WHY DO WE INVEST?

To make sure we have enough funds to be prepared for the future. Simply earning and saving is not enough. Inflation – the price-rise beast – eats into the value of your money. To make up for the loss through inflation, we invest and earn extra. This is the investment fundament. The stock market is one such investment avenue. It has a history that goes way back to the 1800s.

Earlier, stockbrokers would converge around Banyan trees to conduct trades of stocks. As the number of brokers increased and the streets overflowed, they simply had no choice but to relocate from one place to another. Finally in 1854, they relocated to Dalal Street, the place where the oldest stock exchange in Asia – the Bombay Stock Exchange (BSE) – is now located. It is also India's first stock exchange and has since then played an important role in the Indian stock markets. Even today, the BSE Sensex remains one of the parameters against which the robustness of the Indian economy and finance is measured.

In 1993, the National Stock Exchange or NSE was formed. Within a few years, trading on both the exchanges shifted from an open outcry system to an automated trading environment.

This shows that stock markets in India have a strong history. Yet, at the face of it, especially when you consider investing in the stock market, it often seems like a maze. But once you start, you will realize that the investment fundamentals are not too complicated.

WHAT IS SHARE MARKET?

A share market is where shares are either issued or traded in.

A stock market is similar to a share market. The key difference is that a stock market helps you trade financial instruments like bonds, mutual funds, derivatives as well as shares of companies. A share market only allows trading of shares.

The key factor is the stock exchange – the basic platform that provides the facilities used to trade company stocks and other securities. A stock may be bought or sold only if it is listed on an exchange. Thus, it is the meeting place of the stock buyers and sellers. India's premier stock exchanges are the **Bombay Stock Exchange** and the **National Stock Exchange**.

THERE ARE TWO KINDS OF SHARE MARKETS – PRIMARY AND SECOND MARKETS.

Primary Market:

This where a company gets registered to issue a certain amount of shares and raise money. This is also called getting listed in a stock exchange.

A company enters primary markets to raise capital. If the company is selling shares for the first time, it is called an Initial Public Offering (IPO). The company thus becomes public.

Secondary Market:

Once new securities have been sold in the primary market, these shares are traded in the secondary market. This is to offer a chance for investors to exit an investment and sell the shares. Secondary market transactions are referred to trades where one investor buys shares from another investor at the prevailing market price or at whatever price the two parties agree upon.

Normally, investors conduct such transactions using an intermediary such as a broker, who facilitates the process.

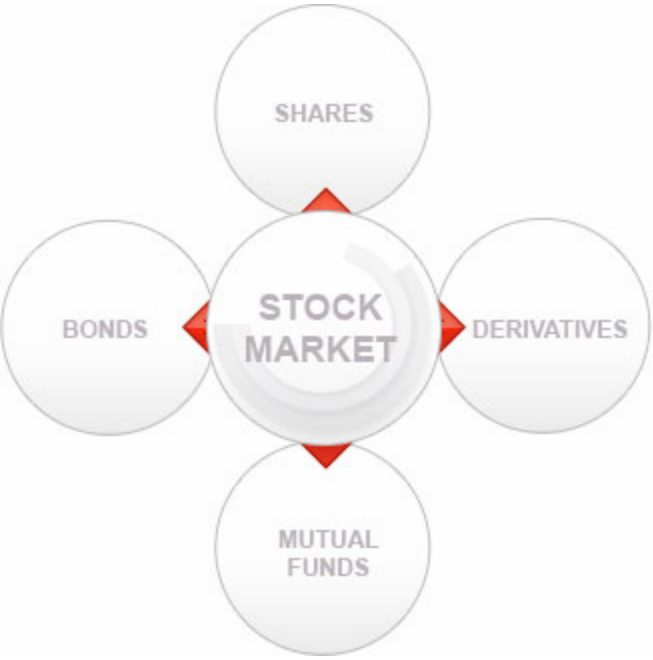
HOW TO BUY SHARES?

First, you need to open a trading account and a demat account. This trading and demat account will be linked to your savings account to facilitate smooth transfer of money and shares.

We offer various trading tools to buy and sell shares that caters to our diversified set of traders and investors :

WHAT ARE THE FINANCIAL INSTRUMENTS TRADED IN A STOCK MARKET?

Now that we have understood what a stock market is, let us understand the four key financial instruments that are traded:



Bonds:

Companies need money to undertake projects. They then pay back using the money earned through the project. One way of raising funds is through bonds. When a company borrows from the bank in exchange for regular interest payments, it is called a loan. Similarly, when a company borrows from multiple investors in exchange for timely payments of interest, it is called a bond.

For example, imagine you want to start a project that will start earning money in two years. To undertake the project, you will need an initial amount to get started. So, you acquire the requisite funds from a friend and write down a receipt of this loan saying 'I owe you Rs 1 lakh and will repay you the principal loan amount by five years, and will pay a 5% interest every year until then'. When your friend holds this receipt, it means he has just bought a bond by lending money to your company. You promise to make the 5% interest payment at the end of every year, and pay the principal amount of Rs 1 lakh at the end of the fifth year.

Thus, a bond is a means of investing money by lending to others. This is why it is called a debt instrument. When you invest in bonds, it will show the face value – the amount of money being borrowed, the coupon rate or yield – the interest rate that the borrower has to pay, the coupon or interest payments, and the deadline for paying the money back called as the maturity date.

Secondary Market:

The share market is another place for raising money. In exchange for the money, companies issue shares. Owning a share is akin to holding a portion of the company. These shares are then traded in the share market. Consider the previous example; your project is successful and so, you want to expand it.

Now, you sell half of your company to your brother for Rs 50,000. You put this transaction in writing – ‘my new company will issue 100 shares of stock. My brother will buy 50 shares for Rs 50,000.' Thus, your brother has just bought 50% of the shares of stock of your company. He is now a shareholder. Suppose your brother immediately needs Rs 50,000. He can sell the share in the secondary market and get the money. This may be more or less than Rs 50,000. For this reason, it is considered a riskier instrument.

Shares are thus, a certificate of ownership of a corporation. Thus, as a stockholder, you share a portion of the profit the company may make as well as a portion of the loss a company may take. As the company keeps doing better, your stocks will increase in value.

Mutual Funds:

These are investment vehicles that allow you to indirectly invest in stocks or bonds. It pools money from a collection of investors, and then invests that sum in financial instruments. This is handled by a professional fund manager.

Every mutual fund scheme issues units, which have a certain value just like a share. When you invest, you thus become a unit-holder. When the instruments that the MF scheme invests in make money, as a unit-holder, you get money.

This is either through a rise in the value of the units or through the distribution of dividends – money to all unit-holders.

Derivatives:

The value of financial instruments like shares keeps fluctuating. So, it is difficult to fix a particular price. Derivatives instruments come handy here.

These are instruments that help you trade in the future at a price that you fix today. Simply put, you enter into an agreement to either buy or sell a share or other instrument at a certain fixed price.

WHAT DOES THE SEBI DO?

Stock markets are risky. Hence, they need to be regulated to protect investors. The Security and Exchange Board of India (SEBI) is mandated to oversee the secondary and primary markets in India since 1988 when the Government of India established it as the regulatory body of stock markets. Within a short period of time, SEBI became an autonomous body through the SEBI Act of 1992.

SEBI has the responsibility of both development and regulation of the market. It regularly comes out with comprehensive regulatory measures aimed at ensuring that end investors benefit from safe and transparent dealings in securities.

Its basic objectives are:

- Protecting the interests of investors in stocks
- Promoting the development of the stock market
- Regulating the stock market

Break-even analysis

Break-even point

What is meant by the term 'break even'?

A firm breaks even when income is sufficiently high to exactly cover total costs therefore neither a profit nor a loss is made. However, break-even analysis is not usually applied to the whole firm but rather to a single product, studying its profitability by comparing its estimated revenue and costs.

Break-even analysis does more than just estimate the break-even point (BEP): it also shows how much profit or loss should be made at various levels of activity. It is therefore seen as a valuable tool for the management accountant.

To use break-even analysis several assumptions must be made:

- There is only one product
- All costs can be classified as either fixed or variable
- Costs remain constant over the whole range of output
- Selling price remains constant for the whole range of output
- Production is equal to sales so there is no adjustment for stock figures
- There are no changes in materials, labour, design or manufacturing methods.

Fixed costs are those that do not change with changes in production levels, e.g. rent.

Variable costs vary in proportion to changes in production levels, e.g. raw materials.

A simple table can be drawn up to show:

- Increasing levels of activity
- Estimated costs of production at these levels
- Estimated revenue at these levels
- The resulting profit/loss for each level.

Example 1: The following figures have been supplied by A Gardiner, who is considering making plant pots. He is particularly concerned to know how many he must make before the product becomes profitable.

Total fixed costs £1,000

Variable costs per unit £3

Selling price per unit £8

We can draw up a table to show the information.

Units of output £	Fixed costs £	Variable costs £	Total costs £	Sales revenue £	Profit (loss) £
0	1,000	—	1,000	—	**(1,000)**
100	1,000	300	1,300	800	**(500)**
200	1,000	600	1,600	1,600	—
300	1,000	900	1,900	2,400	**500**
400	1,000	1,200	2,200	3,200	**1,000**
500	1,000	1,500	2,500	4,000	**1,500**

At an output of 200 units, where both sales revenue and total costs amount to £1,600, he is making neither a profit nor a loss on the plant pots.

Any output below 200 units will result in a loss.

Any output above 200 units will result in a profit.

Break-even point is therefore at a **sales volume of 200 units** and a **sales revenue of £1,600.**

Profit/loss

Profit/loss (the difference between sales revenue and total costs) at various output levels. At 100 units of output the loss is (£500) and at 400 units of output a profit of £1,000 is made. Break-even analysis is thus useful in forecasting profit/loss figures for different production levels.

Margin of safety

Output above BEP which gives a profit is the margin of safety. This margin can be measured by comparing the level of output with BEP and it can be expressed in units or in sales revenue.

Units of output	BEP (units)	Margin of safety (units)	Selling price per unit £	Margin of safety (sales revenue) £
300	200	**100**	8	**800**
400	200	**200**	8	**1,600**
500	200	**300**	8	**2,400**

The margin of safety in sales revenue can also be calculated by comparing the sales revenue for the output level with the sales revenue at BEP.

Sales revenue £	BEP (sales revenue) £	Margin of safety £
2,400	1,600	**800**
3,200	1,600	**1,600**
4,000	1,600	**2,400**

Formulae:

Margin of safety (units) = actual units – BEP units

Margin of safety (revenue) = actual revenue – BEP revenue
or
actual units – BEP units x selling price per unit

Task 1

Use the following information supplied by Julie Carter to complete the table and answer the questions that follow.

Total fixed costs		£12,000
Variable costs per unit:		
materials	£7	
wages	£5	£12
Selling price per unit		£20

Units of output	Fixed costs £	Variable costs £	Total costs £	Sales revenue £	Profit (loss) £
0					
500					
1,000					
1,500					
2,000					
2,500					
3,000					

(a) What is the break-even point in units and sales revenue?

(b) What is the margin of safety (in units and sales revenue) at an output of 2,000 units?

(c) How much is the profit when 3,000 units are produced?

Suggested solution to Task 1

Units of output	Fixed costs £	Variable costs £	Total costs £	Sales revenue £	Profit (loss) £
0	12,000	—	12,000	—	**(12,000)**
500	12,000	6,000	18,000	10,000	**(8,000)**
1,000	12,000	12,000	24,000	20,000	**(4,000)**
1,500	12,000	18,000	30,000	30,000	—
2,000	12,000	24,000	36,000	40,000	**4,000**
2,500	12,000	30,000	42,000	50,000	**8,000**
3,000	12,000	36,000	48,000	60,000	**12,000**

(a) Break-even point = 1,500 units or £30,000 sales revenue.

(b) Margin of safety at 2,000 units = 2,000 – 1,500 = 500 units
500 units x £20 = £10,000 sales revenue

(c) Profit at 3,000 units = £12,000

Task 2

Julie is considering reducing the selling price to £18 per unit although the costs would remain unchanged. Draw up another table to show the effect of this change on the figures then answer the following questions.

(a) What is the break-even point in units and sales revenue?

(b) What is the margin of safety (in units and sales revenue) at an output of 2,500 units?

(c) How much is the profit at an output of 2,500 units?

Suggested solution to Task 2

Units of output	Fixed costs £	Variable costs £	Total costs £	Sales revenue £	Profit (loss) £
0	12,000	—	12,000	—	**(12,000)**
500	12,000	6,000	18,000	9,000	**(9,000)**
1,000	12,000	12,000	24,000	18,000	**(6,000)**
1,500	12,000	18,000	30,000	27,000	**(3,000)**
2,000	12,000	24,000	36,000	36,000	—
2,500	12,000	30,000	42,000	45,000	**3,000**
3,000	12,000	36,000	48,000	54,000	**6,000**

(a) Break-even point = 2,000 units or £36,000 sales revenue

(b) Margin of safety = 2,500 – 2,000 units = 500 units
500 units x £20 = £10,000 sales revenue

(c) Profit at 2,500 units = £3,000