

MODULE 1

INTRODUCTION TO FINANCE

Module 1 Introduction to Finance

Introduction to Basic Concepts of Finance: Money and its need, Meaning and need for Financial Planning; Life goals and financial goals of an individual; Format of a sample financial plan for a young adult.

Time value of Money: Meaning, need, Concepts of Compounding – Simple and Compound Interest and Discounting- Present value of Single Cash Inflow, Series of Cash Inflow, Annuity, Perpetuity- Problems.

Valuation Of Securities: Meaning, Need for valuation of securities, Valuation of fixed income Securities- debentures and preference shares, Valuation of Equity Shares, Dividend Capitalization Approach, Earnings Capitalization Approach-Problems.

INTRODUCTION TO BASIC CONCEPTS OF FINANCE

MEANING OF MONEY- In ordinary conversation, we commonly use the word money to mean income ("he makes a lot of money") or wealth ("she has a lot of money").

- **Money (or money supply) refers to anything that is generally accepted in payment for goods or services or in the repayment of debts.**
- Money is a stock concept.
- It is a certain amount at a given point in time. Money is distinct from wealth or income.

FUNCTIONS OF MONEY

- Money is a medium of exchange; it allows people and businesses to obtain what they need to live and thrive.
- Bartering was one way that people exchanged goods for other goods before money was created.
- Like gold and other precious metals, money has worth because for most people it represents something valuable.
- Fiat money is government-issued currency that is not backed by a physical commodity but by the stability of the issuing government.
- Above all, money is a unit of account - a socially accepted standard unit with which things are priced.

MONEY AND ITS NEED

Money can't buy happiness, but it can buy security and safety for you and your loved ones. Human beings need money to pay for all the things that make your life possible, such as shelter, food, healthcare bills, and a good education.

- ★ **Money gives you freedom.** When you have enough money, you can live where you want, take care of your needs, and indulge in your hobbies. If you are able to become financially independent and have the financial resources necessary to live on without working, you'll enjoy even more freedom since you will be able to do what you want with your time.
- ★ **Money gives you the power to pursue your dreams.** Having money makes it possible for you to start a business, build a dream home, pay the costs associated with having a family, or accomplish other goals you believe will help you live a better life.
- ★ **Money gives you security.** When you have enough money in the bank, you'll never need to worry about having a roof over your head or about having enough to eat or about being able to see a doctor when you're sick. This doesn't mean you'll be able to afford everything you want, but you'll be able to enjoy a stable middle-class life

FINANCIAL PLANNING

Meaning: Financial planning is the process of meeting your life goals through the proper management of your finances.

Financial planning is a step-by-step approach to meet one's life goals. A financial plan acts as a guide as you go through life's journey. It helps you be in control of your income, expenses and investments such that you can manage your money and achieve your goals.

NEED FOR FINANCIAL PLANNING

- **Increase your savings-**It may be possible to save money without having a financial plan. But it may not be the most efficient way to go about it. When you create a financial plan, you get a good deal of insight into your income and expenses. You can track and cut down your costs consciously. This automatically increases your savings in the long run.
- **Enjoy a better standard of living-**Most people assume that they would have to sacrifice their standard of living if their monthly bills and EMI repayments are to be paid. On the contrary, with a good financial plan, you would not need to compromise your lifestyle. It is possible to achieve your goals while living in relative comfort.
- **Be prepared for emergencies-**Creating an emergency fund is a critical aspect of financial planning. The emergency fund can help you pay for varied expenses on time. Proper Planning provides a financial cushion to deal with unexpected crises.
- **Attain peace of mind -**With adequate funds at hand, you can cover your monthly expenses, invest for your future goals and splurge a little for yourself and your family, without worry. Financial planning helps you manage your money efficiently and enjoy peace of mind.
- **Save taxes:** Having an investment plan can help you save taxes under section 80C and also invest in the most tax efficient investment options according to your financial goals and asset allocation.

PERSONAL FINANCIAL PLANNING: Personal financial planning is arranging to spend, save, and invest money to live comfortably, have financial security, and achieve goals.

For example, getting a college education, buying a car, and starting a business are goals. Planning your personal finances is important because it will help you to reach your goals, no matter what they are.

FINANCIAL GOALS & TYPES

Meaning of Financial Goal - A financial goal is a scientifically defined financial milestone that you plan to achieve or reach. Financial goals comprise earning, saving, investing and spending in proportions that match your short-term, medium-term or long-term plans.

E.g. Emergency funds, retirement corpus, home purchase, car ownership, debt clearance etc. are all examples of financial goals.

LIFE GOALS: Life goals can include buying a home saving for your child's education, or planning for retirement.

TYPES OF FINANCIAL GOALS

a) Short-Term Goals: 12 to 24 months - Short-term goals are something you want to achieve in the foreseeable future over the next few months. These are required for your more immediate expenses. These expenses are generally smaller in scope and easier to project and predict.

- Saving for vacations
- Christmas gift savings
- Planning a wedding
- Home Improvement/Renovation
- Building an emergency fund
- Paying off debt

b) Medium-Term Goals: 2 to 5 years- Medium Term lies between short term and long term. Short-term goals have a typical timeline of a year whereas long-term goals are planned for a decade or more. You may have to achieve a series of short-term goals to reach your medium-term goals. Clearing outstanding dues on your credit card or personal loan can be classified under medium-term goals.

- Saving for a home down payment
- Paying for a car in cash

c) Long-Term Goals: 5+ Years - Long-term goals require more deliberation, and in most cases, money. Retirement, buying a house, and funding a child's higher education are typical long-term goals.

- Saving for a child's college education
- Investing for retirement etc.

Note: Sample financial plan for young adult is dictated in class

TIME VALUE OF MONEY

Meaning: Time Value of Money (TVM) is a financial principle. The value of money held today is worth more than the same amount of money in the future. In simple terms, the value of INR 1,000 was worth more yesterday than today. With time, factors like inflation affect the value of money.

Need for TVM

- (a) Availability of better investment opportunities.
- (b) Due to Risk and uncertainty of Cash flows.
- (c) Due to Inflationary Conditions.
- (d) Preference for Present Consumption of goods, commodities and services.
- (e) Due to Urgency or Emergency.

Importance of Time Value of Money

- Having money right now is more valuable than getting the same amount in the future. From a business perspective, the money can be used for the expansion of the business, which can generate more money.
- You can assess the debt position of a business with the help of the time value of money.
- The future is always uncertain. Therefore, better financial decisions can be taken with the time value of money.

PRESENT VALUE: Present value is the value of the money you hold today. Also, it is the present value of the sum of all future cash flows from an investment.

FUTURE VALUE: Future value is the value of an investment at the end of the investment duration.

Note: Problems on PV (Discounting) , FV (Compounding) & Annuity is taught in class.

MODULE 3. MUTUAL FUNDS

mutual Fundx: Cleaning and Features of mutual Fundx, History of Mutual Funds in India, Benefits and drawbacks of investment in mutual Fund ; Major Fund Houses in India and Types of Mutual Fund schemes and plans; SIP, STP, SWP of mutual fund; Net Asset Value- simple problems.

Concept and background on Mutual Funds

A mutual fund is a pool of money managed by a professional Fund Manager. It is a trust that collects money from a number of investors who share a common investment objective and invests the same in equities, bonds, money market instruments and/or other securities.

WHAT ARE MUTUAL FUNDS?

A mutual fund is a pool of money managed by a professional Fund Manager.

It is a trust that collects money from a number of investors who share a common investment objective and invests the same in equities, bonds, money market instruments and/or other securities.

Income / gains generated from this collective investment is distributed proportionately amongst the investors after deducting applicable expenses and levies, by calculating a scheme's "Net Asset Value" or NAV. Simply put, the money pooled in by a large number of investors is what makes up a Mutual Fund.

Meaning of Mutual Fund :

Mutual fund is a financial instrument that pools money from different investors. The pooled money is then invested in securities like stocks of listed companies, government bonds, corporate bonds, and money market instruments.

Advantages of Investing in Mutual Funds

There are over 5000 mutual funds in different categories to meet the objectives of all types of investors. The right mix of growth, income, and safety makes mutual funds suitable for everyone.

Below are the advantages of investing in mutual funds:

1. Expert Money Management

Your pooled money is managed by a team of experts. So, you have the advantage of expert guidance in creating wealth. The fund manager does meticulous research in deciding equities, sectors, allocation, and of course the buy and sell.

2. Low Cost

If you calculate the benefits of expertise, diversity, and other options of return, then mutual funds are definitely a very cost-effective instrument of investment.

There is a regulatory cap of 2.5% on the expense ratio.

3. SIP Option

Systematic Investment Plan gives you the flexibility to invest at an agreed interval which could be weekly, monthly, quarterly. You can start investing in mutual funds with an amount as low as Rs. 500.

4. Switch Funds

If you are not happy with the performance of a particular mutual fund scheme, then some mutual funds do offer you an option to switch funds. However, you need to be very cautious while opting to switch.

5. Diversification

Mutual funds offer you the benefit of diversification in such asset classes which otherwise isn't possible for an individual investor. You reap the dividend of maximum exposure with minimum risk.

6. Ease of Investing and Redemption

Now, it is pretty easy to buy, sell, and redeem fund units at NAV. Just place the redemption request and you will get your money in the desired bank account within a few days.

7. Tax Benefit

Under the ELSS, tax-saving mutual fund you have the double benefit of tax saving and wealth creation. Under Section 80C of the Income Tax Act, you can have a deduction of a maximum of Rs. 1,50,000 a year.

8. Lock-in Period

Close-ended mutual funds have a lock-in period, meaning as an investor you are not allowed to redeem the fund before a certain period.

You get benefits in terms of long-term capital gain tax.

Disadvantages of investing in Mutual Funds:

Limitations or Disadvantages of Mutual Funds

1. Mutual funds are Subject to Market Risk.
- 2. No Guarantee of Returns.
3. Diversification of portfolio doesn't maximize returns.
4. Selecting Right Financial Securities is not easy.
- 5. Cost Management not proportional to Performance.
6. Unethical Practices may creep in.
7. Hidden or 12b-1 fees of mutual funds.

Major Fund Houses in India :

- SB I Mutual Fund.
- ICICI Prudential Mutual Fund.
- HDFC Mutual Fund.
- Aditya Birla Sun Life Mutual Fund.
- Kotak Mahindra Mutual Fund.
- Nippon India Mutual Fund.
- Axis Mutual Fund.

UTI Mutual Fund.

Types of Mutual Fund Schemes and plans :

Different Types of Mutual Funds:

1. Open-ended funds

In an open-ended mutual fund, an investor can invest or enter and redeem or exit at any point of time. It does not have a fixed maturity period.

2. Close-ended funds

Close-ended mutual funds have a fixed maturity date. An investor can only invest or enter in these types of schemes during the initial period known as the New Fund Offer or NFO period. His/her investment will automatically be redeemed on the maturity date. They are listed on stock exchange(s).

3. Equity Mutual Funds

Equity mutual funds invest the pooled money majorly in stocks of different companies. Hence, equity mutual funds have an inherent higher market risk. Factors like earnings, revenue forecasts, management changes, and company & economic policy impact price movements and the returns. Returns from equity funds have high fluctuations. Hence, you should invest if you have a fair understanding of the asset class risks associated with equity.

Types of Equity Funds

Equity funds can be further categorized depending on market capitalization and sectors.

- Large-cap Equity Funds — Invest in shares of large-cap companies that are well-established with a track record of performing consistently over a longer time period. These companies have sound fundamentals and are least affected by business cycles.

- **Mid-cap Equity funds** — Invest in shares of mid-cap companies. Mid-sized companies have relatively lower stability in terms of performance. But have the potential to grow more than the large-cap companies.
- **Small-cap Funds** — Invest in shares of small-cap companies. Small-cap companies have the highest potential to grow or fail. Thus, small-cap funds have a high-risk exposure but also offer an opportunity to generate the highest returns.
- **Multi-cap funds** — Invest in a defined proportion across all market caps. Based on cues and trend analysis, the fund manager allocates aggressively to capitalize on the volatility.

4. Debt Mutual Funds

A debt mutual fund invests a major portion of the pooled corpus in debt instruments like government securities, corporate bonds, debentures, and money-market instruments. The bond issuers “borrow” from investors by giving an assurance of steady and regular interest income. Thus, debt funds are less risky compared to equity funds. The debt fund manager ensures that the fund is invested in the highest-rated securities. The best credit rating signifies the creditworthiness of the issuer in terms of regular interest payments and principal repayment.

Type of Debt Funds

Following are the debt funds available in India:

- **Dynamic Bond Funds:** Dynamic bond fund investment basket comprises both shorter and longer maturities. The debt fund manager aggressively tweaks the portfolio composition based on changing the interest rate regime. This aggressiveness makes the debt fund dynamic, hence the name.
- **Liquid Funds:** The short maturity of the underlying securities (not more than 91 days) makes the liquid funds almost risk-free. It is better than parking funds in saving bank accounts as it gives better returns with much-needed liquidity. You can redeem liquid funds almost instantly. If you are short-term investors then debt

funds like liquid funds could be better as you get returns in the range of 6.5 to 8%. Liquid funds are an effective tool to meet emergency fund needs.

- **Income Funds:** Fund manager's invest primarily in securities with longer maturities to have more stability and regular interest income flow. Most of the income funds have an average maturity of 5 to 6 years.
- **Short-Term and Ultra Short-Term Debt Funds:** There is another category in the maturity range of 1 to 3 years. The fund manager takes a call on the interest rate regime and invests in securities with maturity of the said range. This is suitable for those investors who are risk-averse and looking for interest rate movement safety.

5. Hybrid / Monthly Income Plans (MIP):

These funds are similar to balanced funds but the proportion of equity assets is lesser compared to balanced funds. Hence, they are also called marginal equity funds. They are especially suitable for investors who are retired and want a regular income with comparatively low risk.

6. Index Funds

An "index fund" is a type of mutual fund or exchange-traded fund that seeks to track the returns of a market index. The S&P 500 Index, the Russell 2000 Index, and the Wilshire 5000 Total Market Index are just a few examples of market indexes that index funds may seek to track.

What is in an index fund?

Index funds may take different approaches to track a market index: some invest in all of the securities included in a market index, while others invest in only a sample of the securities included in a market index.

7. Money Market Fund?

A money market fund is a kind of mutual fund that invests in highly liquid, near-term instruments. These instruments include cash, cash equivalent securities, and high-credit-

rating, debt-based securities with a short-term maturity (such as U.S. Treasuries). Money market funds are intended to offer investors high liquidity with a very low level of risk. Money market funds are also called money market mutual funds.

SIP, UTP, SWP of mutual fund :

A Systematic Investment Plan (SIP) is an investment tool which allows the investor to invest a fixed amount at regular intervals in a Mutual Fund scheme. SIP works by investing a fixed amount at a defined frequency. With this an investor does not need to time the market and can invest in a hassle-free manner.

What is an STP-Systematic Transfer Plan? Systematic Transfer Plan (STP) is a facility by which a predetermined amount can be transferred from one scheme of mutual fund to another scheme at predefined intervals.

While both STP and SIP involve regular investments in equity mutual funds, in SIP the money comes from your bank account while in the case of STP, it gets transferred from your debt fund. Also, STPs offer higher returns than SIPs, since you are also getting returns from your debt fund.

The STP route is best for all those investors who wish to invest a lump sum in mutual fund schemes because this way they get the dual benefits of comparative risk investment. Investing a large amount of money in one go in equity oriented mutual funds can be risky.

A Systematic Investment Plan(SIP) allows an investor to invest a fixed amount at predetermined intervals and a Systematic Withdrawal Plan(SWP) is a facility which allows an investor to withdraw a fixed amount at predetermined intervals.

If investors want regular cash flow from their investments the automatic choice for many are bank fixed deposits or postal deposits. However, declining interest rates on these schemes have made investors worry about their future income needs. Mutual funds have a solution for this, called SWP.

What is SWP in mutual funds? SWP or systematic withdrawal plan is a mutual fund investment plan, through which investors can withdraw fixed amounts at regular intervals, for example — monthly/ quarterly/ yearly from the investment they have made in any mutual fund scheme.

What Is Mutual Fund NAV?

Calculation and use of Net Asset Value:

What Is Mutual Fund NAV?

Mutual fund net asset value (NAV) represents a fund's per share market value. It is the price at which investors buy (bid price) fund shares from a fund company and sell them (redemption price) to a fund company.

A fund's NAV is calculated by dividing the total value of all the cash and securities in a fund's portfolio, less any liabilities, by the number of shares outstanding.

Let us understand the concept with the help of an illustration

Mr. Arun invests in 2 different schemes, Scheme-A and Scheme-B. He invests Rs 1 lakh in both the schemes.

NAV of Scheme-A is Rs 10

NAV of Scheme-B is Rs 50

Units to be allocated

Scheme-A: 10000 units (Rs 100,000 / IO)

Scheme-B: 2000 units (Rs 100,000 / TO)

Returns earned in both the schemes is 10% after a month

Here the revised NAV per unit is Rs 11 for Scheme-A and Rs 55 for Scheme-B. The initial amount invested for both the schemes is Rs 1 lakh. The only difference is the number of units allocated, the units allocated in Scheme-A is higher than Scheme-B. But the NAV and the return for both the schemes are the same. So, the role of NAV is not the only factor to measure the performance of the fund.

Mutual fund NAVs are the book value of the scheme. When investing in any scheme, an investor must check the past performance of the scheme. Also, an investor must look at the returns earned by the fund over the years.

Financial Education and Investment Awareness

Instructor Workbook





**KARNATAKA STATE HIGHER
EDUCATION COUNCIL**

Financial Education and Investment Awareness

Instructor Workbook

Title: Financial Education and Investment Awareness

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FOREWORD

Financial education has transformed itself, into an essential life skill today. Equipped with education leading to a state of awareness, students can empower themselves with decisions regarding financing their higher education, meaningful investments and savings and inculcate a value-oriented living philosophy. Financial education is a proactive program to provide adequate skills to make critical financial decisions. This is essential, not just from a microeconomic perspective of an individual, but also from a larger macroeconomic development of the country. It is the responsibility of the various stakeholders in the education system to introduce youngsters to the concepts of finance to help them make better financial decisions in real-life situations.

The academic fraternity of the state of Karnataka has introduced several new courses in UG curriculum as part of implementation of National Education Policy (NEP2020). One of the unique course that is born out of the collaboration between our Commerce and Management Model Curriculum Committee and National Stock Exchange Academy is a 2 credit course titled “Financial Education and Investment Awareness”, to empower youngsters with sound financial management skills. I am also thankful to the Hon’ble Minister of Higher Education, Government of Karnataka, and Prof. Thimme Gowda, Vice Chairman of KSHEC for recognizing the importance of financial education and supporting this initiative. Students of the state universities in Karnataka and their affiliated colleges will undertake the “Financial Education and Investment Awareness” course in the second year of their UG program.

Designing of the course is followed by content development, instructor workbook, students learning resources and conducting faculty training. This workbook is developed by a panel of eminent academicians with inputs from the finance industry. I am grateful to the Commerce Curriculum Committee of Karnataka headed by Prof. Ramchandra Gowda and the team at NSE Academy, a wholly owned subsidiary of National Stock Exchange, for their immense contribution to the curriculum and the content of this workbook. From the workbook it is evident that the panel has done detailed research on the financial skill gap among the current generation of students to evolve interesting learning scenarios. I particularly enjoyed the part on ‘Personal Budget’ that every person can relate to, and develop financial discipline.

I am sure the students will be highly benefitted from this workbook. They must go a step beyond just reading by adopting healthy financial habits, appreciating the concepts discussed in real-life and progress towards financial wellbeing. All the best!

Dr. Gopalkrishna Joshi
Executive Director
Karnataka State Higher Education Council



CONTENTS

PART 1: FOUNDATIONS FOR FINANCE

CHAPTER 1. BASICS OF ECONOMICS	3
Introduction	3
Key Economic Terms	4
<i>Income</i>	4
<i>Expenditure</i>	5
<i>Savings</i>	6
<i>Factors of Production</i>	7
<i>Gross Domestic Product (GDP)</i>	7
<i>Time Value of Money</i>	8
<i>Compounding & Discounting, CAGR</i>	9
<i>Taxation – Direct & Indirect</i>	10
Factors Influencing Decision Making in Investments	11
<i>Macro-environment factors</i>	11
<i>Micro-environment factors</i>	13
CHAPTER 2. BANKING IN INDIA	17
Introduction	17
Definition of Banking	18
Functions of banks	19
<i>Need for banking</i>	19
<i>Functions of Banks</i>	19
Types of Bank Deposits	20
<i>Current Account</i>	20
<i>Savings Account</i>	20
<i>Fixed Deposit Account</i>	21

<i>Recurring Deposit Account</i>	21
<i>Non Resident Accounts</i>	21
Deposit Insurance (PMJDY)	23
Traditional and New-age banking	24
Debit and Credit Cards	25
Digital payment system	25
Role of RBI as banking regulator	26
<i>Main Functions of Reserve Bank of India</i>	26
Key policy rates	27
<i>Liquidity Rates/Ratio</i>	27

CHAPTER 3. ORIENTATION TO FINANCIAL STATEMENTS31

Introduction	31
What are the Key Financial Statements & their Purpose	32
<i>Income statement (Profit and Loss statement)</i>	32
<i>Balance Sheet</i>	32
<i>Cash flow statement</i>	33
Understanding Accounting Equation	33
<i>Assets</i>	33
<i>Liabilities</i>	34
<i>Income/Revenue</i>	34
<i>Expenses</i>	34
<i>Shareholders' Funds</i>	35
<i>Profit</i>	35
<i>Loss</i>	35
Important Ratios	35
<i>Current Ratio</i>	35
<i>Liquid Ratio</i>	36
<i>Debt Equity Ratio</i>	36
<i>Return on Equity Ratio</i>	36
<i>Return on Capital Employed (ROCE)</i>	36
<i>Inventory Turnover Ratio</i>	36
<i>Earnings Per Share (EPS)</i>	36

	<i>Gross Margin Ratio</i>	37
	<i>Net Margin Ratio</i>	37
	Financial Analysis	37
	<i>Trend analysis</i>	37
	Exercise – Output	39
CHAPTER 4.	BASICS OF FINANCIAL PLANNING	41
	Introduction (H1)	41
	Understand the need for Financial Planning	42
	Financial Goals	43
	<i>Goal Value</i>	44
	<i>Time to Goal or Investment Horizon</i>	44
	Sample financial plan for a young adult	45
	PART 2: INVESTMENT MANAGEMENT	
CHAPTER 1.	BASICS OF INVESTMENT PRODUCTS	49
	Introduction	49
	Investment	50
	<i>What are Investment Goals?</i>	51
	<i>Time frame</i>	51
	Various Investment Products	52
	<i>Bank savings</i>	52
	<i>Govt. schemes</i>	52
	<i>Retirement savings</i>	53
	<i>Equity investments</i>	55
	<i>Debt & Money market investments</i>	55
	<i>Mutual Funds & ETFs</i>	55
	<i>Gold & Gold ETFs</i>	56
	<i>Real Estate & REITs</i>	56
CHAPTER 2.	INVESTMENT OBJECTIVES & RISK PROFILES	58
	Introduction	58
	Investment Objectives	59

<i>Growth</i>	59
<i>Income</i>	59
<i>Hybrid (Growth and Income)</i>	59
<i>Secondary objectives</i>	60
Assessing Risk Profiles	60
<i>Need for Risk Profiling</i>	60
<i>Factors that Influence the Investor's Risk Profile</i>	60
<i>Basis family information</i>	60
<i>Basis personal information</i>	61
<i>Basis financial information</i>	61
<i>Risk Profiling Tools</i>	61
Diversification and Asset Allocation	62
<i>Diversification</i>	62
<i>Asset Allocation</i>	63
<i>Asset Allocation Types</i>	63
CHAPTER 3. CAPITAL MARKETS	66
Introduction	66
What is Capital Market? How is it Different from Money Market?	67
<i>What are financial securities?</i>	68
<i>How are Capital Markets different from Money Markets?</i>	68
<i>What are shares & bonds?</i>	68
Primary Market	69
<i>Issue of Shares</i>	69
Secondary Market	70
<i>Over-The-Counter</i>	70
<i>Stock Exchanges</i>	70
Market Participants	72
CHAPTER 4. STOCK SELECTION & STOCK RETURN-RISK	76
Introduction	76
Fundamental Analysis	77
Technical Analysis	78

Stock Return and Risk	80
PART 3: MUTUAL FUNDS AND FINANCIAL PLANNING ESSENTIALS	
CHAPTER 1. INTRODUCTION TO MUTUAL FUNDS	88
Introduction	88
About Mutual Funds	89
<i>Micro level</i>	89
<i>Macro level</i>	89
<i>Advantages of mutual funds</i>	89
<i>Limitations of mutual funds</i>	90
Key Participants in the Mutual Fund Industry	90
History of Mutual Funds in India	91
Major Fund Houses in India	93
Mutual Fund Schemes	93
<i>By Organisation Structure</i>	93
<i>By Portfolio Management Strategy</i>	94
<i>By Investment Objective</i>	94
<i>By Underlying Portfolio</i>	94
<i>By Sector</i>	94
<i>By Themes / solution oriented</i>	95
<i>Exchange Traded Funds (ETF)</i>	95
<i>Fund of funds</i>	95
Net Asset Value	96
CHAPTER 2. CRITERIA FOR SELECTION OF MUTUAL FUNDS	99
Introduction	99
Mutual Fund Returns	100
<i>Drivers of Returns and Risk in a Scheme</i>	100
<i>Measures of Returns</i>	100
Quantitative Measures of Fund Manager Performance	
Absolute & Relative Returns	102
<i>Measures of risk-adjusted returns</i>	102
<i>Sharpe Ratio</i>	102

<i>Treynor Ratio</i>	103
<i>Alpha</i>	104
<i>Beta</i>	104
<i>Tracking Error</i>	105

CHAPTER 3. FINANCIAL PLANNING, LIFE CYCLE & PERSONAL BUDGET.....107

Introduction	107
Steps Involved in Financial Planning	108
<i>Defining the client-planner relationship</i>	108
<i>Gather client data, including goals</i>	108
<i>Analyse and evaluate financial status</i>	109
<i>Develop and present financial planning recommendations</i>	109
<i>Implement the financial planning recommendations</i>	109
<i>Monitor the financial planning recommendations</i>	110
Understanding Financial Life Cycle	110
Personal Budget	113

PART 1

FOUNDATIONS FOR FINANCE

LEARNING OBJECTIVES

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

CHAPTER TABLE OF CONTENT

1. Key economic terms
 - Income
 - Expenditure
 - Savings
 - Factors of production
 - GDP
 - Time value of money
 - Compounding and discounting, CAGR
 - Taxation – Direct & Indirect
2. Factors influencing decision making in investments
 - Macro factors – interest rate, inflation, socio-cultural factors
 - Micro factors – Desire, want and need; Disposable Personal Income (DPI); financial goals; time factor

INTRODUCTION

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

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."**

4 ■ Basics of Economics

Economics seeks to determine the most logical and effective use of resources to meet private and social goals. Production and employment, investment and savings, health, money and the banking system, government policies on taxation and spending, international trade, industrial organization and regulation, urbanization, environmental issues and legal matters (such as the 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 investment and saving alternatives available for *the common investor*.

Let's warm up

Adam Smith was an 18th-century Scottish philosopher. He is widely regarded as the father of modern economics. Smith 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

In simple 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

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.

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.

6 ■ Basics of Economics

- 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.

$$\text{Savings (a.k.a. unspent income)} = \text{Income} - \text{Expenditure}$$

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 economists 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.

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.*

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.

8 ■ Basics of Economics

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

$$\text{GDP} = C + G + I + \text{NX}$$

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

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

$$\text{CI} = A - P$$

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.

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

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.

10 ■ Basics of Economics

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

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

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 assessee 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 assessee, 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 assessee 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

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:

$$A = P \{1 + (R/100)\}^N \rightarrow A = 10,000 \{1 + (10/100)\}^2 \rightarrow A = 12,100$$

$$CI = A - P \rightarrow CI = 12,100 - 10,000 \rightarrow CI = 2,100$$

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

$$\text{Number of years required} = 72 / 8 \rightarrow 9 \text{ years}$$

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

LEARNING OBJECTIVES

- Discuss various types of banking products

CHAPTER TABLE OF CONTENT

1. Definition of banking
2. Functions of banks
3. Types of bank deposits
 - Savings account
 - Fixed/Term deposit
 - Recurring deposit
 - Current account
4. Deposit insurance (PMJDY)
5. Traditional and new-age banking
6. Debit and credit cards
7. Digital payment system
 - Internet banking (NEFT, RTGS, and IMPS)
 - Mobile banking
 - Mobile wallet, AEPS, UPI
8. Role of RBI as banking regulator
9. Key policy rates
 - Cash Reserve Ratio (CRR)
 - Statutory Liquidity Ratio (SLR)
 - Bank rate
 - Repo rate
 - Marginal Standing Facility (MSF)
 - Lending/Deposit rates (base rate, savings deposit Rate)

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 exist.

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.

18 ■ Banking in India

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?

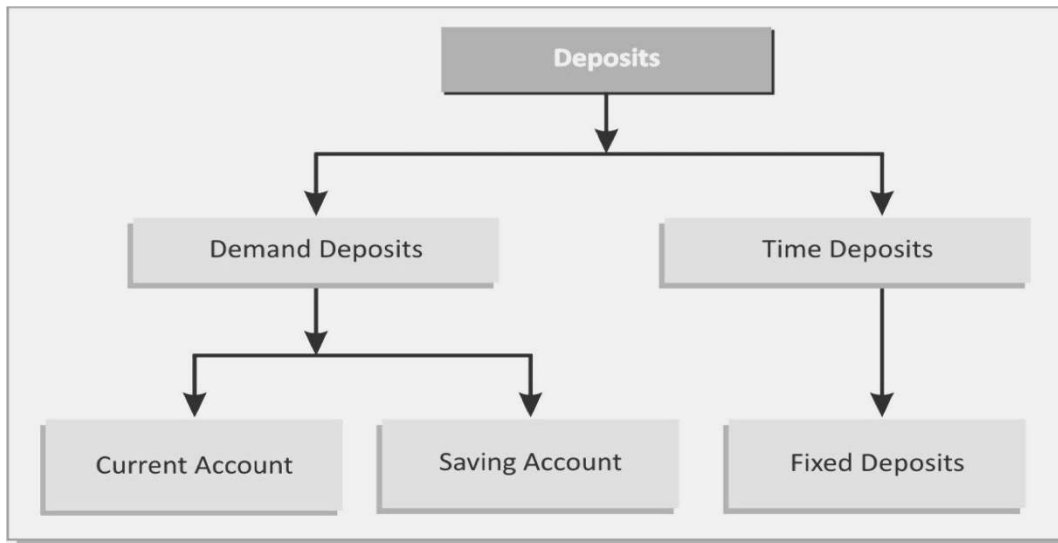
The scheduled commercial banks are those banks which are included in the second schedule of RBI Act, 1934 and which carry out the normal business of banking such as accepting deposits, giving out loans and other banking services.

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 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 small a 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 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

Test Your Understanding 2

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;
- 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
- g) e-Money [Prepaid Payment Instrument (PPI) Cards and Wallets]

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)

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.

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

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

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%

Test Your Understanding 3

In which year was the RBI Act enacted?

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

Test Your Understanding 4

ATM stands for Any Time Money. True or false?

- a) True
- b) False

Test Your Understanding 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

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

LEARNING OBJECTIVES

- Interpret financial statement and analyse key financial ratios

CHAPTER TABLE OF CONTENT

1. What are the key financial statements & their purpose:
 - Income statement (profit and loss statement)
 - Balance sheet
 - Cash flow statements
2. Understanding accounting equation
 - Assets
 - Liabilities
 - Income
 - Expense
 - Owners'/Shareholders' Funds
 - Profit & EBITDA
3. Important ratios
 - Profitability
 - Turnover
 - Liquidity
 - Solvency
 - Market-related ratios
4. Financial analysis
 - Trend analysis
 - Horizontal analysis
 - Vertical analysis (common size analysis)

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 in 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.

Let's warm up

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:

$$\text{Assets} = \text{Liabilities} + \text{Shareholders' Equity}$$

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:

- **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.
- **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.
- **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:

$$\begin{aligned} \text{Accounting Equation: Assets} &= \text{Liabilities} + \text{Shareholder's Funds} \\ \text{Shareholder's Funds} &= \text{Equity} + \text{Reserves \& Surplus} + \text{Retained Earnings of the} \\ &\quad \text{year (Profit) - Debit balance in P\&L a/c (losses, if any)} \\ \text{Retained Earnings} &= \text{Earnings After Tax} - \text{Dividend} \\ \text{Earnings After Tax} &= \text{EBITDA} - \text{Interest} - \text{Taxes} - \text{Depreciation} - \text{Amortisation} \end{aligned}$$

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.

34 ■ Orientation to Financial Statements

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:

$$\text{Current Ratio} = \text{Current Assets} / \text{Current Liabilities}$$

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:

$$\text{Liquid Ratio} = \text{Liquid Assets} / \text{Current Liabilities}$$

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:

$$\text{Debt-Equity Ratio} = \text{Total long term Debt} / \text{Shareholders Funds}$$

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.

$$\text{Return on Equity} = \text{Profit After Tax} / \text{Equity share capital}$$

Return on Capital Employed (ROCE)

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

$$\text{ROCE} = \text{Profit before interest and tax} / \text{Total capital employed}$$

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.

$$\text{Inventory Turnover Ratio} = \text{Cost of Goods Sold} / \text{Average Inventory}$$

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.

$$\text{EPS} = \text{Net Income after tax} / \text{No. of common shares outstanding}$$

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.

$$\text{Gross Margin Ratio} = \text{Gross Margin} / \text{Net Sales}$$

$$\text{Gross Margin} = \text{Net Sales} - \text{Cost of goods sold}$$

$$\text{Net Sales} = \text{Gross Sales} - \text{Returns/Refunds}$$

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.

$$\text{Net Margin Ratio} = \text{Net Profit} / \text{Total Sales}$$

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 item 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.

$$\text{Percentage of Base} = \text{Amount of individual item} / \text{amount of base item} \times 100$$

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

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.

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.

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

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.

$$\text{FV of the goal} = 30 \times (1 + 0.08)^5$$

$$\text{FV of the goal} = 44.08 \text{ lakhs}$$

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.?

- Rs.24.16 lakhs
- Rs. 20 lakhs
- Rs. 89.84 lakhs
- 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 = $20 \times (1+0.065)^3 = 20 \times 1.207949 = 24.16$ 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

PART 2

INVESTMENT MANAGEMENT

BASICS OF INVESTMENT PRODUCTS

CHAPTER 1

LEARNING OBJECTIVES

- list investment and savings alternative to the common investor

CHAPTER TABLE OF CONTENT

1. Definition of investment
2. Various Investment products
 - Bank savings
 - Govt. schemes
 - Retirement savings
 - Equity investments
 - Debt & Money market investments
 - Mutual Funds & ETFs
 - Gold & Gold ETFs
 - Real Estate & REITs

INTRODUCTION

In the previous module we understood the concepts of banking, basics of financial goals, basic economic terms and how financial statements help us evaluate businesses to facilitate investment decisions.

But what do we mean by an ‘investment’? Is it the same as ‘saving’?

In the Indian context, we often get confused if we have to consider buying gold/ornaments as ‘investment’.

Why do some kinds of investments give better returns than others? Also, why are some investment categories are more risky than others?

Who are the different kinds of investors?

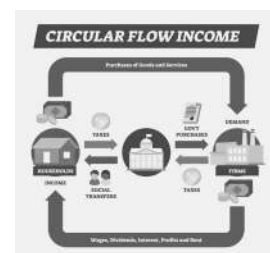
There are many such questions that arise in our minds when discussing the topic of investments.

This chapter is designed to help you understand and identify the various investment avenues available for the common investor.

Let's warm up

Closely observe the picture. The money flows in an endless loop. Households provide the factors of production to firms and receive income in the form of rent, wages, dividends, interest and profits. Households use this income to purchase goods and services from the firms. The government also plays a vital role in the movement of money, by way of collection of taxes, social transfers and purchases of goods and services from the firms.

A part of the income of households flows back to firms in the form of direct finance or indirect finance by way of investments.



INVESTMENT

According to the Oxford Dictionary, ‘to invest’ (verb) means to buy property, shares in a company, etc. in the hope of making a profit.

Investment is said to be the dedication of an asset to attain an increase in value over a period of time. The purpose of investment is to generate a return from the invested asset.

Investment may generate income for you in two ways:

1. If you invest in a saleable asset, you *may* earn income by way of profit (when you sell the asset)
2. If an investment is made in a return generating plan, then you will earn an income via the accumulation of the gains.

From the above understanding, we can deduce that investment is primarily aimed at obtaining an additional source of income or gain from the profit from the investment over a period of time.

Investments can be made in –

1. Physical assets – like real estate, gold, etc.
2. Financial assets – like stocks, bonds, mutual funds, retirement schemes, etc.

Because investing is oriented toward the potential for future growth or income, there is always a certain level of *risk* associated with an investment. An investment *may not* generate any income, or may actually lose value over time. For example, it is a possibility that you will invest in a company that ends up going bankrupt or a project that fails to materialize.

This is the primary way that saving can be differentiated from investing: saving is accumulating money for future use and entails no risk (or at least protected by the regulators to an extent), whereas investment is the act of leveraging money for a potential future gain and it entails some risk.

Let’s look at a few reasons why we invest:

1. *To Keep Money Safe*

Capital preservation is one of the primary objectives of investment for people. Some investments help keep hard-earned money safe from being eroded with time. By parking your funds in these instruments or schemes, you can ensure that you do not outlive your savings. Fixed deposits, government bonds, and even an ordinary savings account can help keep your money safe. Although the return on investment may be lower here, the objective of capital preservation is easily met.

2. *To Help Money Grow*

Another one of the common objectives of investing money is to ensure that it grows into a sizable corpus over time. Capital appreciation is generally a long-term goal that helps people secure their financial future. To make the money you earn grow into wealth, you need to consider investment objectives and options that offer a significant return on the initial amount invested. Some of the best investments to achieve growth include real estate, mutual funds, commodities, and equity. The risk associated with these options may be high, but the return is also generally significant.

3. *To Earn a Steady Stream of Income*

Investments can also help you earn a steady source of secondary (or primary) income. Examples of such investments include fixed deposits that pay out regular interest or stocks of companies that pay investors dividends consistently. Income-generating investments can help you pay for your everyday expenses after you have retired. Alternatively, they can also act as excellent sources of supplementary income during your working years by providing you with additional money to meet outlays like college expenses or EMIs.

4. *To Minimize the Burden of Tax*

Aside from capital growth or preservation, investors also have other compelling objectives for investment. This motivation comes in the form of tax benefits offered by the Income Tax Act, 1961. Investing in options such as Unit Linked Insurance

Plans (ULIPs), Public Provident Fund (PPF), and Equity Linked Savings Schemes (ELSS) can be deducted from your total income. This has the effect of reducing your taxable income, thereby bringing down your tax liability.

5. *To Save up for Retirement*

Saving up for retirement is a necessity. It is essential to have a retirement fund you can fall back on in your golden years, because you may not be able to continue working forever. By investing the money you earn during your working years in the right investment options, you can allow your funds to grow enough to sustain you after you've retired.

6. *To Meet your Financial Goals*

Investing can also help you achieve your short-term and long-term financial goals without too much stress or trouble. Some investment options, for instance, come with short lock-in periods and high liquidity. These investments are ideal instruments to park your funds in if you wish to save up for short-term targets like funding home improvements or creating an emergency fund. Other investment options that come with a longer lock-in period are perfect for saving up for long-term goals.

What Are Investment Goals?

They take various forms, but they ought to be more concrete than generic notions. For instance, even if you wanted your investment in stocks to generate profit, you would benefit from addressing more specific questions, such as how much of a return you wanted to see and how long you wanted to sustain it for.

Other important goals for investing might include:

- Generating income that you can use to supplant your working lifestyle
- Preserving capital, or making safe decisions that maintain your net worth
- Maintaining liquidity, or ensuring that you can always move your money around and have access to it
- Speculating, or making fast profits to build wealth without being overly concerned about incurring losses.

While it is tempting to come up with broad goals, specificity has its advantages. Instead of merely telling yourself that you want to achieve financial stability or to put your kids through college, translate these objectives into number-based terms to maintain a more realistic perspective.

Time frame

Big objectives like retiring can be overwhelming. Make things less of a hurdle by forming your investment goals in parts:

- Pick **short-term investment goals** based on your current consumer habits. For instance, you might want to upgrade your old furniture, make a home improvement or gradually divert some income toward a vehicle down payment.
- Choose **long-term goals for investing** with an eye on your ideal future. This is where you think about saving to fund a comfortable retirement, your children's college fund, or buy a new home.

Do not worry if your investment portfolio goals seem contradictory at first. Effective financial planning typically involves diversified portfolio strategies that let you achieve multiple ends. In other words, not every stock, bond, retirement plan or mutual fund that you buy into needs to do precisely the same thing.

Test Your Understanding 1

Investments made in listed equity stocks provide for _____.

- a. Better liquidity
- b. Guaranteed capital appreciation
- c. Safety of capital
- d. All of the above

Test Your Understanding 2

In investments, ELSS for _____.

- a. Equity Linked Savings Scheme
- b. Exceptional Liquid & Safe Scheme
- c. Enterprise Linked Social Security
- d. All of the above

VARIOUS INVESTMENT PRODUCTS

Bank savings

Savings account is a basic account type that lets you deposit money safely with a bank. It ensures safety and access to your money whenever you need. You can withdraw your funds, either digitally or in person, at any point in time.

Having a savings account is a liquid investment, so you have the ease of using your funds any time for transactions. A savings account also earns decent returns.

To understand the concept of savings account, imagine you and your friend have ₹500 each. While your friend kept it with him, you deposited it in a bank that offers an interest rate of 5% annually. Towards the end of the year, your friend managed to not spend any money and save ₹500, whereas you grew it to ₹525 because you decide to deposit it in the bank savings account.

Fun Learning with English idioms

Idiom: *a stitch in time saves nine*

The idiom *a stitch in time saves nine* means that one should not wait to deal with a specific problem or one would risk it getting much worse later on.

Example: *You should consider getting your car repaired now before you're left stranded on the side of the road – a stitch in time saves nine.*

Govt. schemes

These are various schemes that are launched by the government to encourage people to save money. The government runs these schemes through banks, financial institutions, and post offices. People investing in these schemes can enjoy tax benefits under Sec 80C of the Income Tax Act of 1961 and also earn returns at a fixed rate of interest as decided by the government. These rates are usually more than the regular term deposits of banks.

Some of the key government savings schemes are as follows:

Sukanya Samridhi Yojana (SSY)

Sukanya Samridhi Yojana Scheme was launched with an aim to encourage the parents to secure the future for their daughters. It was launched in the year 2015 by the Prime Minister of India Narendra Modi under the 'Beti Bachao, Beti Padhao'

campaign. This scheme is targeted towards the minor girl child. SSY account can be opened in the name of the girl from her birth to any time before she turns 10 years old.

The minimum investment amount for this scheme is INR 1,000 to a maximum of INR 1.5 lakh per year. Sukanya Samriddhi scheme is operative for 21 years from the date of opening.

National Savings Certificate (NSC)

National Saving Certificate was launched by the Government of India to promote the habit of savings amongst the citizens. The minimum investment amount for this scheme is INR 100 and there is no maximum investment amount. The interest rate of NSC changes every year.

One can claim tax Deduction of INR 1.5 lakh under Section 80C of the Income Tax Act. Only residents of India are eligible to invest in this scheme.

Pradhan Mantri Jan Dhan Yojana (PMJDY)

Pradhan Mantri Jan Dhan Yojana was launched to provide basic banking services like a Savings Account, deposit account, insurance, pension and so on, to the Indian citizens. The government of India aimed to provide easy access to financial services such as Savings and Deposit Accounts, Remittance, Insurance, Credit, Pension to the poor and needy section of our society.

The minimum age limit in this scheme for a minor is 10 years. Otherwise, any Indian resident over the age of 18 years is eligible to open this account. An individual can only exit this scheme after reaching the age of 60 years.

PMVVY or Prime Minister Vaya Vandana Yojana

This investment scheme is meant for the senior citizens aged above 60 years of age. It is known to offer them the guaranteed return of around 7.4 percent per annum.

The scheme offers access to pension scheme that is payable on a monthly, annually, and quarterly basis. The minimum amount that is received in the form of pension is INR 1000.

Sovereign Gold Bonds

The Sovereign Gold Bonds were introduced by the Government of India in November 2015. It aims at offering a lucrative alternative to own and save gold. Moreover, the scheme is known to belong to the category of Debt fund. Sovereign Gold Bonds or SGBs not only help in tracking the overall Import-export value of the given asset, but also helps in ensuring transparency throughout.

SGBs refer to government-based securities. Therefore, these are regarded as completely safe. The respective value gets denominated in multiple grams of gold. As it serves to be the safest substitute for physical gold, SGBs have witnessed immense popularity amongst the investors.

Retirement savings

A pension plan or retirement plan is designed to cater to your financial needs & requirements post-retirement, including medical emergencies, household expenses, and other living costs.

Investing in the best retirement plans is essential to safeguard your golden years. Retirement and pension plans are financial instruments that can shape your hard-earned income into savings for your post-retirement life. It comes in various forms to cater to a multitude of savings and investment goals, enabling a financially stable retired life.

Many funds and life insurance companies offers the following plans towards retirement savings:

1. Deferred Annuity
2. Immediate Annuity

54 ■ Basics of Investment Products

3. Annuity Certain
4. Life Annuity
5. Life insurance with investment lump-sum pay out.

In addition to these, government has also initiated some of the schemes towards retirement savings & planning. Few of these schemes are listed below:

National Pension Scheme (NPS)

National Pension Scheme or NPS is one of the famous schemes offered by the Government of India. It is a retirement saving scheme open to all the Indians, but mandatory for all the government employees. It aims to provide retirement Income to the citizens of India. Indian citizens and NRIs in the age group of 18 to 60 can subscribe to this scheme.

Under NPS scheme, you can allocate your funds in equity, corporate Bonds and government securities. Investments made up to INR 50,000 are liable for deductions under section 80 CCD (1B). Additional investments up to INR 1,50,000 are tax Deductible under Section 80C of the Income Tax Act.

Public Provident Fund (PPF)

PPF is also one of the oldest retirement schemes launched by the Government of India. The amount invested, interest earned and the amount withdrawn are all exempt from tax. Thus, the Public Provident Fund is not only safe, but can help you save Taxes at the same time. The interest rate of the scheme (FY 2021-22) is 7.1% p.a. In PPF, one can claim tax deductions upto INR 1,50,000 under section 80C of Income Tax Act.

The fund holds a longer tenure of 15 years, the overall influence of compounding interest that is tax-free tends to be significant—especially during the later years. Moreover, as interest gets earned and the invested principal gets backed by the respective sovereign guarantee, it is known to make up for a safe investment. It is important to note that the overall rate of interest on PPF gets reviewed every quarter by the Indian Government.

Atal Pension Yojana (APY)

Atal Pension Yojana or APY is a social security scheme launched by the Government of India for the workers in the unorganized sector. An Indian citizen in the age group of 18-40 years with a valid Bank account is eligible to apply of the scheme. It is launched to encourage individuals from the weaker section to opt for a pension, which would benefit them during their old age.

The scheme can also be taken by anyone who is self-employed. One can enrol for APY with your bank or post office. However, the only condition in this scheme is that the contribution must be made until the age of 60.

Test Your Understanding 3

Sovereign Gold Bonds scheme was introduced by the government in the year _____.

- a. 2001
- b. 2020
- c. 2015
- d. 2022

Test Your Understanding 4

An individual under PMJDY scheme can only exit this scheme after reaching the age of 60 years. True or False?

- a. True
- b. False

Equity investments

An equity investment is money that is invested in a company by purchasing shares of that company in the stock market. These shares are typically traded on a stock exchange.

Equity investors purchase shares of a company with the expectation that they'll rise in value in the form of capital gains, and/or generate capital dividends. If an equity investment rises in value, the investor would receive the monetary difference if they sold their shares, or if the company's assets are liquidated and all its obligations are met. Equities can strengthen a portfolio's asset allocation by adding diversification.

For most retail investors, the two main equity investment options are: **equity shares** and **equity mutual funds**.

Equity mutual fund is a type of mutual fund that buys shares of companies in the stock market. The goal of an equity fund is to invest in businesses that will grow, hence increasing the value of the fund over time.

Equity derivatives are another type of investments related to equities. Though these investments are not directly made on the equity shares, these investments are made in derivatives products based on the underlying equity shares / indices. Mainly, there are two types of equity derivative products – **Futures & Options**, popularly referred as the FnO segment.

Debt & Money market investments

When companies or government entities issuing debt instruments want to raise funds, they 'borrow' from investors. In return, they promise a steady and regular interest. This is how debt instruments work in simple terms.

Buying a debt instrument can be considered as lending money to the entity issuing the instrument.

Popular fixed-interest generating securities are **corporate bonds**, **government securities**, **treasury bills**, **commercial paper**, and other money market instruments. The issuers of debt instruments pre-decide the interest rate you will receive as well as the maturity period. Hence, they are also known as 'fixed-income' securities.

In India, till recently, retail investors have not been very active in directly participating in these debt instruments or government securities (G-Secs). Though RBI had decided to permit retail investors to directly buy government securities to deepen the bond market, the sheer lack of awareness about bonds or debt securities is the biggest hindrance. Historically, India has had an equity culture and almost no direct exposure to bonds. Hence, banks attract the lion's share of retail savings through fixed deposits. However, debt investments are very popular through the **Debt funds** of Mutual Fund houses.

The fundamental reason for investing in debt funds is to earn a steady interest income and capital appreciation. Debt funds invest in a variety of securities, based on their credit ratings. Debt funds try to optimise returns by investing across all classes of securities. This allows debt funds to earn decent returns.

Money market investments are highly liquid in nature comprising of Treasury bills, commercial paper, etc. Debt funds invests in these money market instruments which provide for higher liquidity of the investments. The short-term debt funds like liquid funds focus on investments in such money market instruments.

Mutual Funds & ETFs

Mutual fund investments in India have been gaining popularity in the recent times. I'm sure many of you might have heard the Ad "*Mutual Funds Sahi hai*"

Essentially, the money pooled in by a large number of people (or investors) is what makes up a Mutual Fund. This fund is managed by a **professional fund manager**.

It is a trust that collects money from a number of investors who share a common investment objective. Then, it invests the money in equities, bonds, money market instruments and/or other securities. Each investor owns units, which represent a portion of the holdings of the fund.

The income/gains generated from this collective investment is distributed proportionately amongst the investors after deducting certain expenses, by calculating a scheme's **Net Asset Value or NAV**.

We will learn about Mutual Funds and **Exchange Trade Funds (ETFs)** in detail in *Module 3*.

Gold & Gold ETFs

Investments are often made in terms of Gold purchase.

Due to some influencing factors such as high liquidity and inflation-beating capacity, gold is one of the most preferred investments in India. Gold investment can be done in many forms like buying jewellery, coins, bars, gold exchange-traded funds, Gold funds, sovereign gold bond scheme, etc.

In conventional form, investment in gold was just buying physical gold in the forms of jewellery, coins, billions, or artifacts. It always has a risk of theft and burglary involved if you are having physical gold with you.

The scenario has changed nowadays and investors have more options to invest such as gold ETF and gold funds.

Gold ETFs (Exchanged Traded Funds) is similar to buying physical gold but the only difference is you don't actually buy the physical gold. You don't have to go through the hassles of storing the physical gold, instead, the gold bought is stored in Demat (paper) format.

On the other hand, **gold funds** deal with investing in gold mining companies.

Real Estate & REITs

Like gold, investment in real estate is another popular investment avenue by many investors in India. Unlike gold investment, investments in real estate are relatively illiquid. We may not be able to find buyers for our real estate property immediately. Hence, as an alternative to directly investing in real estate, we could consider investing in real estate funds or Real Estate Investment Trusts (REITs).

A real estate investment trust (REIT) is a corporation, trust, or association that invests directly in income-producing real estate and is traded like a stock. A real estate fund is a type of mutual fund that primarily focuses on investing in securities offered by public real estate companies.

Test Your Understanding 5

When you invest in equity shares on the stock exchange, which of these markets are you dealing with?

- a. Primary market
- b. Secondary market
- c. Tertiary market
- d. Commodity market



Did you know?

NSE – World's Largest Derivatives segment

National Stock Exchange was the **world's largest** derivative exchange in terms of the *number of contracts traded* for the year 2019-20 & 2020-21.

NSE Derivative segment deals with Equity Derivatives, Currency Derivatives, Commodity Derivatives and Interest Rate Derivatives.

Test Your Understanding Solutions

TYU 1

Investments made in listed equity stocks provide for _____.

- a. Better liquidity
- b. Guaranteed capital appreciation
- c. Safety of capital
- d. All of the above

Correct Answer: a. Better liquidity

Remarks:

Investments in equity stocks never provide any guaranteed returns, nor they provide for safety of the capital.

TYU 2

In investments, ELSS for _____.

- a. Equity Linked Savings Scheme
- b. Exceptional Liquid & Safe Scheme
- c. Enterprise Linked Social Security
- d. All of the above

Correct Answer: a. Equity Linked Savings Scheme

TYU 3

Sovereign Gold Bonds scheme was introduced by the government in the year _____.

- a. 2001
- b. 2020

c. 2015

d. 2022

Correct Answer: c. 2015

TYU 4

An individual under PMJDY scheme can only exit this scheme after reaching the age of 60 years. True or False?

- a. True
- b. False

Correct Answer: a. True

TYU 5

When you invest in equity shares on the stock exchange, which of these markets are you dealing with?

- a. Primary market
- b. Secondary market
- c. Tertiary market
- d. Commodity market

Correct Answer: b. Secondary market

Remarks: When you invest in the equity shares of the company through the **Initial Public Offer (IPO)** or the Follow-up/Further Public Offer (FPO), then you will be dealing with the **primary market**.

INVESTMENT OBJECTIVES & RISK PROFILES

CHAPTER 2

LEARNING OBJECTIVES

- differentiate various investment objectives
- assess various risk profiles

CHAPTER TABLE OF CONTENT

1. Various types of investment objectives
 - Growth
 - Regular Income
 - Hybrid
2. Assessing Risk profiles
 - High Risk
 - Moderate Risk
 - Low Risk
3. Diversification & Asset allocation

INTRODUCTION

So far we have learnt about the various investment products, the basics of financial planning, need for investing, etc.

Now that you know where to invest, the next question is how do you choose the right investment option. To do this, we need to understand a couple more concepts – investment objectives and the associated risks.

Every investment option exposes the investor to a certain degree of risk.

Every individual has different tastes, right? Some of us might like to eat spicy food, while some prefer non-spicy food. Some of us are adventurous and want to participate in extreme sports, like sky diving, etc., whereas some of us are less adventurous and prefer to participate in non-risky sport.

Just like these differences, we tend to have a different risk appetite for investments as well.

This chapter will help you understand the various investment objectives and the risk profiles.

Let's warm up

What is portfolio management?

Portfolio management involves **building and overseeing a selection of investments that will meet the long-term financial goals and risk tolerance of an investor**. Active portfolio management requires strategically buying and selling stocks and other assets in an effort to beat the broader market. Passive portfolio management, on the other hand, seeks to match the returns of the market by mimicking the makeup of a particular index or indexes.



INVESTMENT OBJECTIVES

An investment objective is the role that an investment, or several investments, plays to help you reach your financial goals. Once you know your objective, it can guide you toward certain asset classes or securities. These help you build a portfolio that will reach your goals.

An investment objective can also be used by someone running a mutual fund. This is a way to define how a fund will invest its portfolio. For mutual funds, an investment objective tells you what the fund's goals are and what type of assets it will hold. This can be found in the fund's prospectus.

The three main types of investment objectives are:

1. Growth
2. Income
3. Hybrid (growth and income)

Growth

Do you have a goal that is at least 10 years away? Are you willing to take risks when you invest? Then a growth objective might be right for you. This gives you plenty of options to invest in.

You can look at stocks, stock mutual funds, or stock exchange-traded funds (ETFs).

There are other objectives that are types of growth – conservative growth, aggressive growth, trading, or speculation.

- Conservative growth is when investors build an investment portfolio that will generate wealth over time.
- Aggressive growth is when investors make a bold investment in stocks to make short and long-term gains.
- Speculation is when investors try to maximise returns by trading shares and securities through the speculation of share prices.

Income

Are you interested in making an income when you invest? Look at investments such as dividend stocks or bonds. You can also choose mutual funds or ETFs that invest in these types of securities. You can also pick a combination of income securities.

As the name suggests, the income investment objective means investing to generate a source of income for yourself. This income comes in the form of dividends, interest, or yields.

Conservative investors tend to include income objectives in their portfolios due to their attractive returns and ability to keep up with inflation.

Income investors seek a maximum amount of income given their risk tolerance and are willing to forgo capital appreciation and growth of income in order to seek a higher level of current income.

Hybrid (Growth and Income)

Designed as a longer-term accumulation account, “Income with Capital Preservation” is generally considered the most conservative investment objective. Its emphasis is on generating current income and a minimal risk of capital loss. Lowering the risk generally means lowering the potential income and overall return.

Capital preservation is often thought of as being for retired or nearly retired people who want to make sure they don't outlive their money. For those people, safety is critical, even if it involves giving up return potential for security.

The logic for this desire is clear: A retired person who loses money through unwise investments may not get a chance to replace it.

60 ■ Investment Objectives & Risk Profiles

Younger investors can have a stock-dominated portfolio. That's because they have many years to recover from any losses that may occur due to market changes or downturns. That isn't the case for older people.

Investors who want capital preservation tend to invest in certificate of deposits, treasury securities, and savings accounts. These vehicles offer modest returns but pose much less risk than stocks.

Secondary objectives

While the above three are the primary objectives that can be associated with investments, there are secondary objectives that are also considered before deciding on the choice of investments. These are:

- Liquidity
- Tax Savings

ASSESSING RISK PROFILES

Before you consider investing in any financial instrument, you must know how much risk you are ready to take. Investing in the financial market carries some inherent risk – which can be classified under systematic and unsystematic risk.

Systematic Risk comes from the influence of external factors on an organisation – those which are not under the control of the organisation. It includes risks such as interest rate risk, foreign exchange risk that are at a macro level which the organisation has no hold on.

Unsystematic Risk refers to the internal risks that an organisation is exposed to which are usually within the control of the organisation. These include business risk such as management decisions, financial risk such as profits and losses and operational risk which pertains to the manpower that a company employs. While these are the overall risks that concern the financial markets, you must, at an individual level recognise yours before you start investing.

Need for Risk Profiling

Various investment schemes have different levels of risk. Similarly, there are differences between investors with respect to the levels of risk they are comfortable with (risk appetite). At times there are also differences between the level of risk the investors think they are comfortable with, and the level of risk they ought to be comfortable with.

Risk profiling is an approach to understand the risk appetite of investors - an essential pre-requisite to advise investors on their investments.

The investment advice is dependent on understanding both aspects of risk:

- **Risk appetite** of the investor
- **Risk level of the investment** options being considered.

Factors that Influence the Investor's Risk Profile

Some of the factors and their influence on risk appetite are as follows:

Basis family information

- *Earning members* - Risk appetite increases as the number of earning members increases
- *Dependent Members* - Risk appetite decreases as the number of dependent members increases

Basis personal information

- *Life expectancy* - Risk appetite is higher when life expectancy is longer
- *Age* - Lower the age, higher the risk that can be taken
- *Employability* - Well qualified and multi-skilled professionals can afford to take more risk
- *Nature of job* - Those with steady jobs are better positioned to take risk
- *Psyche* - Daring and adventurous people are better positioned mentally, to accept the downsides that come with risk

Basis financial information

- *Capital base* - Higher the capital base, better the ability to financially take the downsides that come with risk
- *Regularity of Income* - People earning regular income can take more risk than those with unpredictable income streams

More such factors can be added. The financial planner needs to judge the investor based on such factors, rather than just ask a question “How much risk are you prepared to take?”

Thus, someone with a stable job may be considered to have higher risk appetite than someone struggling to get a job. Similarly, a qualified person (since the employability goes up) may be considered to have higher risk appetite than an unqualified person.

Some of the popular risk profiles are given below:

- **Conservative** - Investor’s top priority is safety of capital and he/she is willing to accept minimal risks and hence, receive minimum or low returns.
- **Moderately Conservative** - Investor is willing to accept small level of risk in exchange for some potential returns over the medium to long term.
- **Moderate** - Investor can tolerate moderate level of risk in exchange for relatively higher potential returns over the medium to long term.
- **Moderately Aggressive** - Investor is keen to accept high risk in order to maximize potential returns over the medium to long term
- **Aggressive** - Investor is willing to accept significant risks to maximize potential returns over the long term and is aware that he/she may lose a significant part of capital.

Risk Profiling Tools

Some AMCs and securities research houses provide risk profiling tools in their website. Some banks and other distributors have proprietary risk profilers. These typically revolve around investors answering a few questions (questionnaire), based on which the risk appetite score gets generated.

Some of these risk profile surveys/questionnaires suffer from the investor trying to “guess” the right answer, when in fact there is no right answer. Risk profiling is a tool that can help the investor; it loses meaning if the investor is not truthful in his answers.

Some advanced risk profilers are built on the responses to different scenarios that are presented before the investor. Service providers can assess risk profile based on actual transaction record of their regular clients.

While such tools are useful pointers, it is important to understand the robustness of such tools before using them in the practical world. Some of the tools featured in websites have their limitations. The financial planner needs to use them judiciously.

Fun Learning with English idioms

Idiom: *put all (one's) eggs in one basket*

The phrase *to put all (one's) eggs in one basket* means to invest, devote, or commit all of one's energy or resources into a single venture, opportunity or goal generally at the risk of losing everything in the event that that thing fails or does not come to fruition.

Example: I applied to several colleges so I wasn't putting all my eggs in one basket.

DIVERSIFICATION AND ASSET ALLOCATION

Diversification

'*Don't put all your eggs in one basket*' is a popular phrase applied to investments.

Diversification is the practice of spreading your investments around so that your exposure to any one type of asset is limited. This practice is designed to help reduce the volatility of your portfolio over time.

One of the keys to successful investing is learning how to balance your comfort level with risk against your time horizon. Invest your retirement nest egg too conservatively at a young age, and you run the risk that the growth rate of your investments won't keep pace with inflation. Conversely, if you invest too aggressively when you're older, you could leave your savings exposed to market volatility, which could erode the value of your assets at an age when you have fewer opportunities to recoup your losses.

One way to balance risk and reward in your investment portfolio is to diversify your assets. This strategy has many complex iterations, but at its root is the simple idea of spreading your portfolio across several asset classes. Diversification can help mitigate the risk and volatility in your portfolio, potentially reducing the number and severity of stomach-churning ups and downs.

Remember, diversification does not ensure a profit or guarantee against loss.

Some tips for successful diversification are list below:

- Assess the qualitative aspects of the investment instruments before investing
- Ensure to have some of your portfolio with money market instruments are short-term emergencies/liquidity
- Ensure to invest in bonds/fixed income securities that offer systematic cash flows
- Since part of the portfolio will be for long term, you should follow a buy-hold strategy on some of the investments
- One needs to understand factors that impact the financial markets (cues on key commodities, geo-political, etc)
- One must keep themselves abreast of the latest happening in the global financial markets. Even though one does not directly investment in global markets, there are always some spill-over effects of other markets on to our market, and hence the need to know the latest happening
- Periodic review of your diversified portfolio is an absolute necessity
- Throw in an element of systematic investment plan. This would bring in the much needed discipline towards investments.
- Part of your diversified portfolio much include insurance related plans
- The critical factor for a successful diversification is to be aware of one's financial biases

Asset Allocation

Different economic conditions may impact the performance of different asset classes differently. For example, during the recessionary situation in 2007-09, equity markets in many countries fared poorly, but gold prices went up. Thus, an investor who had invested in both gold and equity, earned better returns than an investor who invested in only equities. The distribution of an investor's portfolio between different asset classes is called **asset allocation**.

Economic environments and markets are dynamic. Predictions about markets can go wrong. With a prudent asset allocation, the investor does not end up in the unfortunate situation of having all the investments in an asset class that performs poorly. Thus, the purpose of asset allocation is not to enhance returns, but to reduce the risk. The risk in a portfolio can be reduced by bringing together asset classes whose performances are not affected by the same factors in the same way.

Correlation measures the extent to which the returns from two asset classes move together. Correlation ranges from -1 to +1. The risk in a portfolio can be reduced by bringing together asset classes with low correlation.

Some international researches suggest that asset allocation and investment policy can better explain portfolio performance, as compared to selection of securities within an asset class (stock selection) and investment timing.

Asset Allocation Types

At an individual level, difference is made between **Strategic** and **Tactical** Asset Allocation.

Strategic Asset Allocation comes out of the risk profile of the individual, the return requirement to meet the goals and the investment horizon. Risk profiling is key to deciding on the strategic asset allocation. The allocation to the various asset classes is not driven by their expected performance. *The most simplistic risk profiling thumb rule is to have as much debt in the portfolio, as the number of years of age.* As the person grows older, the debt component of the portfolio keeps increasing. This is an example of strategic asset allocation.

As part of the financial planning process, it is essential to decide on the strategic asset allocation that is advisable for the investor. The asset allocation will change if there is a change in the risk and return preferences of the investor.

Tactical Asset Allocation is the decision that comes out of calls on the likely behaviour of the market. An investor who decides to go overweight on equities i.e. take higher exposure to equities, because of expectations of buoyancy in industry and share markets, is taking a tactical asset allocation call.

Tactical asset allocation is suitable only for seasoned investors operating with large investible surpluses. Even such investors might like to set a limit to the size of the portfolio on which they would take frequent tactical asset allocation calls.

The last step in the process of portfolio construction would be selection of schemes within the agreed asset allocation.

Test Your Understanding 1

Risk appetite generally _____ when the number of dependent family members increases.

- a. increases
- b. decreases
- c. there is no correlation between risk appetite and the number of depended family members
- d. does not change

Test Your Understanding 2

The act of spreading your investments to various asset classes in order to reduce the exposure level to any one is called _____.

- a. Divestment
- b. Diversification
- c. Division of labour
- d. Directional trade

Fun Learning with English idioms

Idiom: *a means to an end*

The idiom *a means to an end* refers to a thing you do only in order to achieve or obtain something else.

Example: She saw her college education simply as a means to an end — a well-paid job

Test Your Understanding 3

The risk profile of an Investor who is willing to accept significant risks to maximize potential returns over the long term and is aware that he/she may lose a significant part of capital is _____.

- a. Aggressive
- b. Conservative
- c. Moderately conservative
- d. Moderate

Test Your Understanding 4

Systematic risk comes from the influence of external factors on an organisation. True or False?

- a. True
- b. False

Test Your Understanding 5

The most simplistic risk profiling thumb rule is to have as much debt in the portfolio, as the number of years of age. True or false?

- a. True
- b. False

Test Your Understanding Solutions

TYU 1

Risk appetite generally _____ when the number of dependent family members increases.

- a. increases
- b. decreases
- c. there is no correlation between risk appetite and the number of depended family members
- d. does not change

Correct Answer: b. decreases

TYU 2

The act of spreading your investments to various asset classes in order to reduce the exposure level to any one is called _____.

- a. Divestment
- b. Diversification
- c. Division of labour
- d. Directional trade

Correct Answer: b. Diversification

TYU 3

The risk profile of an Investor who is willing to accept significant risks to maximize potential returns over the long

term and is aware that he/she may lose a significant part of capital is _____.

- a. Aggressive
- b. Conservative
- c. Moderately conservative
- d. Moderate

Correct Answer: a. Aggressive

TYU 4

Systematic risk comes from the influence of external factors on an organisation. True or False?

- a. True
- b. False

Correct Answer: a. True

TYU 5

The most simplistic risk profiling thumb rule is to have as much debt in the portfolio, as the number of years of age. True or false?

- a. True
- b. False

Correct Answer: a. True

LEARNING OBJECTIVES

- differentiate between primary market and secondary market
- identify key market participants of the capital market

CHAPTER TABLE OF CONTENT

1. What is capital market? How is it different from money market?
2. Primary market –
 - Initial Public Offer (IPO)
 - Further/Follow-on Public Offer (FPO)
 - Rights Issue
3. Secondary market –
 - Exchange Traded
 - Over-The-Counter (OTC)
 - Understanding clearing & settlement
4. Market participants
 - Stock Exchange
 - Broker/Dealers
 - Merchant Banks/Investment Banks
 - Depositories
 - Depository Participant (DP)
 - Clearing House
 - Custodian
 - Registrar & Transfer Agent (RTA)

INTRODUCTION

Have you heard the names of these animals when thinking of investments – “**Bulls**” and “**Bears**”? Bulls and Bears represent the sentiment of the stock market at a given point of time. While “**Bulls**” indicate that the overall impact is for rise in prices of stocks, “**bears**” indicate the opposite of it, the fall in prices of stocks.

Stock market is a platform where traders place orders for buying and selling shares of company. Based on the demand and supply of the shares, the price of the stock is unlocked. Not just shares of the company, the stock market platform facilitates *trading* of other financial instruments, like stock derivative contracts (Futures & Options), Interest rate derivatives, currency derivatives, etc.

Have you heard the names of Harshad Mehta, Ketan Parekh, Nick Leeson? Of course, you would have heard these names, though not in a very positive perspective. Well, these are some of the key persons associated with scams that have hit the financial markets. On the contrary, we would also know some popular names on the positive side of the stock markets – like Warren Buffett, Rakesh Jhunjhunwala, Radhakrishna Damani, etc.

Since stock markets deal with shares of company, what exactly is this ‘share’? What is the nature of such instrument? Why are they called instruments of capital markets?

In this chapter, we will try to understand these questions. We will also try to understand why the stock market is one of the favourite investment choices for the public for a long time.

Let's warm up

Charging Bull

Charging Bull is a very popular tourist attractions in the city of New York.

It is a bronze sculpture that stands on Broadway near Bowling Green in the Financial District of Manhattan in New York City, USA.

It weighs a massive 3,600 kg.

This bull was sculpted by artist *Arturo Di Modica* in the aftermath of the 1987 stock market crash. It is said that the artist believed that statue's representation of resilience and courage was a model of integrity.

The artist spent *more than two years* sculpting the now world-famous **Charging Bull**.



WHAT IS CAPITAL MARKET? HOW IS IT DIFFERENT FROM MONEY MARKET?

To understand the concept of capital market, we need to first understand the need for money.

Every individual, business entity, government, non-for-profit organisation requires money, as money is the bloodline of activity. The money required caters to a variety of needs.

Let's look at a simple example. We might need money to go out to a restaurant with our friends. What do we do? We can pool in funds and pay for the restaurant bill. Let's say, one of our friends, has already used his pocket money allowance on something else. He might request of our the friends to pay his share of the restaurant bill and he might reimburse it the next month when he gets his pocket money allowance. Doesn't it sound relatable? Well, this is a need as well. A need for money for a very short period of time.

Taking this further, let's say that one of the friends is now planning to study MBA in a foreign university. Well, the need for money runs into lakhs. And, even he is taking help from a known source, he/she will be able to repay this money only after he/she graduates and lands a handsome paying job. This could take a few years of time.

When we look at these too examples, we can clearly see that the need for money comes with a time-factor.

Just like an individual, business entities requires funds both for the short term and the long term. As a general understanding in the financial parlance, short term works out to be up to a year's requirement and long term is anything beyond one year.

We have already seen in our module 1 that banks play a role of intermediaries that can lend money to individuals and businesses for their short-term and long-term requirements. Then, does bank lending come under Capital market?

The answer is 'no'. Bank loans do not come under the concept of capital market. In the case of bank loans, the lender (bank) and the borrower (individual/business) enter into an loan agreement. While there is an obligation on the part of borrower to repay the lender, there is no creation of any financial instrument, other than signing the loan agreement and associated document.

The concept of 'capital market' comes into picture when *financial securities are issued*.

What are financial securities?

A financial security is a tradable financial asset. The term commonly refers to any form of financial instrument, but its legal definition varies by jurisdiction.

In India, securities are defined under Section 2(h) of the Securities Contracts (Regulation) Act, 1956.

As per the definition, securities include –

- i. Shares
- ii. Bonds/debentures
- iii. Derivative
- iv. Units of mutual funds
- v. Government securities
- vi. Securities receipts (as defined under SARFAESI Act)
- vii. other marketable securities of a like nature in or of any incorporated company or other body corporate

Having seen the various financial instruments considered as securities, let's understand the meaning of capital market.

The term capital market is a broad one that is used to describe the in-person and digital platforms in which various entities trade different types of financial instruments. These venues may include the stock market, the bond market, and the currency and foreign exchange (forex) markets. Most markets are concentrated in major financial centres such as New York, London, Singapore, Hong Kong, and India.

Capital markets are composed of the **suppliers** and **users of funds**. **Suppliers** include households (through the savings accounts they hold with banks) as well as institutions like pension and retirement funds, life insurance companies, charitable foundations, and non-financial companies that generate excess cash. The **users** of the funds distributed on capital markets include corporates, non-financial companies, and government.

How are Capital Markets different from Money Markets?

In money markets, instruments like T-bills, Repos, Certificate of Deposits, Commercial Papers, etc are traded. These are all instruments of short-term nature.

In capital markets, instruments like equity, bonds, debentures, G-secs, etc are traded. These are all instruments of long-term nature.

In a nutshell, capital markets deals with financial instruments having a maturity of more than 1 years, whereas money market deals with financial instruments having a maturity of less than or up to 1 year.

What are shares & bonds?

Shares/Stocks:

Total equity capital of a company is divided into equal units of small denominations, each called a **share/stock**. For example, in a company the total equity capital of Rs 2,00,00,000 is divided into 20,00,000 units of Rs 10 each. Each such unit of Rs 10 is called a Share. Thus, the company then is said to have 20,00,000 equity shares of Rs 10 each. The holders of such shares are members of the company and have voting rights.

In case of shares of public listed companies, these shares are made available for trading (buying/selling) on recognised stock exchanges like National Stock Exchange, etc.

Bonds/Debentures:

Debt instrument represents a contract whereby one party lends money to another on pre-determined terms with regards to rate and periodicity of interest, repayment of principal amount by the borrower to the lender.

In the Indian securities markets, the term 'bond' is used for debt instruments issued by the Central and State governments and public sector organizations and the term 'debenture' is used for instruments issued by private corporate sector.

Mutual Funds:

A Mutual Fund is a body corporate registered with SEBI (Securities Exchange Board of India) that pools money from individuals/corporate investors and invests the same in a variety of different financial instruments or securities such as equity shares, Government securities, Bonds, debentures etc.

PRIMARY MARKET

Capital markets are divided into two different categories – Primary markets and Secondary markets

What is the role of the ‘Primary Market’?

The primary market provides the channel for **sale of new securities**. Primary market provides opportunity to issuers of securities (Government as well as corporates) to raise resources to meet their requirements of investment and/or discharge some obligation.

They may issue the securities at face value, or at a discount/premium and these securities may take a variety of forms such as equity, debt etc. They may issue the securities in domestic market and/or international market.

Issue of Shares**Why do companies need to issue shares to the public?**

Most companies are usually started privately by their promoter(s). However, the promoters’ capital and the borrowings from banks and financial institutions may not be sufficient for setting up or running the business over a long term. So companies invite the public to contribute towards the equity and issue shares to individual investors. The way to invite share capital from the public is through a ‘Public Issue’. Simply stated, a public issue is an offer to the public to subscribe to the share capital of a company. Once this is done, the company allots shares to the applicants as per the prescribed rules and regulations laid down by SEBI.

What are the different kinds of issues?

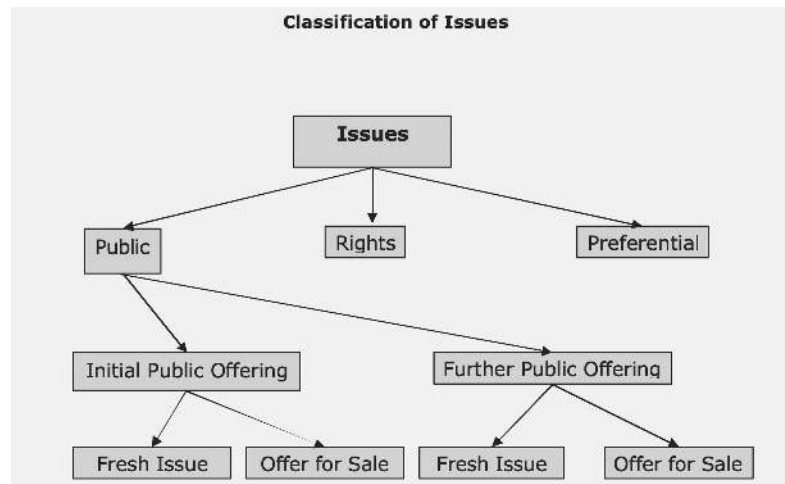
Primarily, issues can be classified as a Public, Rights or Preferential issues (also known as private placements). While public and rights issues involve a detailed procedure, private placements or preferential issues are relatively simpler. The classification of issues is illustrated below:

Initial Public Offering (IPO) is when an unlisted company makes either a fresh issue of securities or an offer for sale of its existing securities or both for the first time to the public. This paves way for listing and trading of the issuer’s securities.

A **follow on public offering (Further Issue)** is when an already listed company makes either a fresh issue of securities to the public or an offer for sale to the public, through an offer document.

Rights Issue is when a listed company which proposes to issue fresh securities to its existing shareholders as on a record date. The rights are normally offered in a particular ratio to the number of securities held prior to the issue. This route is best suited for companies who would like to raise capital without diluting stake of its existing shareholders.

A **Preferential issue** is an issue of shares or of convertible securities by listed companies to a select group of persons under Section 81 of the Companies Act, 1956 which is neither a rights issue nor a public issue. This is a faster way for a company to raise equity capital.



SECONDARY MARKET

Secondary market refers to a market where securities are traded after being initially offered to the public in the primary market and/or listed on the Stock Exchange. Majority of the trading is done in the secondary market. Secondary market comprises of equity markets and the debt markets.

Role of the Secondary Market

For the general investor, the secondary market provides an efficient platform for trading of his securities. For the management of the company, Secondary equity markets serve as a monitoring and control conduit—by facilitating value-enhancing control activities, enabling implementation of incentive-based management contracts, and aggregating information (via price discovery) that guides management decisions.

What is the difference between the Primary Market and the Secondary Market?

As can be seen from the above points, in the primary market, securities are offered to public for subscription for the purpose of raising capital or fund. Secondary market is an equity trading venue in which already existing/pre-issued securities are traded among investors.

Secondary market could be either auction or dealer market. While stock exchange is the part of an auction market, Over-the-Counter (OTC) is a part of the dealer market.

Over-The-Counter

OTC market is characterised by non-existence of a central counterparty (CCP), and hence the parties deal directly with each other. Since, no CCP is involved, the counterparty settlement risk is higher. However, since these are dealt directly between the counterparties, it can be customised to the needs of the buyers and sellers. Some of the popular instruments that are dealt in these OTC markets are – Foreign exchange (Fx), Forward derivatives, Swap derivative contracts, etc.

Stock Exchanges

The stock exchanges in India, under the overall supervision of the regulatory authority, the Securities and Exchange Board of India (SEBI), provide a trading platform, where buyers and sellers can meet to transact in securities.

The notable stock exchanges in India are National Stock Exchange (NSE) and Bombay Stock Exchange (BSE)

The trading platform provided by NSE is an electronic one and there is no need for buyers and sellers to meet at a physical location to trade. They can trade through the computerized trading screens available with the NSE trading members or the internet based trading facility provided by the trading members of NSE.

Test Your Understanding 1

Does IPO come under primary market?

- a. Yes
- b. No

What is Screen Based Trading?

The trading on stock exchanges in India used to take place through open outcry without use of information technology for immediate matching or recording of trades. This was time consuming and inefficient. This imposed limits on trading volumes and efficiency. In order to provide efficiency, liquidity and transparency, NSE introduced a nationwide, on-line, fully-automated screen based trading system (SBTS) where a member can punch into the computer the quantities of a security and the price at which he would like to transact, and the transaction is executed as soon as a matching sell or buy order from a counter party is found.

What is NEAT?

NSE is the first exchange in the world to use satellite communication technology for trading. Its trading system, called National Exchange for Automated Trading (NEAT), is a state-of-the-art client server based application. At the server end all trading information is stored in an in- memory database to achieve minimum response time and maximum system availability for users. It has uptime record of 99.7%. For all trades entered into NEAT system, there is uniform response time of less than one second.

Advantages of the Screen-Based Trading System (SBTS)

- *It electronically matches orders on a strict price/time priority and hence cuts down on time, cost and risk of error, as well as on fraud resulting in improved operational efficiency.*
- *It allows faster incorporation of price sensitive information into prevailing prices, thus increasing the informational efficiency of markets.*
- *It enables market participants, irrespective of their geographical locations, to trade with one another simultaneously, improving the depth and liquidity of the market.*
- *It provides full anonymity by accepting orders, big or small, from members without revealing their identity, thus providing equal access to everybody.*
- *It also provides a perfect audit trail, which helps to resolve disputes by logging in the trade execution process in entirety.*

Clearing & Settlement:

After a trade is executed, it needs to be settled. The clearing and settlement mechanism in Indian securities market has witnessed significant changes and several innovations during the last decade. These include use of the state-of-art information technology, emergence of clearing corporations to assume counterparty risk, shorter settlement cycle, dematerialization, electronic transfer of securities and fine-tuned risk management system.

Till January 2002, the stock exchanges in India were following a system of account period settlement for cash market transactions. An account period settlement is a settlement where the trades pertaining to a period stretching over more than one day are settled. For example, trades for the period Monday to Friday are settled together.

The obligations for the account period are settled on a net basis.

Instead of the account period settlement, T+2 rolling settlement was introduced for all securities. Rolling settlement refers to the settling of trades at a standard fixed period of days after the execution occurred. In a rolling settlement, each trading day is considered as a trading period and trades executed during the day are settled based on the net obligations for the day.

In the year 2021, the stock exchanges in India (NSE & BSE) have made a joint statement to reduce this settlement cycle to T+1 in a phased manner starting February 2022.

Steps involved in a Transaction Cycle

1. A person holding assets (securities/funds), either to meet his liquidity needs or to reshuffle his holdings in response to changes in his perception about risk and return of the assets, decides to buy or sell the securities.
2. He selects a broker and instructs him to place buy/sell order on an exchange.
3. The order is converted to a trade as soon as it finds a matching sell/buy order.
4. At the end of the trade cycle, the trades are netted to determine the obligations of the trading members to deliver securities/funds as per settlement schedule.
5. Buyer (seller) delivers funds (securities) and receives securities (funds) and acquires ownership of the securities.

MARKET PARTICIPANTS

In addition to the Stock Exchange, there are other key market participants like

- **Broker/Dealers:** These are primarily members of the stock exchanges who facilitate trading on the platform. How do we differentiate ‘brokers’ & ‘dealers’? Dealers are usually those trading members who trade for themselves (proprietary trades – trades made using own capital); whereas Brokers are those trading members who act as agents for their clients and trade on behalf of their clients (client trades – trades made using client’s capital) *Examples: Kotak Securities, Zerodha, ICICI Direct, etc.*
- **Merchant Banks/Investment Banks:** These banks are unlike traditional banks. They do not deal with deposits or loans. Instead they facilitate capital raising activities for their clients which include corporations, government and institutional clients. They help with IPOs, advisory servicing on Mergers & Acquisitions (M&A), Underwriting services, etc. *Examples: State Street Bank, SBI Capital, Axis Capital Ltd, etc.*
- **Depositories:** A depository is like a bank wherein the deposits are securities (viz. shares, debentures, bonds, government securities, units etc.) in electronic form. *Examples: NSDL & CDSL*
- **Depository Participant (DP):** The Depository provides its services to investors through its agents called depository participants (DPs). These agents are appointed by the depository with the approval of SEBI. According to SEBI regulations, amongst others, three categories of entities, i.e. Banks, Financial Institutions and SEBI registered trading members can become DPs.
- **Clearing House:** A clearing house is a financial institution that provides clearing and settlement services for financial and commodities derivatives and securities transactions.
- **Custodian:** A financial institution that holds customers’ securities for safekeeping to prevent them from being stolen or lost. The custodian may hold stocks or other assets in electronic or physical form on behalf of their customers.
- **Registrar & Transfer Agent (RTA):** Registrar and Transfer Agents (RTA) are SEBI registered institutions associated with a company to maintain investors’ records.



Did you know?

How is a depository similar to a bank?

A Depository can be compared with a bank, which holds the funds for depositors. An analogy between a bank and a depository may be drawn as follows:

BANK	DEPOSITORY
Holds funds in an account	Hold securities in an account
Transfers funds between accounts on the instruction of the account holder	Transfers securities between accounts on the instruction of the account holder
Facilitates transfers without having to handle money	Facilitates transfers of ownership without having to handle securities.
Facilitates safekeeping of money	Facilitates safekeeping of shares

Test Your Understanding 2

What is the full form of NEAT?

- a. Natural Economic Assisted Treaty
- b. National Economic Advisory Team
- c. National Exchange for Automated Trading
- d. Natural Exchange of Automated Transmission

Test Your Understanding 3

Which of these is not a money market instrument?

- a. Certificate of Deposit
- b. Commercial Paper
- c. T-Bill
- d. Bonds

Test Your Understanding 4

Which of these are characteristic of OTC market?

- a. Contracts can be customised
- b. Trades are bilaterally entered between the counterparties
- c. Counterparty risk is higher compared to Exchange traded contracts.
- d. All of the above

Test Your Understanding 5

NSDL stands for?

- a. National Security Defence Lieutenant
- b. National Stock Derivative Limited
- c. National Securities Depository Limited.
- d. National Securities Development Limited

Test Your Understanding Solutions

TYU1

Does IPO come under primary market?

- a. Yes
- b. No

Correct Answer: a. Yes

TYU2

What is the full form of NEAT?

- a. Natural Economic Assisted Treaty
- b. National Economic Advisory Team
- c. National Exchange for Automated Trading
- d. Natural Exchange of Automated Transmission

Correct Answer: c. National Exchange for Automated Trading

TYU3

Which of these is not a money market instrument?

- a. Certificate of Deposit
- b. Commercial Paper
- c. T-Bill

- d. Bonds

Correct Answer: d. Bonds

TYU4

Which of these are characteristic of OTC market?

- a. Contracts can be customised
- b. Trades are bilaterally entered between the counter-parties
- c. Counterparty risk is higher compared to Exchange traded contracts.
- d. All of the above

Correct Answer: d. All of the above

TYU5

NSDL stands for?

- a. National Security Defence Lieutenant
- b. National Stock Derivative Limited
- c. National Securities Depository Limited.
- d. National Securities Development Limited

Correct Answer: c. National Securities Depository Limited.

STOCK SELECTION & STOCK RETURN-RISK

CHAPTER 4

LEARNING OBJECTIVES

- grasp concepts of fundamental analysis, technical analysis and stock selection

CHAPTER TABLE OF CONTENT

1. Fundamental Analysis (EIC framework)
 - Economy
 - Industry
 - Company
2. Technical Analysis
 - Graphical patterns
 - Candle stick patterns
 - Technical Indicators & Oscillators
3. Analysis risk-return trade-off

INTRODUCTION

In the chapters till now, we have understood the idea of investments and the nature of financial instruments. We also briefly touched upon the various market types.

From that understanding, we can comfortably say that an aggressive risk profile investor would want to have more investments in equity instruments, like shares.

But there are a number of companies whose shares are listed on the stock exchange. So, which company should this investor invest in?

We have companies which are from different industries. We have shares listed of banking companies like HDFC Bank, ICICI Bank, State Bank of India, etc. We have shares listed of Information Technology companies like Infosys, Tata Consultancy Services, Wipro, HCL Technologies, etc. We have shares list of pharmaceutical companies like Sunpharma, Aurobindo Pharma, Dr. Reddy's Limited, etc. And the list goes on. Almost all the industries that we can think of has atleast a handful of companies that are listed on the stock exchange.

So, the key question that arises is how to select the stocks to make investments.

This chapter is designed to help you understand and identify the various analysis undertaken towards stock selection for investments.

Let's warm up

National Stock Exchange (NSE) has many segments in which trading is permitted – Capital Market, Equity Derivatives, Currency Derivatives, Interest Rate Derivatives, Debt Segment, etc.

On the Capital Market segment, the total number of company securities that are available for trading have been on the rise over the years. In 2005, it was less than 1,000 company securities. Over the last 2 decades it has consistently increased and as at the end of June 2022, more than 2,000 securities are being traded on the NSE bourses.



FUNDAMENTAL ANALYSIS

Economy, Industry and Company (EIC) Analysis.

Fundamental analysis is a stock valuation methodology that uses **financial** and **economic analysis** to envisage the movement of stock prices. The fundamental data that is analysed could include a company's financial reports and non-financial information such as estimates of its growth, demand for products sold by the company, industry comparisons, economy-wide changes, changes in government policies etc.

The outcome of fundamental analysis is a value (or a range of values) of the stock of the company called its 'intrinsic value' (often called 'price target' in fundamental analysts' parlance). To a fundamental investor, the market price of a stock tends to revert towards its intrinsic value. If the intrinsic value of a stock is above the current market price, the investor would purchase the stock because he believes that the stock price would rise and move towards its intrinsic value. If the intrinsic value of a stock is below the market price, the investor would sell the stock because he believes that the stock price is going to fall and come closer to its intrinsic value.

To find the intrinsic value of a company, the fundamental analyst initially takes a top-down view of the economic environment; the current and future overall health of the economy as a whole.

After the analysis of the *macro*-economy (termed as **Economic Analysis**), the next step is to analyse the industry environment which the firm is operating in. One should analyse all the factors that give the firm a competitive advantage in its sector, such as, management experience, history of performance, growth potential, low cost of production, brand name etc. This step of the **Industry analysis** entails finding out as much as possible about the industry and the inter-relationships of the companies operating in the industry.

The next step is to study the company and its products (termed as **Company Analysis**). The components that are analysed at the company level are the following:

- 1. Business model:** What exactly does the company do? This isn't as straightforward as it seems. If a company's business model is based on selling fast-food chicken, is it making its money that way? Or is it just coasting on royalty and franchise fees?
- 2. Competitive advantage:** A company's long-term success is driven largely by its ability to maintain a competitive advantage—and keep it. Powerful competitive advantages, such as Coca-Cola's brand name and Microsoft's domination of the personal computer operating system, create a moat around a business allowing it to keep competitors at bay and enjoy growth and profits. When a company can achieve a competitive advantage, its shareholders can be well rewarded for decades.
- 3. Management & Corporate Governance:** One of the important component to look at is the management composition. Corporate governance describes the policies in place within an organization denoting the relationships and responsi-

bilities between management, directors, and stakeholders. These policies are defined and determined in the company charter and its bylaws, along with corporate laws and regulations. You want to do business with a company that is run ethically, fairly, transparently, and efficiently.

- 4. Financial analysis:** Financial statements are the medium by which a company discloses information concerning its financial performance. Followers of fundamental analysis use quantitative information gleaned from financial statements to make investment decisions. The three most important financial statements are income statements, balance sheets, and cash flow statements.

Who Uses Fundamental Analysis?

Fundamental analysis is used largely by long-term or value investors to identify well-priced stocks and those with favourable prospects. Equity analysts will also use fundamental analysis to generate price targets and recommendations to clients (e.g., buy, hold, or sell). Corporate managers and financial accountants will also use financial analysis to analyse and increase a firm's operating efficiency and profitability and to compare the firm against the competition. Warren Buffett, one of the world's most renowned value investors, is a promoter of fundamental analysis

TECHNICAL ANALYSIS

Technical Analysis is a research technique to identify trading opportunities in market based on the actions of market participants. The actions of markets participants can be visualized by means of a stock chart. Over time, patterns are formed within these charts and each pattern conveys a certain message. The job of a technical analyst is to identify these patterns and develop a point of view.

Technical analysis is a trading discipline employed to evaluate investments and identify trading opportunities by analyzing statistical trends gathered from trading activity, such as price movement and volume. Unlike fundamental analysis, which attempts to evaluate a security's value based on business results such as sales and earnings, technical analysis focuses on the study of price and volume.

Technical analysis as we know it today was first introduced by Charles Dow and the Dow Theory in the late 1800s. Several noteworthy researchers including William P. Hamilton, Robert Rhea, Edson Gould, and John Magee further contributed to Dow Theory concepts helping to form its basis. Nowadays technical analysis has evolved to include hundreds of patterns and signals developed through years of research.

Understanding Technical Analysis

Technical analysis tools are used to scrutinize the ways supply and demand for a security will affect changes in price, volume, and implied volatility. It operates from the assumption that past trading activity and price changes of a security can be valuable indicators of the security's future price movements when paired with appropriate investing or trading rules.

It is often used to generate short-term trading signals from various charting tools, but can also help improve the evaluation of a security's strength or weakness relative to the broader market or one of its sectors. This information helps analysts improve their overall valuation estimate.

Using Technical Analysis

Professional analysts often use technical analysis in conjunction with other forms of research. Retail traders may make decisions based solely on the price charts of a security and similar statistics, but practicing equity analysts rarely limit their research to fundamental or technical analysis alone.

Technical analysis can be applied to any security with historical trading data. This includes stocks, futures, commodities, fixed-income, currencies, and other securities. In fact, technical analysis is far more prevalent in commodities and forex markets where traders focus on short-term price movements.

Technical analysis attempts to forecast the price movement of virtually any tradable instrument that is generally subject to forces of supply and demand, including stocks, bonds, futures, and currency pairs. In fact, some view technical analysis as simply the study of supply and demand forces as reflected in the market price movements of a security.

Technical analysis most commonly applies to price changes, but some analysts track numbers other than just price, such as trading volume or open interest figures.

Technical Analysis Indicators

Across the industry, there are hundreds of patterns and signals that have been developed by researchers to support technical analysis trading. Technical analysts have also developed numerous types of trading systems to help them forecast and trade on price movements.

Some indicators are focused primarily on identifying the current market trend, including support and resistance areas, while others are focused on determining the strength of a trend and the likelihood of its continuation. Commonly used technical indicators and charting patterns include trendlines, channels, moving averages, and momentum indicators.

In general, technical analysts look at the following broad types of indicators:

- Price trends
- Chart patterns
- Volume and momentum indicators
- Oscillators
- Moving averages
- Support and resistance levels

What Assumptions Do Technical Analysts Make?

Professional technical analysts typically accept **three general assumptions** for the discipline:

1. Market discounts everything
2. Prices, even in random market movements, will exhibit trends regardless of the time frame being observed
3. History tends to repeat itself.

The repetitive nature of price movements is often attributed to market psychology, which tends to be very predictable based on emotions like fear or excitement.

Before we list down the popular technical charting tool (Japanese candle stick), let's understand a few important data points.

For a productive technical analysis, the following are the key data points that are collated:

- a. **Time period** – Technical analysis can be undertaken for any time period. Depending on the need of the trader, the time period could be 1-min, 5-mins, 15-min, 30-min, 1-hr, 2-hr, 3-hr, 1-day, 5-days, 10-days, 1-month, etc.
- b. **Price data** – Open, High, Low and Close (popularly referred as OHLC). One needs to remember that these price point are for a specific time period, as mentioned above.
- c. **Volume** – The volumes traded at each time-period/price-point becomes a critical factor to evaluate the price movements.

Candle-stick: Candle stick is by far a very popular charting tool. It represents the OHLC data in the form of a candle. There are 3 components to the candle-stick:

- **Central/real body** - The real body, rectangular in shape connects the opening and closing price
- **Upper shadow/wick** - Connects the high point to the real body
- **Lower shadow/wick** - Connects the low point to the real body.

Some of the popular patterns that are studied by the technical analysts using the candle-stick are as follows:

- Marubozu
- Doji
- Spinning Tops

80 ■ Stock Selection & Stock Return-Risk

- Paper umbrella – Hammer and the Hanging man
- Shooting star
- Engulfing pattern
- Morning star / Evening star

Often, technical analysts also look at momentum indicators. Few of the popular momentum indicators /oscillators are given below:

1. Relative Strength Index (RSI)
2. Average Directional Index (ADX)
3. Moving Average Convergence Divergence (MACD)

STOCK RETURN AND RISK

Analysing risk and returns trade off-relationship-investment risk.

Risk

Risk is usually understood as “exposure to a danger or hazard”. In investment decisions, risk is defined as the possibility that what is actually earned as return could be different from what is expected to be earned. For example, consider an investor who buys equity shares after hearing about the huge returns made by other investors. He expects to earn at least 50% return within 2 years. But if equity markets decline during that period, the investor could end up with negative returns instead. This deviation between actual and expected returns is the risk in his investment.

If the return from an investment remains unchanged over time, there would be no risk. But there is no investment of that kind in the real world. Even returns on government saving products change. For example, consider the Public Provident Fund (PPF), which is a 15-year deposit in which investors have to put in money at least once every year. This investment is considered to be government- guaranteed and its returns are viewed as being very safe. The rate of return on PPF was 12% in the year 2000. Consider the changes ever since:

- Reduced to 11% in January 2000
- Reduced to 9.5% in March 2001
- Reduced to 9 % in March 2002
- Reduced to 8% in March 2003

An investor, who began to invest in 1999, hoping to earn 12% return, would have found that by March 2003, the rate had come down to 8%. The unexpected change to investment return that impacts the investor’s financial plans is the risk investors have to deal with.

Deviations from expected outcomes can be positive or negative: both are considered to be risky. However, it is human nature to focus on negative deviations- or situations when actual returns fall below the expected level.

All investments are subject to risk, but the type and extent of risk are different. Thus, it is important to understand the common types of risk and evaluate investments with respect to them. Understanding the risk will help an investor decide the impact it will have on their financial situation and how to deal with it. The risk that an individual will be willing to take is specific to their situation in life. Some risks will require strategic portfolio changes to be made, such as extent of diversification in the portfolio. Other risks may be managed tactically, for example making temporary changes in asset allocation to deal with a risk.

There are several types of risk to which investments can be exposed.

1. Inflation Risk
2. Default Risk
3. Liquidity Risk
4. Re-investment Risk

5. Business Risk
6. Exchange Rate Risk
7. Interest rate Risk
8. Market Risk
9. Systematic & Unsystematic Risk

Understanding Return

Return on investment is a basic computation made to assess how an investment is performing. Every investment can be represented as a set of inflows and outflows. Return is the comparison of the inflow and outflow and therefore the benefit to the investor from making the investment. Returns can be positive or negative. A negative return means that the investment has yielded losses rather than benefits. Consider these examples:

- A plot of land was purchased for Rs.5 lakhs and sold for Rs. 4 lakhs
- A debenture was bought for Rs.105 and sold for Rs.130

On basis of a comparison of inflows and outflows, clearly, the first investment has resulted in a loss, whereas the second has yielded a profit. The first case represents negative return on investment; the second is an example of positive return.

Return can be measured in two ways:

1. Comparing amount of inflows and amount of outflows on an investment in absolute rupee terms.
2. Computing a rate of return by comparing inflows and outflows.

Consider the following investments:

1. Purchase equity shares for Rs.23,000 and sell at Rs.28,000
2. Purchase equity shares for Rs.2500 and sell at Rs.3100

The net return in rupees earned on investment A equals Rs.5000 (28000 minus 23,000). The net return in rupees earned on investment B equals Rs.600 (3100 minus 2500). In rupee terms, it appears that investment A has generated a much higher return as compared to investment B. However, investment A requires higher initial outflow, so the return is earned on a much higher base. It is not possible to compare only amount of return earned; instead, one has to compare the amount of return relative to the initial investment (or starting value). This is done by calculating the **rate of return**.

The rate of return is usually measured in percent terms. This means equalizing the amount invested to Rs.100 so it represents the return that would be earned on each investment if the amount invested was the same i.e. Rs.100. This enables comparison of return across investments even if the amount invested is different. Thus, it is a better measure of return on investment.

Risk Free Rate of Return

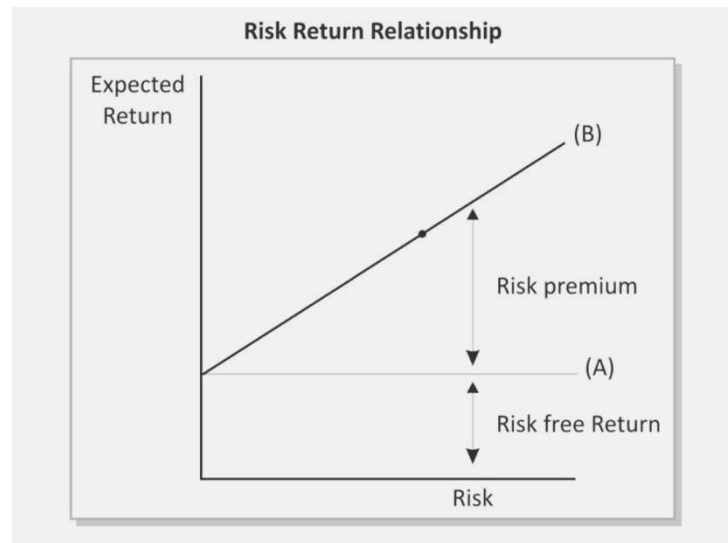
Risk-free rate is rate of return from a default-risk free government security. Government bonds have less risk as interest rate is known and the risk of default is very less. An asset like T-bills, money market funds or bank deposits is taken as the proxy for risk-free rate. Such assets have very low or virtually negligible default risk and interest rate risk. On the other hand one has to take more risk if he wants to invest in shares as return is not certain. However one can expect lower return from Government bond and higher from shares.

Risk and expected return move one behind the other, the greater the risk the greater the expected return.

The following figure shows the risk-return relationship:

In the below graph X-axis represents Risk, Y-axis represents expected return. Risk free return is depicted by the flat line (A) meaning it is constant. And risk premium is increasing along with increasing expected return, as depicted by line (B).

But under inflationary conditions, these are risk-less in nominal terms only as their purchasing powers varies according to inflation. In fact, the real return (nominal return minus inflation rate) may become zero, even negative, when inflation goes up.



Risk Free return is the theoretical rate of return on an investment with zero risk. The risk-free rate symbolizes the interest an investor would expect from an absolutely risk-free investment over a specified period of time. In theory, the risk-free rate is the minimum return an investor expects for any investment since he or she would not bear any risk unless the potential rate of return is greater than the risk-free rate. In practice, however, *the risk-free rate does not exist since even the safest investments carry a very small amount of risk*. Thus, the interest rate on a Treasury bill is often used as the risk-free rate.

An investor assuming risk from his/her investment requires risk-premium above the risk-free rate. Higher the risk of an investment, higher will be the risk premium which leads to higher required returns on that investment. An appropriate balance between return and risk should be maintained to maximize the return or market value of the investment. This balancing act is called risk-return trade-off, and every financial decision demands this trade-off. (An exchange that occurs as a compromise).

Because of the risk-return trade-off, a investment advisor must be aware of his clients risk tolerance when choosing investments for his portfolio. Taking on some risk is the price of achieving returns; therefore, if you want to make money, you cannot cut out all risk. The goal instead is to find an appropriate balance - one that generates some profit, but still allows us to sleep peacefully.

Real Risk Free Rate is the single-period interest rate for a completely risk-free security if no inflation were expected. It is the Real Interest Rate (RIR) that would exist on a security if no inflation were expected over the holding period (e.g. a year) of a security.

Risk tolerance of an investor's varies according to age, income requirements, financial goals, etc. For example, a 70-year-old retiree generally has a lower risk tolerance than a single young 25-year-old executive.

Types of Investors According to 'Risk-Return' Perception

According to risk-return perception the investors may be classified in the following three types:

Risk averse investors avoid risk, however, may be ready to take risk if the return available for taking extra risk is commensurate or equal.

Risk Seeker investors are ready to take risk even if the return for taking that risk is not sufficient enough.

Risk Neutral investors require just sufficient return for taking risk. They want neither extra return for a given risk, nor ready to take extra risk for a given return.

Test Your Understanding 1

Which of these is/are term(s) used in Technical Analysis?

- a. RSI
- b. ADX
- c. Candle Stick
- d. All of the above

Test Your Understanding 2

In case of Fundamental Analysis, what does EIC stand for?.

- a. Equity, Investments, Capital
- b. Economy, Industry, Company
- c. Entrepreneur, Institution, Corporation
- d. All of the above

Fun Learning with English idioms

Idiom: *a balancing act*

The idiom *a balancing act* refers to a situation in which one must accomplish a number of tasks at the same time.

Example: *It's a balancing act to make you're your employees are actually getting things done without micromanaging them.*

Test Your Understanding 3

The three importance financial statements used in Fundamental Analysis are Balance Sheet, Profit & Loss account and Cash Flow Statement. True or False?

- a. True
- b. False

Test Your Understanding 4

Greater the risk, _____ the expected returns.

- a. Greater
- b. Lesser
- c. Smaller
- d. None of these

Test Your Understanding 5

Risk Seeker investors are ready to take risk even if the return for taking that risk is not sufficient enough. True or False?

- a. True
- b. False

Test Your Understanding Solutions

TYU 1

Which of these is/are term(s) used in Technical Analysis?

- a. RSI
- b. ADX
- c. Candle Stick
- d. All of the above

Correct Answer: d. All of the above

TYU 2

In case of Fundamental Analysis, what does EIC stand for?.

- a. Equity, Investments, Capital
- b. Economy, Industry, Company
- c. Entrepreneur, Institution, Corporation
- d. All of the above

Correct Answer: b. Economy, Industry, Company

TYU 3

The three importance financial statements used in Fundamental Analysis are Balance Sheet, Profit & Loss account and Cash Flow Statement. True or False?

- a. True
- b. False

Correct Answer: a. True

TYU 4

Greater the risk, _____ the expected returns.

- a. Greater
- b. Lesser
- c. Smaller
- d. None of these

Correct Answer: a. Greater

TYU 5

Risk Seeker investors are ready to take risk even if the return for taking that risk is not sufficient enough. True or False?

- a. True
- b. False

Correct Answer: a. True

PART 3

MUTUAL FUNDS AND FINANCIAL PLANNING ESSENTIALS

INTRODUCTION TO MUTUAL FUNDS

CHAPTER 1

LEARNING OBJECTIVES

- understand the history of mutual funds in India
- list types of mutual funds
- calculate net asset value (NAV)

CHAPTER TABLE OF CONTENT

1. About Mutual Funds
2. Mutual Fund History in India
3. Mutual Fund structure and key participants
 - Sponsor
 - Trustee
 - Asset Management Company
 - Custodian
4. Major Fund Houses in India
5. Mutual Fund Schemes
6. Net Asset Value (NAV)
 - Subscribers
 - Registrar & Transfer Agents
 - Fund Manager
 - Fund Accountant

INTRODUCTION

In the earlier modules we understood the concepts of banking, basic economic terms, investment products and risk-return analysis.

We also look at the basics of financial planning and how investor risk profile plays a role in selection of the investment avenue.

We also saw that some of the investment instruments carried higher risk and some of them were near risk-free investments.

In the chapter, we will learn all about the mutual fund. We will try to understand the meaning, nature of mutual funds, their advantages and disadvantages, key scheme types and the concept of NAV.

Let's warm up

The Association of Mutual Funds in India (AMFI) is dedicated to developing the Indian Mutual Fund Industry on professional, healthy and ethical lines and to enhance and maintain standards in all areas with a view to protecting and promoting the interests of mutual funds and their unit holders.

AMFI, the association of SEBI registered mutual funds in India of all the registered Asset Management Companies, was incorporated on August 22, 1995, as a non-profit organisation. As of now, all the 42 Asset Management Companies that are registered with SEBI, are its members.

Website: <https://www.amfiindia.com>



ABOUT MUTUAL FUNDS

A Mutual Fund is an avenue of investment in the form of a trust where money mobilised from various investors who share a common investment objective is pooled and invested in securities like bonds, equity, and short-term debt. A key feature of a mutual fund is that it is managed by an asset management company and is overseen by a professional fund manager. The key advantage of this form of investment is that an investor is able to invest in the financial market under the supervision of a qualified portfolio manager while also having access to a wider range of investment options than would be typically accessible to an individual investor.

Mutual Funds serve various functions within the financial economy at both the **micro** and **macro** level.

Micro level

At the micro level they provide a relatively risk-free investment avenue to individual investors and help them earn income or build wealth, by facilitating participating in the financial markets through investment in equity or debt. The major feature and advantage of mutual funds is that because they are managed by professional fund managers, individual investors gain access to their expertise and are also freed from the need to manage their investments on an individual level. Moreover, mutual funds can be structured differently for different kinds of investment objectives, and so offer versatility and make it possible to build a large corpus of money from various investors with diverse objectives.

In the industry, the words ‘fund’ and ‘scheme’ are used inter-changeably. Various categories of schemes are called “funds”. To ensure consistency with what is experienced in the market, this workbook goes by the industry practice. However, wherever a difference is required to be drawn, the scheme offering entity is referred to as “mutual fund” or “the fund”.

Macro level

At the macro level, money raised from investors ultimately benefits governments, companies, and other entities, directly or indirectly, by providing funding for various projects or paying for various expenses. Projects that are facilitated through such financing, offer employment to people; the income they earn helps employees buy goods and services offered by other companies, thus supporting projects of these goods and services companies. Thus, money flow in the economy is sustained and overall economic development is supported.

Moreover, being large investors, mutual funds can keep a check on the operations of the investee company and their corporate governance and ethical standards. The mutual fund industry itself also offers employment to a large number of employees of mutual funds, distributors, registrars and various other service providers. Higher employment, income and output in the economy boosts the revenue collection of the government through taxes and other means. When these are spent prudently, it promotes further economic development and nation building.

Mutual funds can also act as market stabilizers in countering large inflows or outflows from foreign investors. Mutual funds are therefore thought to be a key participant in the capital market of any economy.

Advantages of mutual funds

- Variety of investment structures
- Affordable and accessible
- Ability to make regular and systematic investments
- Wealth creation
- Liquidity
- Well-regulated and controlled
- Expertise of fund managers
- Tax benefits and deferrals

Limitations of mutual funds

- Lack of portfolio control and choice
- Choice overload
- Lack of cost control



Did you know?

Mutual Fund & SEBI:

- **Securities and Exchange Board of India (SEBI)** is a legal body that regulates the Indian capital markets including mutual funds.
- SEBI supervises and controls the securities market, but most importantly, it protects your interests as an investor by enforcing firm rules and regulations.
- Legally speaking, a mutual fund comprises 5 entities - Sponsor, Trustee, AMC, Custodian and RTA.
- To protect financial transactions SEBI mandates that every investor must comply with KYC norms.

KEY PARTICIPANTS IN THE MUTUAL FUND INDUSTRY

The key participants in the mutual fund industry are:

- **Sponsor:** A sponsor is a person or an entity that sets up a mutual fund. The sponsor or sponsors are like the promoters of a company. They set up a trust for the management of the fund.
- **Trustee:** The trustees of the mutual fund hold the property of the fund for the benefit of the unitholders. The trustees hold general power of superintendence and direction over the AMC and monitor its performance and compliance with SEBI Regulations. SEBI Regulations require that at least two thirds of the directors of trustee company or board of trustees must be independent and not affiliated with the sponsors.
- **Asset Management Company:** An Asset Management Company or AMC manages the funds by making investments in various types of securities. This must be approved by SEBI. SEBI also required that 50% of the directors of AMC must be independent.
- **Custodian:** The Custodian holds the securities of the various schemes of the fund in its custody. The custodian must be registered with SEBI.
- **Subscribers:** Are the investors who commit to investing in a financial instrument before the actual closing of the purchase.
- **Registrar & Transfer Agents:** A registrar and transfer agent (RTA) acts as a mediator or agent between investors and mutual fund houses.
- **Fund Manager:** A fund manager is a person who oversees the activities of the mutual fund. In other words, the fund manager is responsible for implementing a fund's investment strategy and managing its trading activities. They also manage analysts, conduct research, and make investment decisions.
- **Fund Accountant:** A fund accountant is responsible the day-to-day aspects of accounting for one or more assigned mutual funds. They also prepare Net Assets Values, yields, distributions, and other fund accounting outputs for subsequent review.

Test Your Understanding 1

Which of full form of AMFI?

- a. Avid Mutual Fund Investor
- b. Association of Mutual Funds of India
- c. Aditya Birla Mutual Fund Inc.
- d. None of the these

Test Your Understanding 2

The trustees of the mutual fund hold the property of the fund for the benefit of the sponsors. True or False?

- a. True
- b. False

HISTORY OF MUTUAL FUNDS IN INDIA

Phase 1 (1964-1987) – Establishment

The naissance of mutual funds in India can be traced back to 1963 when the Government of India established the Unit Trust of India (UTI) through an Act of Parliament. The objective was to encourage and facilitate wider participation in the financial market by investors (and institutions?) with the eventual goal of strengthening the economy of the country. The Unit Scheme, launched in 1964, was the first scheme that was launched by the UTI.

UTI initially worked under the administrative and regulatory control of the Reserve Bank of India (RBI), but was delinked from the RBI in 1978, following which the Industrial Development Bank of India (IDBI) took over its administration and regulation.

Phase 2 (1987-1993) - Launch of Public Sector Mutual Funds

In 1987, the first public sector mutual funds entered the market. These were mutual funds set up and managed by Insurance Corporation of India (LIC), General Insurance Corporation of India (GIC) and various public sector banks. For example, SBI Mutual Fund was the first non-UTI' mutual fund established in June 1987. This was subsequently followed by Canbank Mutual Fund in December 1987, Punjab National Bank Mutual Fund in August 1989, Indian Bank Mutual Fund in November 1989, Bank of India Mutual Fund in June 1990, Bank of Baroda Mutual Fund October 1992. LIC also established its mutual fund in June 1989 and GIC set up its mutual fund in December 1990. At the end of 1993, the Mutual Fund industry had assets under management of ₹47,004 crores.

Phase 3 (1993-2003) – Launch of Private Sector Mutual Funds

In April 1992, the Securities and Exchange Board of India was set up with the aim of regulated the securities market and protect the interests of investors while also to promoting the development of the industry. The first set of SEBI Mutual Fund Regulations came into effect in 1993 and applied to all funds with the exception of UTI. The first private mutual fund was Kothari Pioneer (now merged with Franklin Templeton MF), which was registered in July 1993. The entry of private play-

ers gave a wider range of investment choices to investors. 1996, SEBI issued a new set of regulations that had been revised from the previous regulations. These are currently in effect. In the years that followed this, several foreign sponsors also set up mutual funds in India. The industry also saw many mergers and acquisitions leading to a move towards consolidation. As at the end of January 2003, there were 33 MFs with total AUM of ₹1,21,805 crores, out of which UTI alone had AUM of ₹44,541 crores.

Phase 4 (2003 – 2014) – Consolidation and slowdown

In February 2003, the Unit Trust of India Act, 1963 was repealed and UTI was bifurcated into two separate entities - the Specified Undertaking of the Unit Trust of India (SUUTI) and UTI Mutual Fund which functions under the SEBI MF Regulations. During this time, several private sector funds also underwent mergers and the industry entered into a consolidation phase.

The global meltdown of 2009 had an impact on financial markets around the world as well as in India. Investors who entered in the market during the peak saw steep falls in their portfolio values and consequently lost faith in investments in financial markets, which included mutual funds.

The abolition of Entry Load by SEBI, along with the after-effects of the global financial crisis had an adverse effect on the Indian mutual fund industry, which struggled to recover for over two years, in an attempt to maintain its economic viability which is evident from the sluggish growth the industry AUM between 2010 to 2013.

Phase 5 (since 2014)

With a view to correcting and rejuvenating the mutual fund industry after years of sluggish growth, SEBI introduced several new measures to enhance the image of and trust in mutual funds among investors. There was also a specific objective to penetrate more Tier II and Tier III cities to increase the pool of investors within the country and thus revitalise the market. These were successful in general and the industry stabilized and moved towards growth.

Since May 2014, the Industry has had a consistent growth in inflows and increase in the AUM as well as the number of investor folios.

Some of the important milestones and information are listed below:

- May 2014: The industry's AUM crossed ₹10 Trillion (₹10 Lakh Crore) for the first time.
- August 2017: The industry's AUM crossed ₹ 20 trillion (₹20 Lakh Crore)
- November 2020: The industry's AUM crossed ₹ 30 trillion (₹30 Lakh Crore)
- Between 2012 and 2022 the Indian MF Industry has grown from ₹ 6.99 trillion to ₹37.22 trillion
- Between 2017 and 2022 the number of investor folios went up from 5.72 crore folios to 13.33 crore.
- On an average 12.69 lakh new folios are added every month in the last 5 years since May 2017.

Mutual fund distributors have played an important role in the achievement of these milestones by providing a connect with investors, particularly in Tier II and Tier III cities, which helped expand the retail base. Mutual fund distributors not only enable investments by providing consultations on the various types of funds available for investment based on investors' objectives, but also play a role helping them navigate market volatility and thus experience the benefit of investing in mutual funds.

Mutual fund distributors have especially had a big role in popularising Systematic Investment Plans (SIP) among investors. As on May 31 2022 there were 5.48 crore SIP accounts.

MF Distributors have been providing the much needed last mile connect with investors, particularly in smaller towns and this is not limited to just enabling investors to invest in appropriate schemes, but also in helping investors stay on course through bouts of market volatility and thus experience the benefit of investing in mutual funds.

MF distributors have also had a major role in popularising Systematic Investment Plans (SIP) over the years. In April 2016, the no. of SIP accounts has crossed 1 crore mark and as on 31st May 2022 the total no. of SIP Accounts are 5.48 crore.

Fun Learning with English idioms

Idiom: *Midas touch*

The idiom *Midas touch* means the ability to make everything that one is involved with very successful.

Example: *The young football coach had the Midas touch as he led his undefeated team through a perfect season.*

MAJOR FUND HOUSES IN INDIA

Some of the major Fund Houses in India include :

- Axis AMC
- Aditya Birla SunLife AMC
- Franklin Templeton Asset Management (India)
- HDFC AMC
- Invesco Asset Management (India)
- Kotak Mahindra AMC
- LIC Mutual Fund AMC
- Motilal Oswal AMC
- Nippon Life India Asset Management
- SBI Funds AMC
- UTI AMC

(Please note the list is not exhaustive)

MUTUAL FUND SCHEMES

There is a wide range of mutual fund structures for different investor goals. Mutual funds can be broadly classified based on the following criteria:

- Organisation Structure – Open ended, Close ended, Interval
- Portfolio management strategy – Active or Passive
- Investment Objective – Growth, Income, Liquidity
- Underlying Portfolio – Equity, Debt, Hybrid, Money market instruments, Multi Asset
- Sector specific funds
- Thematic / solution oriented – Tax saving, Retirement benefit, Child welfare, Arbitrage
- Exchange Traded Funds
- Fund of funds

By Organisation Structure

Open-ended schemes: These are perpetual, and open for subscription and repurchase on a continuous basis on all business days at the current NAV.

Close-ended schemes: They have a fixed maturity date. The units are issued at the time of the initial offer and redeemed only on maturity. The units of close-ended schemes are mandatorily listed to provide exit route before maturity and can be sold/traded on the stock exchanges.

Interval schemes: These allow purchase and redemption during specified transaction periods (intervals). The transaction period has to be for a minimum of 2 days and there should be at least a 15-day gap between two transaction periods. The units of interval schemes are also mandatorily listed on the stock exchanges.

By Portfolio Management Strategy

Active Funds: In an active fund, the fund manager is 'Active' in deciding whether to Buy, Hold, or Sell the underlying securities and in stock selection.

Passive Funds: In a passive fund the fund manager has a passive role, as the stock selection / Buy, Hold, Sell decision is driven by a Benchmark Index (Index Funds or Exchange Traded Funds) and the fund manager just replicates a stated index.

By Investment Objective

Growth Funds: Growth Funds are typically designed to provide capital appreciation. They mainly invest in growth-oriented assets, like equity. Investment in growth-oriented funds require a medium to long-term investment horizon.

Income Funds: The objective of Income Funds is to provide regular and steady income to investors. Income funds invest in fixed income securities like corporate Bonds, debentures and government securities. The fund's return comes from the interest income earned on these investments as well as capital gains from any change in the value of the securities.

Liquidity: Liquid Schemes, Overnight Funds and Money market mutual fund are investment options for investors seeking liquidity and principal protection, with commensurate returns. The funds invest in money market instruments like commercial papers, commercial bills, treasury bills, Government securities having an unexpired maturity up to one year, call or notice money, certificate of deposit, usance bills, and any other instruments as specified by the Reserve Bank of India with maturities not exceeding 91 days. The return from the funds will depend upon the short-term interest rate prevalent in the market.

By Underlying Portfolio

These are schemes which are based on the type of instruments in which the funds are invested. These are classified as Equity, Debt, Money market, multi-asset schemes.

Equity scheme primarily invests in equity instruments, where as **debt scheme** invests in fixed income securities. **Money market/liquid schemes** are those that invest in short-term money market instruments. **Multi-asset schemes** are also called as **hybrid schemes**, as these invests in more than one asset class and combines equity, debt and money market instruments based on the investment objectives.

By Sector

Sectoral funds invest in a particular sector of the economy such as infrastructure, banking, technology or pharmaceuticals etc. Since these funds focus on just one sector of the economy, they limit diversification, and are thus riskier. Timing of investment into such funds are important, because the performance of the sectors tend to be cyclical.

Examples of Sector Specific Funds - Equity Mutual Funds with an investment objective to invest in

- Pharma & Healthcare Sector
- Banking & Finance Sector
- FMCG (fast moving consumer goods) and related sectors.
- Technology and related sector

By Themes / solution oriented

Thematic funds select stocks of companies in industries that belong to a particular theme - For example, Infrastructure, Service industries, PSUs or MNCs. They are more diversified than Sectoral Funds and hence have lower risk than Sectoral funds. At times, the theme can be oriented towards specific solutions - Tax saving, Retirement benefit, Child welfare, Arbitrage.

For example, **Equity Linked Savings Scheme (ELSS)** focusses on tax saving. These invest at least 80% in stocks in accordance with Equity Linked Saving Scheme, 2005, notified by Ministry of Finance. It has lock-in period of 3 years (which is shortest amongst all other tax saving options). Currently eligible for deduction under Sec 80C of the Income Tax Act up to ₹1,50,000.

Few of the solution oriented funds are listed below:

Retirement Fund	Lock-in for at least 5 years or till retirement age whichever is earlier
Children's Fund	Lock-in for at least 5 years or till the child attains age of majority whichever is earlier
Index Funds/ ETFs	Minimum 95% investment in securities of a particular index
Fund of Funds (Overseas/ Domestic)	Minimum 95% investment in the underlying fund(s)

Exchange Traded Funds (ETF)

An ETF is a marketable security that tracks an index, a commodity, bonds, or a basket of assets like an index fund. ETFs are listed on stock exchanges.

Some of the key points regarding ETFs are listed below:

- Unlike regular mutual funds, an ETF trades like a common stock on a stock exchange. The traded price of an ETF changes throughout the day like any other stock, as it is bought and sold on the stock exchange.
- ETF Units are compulsorily held in Demat mode
- ETFs are passively managed, which means that the fund manager makes only minor, periodic adjustments to keep the fund in line with its index
- Because an ETF tracks an index without trying to outperform it, it incurs lower administrative costs than actively managed portfolios.
- Rather than investing in an 'active' fund managed by a fund manager, when one buy units of an ETF one is harnessing the power of the market itself.
- Suitable for investors seeking returns similar to index and liquidity similar to stocks

Fund of funds

Fund of funds (FoF) are mutual fund schemes that invest in the units of other schemes of the same mutual fund or other mutual funds. The schemes selected for investment will be based on the investment objective of the FoF.

Test Your Understanding 3

These funds/scheme have a fixed maturity date. The units are issued at the time of the initial offer and redeemed only on maturity. Which scheme/fund are we referring to?

- Open ended scheme
- Closed ended scheme
- Both of the above
- None of the above

Test Your Understanding 4

Equity Linked Savings Scheme (ELSS) are tax savings scheme. True or False?

- a. True
- b. False

Fun Learning with English idioms

Idiom: *a nest egg*

The idiom *a nest egg* means an allotment of money that is set aside for the future.

Example: With the cost of living these days, it is difficult for young couples to build a nest egg and save for retirement.

NET ASSET VALUE

Net Asset value or NAV refers to the value of each unit of the scheme. NAV is one of the most important concept to understand in a mutual fund.

All subscriptions into the fund and all redemptions out of the fund are based on the NAV of the units on the date of subscription/redemption.

The fund houses are directed to publish the NAV of each fund on a daily basis. These NAVs are made available on the respective websites of the AMCs as well as on the AMFI website.

How is NAV calculated?

This is calculated as follows:

$$\text{NAV} = \text{Unit-holders' Funds in the Scheme (a.k.a. Net Assets)} \div \text{No. of outstanding Units}$$

For example, if unit-holders' funds in the scheme are taken as Rs 365 crore and the number of outstanding units are 42 crore, then the NAV will be:

$$\text{Rs 365 crore} \div 42 \text{ crore} = \text{Rs. 8.69 per unit}$$

Alternate formula for calculating NAV:

$$\text{NAV} = (\text{Total Assets} - \text{Liabilities/Expenses other than to Unit holders}) \div \text{No. of outstanding Units}$$

This calculation shows that:

- The higher the interest, dividend and capital gains earned by the scheme, the higher would be the NAV.
- The higher the appreciation in the investment portfolio, the higher would be the NAV.
- The lower the expenses, the higher would be the NAV.

The summation of these three parameters gives us the profitability metric as being equal to:

- (A) Interest income
- (B) + Dividend income
- (C) + Realized capital gains
- (D) + Valuation gains
- (E) – Realized capital losses
- (F) – Valuation losses
- (G) – Scheme expenses

Test Your Understanding 5

The market value of the securities of a mutual fund scheme is Rs. 501.80 lakhs. There are expenses/liabilities of Rs.20 lakhs that are to be adjusted for the scheme. The total number of outstanding units of the funds are 18,24,000. Which of these is the NAV of the mutual fund scheme?

- a. Rs. 26.4144
- b. Rs. 27.5109
- c. Rs. 25.0911
- d. None of these

Test Your Understanding Solutions

TYU 1

Which of full form of AMFI?

- a. Avid Mutual Fund Investor
- b. Association of Mutual Funds of India
- c. Aditya Birla Mutual Fund Inc.
- d. None of the these

Correct Answer: b. Association of Mutual Funds of India

TYU 2

The trustees of the mutual fund hold the property of the fund for the benefit of the sponsors. True or False?

- a. True
- b. False

Correct Answer: b. False

Remarks: The trustees of the mutual fund hold the property of the fund for the benefit of the unitholders (and not the sponsors).

TYU 3

These funds/scheme have a fixed maturity date. The units are issued at the time of the initial offer and redeemed only on maturity. Which scheme/fund are we referring to?

- a. Open ended scheme
- b. Closed ended scheme
- c. Both of the above
- d. None of the above

Correct Answer: b. Closed ended scheme

TYU 4

Equity Linked Savings Scheme (ELSS) are tax savings scheme. True or False?

- a. True
- b. False

Correct Answer: a. True

TYU 5

The market value of the securities of a mutual fund scheme is Rs. 501.80 lakhs. There are expenses/liabilities of Rs.20 lakhs that are to be adjusted for the scheme. The total number of outstanding units of the funds are 18,24,000. Which of these is the NAV of the mutual fund scheme?

- a. Rs. 26.4144
- b. Rs. 27.5109
- c. Rs. 25.0911
- d. None of these

Correct Answer: a. 26.4144

Remarks (Calculation):

$$\begin{aligned} \text{Net assets} &= \text{Asset value} - \text{Liabilities} = \text{Rs.}501.80 \text{ lakhs} \\ &- \text{Rs.}20 \text{ lakhs} = \text{Rs.}481.80 \text{ lakhs} \\ \text{NAV} &= \text{Net assets} / \text{No. of outstanding units} \\ \text{NAV} &= 481,80,000 / 18,24,000 = 26.4144 \end{aligned}$$

CRITERIA FOR SELECTION OF MUTUAL FUNDS

CHAPTER 2

LEARNING OBJECTIVES

- grasp key concepts associated with mutual fund investment returns

CHAPTER TABLE OF CONTENT

1. Mutual Fund returns
2. Performance Measures
 - Sharpe
 - Treynor
 - Alpha
 - Beta

INTRODUCTION

In the earlier chapter, we understood a few concepts of mutual funds, various schemes of mutual funds, advantages and disadvantages of mutual funds and the concept of Net Asset Value (NAV)

While the industry of mutual funds is vast expanding with a variety of new scheme offerings, it is important to understand how these returns of mutual funds are tracked.

When fund manager creates portfolio of stocks/debt instruments, they need to evaluate the fund performance. But, what are these fund performance metrics?

Mutual fund schemes invest in the market for the benefit of Unit-holders. How well did a scheme perform? An approach to assess the performance is to pre-define a comparable – a benchmark – against which the scheme can be compared.

In the chapter, we will learn all about the returns and the metrics for evaluating the mutual fund performance.

Let's warm up

Risk Level of a scheme will be depicted by "Risk-o-meter", as shown below:



Securities and Exchange Board of India (SEBI), being the capital market regulator, has issued a circular in October 2020 advising the Mutual Fund industry intermediaries on the use of Risk-o-meter.

SEBI, based on the recommendation of Mutual Fund Advisory Committee (MFAC), has reviewed the guidelines for product labelling in mutual funds and decided that the Risk level of a scheme be depicted by “Risk-o-meter”.

Risk-o-meter has following six levels of risk for mutual fund schemes:

- i. Low Risk
- ii. Low to Moderate Risk
- iii. Moderate Risk
- iv. Moderately High Risk
- v. High Risk and
- vi. Very High Risk

Source: https://www.sebi.gov.in/legal/circulars/oct-2020/circular-on-product-labeling-in-mutual-fund-schemes-risk-o-meter_47796.html

1. MUTUAL FUND RETURNS

Drivers of Returns and Risk in a Scheme

The portfolio is the main driver of returns in a mutual fund scheme. The asset class in which the fund invests, the segment or sectors of the market in which the fund will focus on, the styles adopted to select securities for the portfolio and the strategies adopted to manage the portfolio will all determine the risk and return in a mutual fund scheme. The underlying factors are different for each asset class.

Measures of Returns

The returns from an investment is calculated by comparing the cost paid to acquire the asset (outflow) or the starting value of the investment to what is earned from it (inflows) and computing the rate of return. The inflows can be from periodic payouts such as interest from fixed income securities and dividends from equity investments and gains or losses from a change in the value of the investment. The calculation of return for a period will take both the income earned and gains/loss into consideration, even if the gains/loss have not been realized.

Simple Return

$$\frac{((\text{Later value} - \text{Initial value}) \times 100)}{\text{Initial Value}}$$

Suppose you invested in a scheme at a NAV of Rs. 15. Later, you found that the NAV has grown to Rs. 20. How much is your return?

$$\text{Simple Return} = \frac{((20-15) \times 100)}{15} = 33.33\%$$

Annualised Return

Annualization helps us compare the returns of two different time periods.

$$\text{Simple Return} \times 12 / \text{Period of simple returns in months}$$

Two investment options have indicated their returns since inception as 9 percent and 4 percent respectively. If the first investment was in existence for 9 months, and the second for 3 months, then the two returns are obviously not comparable.

Annualised returns:

Investment 1: $9 \text{ percent} \times 12 / 9 = 12\% \text{ p.a.}$

Investment 2: $4 \text{ percent} \times 12 / 3 = 16\% \text{ p.a.}$

Fun Learning with English idioms

Idiom: *save for a rainy day*

The idiom *save for a rainy day* means to reserve something, especially money, for use in a time or period of unforeseen difficulty, trouble, or need.

Example: *I know you want to buy a new TV with your bonus, but you should really save that money for a rainy day.*

SEBI Norms regarding Representation of Returns by Mutual Funds in India

- Mutual funds are not permitted to promise any returns, unless it is an assured returns scheme.
- Assured returns schemes call for a guarantor who is named in the offer document. The guarantor will need to write out a cheque, if the scheme is otherwise not able to pay the assured return.
- Advertisement Code and guidelines for disclosing performance related information of mutual fund schemes are prescribed by SEBI.

Test Your Understanding 1

On an annualised return basis, with of these investment options (funds) give a better return?

- Fund A: Return since inception – 6%; Time since existence – 6 months
- Fund B: Return since inception – 4%; Time since existence – 2 months
- Fund C: Return since inception – 8%; Time since existence – 8 months
- Fund D: Return since inception – 12%; Time since existence – 6 months



Did you know?

Systematic Transactions

Mutual funds provide transactional facilities that allow investors to tailor investments and structure pay-outs to suit their specific needs and goals. **Systematic transactions**, such as SIP, SWP and STP, enable periodic investments and withdrawals that investors can align to the available investible surplus, need for regular funds or rebalancing the investments to manage risks.

Signing up for the systematic transactions also enables these transactions to be executed without the intervention of the investor every time, thus protecting the portfolio from investor inertia.

SIP investment amount can be **as low as Rs.500 per month**. (*Select few funds are even offering SIPs starting Rs.100*).

QUANTITATIVE MEASURES OF FUND MANAGER PERFORMANCE ABSOLUTE & RELATIVE RETURNS

Using the concept of **benchmarks**, one can do relative comparison viz. how did a scheme perform vis-à-vis its benchmark or peer group. Such comparisons are called **relative return comparisons**.

A **credible benchmark** should meet the following requirements:

It should be in sync with (a) the **investment objective** of the scheme (i.e. the securities or variables that go into the calculation of the benchmark should be representative of the kind of portfolio implicit in the scheme's investment objective); (b) **asset allocation** pattern; and (c) **investment strategy** of the scheme.

The benchmark should be calculated by an independent agency in a transparent manner, and published regularly. Most benchmarks are constructed by stock exchanges, credit rating agencies, securities research houses or financial publications.

If a comparison of relative returns indicates that a scheme earned a higher return than the benchmark, then that would be indicative of **outperformance** by the fund manager. In the reverse case, the initial premise would be that the fund manager **under-performed**. Such premises of outperformance or under-performance need to be validated through deeper performance reviews.

AMCs and trustees are expected to conduct such periodic reviews of relative returns, as per the SEBI Guidelines.

Risk-adjusted Returns

Relative returns comparison is one approach towards evaluating the performance of the fund manager of a scheme. A weakness of this approach is that it does not differentiate between two schemes that have assumed different levels of risk in pursuit of the same investment objective. Therefore, although the two schemes share the benchmark, their risk levels are different.

Evaluating performance, purely based on relative returns, may be unfair towards the fund manager who has taken lower risk but generated the same return as a peer.

An **alternative approach** to evaluating the performance of the fund manager is through the **risk reward relationship**. The underlying principle is that return ought to be commensurate with the risk taken. A fund manager, who has taken higher risk, ought to earn a better return to justify the risk taken. A fund manager who has earned a lower return may be able to justify it through the lower risk taken. Such evaluations are conducted through **Risk-adjusted Returns**.

Fun Learning with English idioms

Idiom: *keep (one's) head above water*

The idiom *keep (one's) head above water* means to manage to survive, especially financially.

Example: *We have so little money that we can hardly keep our heads above water.*

Measures of risk-adjusted returns

We will focus on three metrics, which are more commonly used in the market.

Sharpe Ratio

Sharpe ratio is a very commonly used measure of risk-adjusted returns.

An investor can invest with the government and earn a risk-free rate of return (R_f). T-Bill index is a good measure of this risk-free return.

Through investment in a scheme, a risk is taken, and a return is earned (R_s).

The difference between the two returns i.e. $R_s - R_f$ is called risk premium. It is like a premium that the investor has earned for the risk taken, as compared to government's risk-free return.

This risk premium is to be compared with the risk taken. Sharpe Ratio uses Standard Deviation as a measure of risk.

It is calculated as:

$$\text{Sharpe Ratio} = (R_s \text{ minus } R_f) \div \text{Standard Deviation}$$

Example:

Let's say that the risk free return is 4.25% and the scheme has a standard deviation of 0.35%. The return earned by the scheme is taken at 8%. Calculate the Sharpe Ratio.

$$R_f = 4.25\%$$

$$R_s = 8\%$$

$$\text{Standard Deviation} = 0.35\%$$

Replacing these values in the above formula, we get

$$\text{Sharpe Ratio} = (8 - 4.25) / 0.35 = 10.71$$

Sharpe Ratio is effectively the risk premium generated by assuming per unit of risk. Higher the Sharpe Ratio, better the scheme is considered to be.

Sharpe Ratio comparisons can be undertaken only for comparable schemes. For example, Sharpe Ratio of an equity scheme cannot be compared with the Sharpe Ratio of a debt scheme.

Test Your Understanding 2

If risk free return is 5 percent, and a scheme with standard deviation of 0.5 percent earned a return of 7 percent, its Sharpe Ratio would be ____.

- a. 4
- b. 4.5
- c. 5
- d. 5.5

Treynor Ratio

Like Sharpe Ratio, Treynor Ratio too is a risk premium per unit of risk.

Computation of risk premium is the same as was done for the Sharpe Ratio. However, for risk, Treynor Ratio uses Beta.

$$\text{Treynor Ratio} = (R_s \text{ minus } R_f) \div \text{Beta}$$

Let's say that the risk free return is 4.25% and the scheme has a Beta of 1.2. The return earned by the scheme is taken at 7.5%. Calculate the Treynor Ratio.

$$R_f = 4.25\%$$

$$R_s = 7.5\%$$

$$\text{Beta} = 1.2$$

Replacing these values in the above formula, we get

Treynor Ratio = $(7.5 - 4.25) / 1.2 = 2.71$

Higher the Treynor Ratio, better the scheme is considered to be.

Since the concept of Beta is more relevant for diversified equity schemes, Treynor Ratio comparisons should ideally be restricted to such schemes.

Test Your Understanding 3

If risk free return is 5 percent, and a scheme with beta of 1 earned a return of 7 percent, its Treynor Ratio would be ____.

- a. 1
- b. 1.5
- c. 2
- d. 2.5

Alpha

Non-index schemes too would have a level of return, which is in line with its higher or lower beta as compared to the market. Let us call this the optimal return.

The **difference between a scheme's actual return and its optimal return is its Alpha** – a measure of the fund manager's performance. Alpha, therefore, measures the performance of the investment in comparison to a suitable market index. Positive alpha is indicative of out-performance by the fund manager; negative alpha might indicate under-performance.

Since the concept of Beta is more relevant for diversified equity schemes, Alpha should ideally be evaluated only for such schemes.

These quantitative measures are based on historical performance, which may or may not be replicated.

Such quantitative measures are useful pointers. However, blind belief in these measures, without an understanding of the underlying factors, is dangerous. While the calculations are arithmetic – they can be done by a novice; scheme evaluation is an art - the job of an expert.

Beta

Beta is based on the Capital Asset Pricing Model (CAPM), which states that there are two kinds of risk in investing in equities – **systematic risk** and **non-systematic risk**.

Systematic risk is integral to investing in the market; it cannot be avoided. For example, risks arising out of inflation, interest rates, political risks etc. This arises primarily from macro-economic and political factors. This risk cannot be diversified away.

Non-systematic risk is unique to a company; the non-systematic risk in an equity portfolio can be minimized by diversification across companies. For example, risk arising out of change in management, product obsolescence etc.

Since non-systematic risk can be diversified away, investors need to be compensated only for systematic risk, according to CAPM. This systematic risk is measured by its **Beta**

Beta measures the fluctuation in periodic returns in a scheme, as compared to fluctuation in periodic returns of a diversified stock index (representing the market) over the same period.

The diversified stock index, by definition, has a Beta of 1. Companies or schemes, whose beta is more than 1, are seen as more risky than the market. Beta less than 1 is indicative of a company or scheme that is less risky than the market.

Tracking Error

The Beta of the market, by definition is 1. An index fund mirrors the index. Therefore, the index fund too would have a Beta of 1, and it ought to earn the same return as the market. **The difference between an index fund's return and the market return is the tracking error.**

Tracking error is a measure of the consistency of the out-performance of the fund manager relative to the benchmark. It is not enough if the fund is able to generate a high excess return, it must do so consistently. Tracking error is calculated as the standard deviation of the excess returns generated by the fund. The tracking error has to be low for a consistently out-performing fund.

Test Your Understanding 4

As advised by SEBI, Risk-o-meter has five levels of risk for mutual fund schemes. True or False?

- a. True
- b. False

Test Your Understanding 5

Risk premium is the difference between the risk-free rate of return and the return earned by the scheme. True or False?

- a. True
- b. False

Test Your Understanding Solutions

TYU 1

On an annualised return basis, with of these investment options (funds) give a better return?

- a. Fund A: Return since inception – 6%; Time since existence – 6 months
- b. Fund B: Return since inception – 4%; Time since existence – 2 months
- c. Fund C: Return since inception – 8%; Time since existence – 8 months
- d. Fund D: Return since inception – 12%; Time since existence – 6 months

Correct Answer: b. Fund B

Explanation:

Fund	Return since inception	Time since existence	Annualised Return
A	6%	6	12%
B	4%	2	24%
C	8%	8	12%
D	12%	9	16%

TYU 2

If risk free return is 5 percent, and a scheme with standard deviation of 0.5 percent earned a return of 7 percent, its Sharpe Ratio would be ____.

- a. 4
- b. 4.5
- c. 5
- d. 5.5

Correct Answer: a. 4

Explanation:

$$R_f = 5\%$$

$$R_s = 7\%$$

$$\text{Standard Deviation} = 0.5\%$$

Replacing these values in the above formula, we get

$$\text{Sharpe Ratio} = (7 - 5) / 0.5 = 4$$

TYU 3

If risk free return is 5 percent, and a scheme with beta of 1 earned a return of 7 percent, its Treynor Ratio would be ____.

- a. 1
- b. 1.5
- c. 2
- d. 2.5

Correct Answer: c. 2

Explanation:

$$R_f = 5\%$$

$$R_s = 7\%$$

$$\text{Beta} = 1$$

Replacing these values in the above formula, we get

$$\text{Treynor Ratio} = (7 - 5) / 1 = 2$$

TYU 4

As advised by SEBI, Risk-o-meter has five levels of risk for mutual fund schemes. True or False?

- a. True
- b. False

Correct Answer: b. False

Explanation:

Risk-o-meter has 6 levels of risks:

- i. Low Risk
- ii. Low to Moderate Risk
- iii. Moderate Risk
- iv. Moderately High Risk
- v. High Risk and
- vi. Very High Risk

TYU 5

Risk premium is the difference between the risk-free rate of return and the return earned by the scheme. True or False?

- a. True
- b. False

Correct Answer: a. True

FINANCIAL PLANNING, LIFE CYCLE & PERSONAL BUDGET

CHAPTER 3

LEARNING OBJECTIVES

- list various steps of financial planning and elaborate on the need for financial planning

CHAPTER TABLE OF CONTENT

1. Steps involved in Financial planning
 - Identifying your financial situation
 - Determined financial goals
 - Identifying alternatives for investments
 - Evaluating alternatives
- Put together a financial plan and implement
- Review, Re-evaluate and monitor the plan
2. Understanding financial life cycle
3. Personal Budget Template

INTRODUCTION

In the earlier modules, we have learnt at length about the various concepts of savings & investments, returns, investment vehicles, etc.

We have also touched based on the very basic of financial planning.

In the chapter, we will try to learn some more about financial planning, the steps involved, and the other aspects associated with investments and sourcing of finances.

Let's warm up

SEBI and it's Chairperson

The Securities and Exchange Board of India was established as a statutory body in the year 1992 and the provisions of the Securities and Exchange Board of India Act, 1992 (15 of 1992) came into force on January 30, 1992.

The Preamble of the Securities and Exchange Board of India describes the basic functions of the Securities and Exchange Board of India as “...to protect the interests of investors in securities and to promote the development of, and to regulate the securities market and for matters connected therewith or incidental thereto”

In March 2022, **Ms. Madhabi Puri Buch** took charge as the Chairperson of SEBI. Ms. Buch holds an MBA from the Indian Institute of Management, Ahmedabad and is a graduate in Mathematics from St. Stephen's College, New Delhi.



STEPS INVOLVED IN FINANCIAL PLANNING

Financial planning can be undertaken by each of us for our activities. However, it is prudent to take up the services of financial advisors as they bring in the much-needed expertise in terms of various solutions.

This section of the chapter, we would focus on the process/steps undertaken by financial advisors for their clients' financial planning. Financial planning requires financial advisors to follow a process that enables acquiring client data and working with the client to arrive at appropriate financial decisions and plans, within the context of the defined relationship between the planner and the client.

The following is the **six-step process** that is used in the practice of financial planning:

- 1. Establish and define the client-planner relationship:** The planning process begins when the client engages a financial planner and describes the scope of work to be done and the terms on which it would be done.
- 2. Gather client data, including goals:** The future needs of a client require clear definition in terms of how much money will be needed and when. This is the process of defining a financial goal.
- 3. Analyse and evaluate financial status:** The current financial position of a client needs to be understood to make an assessment of income, expenses, assets and liabilities. The ability to save for a goal and choose appropriate investment vehicles depends on the current financial status.
- 4. Develop and present financial planning recommendations:** The planner makes an assessment of what is already there, and what is needed in the future and recommends a plan of action. This may include augmenting income, controlling expenses, reallocating assets, managing liabilities and following a saving and investment plan for the future.
- 5. Implement the financial planning recommendations:** This involves executing the plan and completing the necessary procedure and paperwork for implementing the decisions taken with the client.
- 6. Monitor the financial planning recommendations:** The financial situation of a client can change over time and the performance of the chosen investments may require review. A planner monitors the plan to ensure it remains aligned to the goals and is working as planned and makes revisions as may be required.

Defining the client-planner relationship

When the financial advisor takes up the role, it is important that the client and the planner enter into a mutual agreement. This agreement should ideally include the scope of the services that the planner is expected to offer, the fees that would be paid, the rights and the obligations of both the parties.

SEBI, being the capital market regulator, has issued regulations regarding investment advising. These are the SEBI (Investment Advisers) Regulations, 2013.

As required by these regulations, the planner is expected to disclose a defined list of information about themselves. The terms of engagement are expected to be complying with these regulations.

Gather client data, including goals

Once the engagement terms are finalised, it is important to gather the client data.

The financial planning professional and the client identify the client's personal and financial objectives, needs and priorities that are relevant to the scope of the engagement before making and/or implementing any recommendations. The financial planning professional collects sufficient quantitative and qualitative information and documents about the client relevant to the scope of the engagement before making and/or implementing any recommendations.

What sort of data do we need to collect or gather about the client? Well, almost everything!

A few of **quantitative aspects** (paperwork) that helps in client's data gathering are listed below:

1. Bank statements for any savings or current accounts
2. Statements for any retirement or investment accounts

3. Statement of home loan account
4. Statements of any vehicles loans
5. Credit card statements and current balances
6. Student education loan statements
7. Statements of any other loans – personal loan, gold loan, etc.
8. Paperwork pertaining to a business, if they run a business
9. Alimony or child support statements, if applicable
10. Life insurance information or policy statements, including group term life insurance from employer

The above list is only indicative and not exhaustive. There may be many other similar documents that can help assess the client's income, expenses, etc.

A few of **qualitative aspects** (usually gather using a questionnaire or interview) that helps in client's data gathering are listed below:

1. List of dependents/children – number of dependents, their relationship with client, age, special requirements (if any), etc.
2. Health details – Do they have any private insurance, if they are aware of any health issues that may impact their ability to earn an income, their smoking/drinking habits, etc.
3. Future needs – lifestyle changes, anticipated areas of concern with respect to lifestyle, short term lifestyle needs, medium term lifestyle needs, long term lifestyle needs, including exotic vacations, dream cruises, etc.
4. Estate/Retirement planning details – If they have a will, and when was it last reviewed, details of any Power of Attorney (PoA), desired retirement income, etc.

The above list is only indicative and not exhaustive.

We have already read about financial goals in the first module. Just to recap, 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.

Analyse and evaluate financial status

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.

The financial planning professional analyses the client's information, subject to the scope of the engagement, to gain an understanding of the client's financial situation. The financial planning professional assesses the strengths and weaknesses of the client's current financial situation and compares them to the client's objectives, needs and priorities.

Develop and present financial planning recommendations

The financial planning professional considers one or more strategies relevant to the client's current situation that could reasonably meet the client's objectives, needs and priorities; develops the financial planning recommendations based on the selected strategies to reasonably meet the client's confirmed objectives, needs and priorities; and presents the financial planning recommendations and the supporting rationale in a way that allows the client to make an informed decision.

Implement the financial planning recommendations

The financial planning professional and the client agree on implementation responsibilities that are consistent with the scope of the engagement, the client's acceptance of the financial planning recommendations, and the financial planning profes-

sional's ability to implement the financial planning recommendations. Based on the scope of the engagement, the financial planning professional identifies and presents appropriate product(s) and service(s) that are consistent with the financial planning recommendations accepted by the client.

Monitor the financial planning recommendations

It's called "financial planning" for a reason: Plans evolve and change just like life. Once the plan is created, it's essentially a piece of history. This is why the plan needs to be monitored and tweaked from time to time. Think of what can change in your life, such as marriage, the birth of children, career changes, and more.

These life events may require new perspectives or changes to your financial plans. Now think about events or changes beyond your control, such as tax laws, interest rates, inflation, stock market fluctuations, and economic recessions.

The financial planning professional and client mutually define and agree on terms for reviewing and re-evaluating the client's situation, including goals, risk profile, lifestyle and other relevant changes. If conducting a review, the financial planning professional and the client review the client's situation to assess progress toward achievement of the objectives of the financial planning recommendations, determine if the recommendations are still appropriate, and confirm any revisions mutually considered necessary.

Fun Learning with English idioms

Idiom: *in the black*

The idiom *in the black* means to not be in debt, to be making some more (money) than spending.

Example: Raju hoped that his business would be in the black after getting a few more contracts.

UNDERSTANDING FINANCIAL LIFE CYCLE

Life-cycle finance, especially saving and investing for retirement, is today a matter of intense concern to millions, perhaps billions, of people around the world.

New researchers are suggesting ways to better align the practice of life-cycle finance with the latest scientific knowledge. Among the important insights of modern financial science are:

- A person's welfare depends not only on his/her end-of-period wealth, but on the consumption of goods and leisure over his/her entire lifetime.
- Multi-period hedging (rather than "time diversification") is the way to manage market risk over time.
- Portfolio managers can and should make greater use of the information embedded in the prices of derivatives such as swaps and options: interest rates and implied volatilities.
- The value, riskiness, and flexibility of a person's labour earnings are of first-order importance in optimal portfolio selection at each stage of the life cycle.
- Habit formation can give rise to a demand for guarantees against a decline in investment income.
- Because of transaction costs, agency problems, and limited knowledge on the part of consumers, dynamic asset allocation will and should become an activity performed by financial intermediaries, rather than by their retail customers.

While we have glimpsed at the life cycle in one of the earlier modules, let's deep dive into the various stages (and sub-stages) of financial life cycle.

The Ten Financial Stages of Life

Experts have divided life into ten typical financial stages. There are specific wealth building strategies for each stage and financial ratios that mark the transition from one stage to the next. The most unreliable indicator on the Financial Life Cycle is the age range. People can spend 50 years stuck in a stage or skip it altogether. A divorce can move people backward and commitment to a Wealth Plan can jump them forward. So don't be discouraged if you're "behind" and don't get too excited if you're "ahead".

Life Stages #1 & 2: Toddler & Childhood

The first two stages are Toddler (Early Childhood) and Childhood. During the Toddler stage (0-5) we believe that money is to eat. Our parents teach us that eating money is not a sound financial strategy (or healthy habit). By Childhood, which we define as age 6 to 12, our parents have taught us *three more financial concepts: accumulation, convertibility and relative value*. In the old days parents taught us to accumulate when they gave us an allowance and a piggy bank in which we had to save some of the allowance. We learned about convertibility when our parents let us spend some of our allowance to buy things. Relative value means we learned that dimes are worth more than nickels even though dimes are smaller.

Life Stage #3: Teenage Years

During the Teenage years, from about 12 to 19, we learn *two more concepts: budgeting and earned income and how money makes money*. We learn about budgeting when our parents give us a clothing allowance and make us buy our own clothes. We learn about earned income when we make and sell stuff (like cakes/cookies/paper craft gifts) for a profit or when we take tuitions for money. During this stage, some children get side-tracked with the idea of moving out on their own, but that seems to be occurring less frequently.

Life Stage #4: Building the Foundation

During our 20s, we enter the Building the Foundation stage. During these years we become completely self-supporting. These are the **critical years** where we establish the financial habits that will determine our financial future.

There are three basic ways to acquire money:

1. The first is by **affiliation** - you marry it, inherit it, or are given it. It's common to think that this is the easy way to wealth, but in our experience it seldom is. Money obtained this way seldom lasts because the recipient hasn't learned the basic concept of how to invest money. Thus "a fool and his money are soon parted".
2. The second way to get money is to **earn it by the sweat of your brow**. While this is honourable, most people yearn to get to a point in their life where they can do what they want to do (self-actualization) without having to worry about how much money they make.
3. The third way to acquire money is to have **your money make money for you**. This means saving and investing until you have accumulated a pile of money big enough to earn more than you earn by the sweat of your brow. When your money makes enough money to cover your living expenses then you have achieved financial freedom. Understanding this goal of financial independence is crucial for clients to get beyond the Building the Foundation stage.

Life Stage #5: Early Accumulation

At the point, usually between 30 and 40, that our net worth exceeds our annual income, we move into the Early Accumulation stage. This is where basic investment begins and we teach clients how to diversify.

Life Stage #6: Rapid Accumulation

At some point, usually between 40 and 55, when our net worth is three (3x) times our annual income; we reach the point at which the income from our investments exceeds our annual savings. At this point we move into the Rapid Accumulation stage and our net worth tends to grow exponentially.

Life Stage #7: Financial Independence

At this point our key financial ratios change. Instead of measuring Net Worth/Income we calculate Investment Portfolio/Living Expenses. When our investable assets have grown to between seven and ten times (7-10x) our annual living expenses we pass into the stage of Financial Independence.

This usually occurs between ages 55 and 70. At this stage we have options - to change jobs, semi-retire or have a mid-life crisis. At this point we can use some of the income from our investments to subsidize our living expenses so that we don't have to work full-time at a job we don't really like. At this point our strategic priorities also change from accumulating wealth to conserving wealth. Not falling backwards becomes more important than moving forward.

Life Stage #8: Conservation

When our investable assets are ten to fifteen times (10-15x) our living expenses, the earnings and any income from pensions are usually adequate so that we don't have to work anymore. While many call this retirement, we call it the Conservation stage. We have arrived at our destination, so why should we risk going backwards just to accumulate a little more? Many clients find it difficult to invest conservatively after years of pursuing a "growth" portfolio. It seems "wasteful" to not try to get a higher investment return.

Life Stage #9: Distribution

If we continue to practice the fundamentals of fiscal fitness, we eventually reach the point where our net worth exceeds 15 times (>15x) our annual expenses. At this juncture we have more money than we can spend in our lifetime. We enter the Distribution stage. At this point we "invest in memories" and ensure our financial legacy. We gift money to children or fund a family cruise. We may gift money to charities, set up endowments and create an estate plan that will shape the values on our descendants.

Life Stage #10: Sunset

The Sunset stage comes when we have less than 12 months to live, and we try to provide for the orderly distribution of the bulk of our assets.

Fun Learning with English idioms

Idiom: *time is money*

The idiom *time is money* means that time is valuable, and so one should be as quick or expeditious as possible and not to waste it.

Example: *My mom was of the firm believe that time is money, so she never really liked to sit back, relax, and do nothing—she always needed some project to be working on.*

Test Your Understanding 1

Financial planning involves six steps. True or False?

- a. True
- b. False

Test Your Understanding 2

Which regulations of SEBI are applicable for advisory services on investments?

- SEBI Listing Obligations and Disclosure Requirements (SEBI LODR) Regulations, 2015
- SEBI Issue of Capital and Disclosure Requirements (SEBI ICDR) Regulations, 2009
- SEBI Investment Advisers Regulations, 2013
- None of these

PERSONAL BUDGET

One of the essential elements of financial planning is to identify the financial gap. A budget can help in keep in check the possible expenses and to plan for saving/investing the uncommitted income.

If you want to control your spending and work toward your financial goals, you need a budget.

A **personal or household budget** is a summary that compares and tracks your income and expenses for a defined period, typically one month. While the word “budget” is often associated with restricted spending, a budget does not have to be restrictive to be effective.

A budget will show you how much money you expect to bring in, then compare that to your required expenses—such as rent and insurance—and your discretionary spending, such as entertainment or eating out.

Instead of viewing a budget as a negative, you can view it as a tool for achieving your financial goals.

A written, monthly budget is a financial planning tool that allows you to plan how much you will spend or save each month. It also allows you to track your spending habits.

Though making a budget may not sound like the most exciting activity (and for some, it’s downright scary), it’s an important part of keeping your financial house in order. That’s because budgets rely on balance. If you spend less in one area, you can spend more in another, save that money for a large purchase, build a “rainy day” fund, increase your savings, or invest in building wealth.

A budget only works if you are honest about both your income and expenses. To make an effective budget, you must be willing to work with detailed and accurate information about your earning and spending habits.

Sample/Template of Personal Budget:

Sno	Particulars	Amount
	INCOME	
(i)	Your Pay	
(ii)	Yours Spouse’s Pay	
(iii)	Rental Income	
(iv)	Interest Income	
(v)	Other Income	
A	Total Income (i+ii+iii+iv+v)	XXXX
	EXPENSES	
B	Home Loan EMI	
C	Other Loans EMI	

D	Home Maintenance/Improvements	
E	Govt. Property Taxes	
F	Food & Groceries Expenses	
G	Phones/Mobiles/Internet Expenses	
H	Electricity/Gas/Water	
I	Fuel/Transportation	
J	Insurance payments	
K	School/College Fees	
L	Child Care/Sports/Leisure activities	
M	Clothing/Shoes/Hairdressing, etc	
N	Travel/Holiday/Movies/Outing	
O	Incidentals/other Expenses	
P	TOTAL EXPENSES (B to O)	XXX
	Uncommitted Income (A - P)	XXX

Fun Learning with English idioms

Idiom: *penny pinching*

The idiom *penny pinching* means unwilling to spend money.

Example: *I became tired of his penny pinching friends.*

Test Your Understanding 3

Reviewing and monitoring the financial planning recommendations is not a step in the financial planning process. True or False?

- a. True
- b. False

Test Your Understanding Solutions**TYU 1**

Financial planning involves six steps. True or False?

- a. True
- b. False

Correct Answer: a. True

TYU 2

Which regulations of SEBI are applicable for advisory services on investments?

- a. SEBI Listing Obligations and Disclosure Requirements (SEBI LODR) Regulations, 2015
- b. SEBI Issue of Capital and Disclosure Requirements (SEBI ICDR) Regulations, 2009

- c. SEBI Investment Advisers Regulations, 2013
- d. None of these

Correct Answer: c. SEBI Investment Advisers Regulations, 2013

TYU 3

Reviewing and monitoring the financial planning recommendations is not a step in the financial planning process. True or False?

- a. True
- b. False

Correct Answer: b. False

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The Financial Education and Investment Awareness Course is a joint initiative by NSE Academy Ltd. (a wholly-owned subsidiary of National Stock Exchange) and Karnataka State Higher Education Council (KSHEC) for the students of Karnataka.

