratio

It is the percentage of revenue left after all expenses have been deducted from sales. The measurement reveals the amount of **profit** that a business can extract from its total sales.

Net Margin Ratio = Net Profit / Total Sales

FINANCIAL ANALYSIS

Trend analysis

Trend analysis is a technique used to make future projections/predictions based on the past data. It usually enables the user of financial data to compare data points over a given period of time (say an accounting year) and identify uptrend or downtrend.

Trend analysis can show 3 outcomes:

- Consistency – the trend is stable and steady over a period of time.
- Inconsistency – the trend is drastically changing positions.

This trend analysis tends to provide the key elements/components that the management should focus on in future.

There are two types of trend analysis that are undertaken—**horizontal analysis and vertical analysis**

Horizontal analysis

Horizontal analysis is used in the review of a company's financial statements over multiple periods. It is usually depicted as percentage growth over the same line item in the base year.

Horizontal analysis allows financial statement users to easily spot trends and growth patterns.

Let's say, your company made a net margin of 8% in Year 1 and 7% in Year 2. Horizontal analysis is to compare these two data points (of two different year) and evaluate the reasons for the change over the year.

These comparisons across the financial years/periods can be done on every line time or ratios.

Vertical analysis (common size analysis)

Each line item is expressed as a percentage of the base amount for that period. This can be used on income statement, balance sheet, as well as cash flow statement.

Percentage of Base = Amount of individual item / amount of base item X 100

For income statement, common base item is total revenue.

For balance sheet, common base item is total assets.

Vertical analysis is used for the same financial period.

Did you know?

What are Indian Accounting Standards (Ind AS)?

The Indian Accounting Standards (Ind AS), as notified under Section **133 of the Companies Act 2013**, have been formulated keeping the Indian economic and legal environment in view and ***with a view to converge with IFRS Standards***, as issued by and copyright of which is held by the IFRS Foundation.

Notwithstanding anything contained in the above para, Ind AS notified under the Companies Act 2013 are governed by the provisions of Indian Copyright Act, 1957 and the copyright in Ind AS vests in the Government of India.

Such standards need to be adopted by various corporate firms and NBFCs in India under the supervision of the Accounting Standards Board (ASB). The Accounting Standards Board was established in 1977 as a regulator and body.

Classroom Exercise

ABC Limited was incorporated on January 1, 2021. Based on the following transaction during the period financial year (January 1, 2021, till December 31, 2021), construct a Profit & Loss Account and a Balance Sheet of the company.

Through an issue of shares, the company raised INR50 million. This money was received in the company's bank accounts.

The company also raised a loan of INR 100 million from financial institutions. The interest of INR11 million has accrued for the period ended December 31, 2021, but would be falling due for payment only later.

With the money raised from issue of shares and loan from financial institutions, the company has purchased machinery worth INR80 million. This machinery has been used immediately. The machinery depreciates with each passing year to the extent of 10% of its original value. The company recognises depreciation to this extent.

The company has around 100 employees. The annual employee cost is INR10 million and has been fully paid for.

The company incurs other administrative expenses totalling to INR 6 million. Out of this expense equal to INR 1 million are yet to be paid by the company.

During the year, the company purchased material worth INR150 million. Out of this material worth INR25 million is available in stock at the end of the year.

The company has not paid for the entire material purchased. INR30 million is yet to be paid to the suppliers.

The company has been able to notch up sales of Rs. 175 million. In addition, some dealers have already booked orders with the company and have paid an advance of Rs.5 million. At the same time, the company has not been able to recover the total amount due on sales. Despite, the best push given by the sales team, INR20 million is outstanding to be collected.

The tax rate applicable to the company is 40%

The company is currently enjoying an excellent liquidity position. But soon it is likely to embark on an expansion plan. The company has set aside in liquid investments a sum of Rs. 65 Million which would be used for the purchase of equipment at the appropriate time.

Use this data to construct a P&L account and a balance sheet.

EXERCISE – OUTPUT

ABC Limited

P&L statement for the YE 31.12.2021

Expenses	$	Revenue	$
Purchases	150	Sales	175
Salary	10	Closing stock	25
Other administrative expenses	6		
Depreciation	8		
Interest expenses	11		
Provision for taxation	6		
Net profit	9		
Total	**200**	**Total**	**200**

ABC Limited

Balance Sheet as on 31.12.2021

Liabilities	$	Assets	$
Share capital	50	Fixed assets	80
Surplus in P&L account	9	Less: Depreciation	8
Loan from financial institutions	100	Net fixed assets	72
Advance received from customers	5	Investments	65
Creditors for materials	30	Receivables from customers	20
Creditors for expenses	1	Inventory	25
Interest accrued but not due	11	Balance in bank account	30
Provision for taxation	6		
Total	**212**	**Total**	**212**

Test Your Understanding 1

Using the information in the Exercise used in this chapter, calculate the following ratios:

1. Current Ratio
2. Debt-Equity Ratio
3. Net margin Ratio
4. Return on Equity

Test Your Understanding Solutions

1. Current ratio – 1.41
   Remarks:
   Current assets = Rs. 75 million
   Current liabilities = Rs. 53 million
2. Debt-Equity – 1.69
   Remarks:
   Total long-term debt = Rs. 100 million
   Equity = Rs. 59 million
3. Net margin ratio – 5.14%
   Remarks:
   Net profit after tax = Rs. 9 million
   Net sales = Rs.175 million
4. ROE – 18%
   Remarks:
   Net profit after tax = Rs. 9 million
   Equity capital = Rs. 50 million

BASICS OF FINANCIAL PLANNING

CHAPTER 4

LEARNING OBJECTIVES

- Identify the critical components of financial planning

CHAPTER TABLE OF CONTENT

1. Understand the need for financial planning
2. Basic concepts –
   - life goals
   - financial goals
3. Format of a sample financial plan for a young adult

INTRODUCTION (H1)

When we look around in our society, especially in the Indian context, we notice that we start earning, in majority of cases, once we cross 20 years of age. That's typically the age when we graduate from college.

Till then our needs and wants are satisfied mostly by our parents or guardians, at least financially.

The excitement of our first salary is truly amazing. When we start getting your salary, we start to feel financially independent and aspire for bigger things requiring more finances.

It is at this stage that we need some sort of control over how we should spend our earnings. We need to keep a check on how the money is spent and how the residual income is saved/invested.

But how much is sufficient for future needs? We also need to understand that the future is filled with uncertainty.

These are some of the challenges that we face when we want our money to grow.

This chapter is aimed to give you the basic understanding of financial planning and the various goals associated with it.

Let's warm up

Human life cycle shows the different stages of life that a human goes through. We are born as infants and slowly go through stages before reaching adulthood. These stages are called a life cycle. A human life cycle is defined as the developmental stages that occur during an human's lifetime. A life cycle ends when the person dies.

UNDERSTAND THE NEED FOR FINANCIAL PLANNING

Financial planning aims at ensuring that a household has adequate income or resources to meet current and future expenses and needs. The regular income for a household may come from sources such as profession, salary or business.

The normal activities of a household and the routine expenses are woven around the regular income. However, there are other charges that may also have to be met out of the available income. The current income of the household must also provide for a time when there will be no or low income being generated, such as in the retirement period.

There may be unexpected expenses which are not budgeted, such as a large medical expense, or there may be needs in the future that require a large sum of money, such as education of children or buying a home, all of which require adequate funds to be made available at the right time. A portion of the current income is therefore saved and applied to creating assets that will meet these requirements. medical.

Financial planning refers to the process of streamlining the income, expenses, assets and liabilities of the household to take care of both current and future need for funds.

Example

Reena is 45 years old and earns Rs.4 lakhs a month. After meeting all the routine expenses of her family, paying EMIs and other needs, she is able to save Rs.1.2 lakhs a month.

She invests her savings in investments such as tax savings, bank deposits, bonds and some mutual funds. She pays premiums on life insurance for self.

She is the sole earning member of her family. She believes that the investments take care of her finances adequately towards her financial needs – both current and future. How would financial planning help her?

Financial planning will help Reena in better decision making:

- In the event of her current income getting interrupted, has she made sufficient provisions for taking care of her expenses?
- What are her specific future expenses and how will she fund them?
- As she is the sole earning member, does she have adequate insurance cover for exigencies?
- How much of risk is Reena willing to take?
- How would these risks be managed?

A formal treatment of the issues that Reena faces will require a financial planning process to assess the current situation; identify the current and future needs; determine the savings required to meet those needs and put the savings to work so that the required funds are available to meet each need as planned.

Key points of financial planning

Financial planning is a fundamental exercise towards securing financial independence. The following are the key points about financial planning:

- It enables better management of personal financial situation
- It works primarily through identification of key goals
- It puts in place and action plan to realign the finances to meet financial goals.
- It is an holistic approach that considers the existing financial position, evaluates the future needs, puts a process to fund the needs and reviews the progress.
- It is the exercise of ensuring that a household has adequate income or resources to meet current and future expenses and needs.

The income is primarily derived from **two sources**:

I. Income from profession or business or employment undertaken.

II. Income and earnings from assets or investments such as rent from property, interest from bank deposits, dividends from shares and mutual funds, interest earned on debentures.

Income from business or profession will be the primary source of income in the period when the individual is capable of being gainfully employed and generating an income. When this period is over, the dependence for income from the assets and investments will increase. Assets and investments as a source of income are typically built over a period of time from surplus income after meeting expenses.

Current income is first assigned to meet current expenses. Surplus income available after meeting expenses is called savings and it is used to create assets that will provide future income or meet future expenses. Large ticket size assets, such as real estate, or, purchases that are not amenable to being met out of regular income, such as buying a car, may require surplus income to be accumulated over a period of time.

Typically such assets are acquired with a combination of own funds and loans. Loans result in a liability that has to be met out of current and future income.

- Income is used to meet current expenses and create assets to meet future income needs and expenses.
- Expenses have to be controlled to fit into available income and to be able to generate savings.
- Savings are used to create assets that will generate income for the future needs.
- Borrowings or loans may be combined with savings to acquire assets of a large value or meet expenses.
- Borrowings impose a liability to be met out of income to pay the cost and repay the loan.

Financial planning helps in understanding the relationship between the four elements of the personal finance situation of an individual: income, expenses, assets and liabilities so that all the current and future needs are met in the best way possible.

FINANCIAL GOALS

Financial goal is the term used to describe the future needs of an individual that require funding. It specifies the **sum of money required** in order to meet the needs and when it is required. Identifying financial goals help put in place **a spending and saving plan** so that current and future demands on income are met efficiently.

Goals described in terms of the money required to meet it at a point of time in future, is called a **financial goal**.

Examples of financial goals:

- Rs. 30 lakhs required after five years for the college admission for a child is a financial goal.
- Rs. 3 lakhs required each month after 10 years to meet household expenses in retirement.
- Rs. 10 lakhs required after 5 years for a luxury cruise holiday.
- Rs. 20 lakhs required after three years as down payment for a house.
- Rs. 1 lakh required after 6 months to buy a car.

Converting a goal into a financial goal requires the definition of the amount of money required and when it will be required.

As can be seen from the above examples, each financial goal contains two important components:

a) goal value; and

b) time to goal or investment horizon

Goal Value

The goal value that is relevant to a financial plan is not the current cost of the goal but the amount of money required for the goal at the time when it has to be met. The current cost of the goal has to be converted to the value in future. The amount of money required is a function of:

- Current value of the goal or expense
- Time period after which the goal will be achieved
- Rate of inflation at which the cost of the expense is expected to increase.

The current cost of a college admission may be Rs. 10 lakhs. But after 5 years, the cost would typically be higher. This increase in the cost of goods and services is called **inflation**. While saving for a goal, therefore, it is important to estimate the future value of the goal because that is the amount that has to be accumulated.

Future Value (FV) of a goal = Current Value of the goal x (1+rate of inflation)$^{\text{Years to goal}}$

Example

Rs. 30 lakhs required after five years for the college admission for a child is a financial goal. How much is the future value of this goal? Assume rate of inflation is 8% p.a.

FV of the goal = 30 x (1+0.08)5

FV of the goal = 44.08 lakhs

This is the value of the goal which needs to be achieved by saving and investment.

Time to Goal or Investment Horizon

Financial goals may be short-term, medium-term or long-term.

The term to goal refers to the time remaining for the funds to be made available to meet the goals. The investment horizon will determine the type of investment that will be selected for investing funds for the goal. If the goal is short-term, low risk investments will be preferred even though the returns will be low since the investor would not like to take a chance of losing the principle and return on the amount invested. As the time available for the investment increases, the investor will be able to take higher risks for better returns.

Raju (aged 24) is setting aside money to create an emergency fund and is also saving for his retirement. She has the option of investing in a short-term debt fund or in an equity fund. What will be the consequence of her decision?

A short-term debt fund may be ideal for Raju to hold his emergency fund since it has the twin features of relatively safe returns and ability to draw the funds out whenever he requires. But his retirement goal may see inadequacy of funds because the returns from short-term debt funds are low and the amount he is investing may not be earning as well as it could.

If Raju invested in an equity fund, he may find that the value of the emergency fund has gone down when he needs the money since the returns from equity will be volatile. This is a risk he will be unwilling to take. On the other hand, his retirement corpus will benefit from the higher returns from equity since he requires the funds only after a long period during which the volatility in returns might be ironed out.

The appropriate investment for a goal will be one that aligns the risk and return preferences of the investor to the investment horizon.

The term to the goal will keep reducing and the investments made for the goal has to align to the new situation. In the above example, as Raju's retirement comes closer he will need to move his investments from equity to lower risk products.

Fun Learning with English idioms

Idiom: *at (one's) expense*

The idiom *an own goal* refers to a course of action which is intended to bring you an advantage and which instead causes a problem for you.

Example: *It was a classic own goal by the fashion house. They brought their prices down to attract more customers but lost the high-end customers that they already had.*

Test Your Understanding 1

You require Rs. 20 lakhs after three years as down payment for a house. What will be the future value of this goal, assuming a rate of inflation of 6.5% p.a.?

a. Rs.24.16 lakhs
b. Rs. 20 lakhs
c. Rs. 89.84 lakhs
d. Rs. 16.55 lakhs

SAMPLE FINANCIAL PLAN FOR A YOUNG ADULT

Name: Mr. Srikantha Hegde (Age 21 years)

Goals	Goal Type	Name	Target Date	Amount (Lakhs)	Action plan required
Education (MBA)	Short term	Self	2023	5	Finance your fees partly from your parents funds and partly by taking loan
Car	Medium term	Self	2027	10	By 2024 it is expected you would begin to earn money. So you can save 1 lakh every year so in three years you can have enough funds to make down payment to buy a vehicle and fund the rest by bank loan
Vacation	Medium term	Parents	2028	1	Also keeping in mind this goal you can make suitable investments like equity and mutual funds to earn sufficient returns to fund the vacation for your parents provided you plan well in advance
Marriage	Long term	Self	2030	20	Make investments in equities, debt and mutual funds which will give you sufficient returns to cover your expenses
House	Long term	Self	2032	60	You can make investments in Fixed deposits which will help you to lock away funds for this goal, however as this would not be enough you should look at other options (like bank loans) as well

Test Your Understanding 2

Investment horizon, from a financial goal perspective, can be short-term, medium term or long term. True or False?

a. True
b. False

Test Your Understanding 3

Net worth of a person is the difference between the values of assets and the outstanding loan liabilities. True or False?

a. True
b. False

Test Your Understanding Solutions

TYU 1

You require Rs. 20 lakhs after three years as down payment for a house. What will be the future value of this goal, assuming a rate of inflation of 6.5% p.a.?

a. Rs.24.16 lakhs
b. Rs. 20 lakhs
c. Rs. 89.84 lakhs
d. Rs. 16.55 lakhs

Correct Answer: a. Rs.24.16 lakhs

Solution:

FV of the goal = 20 x (1+0.065)3 = 20 X 1.207949 = 24.16 lakhs

TYU 2

Investment horizon, from a financial goal perspective, can be short-term, medium term or long term. True or False?

a. True
b. False

Correct Answer: a. True

TYU 3

Net worth of a person is the difference between the values of assets and the outstanding loan liabilities. True or False?

a. True
b. False

Correct Answer: a. True