Wealth Management

The Icfai University

Wealth Management



The Icfai University Press

52, Nagarjuna Hills, Hyderabad - 500 082

© 2008 The Icfai University Press. All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, used in a spreadsheet, or transmitted in any form or by any means – electronic, mechanical, photocopying or otherwise – without prior permission in writing from The Icfai University Press.

Ref. No. WM - 052008UG188

For any clarification regarding this book, the students may please write to us giving the above reference number of this book specifying chapter and page number.

While every possible care has been taken in type-setting and printing this book, we welcome suggestions from students for improvement in future editions.

Contents

Chapter I	:	The Wealth Management Prognosis	1
Chapter II	:	Overall Assessment of Macroeconomic Fundamentals of Indian Economy	10
Chapter III	:	Savings and Investment Trends	21
Chapter IV	:	Investments	31
Chapter V	:	Wealth Management Scenario	43
Chapter VI	:	Stock Market in India	52
Chapter VII	:	Mutual Funds	74
Chapter VIII	:	Introduction to Marketing of Financial Services	93
Chapter IX	:	Marketing of Banking and Insurance Services	101
Chapter X	:	Marketing of Mutual Fund and Portfolio Management Services	124
Chapter XI	:	Financial Planning Process	134
Chapter XII	:	Fundamentals of Security Analysis	147
Chapter XIII	:	Technical Analysis	154
Chapter XIV	:	Portfolio Analysis	178
Chapter XV	:	Portfolio Revision	201
Chapter XVI	:	Managing Risks in Wealth Management	220
Bibliography			246
Glossary			247

Detailed Curriculum

The Wealth Management Prognosis: Concept of Wealth Management – Evolution of the Wealth Manager – Wealth Management Process – The Asset Allocation Process.

Overall Assessment of Macroeconomic Fundamentals of Indian Economy: Macroeconomic Indicators – Performance of Macro Economic Indicators in Indian Economy – Indian Economy – Present Status of Consumer and Capital Markets – Structural Transformation of the Indian Economy in the Last Decade of 20th Century.

Savings and Investment Trends: Savings Trends in India – Trends in Investments – Factors that make India an Attractive Destination for FII Investment – Global Imbalances in Savings and Investment.

Investments: Concept of Investment – Difference between Investment, Gambling and Speculation – Investment Objectives and Constraints – Different Forms of Financial Investments – Various Investment Instruments – Forms of Real Investment.

Wealth Management Scenario: The Wealth Management Market – The State of the World's Wealth – 2006 – Wealth Management Industry in India – The Outlook for 2008.

Stock Market in India: Financial Markets – Functions and Classification – Capital Markets – Evolution and Functioning of Stock Market in India – Trading Mechanism in Stock Market in India – Recent Developments.

Mutual Funds: Objectives and Types of Mutual Funds – Advantages of Mutual Funds – Mutual Fund Services – Organization and Management of Mutual Funds – The Mutual Fund Scene in India.

Introduction to Marketing of Financial Services: Concept and Types of Financial Services – Characteristics of Financial Services – Recent Trends in Financial Services.

Marketing of Banking and Insurance Services: Banking Industry in India – Product Innovation and Branding in Banks – Marketing Mix of Banks – Commercial Financing – Recent Trends in Banking in India – Insurance Industry – Strategic Alternatives for Insurance Industry – Marketing Mix of Insurance Industry.

Marketing of Mutual Fund and Portfolio Management Services: Structure of the Indian Mutual Funds – Marketing Mix for Mutual Funds – Benefits of Mutual Fund Investments – Recent Trends in Mutual Funds – Portfolio Management Services – Market Segmentation and Marketing Mix – Recent Trends in Portfolio Management Services.

Financial Planning Process: Rewards of Financial Planning – Personal Financial Planning Process – Various Determinants of Personal Income.

Fundamentals of Security Analysis: Objectives and Beliefs of Fundamental Analysis – The Fundamental Analysis Framework – Definition of Intrinsic Value – Market Analysis.

Technical Analysis: Meaning of Technical Analysis – Technical Trading Rules and Indicators – The Dow Theory – Charting – Price Patterns.

Portfolio Analysis: Components of Risk and Return – Systematic and Unsystematic Risk – Beta of a Portfolio – Portfolio Diversification – Marginal Productivity of Incremental Assets – Perils of Excessive Diversification.

Portfolio Revision: Need and Importance of Portfolio Revision – Pitfalls to be Avoided in Portfolio Revision – Portfolio Revision – Portfolio Revision – Practical Problems in Portfolio Revision – Selection and Revision of Equity Portfolios.

Managing Risks in Wealth Management: Options – Futures – Difference between Options and Futures.

<u>Chapter I</u> The Wealth Management Prognosis

After reading this chapter, you will be conversant with:

- Concept of Wealth Management
- Evolution of the Wealth Manager
- Wealth Management Process
- The Asset Allocation Process

Introduction

The World's economic scenario has been undergoing transformation since a decade as a result of increase in the growth rates of real GDP and market capitalization of major economies. These factors have instilled confidence in the minds of the investors and led to the creation of wealth. However, the increase in investment options and introduction of complex financial instruments have added to the confusion of investors. Today, there are over 700 plus mutual fund schemes, and different kinds of derivative instruments, making the decision to choose a right investment very complicated.

With an increase in the personal net worth, the financial issues and challenges have become intricate. The aim of any individual is to protect and distribute his assets with utmost advantages from taxes. This needs sophisticated planning and professional advice. Thus, the need for the subject 'Wealth Management'.

CONCEPT OF WEALTH MANAGEMENT

What is it all about?

Irrespective of one's surplus, expert advice always counts. As such, to take advice on tax one has to go to a chartered accountant; for advice on insurance one has to consult an insurance agent; for advice on any investment one has to go to a Chartered Financial Planner or a Wealth Manager; and if one possess a huge portfolio one needs to go to a portfolio manager. An individual may need to gain expert advice on insurance, investments, tax, etc., to gain a comprehensive perspective of his wealth. The service provided by banks or other institutions which manage the various investment options of an individual is called wealth management. A wealth manager is therefore a professional who analyzes the portfolio of an investor, learns the short-term as well as the long-term goals of an investor and decides on an asset-mix that can give the best desired returns given the risk profile of the investor.

Wealth managers use in-built techniques to provide customized investment advice to clients on different financial products ranging from mutual funds to insurance to equity to tax management to legal solutions to transmission of wealth. While preparing a financial strategy for the client, they take into account the risk-return profile of the client, liability profile, objectives and long-term financial goals.

The encouraging performance of economies in the developed and developing countries and the trends of wealth creation on institutional and individual basis across the globe give an idea of the robust wealth creation. A wealth manager needs to focus on the following:

- i. Accumulation of wealth: The customer's wealth should grow.
- ii. Preservation of wealth: The customer's wealth should be well protected.
- iii. **Transfer of wealth:** Smooth transfer of customer's assets to his legal heirs at a minimum cost.

Box 1: Wealth Management – What is it?

Wealth management is the comprehensive mix of asset, debt, tax and risk management strategies. These solutions normally cover critical issues such as: Asset allocation, estate and trust planning, retirement planning, business succession planning, employee's stock options and equity strategies.

Wealth Management is defined as: "A comprehensive service to optimize, protect and manage the financial well being of an individual, family or corporation." The definition thus covers advice on loans, investment and insurance giving a broad picture of how investors should best deploy their financial resources. A broader description may include tax advice, estate planning, business planning, charity foundations and other financial needs.

An alternate definition can be: 'A professional service which is the combination of financial/investment advice, accounting/tax services and legal / estate planning.'

(http://financialdictionary.thefreedictionary.com/wealth+management)

Wealth management is more than just investment advice, as it encompasses all parts of a person's financial life.

Source: Ramakrishna Rao, T. S. "Wealth Management – The New Kid on the Block", Portfolio Organiser, October, 2005.

EVOLUTION OF THE WEALTH MANAGER

The wealth management professional has evolved over the years from a person handling fixed deposits to a merchant banker to the wealth manager. He has tried to keep in tune with times as the operations of the banks have changed from a simple supplier of funds for the working capital requirements of corporates to a universal banker. With the increase in awareness about investment options, there is a change in the attitude of investors who are willing to have a diversified financial portfolio. As such, the merchant banker is presently offering a varied portfolio through the entire chain of operations from providing working capital funds to fulfilling long-term requirements in addition to catering to the retail segment. He has become the intermediatory for insurance, real estate, commodity exchange, stock exchange, forex market, etc. To cater to the emerging needs of High Net Worth Individuals* (HNWI) whose portfolio is a mix of several financial instruments, the services of the wealth manager came to the fore. As the wealth management process undergoes a sea change, there will be an increase in the opportunities to manage wealth. A case in point is of Azim Premji who entrusted the management of his wealth to a professional. With the increase in the number of HNWIs in India and elsewhere, the wealth management business is set to explode with the attendant benefits flowing to the participants in this market. A young MBA with a good grounding in the basics and experience in the segment is expected to go places with the sky being the limit. However, a Wealth Management professional has to take note of the ten important pitfalls in this area as given in Annexure I.

WEALTH MANAGEMENT PROCESS

The four-part Wealth Management Process of Merrill Lynch provides a framework to deliver a personalized, high-value experience to customers collectively covering their financial aspects to generate, build and guard their wealth.

Step 1

Establishing Objectives: Have a close contact with the customers and potential customers to assess their overall financial picture and assist them in identifying, and prioritizing their long-term and short-term goals and also gain an understanding of their tolerance to risk.

High Net Worth Individuals (HNWI) are people with more than \$1 million in financial asset wealth.

Wealth Management

Step 2	
	Setting Strategies: An asset allocation strategy needs to be developed encompassing the customer's investment objectives, levels of risk tolerance and time frame, such that the strategy can lead them towards their goals.
Step 3	
	Solution Implementation: The investments and solutions proposed need to be consistent with the customer's strategic asset allocation as well as financial goals.
Step 4	
	Reviewing the Progress: Once in a while, meet the customers and review their objectives, strategies and performance, to appraise their continuing capacity to achieve their financial goals.

THE ASSET ALLOCATION PROCESS

During the past few years, there has been a change in the composition of investor and consumer segment. With the increase in the number of affluent middle class, working women and wealthy young population, the market scenario has changed for manufacturers, retail chain outlets, entertainment media and several other spending outlet. The middle class population of about 325-350 million^{*} in India with its sizeable buying power and investment money has forced various channels to change their ways to attract this money to their segments. Due to the stiff competition to attract wealth to specific different asset categories, the wealth management professionals have introduced several innovative products.

Asset allocation is basically a question of Maslow's hierarchial needs. Individuals first cater to the basic needs such as food, shelter, insurance and allocate the remaining money for investment. Among the different asset classes available viz., equities, bank deposits, fixed assets like real estate and alternative investments like jewelry, to name a few, real estate for personal use takes the prime position. Investments of remaining assets are allocated based on the return expectations. In recent times, the wealthy individuals have diversified their portfolio to include foreign assets as they provide higher returns. Further, the high GDP growth of emerging economies, more importantly the BRIC segment, has gained prominence as a promising investment destination in comparison to that of the developed countries.

Banks and other major financial institutions have enhanced their area of operations in order to attract the wealth of the high net worth individuals.

Banks have changed from being suppliers of funds for working capital requirements to being universal bankers. They are tapping the retail segment for their business. Banks have introduced the super saver concept, easy shift from savings account to fixed deposit account and vice versa and are now concentrating on the retail segment through credit cards, easy finance for purchase of white goods, automobiles, residential homes, etc., to boost their profits. The recent introductions in the Indian market include the future and option segments for equities and commodities.

The insurance business has been opened up for private players and they have brought innovative products to expand their business. One such product combines the element of insurance and equity.

There has been a boom in the mutual fund business. There is now a plethora of private players offering a wide range of benefits to the investor. ICICI Prudential is the number one player now overtaking UTI. Mutual funds are now allowed to invest their funds in foreign markets.

^{* (}www.state.gov/r/pa/ei/bgn/3454.htm)

Air travel has become affordable for the middle class with the introduction of number of frills services that lost less than the second class A/c railway fares. Volvo has entered into the luxury bus segment. Incidentally, the largest contingents of holiday travelers to resorts in Switzerland are from India.

The serious competition among the various players in the different markets could change the market scene. We could see an overlapping of different markets and a single player could operate in different markets. Such developments are both an opportunity and threat to several organizations which need to buck up to remain, survive and grow in this competitive environment.

Asset allocation as such has become a complex decision given the myriad investment avenues available in the market. However, studies show that equities are the most preferred lot.

The factors of tax, age and regulations are expected to bring in many more innovative products in the markets in the days to come as India and China take the lead to become the world's leading economies.

SUMMARY

- Wealth management is about managing the tax, debt, investment and risk strategies of an individual.
- With increase in the income levels, there is an increase in the number of wealthy individuals who do not have the time to manage their investments. Therefore, instead of going to different advisors for different financial issues, an individual can go to a wealth manager.
- A wealth manager prepares strategies taking into account the objectives, financial, short-term and long-term goals of an individual such that there is an increase in the wealth of that individual.

Annexure I

Top 10 Wealth Management Pitfalls*

by Sue Stevens, CFA, CFP

You're smart. You're well-educated. You're doing well in life. Then why are you so worried about losing it all? Or worse yet, may be you aren't worried and you should be.

Let's take a look at some of the biggest pitfalls on the road to wealth. If you're truly going to be successful, you'll need to navigate carefully through the many hazards along the way.

Leaving Assets Unprotected

It's not going to do you much good to build up your wealth if you let it slip through your fingers. Any number of catastrophes can occur along the way. Have you really protected yourself and your family?

Do you have adequate life insurance? If you were to die tomorrow, would your spouse or loved ones have money to pay some of their biggest expenses like college or paying off the mortgage balance? Would they be able to stay in your house and still be able to pay the bills? Life insurance can help protect the assets you've built up by sheltering them from estate tax and providing income replacement for your family. This is especially important when you have young children, a non-working spouse, or a big mortgage. You'll want to consider these needs as you weigh the cost of life insurance.

Another potential wealth destroyer is the dizzying cost of medical care in your later years. Have you considered long-term care insurance? According to a study by the *New England Journal of Medicine*, 43% of people aged 65 are expected to enter a nursing home at least once before they die. Many people are in denial about long-term care. If you don't have a relative or family friend who has gone through this process, you may not have given it much thought at all. For those of you who have experienced it first-hand, you know the physical, mental, and financial strain it can bring to the whole family. Does everyone need it? No. The very rich can self-insure, and the very poor won't be able to afford it. For everyone else, it's worth taking a look at these policies.

Finally, consider how you are protecting your personal property. Is your home protected from fire, weather disasters, and theft? How about acts of terrorism? Take a look at your homeowner's insurance to be sure. You should also have adequate coverage on your auto insurance. If you or someone in your family had an accident, would your insurance company pay for the damage? What about lawsuits that could arise from an accident? Check to see what the underlying liability coverage is for both homeowners and auto insurance. Protect yourself from property lawsuits by purchasing an "umbrella" policy. These policies build on the underlying liability levels in your homeowner's and auto policies and take your coverage up to the \$1 million range. The more wealth you've accumulated, the more umbrella coverage you should carry.

Mismanaging Cash Flow

The most successful wealth managers know that they must be disciplined in their spending. It's so easy to let expenses creep up as you make more and more money. If you're not careful, those expenses can kill your chances of capitalizing on that wealth. Tshe first rule of any good financial plan is to pay yourself first. Make sure that you are putting away a healthy portion of your income and investing it. Don't trip over the pitfall of living beyond your means.

^{*} http://news/morningstar.com/articlenet/article.aspx?id=107372&wmcsection=sudwealth2

Another aspect of managing cash flow is minimizing taxes. As your return gets more and more complex, you need to find professional help to take advantage of every deduction you're entitled to. Your accountant can also help identify other opportunities like additional retirement funding vehicles, mortgage refinancing strategies and/or estate planning techniques. At the very least, you should be discussing ways to use capital loss carryforwards (many of you will have these) to your advantage.

During your working years, it is critical that you carry disability insurance. Many of you can purchase this coverage through your employer. Take advantage of the opportunity to protect your income should something prevent you from working. It's far more probable that you'll have a disability claim than a life insurance claim, and yet many people ignore this important coverage.

Mismanaging Debt

A well-run company knows how to manage its debt. You need to think about debt management in your personal life too. How much debt is too much? Look at your shorter-term debts first-things like credit card debt, car loans, bank loans (other than mortgages), student loans, etc. If your short-term loans add up to more than your liquid assets are worth, you probably have too much short-term debt. (Liquid assets would include cash accounts, brokerage accounts, and cash surrender value of life insurance policies.) If you find yourself in this situation, you should (at the very least) examine the interest rates you are paying on each loan and try to consolidate your debt at a lower interest rate. Home equity lines of credit work well in many situations because not only are interest rates low, but the interest is tax deductible.

Mortgages can be a good way of managing debt. You get a tax break, and interest rates are still relatively low. But even with your mortgage you should exercise some caution. Taking on more debt makes it harder to adjust should you find your circumstances change (for instance, you lose your job). If at all possible, you should try to keep mortgage debt below 75% of the value of the property. Many people are re-evaluating their adjustable rate mortgages and considering locking in a fixed rate while interest rates are still low. Just paying your mortgage every two weeks throughout the year helps to cut overall interest payments over the life of the loan.

Neglecting your Finances

One of the biggest pitfalls in wealth management is just lack of attention. People are very busy. Sometimes personal finance takes a backseat to other more pressing matters. But if you take that approach, you may end up feeling that the years have flown by and you haven't made much progress. Successful wealth creation takes a commitment of time. If you can't make that commitment, hire someone you can trust.

Choosing the Wrong Investment Strategy

Even if you're able to generate a considerable amount of income, you have to know how to protect and preserve that capital.

One pitfall a lot of people have experienced in the past few years is misjudging risk tolerance. When the market just kept going up, it was easy to think one could handle the risk. But now, after seeing part of one's portfolio value erased, many investors are rethinking how much risk (or loss) is acceptable to them.

Another common mistake is not rebalancing periodically. Many people refuse to sell if they've lost money on an investment. If the mix of stocks, bonds, and cash (asset allocation) makes you very uncomfortable, you need to think about taking some losses and moving to an asset allocation that is in line with your ability to handle risk.

If you do realize losses, you can try to make the best of it by being tax-savvy. No one likes to lose money, but those losses can be a benefit at tax time. You can use \$3,000 a year to offset ordinary income. You can net out an unlimited amount of capital gains and losses against each other. Any losses you can't use right away can be carried forward indefinitely. This is just one of many techniques you can use to create a tax-efficient portfolio.

Mismanaging Windfalls

Sometimes life hands you a little something extra. May be it's stock options or an inheritance or some other once-in-a-lifetime event. Now that you've got that money, what do you intend to do with it?

Many of you will benefit from professional advice in such situations. There are almost always tricky tax implications. For stock options, you have to understand what type of tax you may trigger upon exercise or sale of your shares: ordinary income tax, capital gains tax, alternative minimum tax, or all of the above. Careful planning can help you keep more of your windfall.

Over the next 10 years, \$10 trillion will pass from generation-to-generation. Most heirs have no idea how to integrate that wealth into their own portfolios.

Failing to Maximize Retirement Plan Benefits

Sadly, the majority of participants in company retirement plans don't put away anything close to the maximum contribution. For 2006, you can contribute \$13,000 (\$16,000 if you are over age 50 and your plan allows it) to 401(k) plans, 403(b) plans, and 457 plans. If you have a Profit Sharing or SEP plan, you may be able to sock away as much as \$41,000 a year.

If you are at the executive level of your business, in addition to the "qualified" types of plans discussed above, you may be able to take advantage of "nonqualified" plans. These plans allow you to put away money and defer paying tax on the income until a future date when you take withdrawals. They have fewer restrictions on how much and who can contribute than qualified plans do. The downside is that you cannot roll over these plans (in general) to an IRA. When you take distributions, they are immediately taxable. In addition, if your company goes bankrupt, your non-qualified assets are not protected. You'll stand in line with other creditors. Good planning can help you make the most of these opportunities.

Another potential retirement pitfall is making a mistake when rolling over your company retirement plan to a traditional IRA. It's important to understand the tax issues, cash flow considerations, and potential penalties.

Drawing Down Assets in Retirement

One of the biggest fears retirees have right now is running out of money too soon. You need to spend time thinking carefully about what you'll have coming in during your retirement years as well as how much you expect to spend. You should probably seek professional help to quantify the probability of whether your assets will provide the type of retirement you've envisioned.

Even with careful retirement planning, there's always going to be change. You'll need to revise your plan as time goes by. A healthy dose of common sense also goes a long way. In times when the economy is sluggish and the stock market is gloomy, you can at least control your own expenses. This can mean voluntarily tightening your belt by spending less as well as choosing investments with low costs.

Once you reach 70 years of age you will have to start taking withdrawals from traditional IRAs and most company plans.

Failing to Plan Your Estate

The estate planning arena is loaded with wealth management pitfalls. Many of you may not have any plan in place at all. That's your biggest pitfall. The best way to care for your family if something happens to you is to put an estate plan in place.

Other potential pitfalls include setting up a plan but forgetting to fund your trusts, and forgetting to change your beneficiary designations on life insurance, company benefits, IRAs, etc. Another important part of your planning should include considerations for disability as well as death. Powers of attorney for health care and property can help if you are disabled. So can living trusts.

Leaving Heirs Unprepared

One of the biggest concerns for families with significant wealth is how to teach their heirs to responsibly manage the money they'll eventually inherit. You can setup children's trusts within your estate documents that stagger the ages for access to the money over time. For example, instead of giving the children all of their inheritance at age 25 when they may not be emotionally ready for it, you can give them part of it at age 25, another portion when they are 35, etc. If they "blow" the first installment, there is still a chance they can make the most of the remainder of the estate.

Having family meetings during your lifetime can also go a long way toward educating your loved ones on how to manage that wealth. It can also head off potential family squabbles over what your intentions are with respect to your assets.

Chapter II

Overall Assessment of Macroeconomic Fundamentals of Indian Economy

After reading this chapter, you will be conversant with:

- Macroeconomic Indicators
- Performance of Macro Economic Indicators in Indian Economy
- Indian Economy Present Status of Consumer and Capital Markets
- Structural Transformation of the Indian Economy in the Last Decade of 20th Century

Introduction

An economy refers to the system of economic relations taking place within a specific framework. The systems of economic relations are the economic activities such as production, consumption, exchange and distribution. Every economy aims at improving this system of economic relations and achieving economic growth.

Economic growth is reflected in the standard of living of the people, which is based on the number of goods that are available at their disposal. If more quantity of goods are available, the standard of living of the people will be better. Thus, improvements in the long term living standards of the people are dependant on how fast the economy can grow. There are several indicators which help measure the economic growth of a country. Let us now look into each of these indicators and their performance in the context of Indian Economy.

MACROECONOMIC INDICATORS

Economic growth of a country is measured with the help of the following parameters:

- National Income and its related concepts.
- Balance of Payments.
- Foreign Exchange Reserves.
- Inflation.

National Income

National Income may be defined as the factor income earned by residents of a country i.e., the aggregate of labor income and capital income. Labor income refers to the wages, salaries and other benefits paid to the workers for providing labor services. Capital income refers to the profits, rental payments and interest payments. The following concepts form a part of the computation of National Income:

GROSS NATIONAL PRODUCT (GNP)

The GNP is the sum of all final goods and services produced by the people of a country during a specific period of time, usually a year, with value of goods measured at the prices prevailing in that year.

GROSS DOMESTIC PRODUCT (GDP)

Production of a country is measured by GDP. GDP is a measure of the final value of goods and services produced in a country during a period of time, which includes depreciation.

PER CAPITA INCOME

It is the average income of the people of a country in a particular year.

Balance of Payments (BoP)

The Balance of Payments of a country indicates its external balance position during a specific period of time. Therefore, it may be defined as the statement of all receipts on account of goods exported, services rendered and capital received and payments made on account of goods imported, services received and capital transferred to other countries. The BoP statement usually consists of two parts namely:

- Current Account.
- Capital Account.

Current Account records the transactions in the merchandise and invisibles with the rest of the world. Merchandise items cover exports and imports of all movable goods. Invisible items include travel, transportation, insurance, investment income and other miscellaneous items.

Capital Account represents all transactions of financial nature such as investments by foreign residents in physical assets, loans in foreign currencies, changes in foreign assets and liabilities of banks and long term or medium term borrowings from international capital market.

Foreign Exchange Reserves

The foreign exchange reserves of a country indicate its financial health. International Monetary Fund defines foreign exchange reserves as 'external assets that are readily available'. Foreign exchange reserves are controlled by monetary authorities for direct financing of external payments imbalances, and for indirectly regulating the magnitudes of such imbalances through intervention in exchange markets to affect the currency exchange rate.

Inflation

Inflation is an increase in the general level of prices of a basket of goods and services and factors of production in an economy over a period of time. The rate of inflation also indicates the economic statues of the country. If there is an increase in the inflation rate, it indicates the economic growth of a nation. Inflation is measured using the Consumer Price Index (CPI), Wholesale Price Index (WPI), and the Gross Domestic Product (GDP) deflator.

PERFORMANCE OF MACROECONOMIC INDICATORS IN INDIAN ECONOMY

The Indian economy is the fourth largest among the growing economies in terms of purchasing power parity next only to the US, China and Japan. A key contributor to the Asia Balance of Payments surplus, it is projected to become the third largest in the world by 2020 according to a report by KPMG. The macroeconomic indicators are an ample proof to this fact. A detailed study of the performance of these indicators in Indian economy is as follows:

National Income Trends

At the time of independence, Indian economy lacked a strong industrial base and hence there was a need for establishing basic industries not only to achieve rapid industrial development but also to foster economic growth. The broad trends observed in India's national income are discussed here briefly. First, the decadal growth rate is considered (Table 1), wherein we find that the Gross Domestic Product at factor prices and the per capita Net National Product (NNP) increased moderately during the period 1950-51 and 1960-61. In the next two decades, i.e., 1960-61 to 1980-81, though in absolute terms there has been an increase in GDP and per capita NNP, the rate of increase has marginally reduced between 1960-61 and 1970-71 and further deteriorated between 1970-71 and 1980-81. However, during 1980-81 and 1990-91, the GDP and Per capita NNP recorded a tremendous improvement, which is one of the best in the history of National Income statistics in India. In the last decade i.e., 1990-91 and 2000-01, there has been a steady increase, which provides ample proof of the fact that the economy has been growing at a satisfactory rate. The growth in the 1990s was essentially contributed by the tremendous growth in the services sector and also good performance of the agricultural and industrial sectors.

Overall Assessment of Macroeconomic Fundamentals of Indian Economy

Years	GDP at Factor Cost	Change in GDP	Per Capita NNP at Factor Cost	Change in Per Capita NNP
1950-51	9719		265	-
1960-61	16,512	6793	363	98
1970-71	42,981	26,469	739	376
1980-81	1,32,520	89,539	1,781	1,042
1990-91	5,15,032	3,82,512	4,749	2,968
2000-01	19,25,415	14,10,383	16,648	11,899
2001-02	21,00,187	1,74,772	17,800	1,152
2002-03	22,65,304	1,65,117	18,899	1,099
2003-04	25,49,418	2,84,114	20,936	2,037
2004-05	28,55,933	3,06,515	22,946	2,010
2005-06	32,50,932	3,94,999	25,716	2,770
2006-07	37,43,472	4,92,540	29,382	3,666

 Table 1: Gross Domestic Product and Per Capita

 Net National Product at Factor Cost (Base: 1999-2000)

Source: http://www.rbi.org.in/scripts/Annual Publications. aspx?Lead=Handbook %20of%20statistics%20on% 20Indian%20Economy.

GDP grows by 8.4% during 2005-2006

According to the Central Statistical Organization (CSO), the real Gross Domestic Product increased by 8.4% during 2005-06 as against 7.5% in 2004-05. The organization earlier projected an 8.1% growth in February, 2006 with the base year 1993-94. However, in May 2006, it changed the base year of national accounts to 1999-00 to factor in the structural changes taking place in the economy and project a realistic view of the Indian economic scenario. The present real GDP growth is the fourth highest since independence and the first in three years. The last quarter of 2005-2006 was particularly significant with rise in GDP to 9.3% from 8.6% in the corresponding quarter of the previous year, the highest since 2000-01.

The advance estimates of GDP for 2006-07, released by Central Statistical Organization (CSO) on February 7, 2007 places the growth of GDP at factor cost (1999-2000 prices) in the current year at 9.2%.

SECTOR WISE GROWTH IN GDP

During 2005-06, the GDP grew mainly due to the boost in manufacturing activity and services sector. The growth in the manufacturing sector counterbalanced the deceleration in mining and quarrying. The services sector for the second year in a row experienced a double digit growth and the 'trade, hotels, transport, communications' and construction segments in particular showed a double-digit growth for the third time in three years.

During the year 2005-06, the sectors that registered a growth rate of more than 5% were manufacturing (9.0%), construction (12.1%), trade, hotels, transport and communication (11.5%), financing, real estate and business services (9.7%), electricity, gas and water supply (5.3%) and community, social and personal services (7.8%).

The growth was mainly contributed by agriculture and allied sectors which recorded the highest in the last two years with 5.5% in the last quarter of 2005-06. However, the non-farm sector dipped from 10.4% in the last quarter of 2004-05 to 10.2% in 2005-06.

In 2006-07, the growth rate of industrial sector touched 10%, with manufacturing being 11.3%, construction 9.4%, trade, hotels, transport and communication 7.3%, financing, real estate and business services 11.1%, electricity, gas and water 7.7% and community, social and personal services 7.8%. The agriculture and allied activities sector showed a decline with the growth rate recorded being only 2.7% in 2006-07. Low investment, imbalance in fertilizer use, low seeds replacement rate, a distorted incentive system and low post harvest value addition continued to be a drag on the sector's performance thereby resulting in escalating prices in essential commodities.

The overall sectoral growth rates in GDP at factor cost are presented in table 2 below:

Sectors	Percentage Change Over Previous Year									
Sectors	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07			
Agriculture and allied activities	-0.2	6.3	-7.2	10.0	0.0	6.0	2.7			
Industry	6.4	2.7	7.1	7.4	9.8	9.6	10.0			
Manufacturing	7.7	2.5	6.8	6.6	8.7	9.1	11.3			
Construction	6.2	4.0	7.9	12.0	14.1	14.2	9.4			
Mining and quarrying	2.4	1.8	8.8	3.1	7.5	3.6	4.5			
Electricity, gas and water	2.1	1.7	4.7	4.8	7.5	5.3	7.7			
Services	5.7	7.2	7.4	8.5	9.6	9.8	11.2			
Trade, hotels, transport and communication	9.1	9.2	12.1	10.9	10.4	13.0	7.3			
Financial services, real estate and banking	4.1	7.3	8.0	5.6	8.7	10.9	11.1			
Community and social services	4.8	4.1	3.9	5.4	7.9	7.7	7.8			
Total GDP at factor cost	4.4	5.8	3.8	8.5	7.5	9.0	9.2			

Table 2: Sectoral Growth Rates in GDP at Factor Cost (at 1999-00 Prices)

Source: www.domain-b.com/economy/ecosurvey2007/index.html

Foreign Exchange Reserves and Balance of Payments

The economic prosperity and rising levels of disposable incomes have made India an attractive destination for foreign investments which can be witnessed from the inflow of MNCs into the country. Foreign Direct Investment (FDI) in India touched US \$647.7 million in January 2006 as against US\$ 152 million in 2005. The first quarter of 2006-07 witnessed ample capital inflows. The inflow of FDI was \$1.74 billion as against \$1.18bn in the corresponding quarter of the previous year, a growth of nearly 47%. In June 2006 itself, the FDI inflows grew by 102% increasing from \$264 million in 2005 to \$534 million in 2006. This places India as the second most attractive destination for FDI according to a survey of global investor confidence by AT Kearney.

Foreign Institutional Investors (FII) continued to be the net buyers in July 2006 with net inflows of \$252 million as against \$106 million in June 2006, a growth of 58% in a month. By the end of March 2006, the number of FIIs was 882, which went up to 928 by the end of June, 2006.

India, which stands fifth in the largest stock of foreign exchange reserves held by a country among the emerging market economies and sixth in the world, had reserves to the extent of \$151.62 billion. These trends only reveal the comfortable levels that are consistent with the share of external sector in the economy, the rate of growth, and the extent of risk-adjusted capital inflow. During 2005-2006, the rupee appreciated against Euro by 4.4% but depreciated against US dollar by 1.9%. It also appreciated against Japanese Yen by 7.5% and against pound sterling by 5.5%. The exchange rates as on 31st March, 2006 were Rs.44.61 per USD, Rs.77.80 per GBP, Rs.54.20 per Euro and Rs.38.01 per 100 Yen.

Overall Assessment of Macroeconomic Fundamentals of Indian Economy

The significant increase in the reserves in the recent years helped India prepay the high cost foreign currency debts taken from Asian Development Bank and World Bank. During 2003-04, the total amount of prepayments were to the extent of \$3.7 billion, and during 2004-05, the total prepayment of bilateral loans amounted to \$3.03 billion. However, during 2005-06, no prepayments of high cost bilateral or multilateral loans were made.

The external debt at the end of March 2006 stood at \$119.2 billion with a noticeable progress in the external debt indicators over the years demonstrating the increasing sustainability of external debt. The external debt to GDP ratio nearly halved from 30.8% by March end 1995 to 15.8% by March end 2006.

India's gross external aid stood at \$543.85 million in April-June 2006, a decline by 28.8% from \$764.25 million in April-June 2005.

The government has decided to (i) discontinue receiving aid from other countries except the following nine: Japan, UK, Germany, USA, EU, France, Italy, Canada and the Russian Federation, and (ii) make pre-payment of all bilateral debt owed to all the countries except the one's mentioned above. Since July 2003, India has become a net creditor to the IMF, after having been a borrower in the past.

The NFA (Net Foreign Assets) of RBI grew by Rs. 60,193 crore in 2005-06. The corresponding growth in NFA between end-March 2006 and Jan 2007 was Rs.1,14,338 crore. The rapid growth in NFA of the RBI was a reflection of the buoyant flows of foreign exchange reserves through the balance of payments. Reserve accretion through the balance of payments was US \$15.1 billion in 2005-06 and US \$8.6 billion in the first six months of 2006-07. While the appreciation of US Dollar vis-à-vis other major currencies resulted in a valuation loss of US \$5.0 billion in 2005-06, in the first half of the current year, the weakening of US Dollar resulted in valuation gain of a similar amount. Inclusive of gold, IMF reserve tranche position and valuation changes, foreign exchange reserves grew from US \$141.5 billion at the end of March 2005 to US \$151.6 billion at end March, 2006 and to US \$165.3 at end September, 2006. Such reserves were US \$185.1 billion on February 9, 2007.

In balance of payments, in 2005-06 and in the first half of 2006-07, capital flows more than made up for current account deficits of US \$9.2 billion and US \$11.7 billion respectively. The current account deficit reflected the large and growing trade deficit in the last two years. Exports grew fast, but imports grew faster. In the first 9 months of 2006-07, imports grew by 36.3%. While import of petroleum products continued to grow rapidly, non-oil import growth decelerated to a moderate 18.7% in the first nine months of the 2006-07.

India's exports have been growing at a rate of more than 20% since 2002-03. During 2005-06, with a growth of 23.4%, india's exports crossed the US \$ 100 billion mark. During 2006-07, after a slow start, exports gained momentum to grow by an estimated 36.3% to reach 89.5 billion. Buoyancy of exports was due to resurgence in the manufacturing sector and sustained demand from major trading partners. Table 3 presents an overview of the annual percentage change in exports and imports from 2000-01 to 2006-07.

Table 3:	Performance of Foreign Trade Sector
	Annual Percentage Change)

Year	Exports (in US \$)	Imports (in US \$)
2000-01	21.0	1.7
2001-02	-1.6	1.7
2002-03	20.3	19.4
2003-04	21.1	27.3
2004-05	30.8	42.7
2005-06	23.4	33.8
2006-07	36.3	36.3
	Year 2000-01 2001-02 2002-03 2003-04 2004-05 2005-06 2006-07	YearExports (in US \$)2000-0121.02001-02-1.62002-0320.32003-0421.12004-0530.82005-0623.42006-0736.3

Source: http://www.dgciskol.nic.in/pub

Inflation

On the inflation front, India's annual inflation rate in terms of Wholesale Price Index (WPI) with base 1993-94 = 100 was 4.82% for the week ended 5th August, 2006. From early on August 2006, inflation has been over 5 %. In order to stem the inflationary tendencies, the RBI announced measures to contain the credit take-off at the desired growth rate of 20%. The WPI continues to be the most popular measure for monitoring inflation. In terms of WPI, annual point-to-point inflation was 6.11% on January 20, 2007. The inflation rate in the corresponding week of the previous year was 4.24%. Starting with a rate of 3.98%, the inflation rate in 2006-07 had a general upward trend with intermittent decreases in between. While average inflation in the 52 weeks ending on January 20, 2007 remained below 5%, such a spurt in inflation as observed in the current year had been surpassed in the recent past in 1998-99, 2000-01, 2003-04 and 2004-05.

An overview of the performance of the various economic indicators during the year 2006-07 is presented in Table 4.

Population (July 2007 est.)	1,129,866,154
GDP at factor cost (2006-07) calculated at 1999-2000 prices	Rs.37,43,472 crore
GDP growth rate in 2006-07	9.2%
	Services 11.2%
Sectoral growth rates of GDP (2006-07)	Industry 10.0%
	Agriculture 2.7%
Inflation as on January 20, 2007	6.11%
Foreign Exchange Reserves	US \$1,51,622 million
Exchange rate	Rs.39.83/\$ (on February 21st, 2008).
Food Grains Production (2006-07)	209.2 million tonnes
Exports (2005-06) (April-December 2006)	Rs.4,56,418 crore RS.4,08,394 crore
Imports (2005-06) (April-December 2006)	Rs.6,60,409 crore Rs.5,98,287 crore
Foreign Debt (Qtr ended September 2006)	Rs.6,38,181 crore
Foreign Debt as Percentage of GDP	15.8%
Unemployment rate (2005 est.)	3.06%
Average literacy rate	64.84%
Life expectancy for males (2006 est.)	61.8 years
Life expectancy for women (2006 est.)	63.5 years
FDI April – September 2006 Cumulative (from August 1991 to September 2006)	Rs.20,155 crore Rs.1,81,566 crore
FII investment (net inflows) (2005) (2006)	Rs.10,467 crore Rs.9,031 crore

 Table 4: India's Overall Macroeconomic Indicators (2006-07)

Source: http://indiabudget.nic.in/es2006-07/esmain.htm.

INDIAN ECONOMY – PRESENT STATUS OF CONSUMER AND CAPITAL MARKETS

Consumer Market

- The Indian consumer market is growing with 1 billion people of which 300 million belong to the middle class. According to AC Nielson's consumer confidence survey, about 66% of Indians feel it is a good time to make purchases now. With 54% of its population below the age of 25 years, India offers a vibrant market. These young people work harder, earn more, spend more and demand more from the market, making India a dynamic and aspirational society.
- The domestic demand is expected to double over the ten-year period from 1998 to 2007. The number of households with "high income" is expected to increase by 60% in the next four years to 44 million households.
- The FMCG market in India is the fourth largest which is more than US\$13.1 billion and it is expected to reach US\$33.4 billion by 2015. The number of shopping malls is expected to increase from 25 in 2003 to 600 by 2009.
- The outsourcing opportunities in India and the booming IT sector have created a lot of avenues in India. There is a new trend of home improvements and leisure holidays that the consumers are willing to indulge in.
- There has been a considerable growth in the automobile industry with increase in the sale of utility vehicles increasing by 11.95% in April-August 2006 over the same period in 2005.
- Every month, there is an addition of more than 1.5 million cell phone subscribers. According to the Telecom Regulatory Authority of India, there has been a significant increase in the number of subscribers with the tele-density reaching 13.95% in June 2006.
- Computer sales grew by 19% (1.25 million units) during April-June 2006.

Capital Market

- The Indian capital market is a vibrant one comprising 22 stock exchanges with over 9000 listed companies and a world class trading and settlement system. Bombay Stock Exchange is second largest exchange after NYSE.
- According to Credit Lyonnais (CLSA), India's stock market has the greatest short-term and long-term potential in Asia.
- There is an increase in the number of Indian companies mobilizing capital from the overseas market with overseas floatation's accounting for 20% and 32% of the total floatation's in fiscal 2005 and 2006 respectively.
- The aggregate resource mobilization through IPOs and private placements showed an increase with the total resources mobilized amounting to Rs.1,61,769 crore in 2006. Seventy five IPO's were issued, which meant an average of six IPO's per month.
- Net mobilization of resources by mutual funds increased more than four fold to Rs.1,04,950 crore in 2006 from Rs.25,454 crore in 2005. The sharp rise in mobilization by mutual funds was due to buoyant inflows under both income/debt oriented schemes and growth/equity oriented schemes.
- On October 29, 2007, the BSE sensex crossed the 20,000 points mark for the first time. It reached 21,000 points on January 8, 2008.
- The small and mid cap stocks did well during the month of April, 2007 and the domestic mutual funds continued to be the major buyers in the secondary market. Mutual fund houses invested a net of Rs.3088.4 crore in April, 2007 in the equity markets.
- India has the third largest investor base in the world.
- India has one of the world's lowest transaction costs based on screen-based transactions, paperless trading and a T + 2 settlements cycle.

STRUCTURAL TRANSFORMATION OF INDIAN ECONOMY IN THE LAST DECADE OF 20TH CENTURY

There has been an evident structural metamorphosis of the Indian economy in the nineties as juxtaposed to the eighties. The intersectoral composition of GDP has undergone a considerable shift after India embarked on the reform process in 1991. The services sector has emerged to occupy a conspicuous place in terms of relative contribution to GDP. The increasing contribution of the services sector to GDP underscores profuse implications for the economy, the high resilience of the economy being the most significant.

When the period from 1990-91 to 2000-01 is considered, the relative share of 'agriculture and allied activities' in GDP has fallen to 28.6% from 36.4% during the decade 1980-1990. During 2005-2006, while the share of agriculture in GDP was 20.6%, the share of services in GDP was 51.4% and the share of industry in GDP was 28.1%.

India is riding high on the global radar mainly because of its notable economic performance backed by corporate growth, entrepreneurship and globalization. In the latest World Development Indicator's database, it has been ranked as the world's 10th largest economy in terms of GDP. India was placed at the 12th position since 1999 and this is the first time ever that it is being tagged along with the 10 biggest economies of the world having GDP at factor cost amounting to Rs.6953.82 billion as of March 2006, pushing back South Korea and Mexico. Now, India has to fray with the most developed economies of the world to move further upward. In order to reach the eighth position, India has to compete with Spain and Canada and now it is just two positions behind China. In terms of Purchasing Power Parity (PPP), India is already the fourth largest economy after the US, China and Japan. It is the second fastest growing economy in the world after China. India also enjoyed the credit of being the sixth largest holder of foreign exchange in 2005 according to the CIA World Fact Book.

We will now study the sectoral growth in Indian economy in detail.

Services Sector: The Driver of Growth

India's service sector, which ranks fifteenth worldwide, can be termed as the growth driver for the country's economy as reflected by its growing share in the GDP and its high pace of growth relative to primary and secondary sector. This is matched by a corresponding decline in the share of agriculture. The share of industrial sector in GDP is not displaying significant improvement and is on lower radar in India in contrast to the developed nations. The share of services in GDP increased from 38.3% in 1970-71 to 51.4% in 2005-06. In fact, the growth in the services sector was the major factor that contributed to the buoyancy in the overall growth of the Indian economy particularly in times of industrial slowdown and unfavorable agricultural shocks. Further, the services sector has also emerged as the fastest growing sector in terms of exports which increased from US \$4.6 billion in 1990 to US \$67.6 billion in 2005, making the country the 10th largest exporter of services with share in the global services exports being 2.8% in 2005.

Software exports have been a major contributing factor to the outstanding growth in the services sector and are expected to augur further growth in the years to come. According to estimates of Nasscom, IT-ITES industry touched \$28.2 billion and the software and services exports reached \$17.9 billion growing at 35%.

INDUSTRIAL SECTOR

A modest increase was visible in the relative share of the industry from 25.9% in 1999 to 27.1% in 2004 and 28.1% in 2005-2006. Opening of more sectors for foreign direct investment and relaxing of restrictions led to the revival of industries share in GDP. Moreover, several MNCs are expanding their base in India especially in IT related areas and further more in pharmaceutical, biotechnology, automobile and consumer goods, etc. The rate of growth which is measured in

Overall Assessment of Macroeconomic Fundamentals of Indian Economy

terms of Index of Industrial Production (IIP) was 7.8% during April-December 2005-2006. Further, the manufacturing sector put up an impressive performance with a growth of 8.9% during the same period which contributed largely to the growth in the IIP.

AGRICULTURAL SECTOR

The relative share of agricultural sector in the GDP decreased from 26.2% in 1999 to 21.2% in 2004-05. In 2005-2006, agriculture and allied sectors registered 2.3% growth and the food grains production increased to 209.3 million tonnes in 2005-2006, registering a growth of 2.3%.

Current Trends in Sectoral Growth

Services contributed as much as 68.6% of the overall growth in GDP in the last five years between 2002-03 and 2006-07. Practically, the entire residual contribution came from the industrial sector. As a result, in 2006-07, while the share of agriculture in GDP declined to 18.5%, the share of industry and services improved to 26.4% and 55.1% respectively.

The lower contribution of industry to GDP growth relative to services in recent years is partly because of its lower share in GDP, and does not adequately capture the signs of industrial resurgence.

- First, growth of industrial sector, from a low of 2.7% in 2001-02 revived to 7.1% and 7.4% in 2002-03 and 2003-04 respectively, and after accelerating to over 9.5% in the next two years, touched 10% in 2006-07.
- Second, growth of industry, as a proportion of the corresponding growth in services, which was 78.9% between 1991-92 and 1999-2000, improved to 88.7% in the last seven year.
- Third, within industry, the growth impulses in the sector seem to have spread to manufacturing. Industrial growth would have been higher, had it not been for a relatively disappointing performance of the other two sub sectors, namely mining and quarrying and electricity, gas and water supply.
- Fourth, since 1951-52, industry has never consistently grown at over seven percent per year for more than 3 years in a row before 2004-05.
- Fifth, year on year, manufacturing, according to monthly index of industrial production available until December, 2006, has been growing at double digit rates every month since March 2006, with the solitary exception of the festive month of October, 2006.

Services sector growth has continued to be broad based. Among the three sub-sectors of services, trade, hotels, transport and communication services have continued to boost the sector by growing at double digit rates. Impressive progress in IT and IT enabled services, both rail and road traffic, and fast addition to existing stock of telephone connections, particularly mobiles, played a key role in growth. Growth in financial services (comprising banking, insurance, real estate and business services) after dipping to 5.6% in 2003-04 bounced back to 8.7% in 2004-05 and 10.9% in 2005-06. The momentum has been maintained with a growth of 11.1% in 2006-07.

After an annual average of 3.0% in the first five years of the new millennium starting 2001-02, growth of agriculture at only 2.7% in 2006-07, on a base of 6.0% growth in the previous year, is a cause of concern. Given its low share, a mechanical calculation of the impact of low growth in agriculture on overall GDP can be misleading. With more than half the population directly depending on this sector, low agricultural growth has serious implications for the inclusiveness of growth. Further, more poor agriculture performance, as the current year has demonstrated can complicate maintenance of price stability with the supply side problems in essential commodities.

SUMMARY

- India, the fourth largest growing economy in the world in terms of purchasing parity, is also the most favored destination for foreign investments.
- Economic growth is on a high trajectory with the GDP growth of 8.4% in 2005-2006 (base year 1999-2000). The boost to GDP was mainly given by the services and manufacturing sectors.
- The economy is characterized by a vibrant consumer market with the increase in the levels of income and hence changes in expenditure patterns, and a buoyant capital market.
- The BSE Sensex reached an all time high of 12,928 points on October 16, 2006 and the companies mobilized \$3.25 billion from the primary market alone in April 2006, of which 67% was from the domestic market.
- Since the reforms initiated, the Indian economy has been doing incredibly well with the GDP growth rate ranging between 7% and 8. The main contribution to the growth has been the services sector.

<u>Chapter III</u> Savings and Investment Trends

After reading this chapter, you will be conversant with:

- Savings Trends in India
- Trends in Investments
- Factors that make India an Attractive Destination for FII Investment
- Global Imbalances in Savings and Investment

Introduction

The importance of savings and investment for the development and growth of any economy cannot be undermined. Savings are the main source of funds for financing capital investments. The savings and investment figures in Indian economy in the recent years have been quite encouraging and are reflecting the overall growth of the economy. India has now one of the highest savings rates in the world (next only to China), higher than those in the developed countries such as the US and UK. Let us study in detail the trends regarding savings in India.

SAVINGS TRENDS IN INDIA

The extreme cuts in interest rates on savings, instability in the tax incentives for savings and the rude shocks given by the capital market and the non-banking finance companies during the last decade, did not have an adverse impact on the household savings sector. According to an RBI report, the financial savings of the household sector in the country rose by 35% i.e., Rs.5,88,656 crore in 2006 from Rs.4,35,706 crore in 2005. The household savings contributed as much as 16.7% to the GDP in 2005-06 as against 14% in 2004-05. This figure further increased to 18.4% in 2006-07. (Refer to Table 1)

(Perce										
ltem	2006-07	2005-2006#	2004-2005P	2003-2004P	2002-03P	2001-02P	2000-01			
Financial Savings (Gross)	100	100	100	100	100	100	100			
	(18.4)	(16.7)	(14.0)	(13.8)	(13.6)	(12.7)	(11.9)			
a) Currency	8.6	8.8	8.5	11.2	8.5	9.7	6.3			
	(1.6)	(1.5)	(1.2)	(1.5)	(1.2)	(1.2)	(0.7)			
b) Deposits										
i. With banks	55.7	47.4	37.0	38.3	41.5	39.4	41.0			
ii. With non-banking companies	(10.2)	(7.9)	(5.2)	(5.3)	(5.7)	(5.0)	(4.9)			
iii. With co-operative banks and societies	55.6	46.7	36.4	37.4	36.3	35.3	32.5			
iv. Trade debt (net)	0.10	0.8	0.8	1.0	1.6	2.6	2.9			
	0.0	0.0	0.0	0.0	3.7	3.6	5.6			
	0.0	0.0	0.0	0.0	-0.1	-2.1	0.1			
c) Shares and debentures										
i. Private corporate business	6.3	4.9	1.1	0.1	1.6	2.7	4.1			
ii. Co-operative banks and societies	(1.2)	(0.8)	(0.2)	(0.0)	(0.2)	(0.3)	(0.5)			
iii. Units of UTI	1.4	1.3	1.4	1.1	0.8	1.5	3.1			
iv. Bonds of PSUs	0.1	0.0	0.1	0.0	0.0	0.1	0.0			
v. Mutual funds (other than UTI)	0.0	-0.1	-0.7	-2.3	-0.5	-0.6	-0.4			
	0.0	0.0	0.0	0.0	0.0	0.0	0.1			
	4.8	3.6	0.4	1.2	1.3	1.8	1.3			
d) Claims on government	5.2	14.7	24.4	23.0	18.6	17.9	15.7			
i. Investment in government securities	(1.0)	(2.5)	(3.4)	(3.2)	(2.5)	(2.3)	(1.9)			
ii. Investment in small savings, etc.,	0.2	2.4	4.9	7.5	4.3	5.8	1.7			
	4.9	12.3	19.5	15.5	14.3	12.1	14.0			
e) Insurance funds										
i. Life insurance funds	15.0	14.2	16.0	13.7	15.5	14.2	13.6			
II. Postal insurance	(2.8)	(2.4)	(2.2)	(1.9)	(2.1)	(1.8)	(1.6)			
III. State insurance	14.6	13.5	15.1	13.0	14.8	13.5	12.9			
	0.2	0.2	0.3	0.3	0.2	0.3	0.2			
	0.2	0.5	0.5	0.5	0.5	0.4	0.5			
 Provident and pension funds 	9.2	10.0	12.9	13.6	14.3	16.1	19.3			
	(1.7)	(1.7)	(1.8)	(1.9)	(2.0)	(2.0)	(2.3)			
# Preliminary Estimates, P: Provisional.										
1. Figures in parentheses are percentages	. Figures in parentheses are percentages to GDP at current market prices.									

Table 1: Financial Savings of the nousehold Sector (Gros	able 1: Finar	cial Saving	s of the Hous	sehold Sector	(Gross
--	---------------	-------------	---------------	---------------	--------

2. Components may not add up to the totals due to rounding off.

Source: http://www.rbi.org.in/scripts/AnnuaReportPublications.aspx

Savings and Investment Trends

During the 11-year period of 1993-94 to 2003-04, a greater part of the savings flowed into bank deposits, claims on government, insurance, provident and pension fund, etc. During the five-year-period of 1999-00 to 2003-04, the combined savings in the above channels accounted for nearly 85% or more of household sector's total financial savings. In 2005-2006, there was a surge in the contribution of the savings of household sector to bank deposits by 73% helping match the increasing investment needs in the economy, which was further strengthened in 2006-07.

Bank deposits have been the most preferred investment avenue given the safety, liquidity, tax concessions over the other investment avenues. On the other hand, deposits in the non-banking finance companies have been decreasing year by year given the sorry experiences of these unsecured savings.

Table 2: Domestic Savings by Type of Institutions Savings and Investment (Base: 1999-2000)

1	New	series	hase	1999-	2000)
---	-----	--------	------	-------	------	---

			1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06 (Q)
			•	. (8	as per cent of GDI	P at current n	narket prices)		
Gross Domestic Savings			24.8	23.4	23.5	26.4	29.7	31.1	32.4
a.	Public		-0.8	-1.9	-2.0	-0.6	1.2	2.4	2.0
b.	Private		25.6	25.3	25.5	27.0	28.5	28.7	30.4
	i. House	ehold	21.1	21.0	21.8	22.7	23.8	21.6	22.3
	Finar	ncial	10.6	10.2	10.8	10.3	11.3	10.2	11.7
	Physi	ical	10.5	10.8	10.9	12.4	12.4	11.4	10.7
	ii. Priva	te Corporate	4.5	4.3	3.7	4.2	4.7	7.1	8.1
Gross	Domestic In	nvestment*	25.9	24.0	22.9	25.2	28.0	31.5	33.8
	Public		7.4	6.9	6.9	6.1	6.3	7.1	7.4
Private			17.9	16.5	16.3	18.4	19.4	21.3	23.6
	Valuables		0.8	0.7	0.6	0.6	0.9	1.3	1.2
Gross fixed capital formation		23.4	22.6	23.0	23.8	24.8	26.3	28.1	
	Change in	stocks	1.9	0.6	0.2	0.7	0.8	2.0	2.9
Valuables		0.8	0.7	0.6	0.6	0.9	1.3	1.2	
	Saving – i	nvestment gap @	-1.1	-0.6	0.6	1.2	1.6	-0.4	-1.3
	Public		-8.2	-8.8	-8.9	-6.6	-5.2	-4.7	-5.4
	Private		7.7	8.8	9.2	8.6	9.2	7.4	6.9
Note	: Gr	ross domestic invest	ment denotes	gross domes	stic capital formation	on (GDCF) a	nd is adjusted fo	or errors and o	missions
	Fi	gures may not add u	p due to round	ding.					
	: Ac	djusted for errors and	d omissions;						
@	: Di	fference between the	e rate of savin	gs and the ra	ate of investment.				
GFCF	: Gr	ross fixed capital form	mation.						
Q	: Qi	uick							
Sourc	e : Ce	entral Statistical Orga	anization.						

Source: http://rbi.org.in/scripts/AnnualReportPublications.aspx?Id=751

The increasing trend in gross domestic savings as a proportion of GDP observed since 2001-02 has continued with the savings ratio rising from 26.4% in 2002-03 to 29.7% in 2003-04, 31.3% in 2004-05, and 32.4% in 2005-06. The rise in the savings rate in 2005-06 was contributed by two of its three components – private corporates and household sector, which as a proportion of GDP, increased by 1.0 percentage point and 0.7 percentage point respectively. The third component namely public savings, declined by 0.4 percentage points, and made a negative contribution to the overall savings rate. However, a redeeming feature of recent years is that the savings of the public sector, which had been negative until 2002-03, were positive for the third successive year in 2005-06. The positive savings of Rs.71,262 crore in 2005-06 (QE) is largely attributable to the higher savings of non-departmental as well as departmental enterprises. Table 2 gives an overview of the savings and investment trends between 1999-00 to 2005-06.

Wealth Management

A dramatic element in the savings profile of the Indian economy has been the sharp rise in the savings rate of the private corporate sector for four years in a row. For 2004-05, the earlier quick estimates of private corporate savings of 4.8% of the GDP has been substantially scaled upto 7.1% in the provisional estimates released by the CSO. The savings rate for 2005-06, as per the quick estimates has been placed at 8.1%. The private corporate sector has financed a large part of its investment in the on-going long capex cycle from such retained earnings or savings.

As much as 0.7 percentage points of the 1.3 percentage points increase in GDP between 2004-05 and 2005-06 has come from the household sector. Two forces have been acting simultaneously on the portfolio behavior of Indian households – a construction boom with residential buildings financed from housing loans from banks and the progressive maturing of the domestic financial markets. While the former has tended to increase household savings in physical form and depress financial savings, the latter has provided incentives for higher financial savings. There was a perceptible shift in the household portfolio in the three years ending in 2005-06. Physical savings as a proportion of GDP have declined steadily from a high of 12.4% in 2003-04 to 10.7% in 2005-06. Financial savings, on the other hand, after declining from 11.3% to 10.2% between 2003-04 and 2004-05, more than recovered to 11.7% in 2005-06.

The increase in savings is what is to be expected with higher growth rate of the economy and a declining dependency ratio. With the proportion of population in the working age group of 15-64 years increasing steadily from 62.9% in 2006 to 68.4% in 2026, the demographic dividend in the form of high savings rate is likely to continue.

TRENDS IN INVESTMENT

A rise in the savings rate, however impressive, cannot be viewed in isolation from the investment rate. This is where, the trends show a contrasting picture in India. The rate of gross domestic capital formation, though has been in step with the savings for most of the time, has lagged behind the savings rate in 2002-03 and 2003-04. This is evident from the savings-investment gap in these two years which indicates that the savings were more than the investment figures. The implication of this development is enormous for a capital shy economy such as India. It reveals that the household savings to the tune of Rs.50,000 crore have been invested outside the country. This, to some extent, can be attributed to the liberalization of the investment norms in the country which permitted overseas investments. The figures have however changed for the better in 2004-05 and 2005-06. The savings investment gap for 2005-06 infact shows a negative trend implying that investments have exceeded the savings mobilized. This could be due to the heavy FII inflows into the country. Let us undertake a more detailed study of the investment trends in India.

Investment in Capital Market

Investment in government securities and small savings increased a substantial 500 basis points from 12.3% in 1999-00 to 17.7% in 2003-04. In nominal terms, from 1993-94 to 2003-04, these savings registered a whopping 12 times growth. However, these investments declined to 14.7% in 2005-06 from 24.4% in 2004-05. Further, the small savings fell drastically from 19.5% in 2004-05 to 12.3% in 2005-06. The main reason for the decline is the falling yield levels of these investments.

Life insurance and provident/pension fund investments have also seen a rise. Life insurance funds growth could be for two reasons: Increased realization about the need to insure and the increased competition from private players in the last decade. While, the gross investments in absolute terms in life insurance rose to Rs.79,426 crore from Rs.65,577 crore, the gross gain in provident and pension funds rose to Rs.58,615 from Rs.56,354 crore.

Capital market investments suffered a similar fate as risky company deposits. Barring the first two years (1993-94 and 1994-95) and the dotcom boom year 1999-2000 (where investment peaked to Rs.18,118 crore), the savings came down to Rs.5,699 crore in 2003-04.

These include investment through mutual funds (with the exception of UTI). The households have kept away from this avenue as they were averse to risk though, the Comptroller of Capital Issues has been replaced by the SEBI and from 1993-94 onwards, the capital market regulator has been framing regulations on various issues connected with the capital market.

With the regulations becoming tougher and stricter, aggravated by the investing community taking a beating with such mega scandals as perpetrated by Harshad Mehta and Ketan Parekh, investments came down.

Similarly, after the crisis in UTI,¹ the country's single largest mutual fund, the investors remained net sellers only.

The entire corporate revenue contribution to the nation's income is nearly 14% and a large portion of the balance income comes from the non-corporate sector which in reality comprises the wealth creators and outright savers as mentioned above, in addition to individuals in the household sector.

Therefore, any tax incentive to the stock market such as removal of double taxation on dividends and replacing transaction tax for capital gains stands to benefit primarily foreign and domestic institutional investors.

These investors who dominate the stock market and the household sector are not lured by such tax bounties, but appear to rely on guaranteed return on safe investment. They possibly, fancy returns on what is essentially a 'risk' capital.

The household remains the super saver, if its investments in gold are counted. The private sector savings are small and public sector spendings are more which means its savings are in the negative. The household sector consisting of the retail investors is a weak link in the bullish Indian stock market. However, of late, it has also started entering the equity market which is evident from the amounts collected by new mutual fund schemes, which was over Rs.10,000 crore and part of which was contributed by retail investors. This will change the scenario of the contribution of the household sector towards equities which is at present a meager 1.8% of the total savings.

Thus, shedding risky avenues, ignoring policy flip-flops, the household is conscious of the fact that it has to mind its business that is, financial security of its next generation, depending on its own conservative saving techniques.

Administered interest rates are, perhaps, keeping people away from saving in financial assets. There is a strong need for increasing the country's overall savings in financial assets. Savings in financial assets have important consequences for the financial sector especially, the banking system. If more savings come in the form of financial assets, it would help banks increase their credit disbursal.

Foreign Institutional Investment (FII)

When talking about investments in capital markets one cannot ignore the role of Foreign Institutional Investors (FIIs), an entity incorporated or established outside India to make investment in India. The FIIs were at the back of the three year bullish trend in the capital market. Since the commencement of the Bull Run in late 2003 April, FII inflows have been more than \$30 billion into Indian equities. FII inflows have grown at a rate of 25% YOY. By the end of March 2006, the cumulative net FII investments stood at US \$45.3 billion.

¹ UTI was established by an Act of Parliament in 1963 and a year later it launched its first mutual fund scheme –Unit Scheme 1964(US -64). In 2001, UTI, managed money for about 41 million people and controlled assets of approximately Rs.600 billion (US \$12.73 billion) a quarter of which was invested in the US-64 scheme. It delivered regular returns but invested heavily in the technology stocks even after the end of the technology boom and US-64 lost half its Rs.30,000 crore portfolio value within a year. It invested more than 60% in equity despite the recommendations by Deepak Parekh Committee to switch to debt.

The entities or funds that are qualified to get registered as FIIs are pension funds, mutual funds, insurance companies, investment trusts, banks, university funds, endowments, foundations, charitable trusts or societies, asset management companies, institutional portfolio managers, trustees, and holders of power of attorney on behalf of broad based funds. The registration and investment activities of FIIs are governed by the SEBI.

FII is permitted through,

- Secondary market operations by foreign banks, insurance companies, mutual fund companies and pension funds.
- GDRs and ADRs (Euro Issues).

When foreign banks, insurance companies, mutual funds and pension funds purchase stocks and bonds of companies of other countries in the secondary markets, it comes under foreign portfolio investment or FII investment. Returns trickle in the form of capital gains and dividend but these financial institutions cannot exercise any direct control in running these companies. Since restrictions on foreign equity investment by various countries have been reduced or eliminated in recent years, it permits diversification of portfolios by pension, mutual fund and insurance companies in order to hedge risk. Liberalization policies followed by developing countries facilitated growth of portfolio foreign capital thereby, making pension funds, mutual funds and insurance companies more active in moving portfolio capital.

Portfolio capital started flowing into India since 1991 following the adoption of liberalization policy. As a sequel, the decade since liberalization (1991-2001) witnessed an inundation of foreign portfolio capital. In this context, Mexico has an edge over other countries. When we consider the net capital flows to the developing countries, the share of portfolio capital flows is one third.

FII flow helps in lowering the cost of capital and is beneficial to the economy as a whole. This is apparently evident from the benefits enjoyed by the Indian companies as they raise money cheaply to finance their capital expenditure programs. Moreover, FII inflows increase the transparency level and disclosure and give a facelift to corporate governance standards in the system. Equity research, particularly, has greatly benefited and compelled investment banks to invest in previously neglected areas. At last, what virtually matters is that business is conducted with sufficient capital, a purpose served by FII capital. Ever since the liberalization of the Indian stock market in 1993, FIIs have played a significant role in the domestic capital market and have been positive with the exception of financial year 1999. The foreign institutional investment was over \$10 billion in 2005. When we look at the behavior of foreign portfolio investors, we can say that weird and wonderful are their ways. When a crash occurs in the stock market, they are busy buying and sometimes, amusingly the reverse is also true. For example, on September 22, 2005, when the BSE Sensex crashed by 266 points registering the steepest fall in over a year and all category of investors went berseck trying to sell, foreign investors were busy buying. Indeed, market regulator SEBI says that foreign portfolio investors made the largest investment on September 22, by buying Rs.514 crore worth of shares. All the more, FII investment on that day was the largest in September. This reflected the sense of confidence of the investing class in India's integrity and growth. This also shows that they are not worried if the correction in the market is technical. They are worried only if the correction is fundamental. In retrospect, we can also see that six years ago on May 2, 2000, at a time when markets crashed 285 points, FIIs had gone on a similar buying spree by investing in Rs.278 crore worth of shares.

The present picture of the global investors is that they are making a bee line for the Indian Market, enthused by sturdy corporate earnings, strong macroeconomic fundamentals and a positive growth forecast. Foreign Portfolio Investment has been widely expected to continue. Indian economy which is Asia's third largest economy is set on a 25% - 30% earnings growth trajectory. It achieved a GDP growth of 8.4% in the year 2005-06 (base year 1999-2000), with most corporates already growing at the rate of 20% - 25% every year. Majority of the foreign

investors currently in India are from mature markets, where buying is considered the sound logic of operation in stock market, when the rest of the market is selling. The number of foreign institutional investors registered with the SEBI stood at 882 in 2006, stridently up from 787 in 2005-06, 685 in 2004-05 and 540 in 2003-04.

India's International Investment Position

India's net international liabilities increased by US\$15.5 billion between end-March 2007 and end-June 2007, as the increase in international liabilities (US\$ 31.6 billion) exceeded the increase in international assets (US\$16.1 billion). While the increase in the liabilities was mainly due to large capital inflows under portfolio investments, direct investments and external commercial loans, the increase in international assets was on account of an increase of US\$14.2 billion in reserve assets between end-March 2007 and end-June 2007, followed by direct investment abroad (US\$5.4 billion). International liabilities reflected increases in direct and portfolio investment at end-June 2007 from their levels in end-March 2007. A major part of the liabilities like direct and portfolio investment reflects cumulative inflows, which are at historical prices.

Not only is the number increasing, but the sources and category of investors also is growing because now investment is also flowing from countries such as Japan, Korea, Denmark, Norway and Taiwan. The Sensex and Nifty are puffing up new highs making the Indian stock market grow at a pace second only to Korea, the fastest growing economy in Asia. FIIs have emerged as the most influential in determining the direction of the market and a major source of liquidity in the domestic market.

r							<i>,</i>
Period			2003PR	2004PR	2005PR	2006P	2007PR
International Investment							
Posi	ition,	Net	-60.46	-45.27	-40.31	-46.07	-47.0
A. <i>A</i>	Assets		95.59	137.78	168.90	183.13	243.6
1.	Dire	et Investment Abroad	5.83	7.76	10.11	12.07	24.0
2.	Port	folio Investment	0.78	0.76	0.81	1.29	0.8
	2.1	Equity Securities	0.37	0.40	0.40	0.65	0.4
	2.2	Debt Securities	0.41	0.36	0.41	0.64	0.4
3.	Othe	er Investment	12.88	16.31	16.48	18.15	19.6
	3.1	Trade Credits	1.10	1.90	2.77	0.96	2.5
	3.2	Loans	1.41	1.76	1.87	2.55	2.6
	3.3	Currency and Deposits	7.52	9.47	8.44	11.17	10.3
	3.4	Other Assets	2.86	3.17	3.40	3.47	4.2
4.	Rese	erve Assets	76.10	112.96	141.51	151.62	199.2
B. I	iabili	ities	156.05	183.12	209.22	229.20	290.6
1.	Dire	ect Investment	31.22	38.18	43.59	50.26	72.3
2.	Port	folio Investment	32.41	43.70	55.28	63.36	79.2
	2.1	Equity Securities	20.09	33.93	42.74	54.33	63.3
	2.2	Debt Securities	12.32	9.77	12.53	9.03	15.9
3.	Othe	er Investment	92.42	101.25	110.34	115.58	139.1
	3.1	Trade Credits	4.88	6.28	9.56	10.54	13.7
	3.2	Loans	61.05	61.87	65.76	67.77	82.2
	3.3	Currency and Deposits	25.57	32.18	33.64	36.16	42.3
	3.4	Other Liabilities	0.92	0.92	1.39	1.11	0.9

Table 3: International Investment Position of India (IIPI)in \$ billion between 2003-2007

(in US\$ billion)

Source: http://www.rbi.org.in/scripts/PublicationsView.aspx?id=10193

FACTORS THAT MAKE INDIA AN ATTRACTIVE DESTINATION FOR FILINVESTMENT

India with its liberal investment policies, skilled manpower, large markets and diversified manufacturing base, offers attractive investment climate for the foreign institutional investors. Further, the progressive liberalization measures undertaken by our government have opened the doors to overseas investors. The figures discussed above are an ample proof of this fact. The factors that made India an attractive destination for FII can be listed out as follows:

- Strong macroeconomic fundamentals India is the second largest emerging market and the fourth in respect of purchase power parity. It is one of the fastest growing economies in the world.
- Streamlined management and radiant performance of external sector foreign exchange reserves have increased to over \$ 100 million.
- Successful technology story India has emerged as the preferred business process outsourcing destination.
- Buoyant sectoral performance.
- Strong rupee.
- Political stability.
- Momentum of ongoing reform process.
- Strong forex position.
- Corporate performance.
- Adequate and constant liquidity for investment, which consists of amount in Market Stabilization Scheme, liquidity adjustment facility and the existing cash balance with RBI.
- Lesser external dependence and resilience during external crises.

GLOBAL IMBALANCES IN SAVINGS AND INVESTMENT

Savings and investments affect the balance of payments of a country and in turn, the deficits and surpluses of the account reflect on the economy's performance.

It is a tale of two deficits. An investment crunch is expected to be faced by the emerging economies including India as a counterpart of the US current account deficit. Revaluation of Chinese Yuan is expected to be a panacea for faster resolution of global imbalances. For more than a decade, the US has been running a large current account deficit. Its trade deficit with China which was 146.3 billion dollars in the first nine months of 2005 constituted the major part of its trade deficit in 2005. A huge current account deficit (currently above 6% of its GDP) is tagged along with the dominant place the US occupies in the global economic arena. US is dominant as it accounts for two-thirds of increase in global income between 1995 and 2002. However, the large current account deficit of the US is a cause of concern for the global economy despite the fact that the US dollar is the favorite reserve currency of the world. The current account surplus/deficit of a country is matched by its gap between savings and investment. Inadequacy of savings is reflected through the US current account deficit. What is required to reduce this deficit? US savings should rise or the demand for its goods (in the rest of the world) has to prop up. The by-product of this adjustment would be a fall in the dollar. Some experts envisage that in the near future, the dollar might depreciate by another 20% in real trade-weighted terms.

Global savings rate was outstandingly high at 25% during 2004. However, the US savings rate may have been very low. The conspicuously high and rising savings rate of the emerging market economies and low and falling savings rate of the US remain the striking features of the savings scenario in the global economy.

Emerging economies, as a group, ran large current account deficits before 1997 financed by private capital inflows. Since then, there has been a tendency to generate enormous current account surpluses combined with hefty private capital inflows. The financial crises of the late 1990s made everyone more cautious. Through official intervention, the governments' of emerging markets also have played a major role in sustaining the domestic excess savings. This excess savings constitute an 'investment deficit'. This situation of inadequacy in investment vis-à-vis savings is systemic and is a sequel of burgeoning current account deficit of the US. It is a scenario of the young and relatively poor countries in the world to save more than they invest, while the rich and ageing countries of the world do the reverse. This state of affairs is not what the doctor prescribed.

- In order to reduce excessive draft on global savings, the US requires rapid fiscal consolidation.
- Investment deficit in the emerging market economies needs to be cut down.
- The brunt of adjustment will be more on other countries if the US does not act.
- A revisit is required on Asia's strategy of export-led growth which is riding on artificially low exchange rates and parking surplus funds in US dollar-denominated assets.
- In all emerging markets, except China, both the quality and quantity of investment has to be enhanced.
- Structural reforms in the labor, product and financial markets need to be carried out, in countries like Germany and Japan, to prop up the efficiency of investment and growth potential.

Keynes opined that what is good for individuals can be bad for the economy. Savings by individuals is good for the economy but if the whole economy saves, it is not so. What is currently being played out in the global theater is this paradox of thrift. The excessive savings by the emerging economies is responsible for the large current account deficit in the US, according to some experts. In its attempt to run its economy in synergy with potential, the US has been accommodating the excess savings of the rest of the world. The savings of the poor of the emerging economies seem to be fuelling the consumption of the rich in the US. This is mainly because funds from emerging economies are increasingly being channelized into foreign currency reserves as a side effect of growing global integration. Keynesian prescription is that, the financial sector reforms in the long run, in the emerging economies will encourage these citizens to spend more. Some of the savings by the surplus countries could go on a path of cautious fiscal expansion in the short and medium-term to reduce their excessive savings. Tailoring of this prescription to the individual country's requirements is highly warranted to smoothen out the global disequilibrium. Until and unless the government is well within its solvency constraint and does not run the risk of getting into a debt-trap, a fiscal expansion is least feasible.

Re-emergence of Asia as a front-runner is apparently visible in the new global order and a re-configuration of its mindset is highly warranted. Now the global arena is set in such a way that in all future global balance calculations, the rising importance of India and China needs to be accounted for. It is emphatically true that the world economy has always revolved on a fulcrum and Asia has been that fulcrum, except for a terse and aberrant intermission in the past couple of hundred years.

SUMMARY

- The financial savings of the household sector concentrated on safe modes and moved away from the capital markets and non-banking finance companies.
- Of the investment avenues available, the provident funds have shown an increase in their investments.
- Of the investments made in the capital market, a meager percentage is contributed by retail investors. However, there is a change in this trend with an increase in the retail participation in mutual funds.
- Foreign institutional investors have been the major influencing factor behind the bullish trend of the stock market. They have contributed much to the liquidity in the market.
- Global imbalances in savings and investment arose due to the large and consistent current account deficit in the US economy, which needs to be corrected.

Chapter IV

Investments

After reading this chapter, you will be conversant with:

- Concept of Investment
- Difference between Investment, Gambling and Speculation
- Investment Objectives and Constraints
- Different Forms of Financial Investments
- Various Investment Instruments
- Forms of Real Investment
CONCEPT OF INVESTMENT

We can define investment as the process of 'Sacrificing something now for the prospect of gaining something later'. Our definition implies that there are three dimensions to an investment – time, present sacrifice and prospective gain.

We can, of course, think of a number of transactions which will qualify as 'investments' as per our definition. Consider, for example, the following transactions:

- i. In order to settle down, a young couple buys a house for Rs.15 lakh in Bangalore.
- ii. A wealthy farmer pays Rs.5 lakh for a piece of land in his village.
- iii. A cricket fan bets Rs.10,000 on the 'outcome' of a test match in England.
- iv. A government officer buys 'units' of Unit Trust of India worth Rs.20,000.
- v. A college professor buys, in anticipation of good return, 100 shares of Reliance Industries Ltd., for Rs.40,000.
- vi. A lady clerk deposits Rs.5,000 in a Post Office Savings Account.
- vii. Based on the rumor that it would be a hot issue in the market in no distant future, our friend John invests all his savings in the newly floated share issue of Fraternity Electronics Ltd., a company intending to manufacture ipods, with latest technology.

A common feature of all these transactions is that something is sacrificed now for the prospect of gaining something later. For example, the wealthy farmer in transaction (ii) sacrifices Rs.5 lakh now with an intention to use it for farming and derive income from the crop in the future. The lady clerk in transaction (vi) sacrifices Rs.5,000 now for the prospect of getting a larger amount later due to interest earned on the savings account. Thus, in a broad sense, all these seven transactions qualify as investment. Broadly speaking, any investment decision is a trade-off between risk and return.

Are all Investments Speculative?

We know that investment means sacrificing or committing some money today in anticipation of a financial return later. The investor indulges in a bit of speculation as to how much return he is likely to gain. There is an element of speculation involved in all investment decisions. This does not mean that all investments are speculative by nature.

Genuine investments are carefully thought out, planned decisions. They involve only calculated risks. The expected return is consistent with the underlying risk of the investment. A genuine investor is risk averse and usually has a long-term perspective in mind. The government officer's investment in the units of UTI (transaction (iv)), the college professor's Reliance stockholding (transaction (v)) and the lady clerk's Post Office Savings Deposit (transaction (vi)), all may be regarded as genuine investments. Each person seems to have made a carefully thought out decision and each has taken only a calculated risk.

Speculative investments on the other hand are not carefully thought out decisions. They are based on rumors, hot tips, inside dopes and often simply on hunches. The risk assumed is disproportionate to the return expected from such transactions. The intention is to profit from short-term market fluctuations. In other words, a speculator is relatively less risk averse and has a short-term perspective for investment. Our friend John's decision to invest all his savings in the new issue of Fraternity Electronics based only on rumors (transaction (vii)) may be labelled as speculative investment. John does not seem to have carefully thought out this decision. He is taking a high risk by putting all his savings in just one stock and that too in a new one.

So, an investment can be distinguished from speculation by (a) the time horizon of the investor, and (b) the risk-return characteristics of the investments. A genuine investor is interested in a good rate of return earned on a rather consistent basis for a relatively long period of time. The speculator, on the other hand, seeks opportunities promising very large returns, earned rather quickly. In this process, he assumes a risk that is disproportionate to the anticipated return.

From the foregoing discussion, it cannot be however, inferred that there exists a clear-cut demarcation between investment stocks and speculative stocks. The same stock can be purchased as a speculation or as investment, depending on the motive of the purchaser. For example, the decision of the professor to invest in the stock of Reliance Industries is considered as a genuine investment because he seems to be interested in a regular dividend income and prospects of long-term capital appreciation. However, if another person buys the same stock with the anticipation that the share price is likely to rise very quickly and gain from the rise, such decision will be characterized as speculation.

DIFFERENCE BETWEEN INVESTMENT, GAMBLING AND SPECULATION

Gambling is defined in Webster's Dictionary as 'An act of betting on an uncertain outcome'. Since the prospective return on investment is uncertain at the time of investment, one may say that there is an element of gambling involved in every investment. This is particularly so in the case of those investments in respect of which little information exists at the time of taking the investment decision. However, genuine investments cannot be labeled as gambling activities.

In gambling, the outcome is largely a matter of luck; no rational economic reason can be given for it. This is in contrast to what we can say about genuine investments. Unlike investors and speculators, the gamblers are risk lovers in the sense that the risk they assume is quite disproportionate to the expected reward. Though the pay-off, if won, is extraordinary, the chances of winning the bet are so slim that no risk averse individual would be willing to take the associated risk. The cricket fan's bet of Rs.10,000 on the outcome of a test match in England (transaction (iii)) is an act of gambling; it is not a genuine investment.

The difference between gambling, speculation and genuine investment can also be highlighted from the point of view of the length of investment. Usually, people make investments with a future end date in mind. The length of time from the date the investment is made to the date when it is dissolved is known as the investor's investment horizon, or holding period. If a person purchases a financial asset with the intention of holding it for a longer duration of time, then it does not amount to gambling or speculation. Gambling is usually a very short run investment say for example gambling in cards may last for a few seconds until the card is shown. On the other hand, speculation has a comparatively longer holding period though not as long as an investment. A speculation, thus, usually involves the purchase of marketable assets in the hope of making a quick profit from an increase in its value which is expected to occur within a few weeks or months.

It should, however, be noted that a clear demarcation between investment, speculation and gambling is not always easy. Often, it becomes a matter of degree of risk and the perception of the investor. Aggressive investors are likely to decide on investments based on other things. Their speculative or gambling instincts are more than those of the defensive or conservative investors.

Having understood what genuine financial investments are, let us now consider the objective sought to be fulfilled by investors seeking such investments.

Box 1: Speculation Doesn't Work always! The Hunt Bros and the Silver Bubble
In 1973, the Hunt family of Texas, possibly the richest family in America at tha time, decided to buy precious metals as a hedge against inflation. Gold could no be held by private citizens at that time, so the Hunts began to buy silver i enormous quantity.
In 1979, the sons of patriarch H L Hunt, Nelson Bunker and William Herber together with some wealthy Arabs formed a silver pool. In a short period of time they had amassed more than 200 million ounces of silver, equivalent to half the world's deliverable supply.
When the Hunt's began accumulating silver back in 1973, the price was in th \$1.95/ounce range. Early in '79, the price was about \$5. In '79/early'80, the price was in the \$50s, peaking at \$54.
Once the silver market was cornered, outsiders joined the chase but combination of changed trading rules on the New York Metals Market (COMEX and the intervention of the Federal Reserve put an end to the game. The price began to slide, culminating in a 50% one-day decline on March 27, 1980 as the price plummeted from \$21.62 to \$10.80.
The collapse of the silver market meant countless losses for speculators. Th Hunt brothers declared bankruptcy. By 1987, their liabilities had grown to nearl \$2.5 billion against assets of \$1.5 billion. In August of 1988, the Hunts wer convicted of conspiring to manipulate the market.
Another silver bubble debacle worth noting, according to author Edwar Chancellor ("Devil Take the Hindmost"), is the experience of an official at th Peruvian Ministry of Commerce, employed to hedge his country's silve production, who lost \$80 million by illicitly selling silver short. Chancellor said "Although a relatively small sum for a sovereign nation, it was an omen: th 'rogue trader' had appeared on the modern financial scene."
The stock market had its own troubles during the rise and fall of silver. The Dov Jones peaked on February 13, 1980 at 903.84. The day of the collapse, Marc 27th, the Dow closed at 759.98, a decline of 16% in just 6 weeks. (However, intr day, the loss between the 2/13 high of 918.17 and the 3/27 intra day low of 729.95 was actually 20%.)
For many traders, the collapse in silver was the final straw for a stock marked already under siege from worries as diverse as the Iranian hostage crisis, the Russian invasion of Afghanistan and soaring interest rates. [The consumer price index climbed to a 13% rate in 1979]. The prime lending rate hit 22% in earl 1980]. But at the year end, the whole decline was almost forgotten. The Dow ended the year at 963.99, thanks, in large part, to the euphoria over the election of Ronald Reagan.

Source: www.buyandhold.com/bh/en/education/history/2000/hunt bros.html

INVESTMENT OBJECTIVES AND CONSTRAINTS

Investment Objectives

Rationally speaking, all personal investments are designed to achieve a goal, which may be tangible (e.g., a car, a house, etc.) or intangible (e.g., social status, security, etc.). Goals can be classified into various types based on the way investors approach them, viz.,

- Near-Term High Priority Goals.
- Long-Term High Priority Goals.
- Low Priority Goals.
- Entrepreneurial or Money Making Goals.

Investments

Investment Constraints

An investor seeking fulfillment of any of the above goals operates under certain constraints such as:

- Liquidity
- Age
- Need for Regular Income
- Time Horizon
- Risk Tolerance
- Tax Liability.

The challenge in investment management, therefore, lies in choosing the appropriate investments that will meet the investment objectives of the investor subject to his constraints. To take on this challenge, the first step will be to get acquainted with different types of investments that are available in the financial market.

DIFFERENT FORMS OF FINANCIAL INVESTMENTS

Investment relates to the purchase of assets in the hope of getting returns on it in future. Investments can be broadly classified into Financial investments or Real Investments as shown in Figure 1:



Financial investments refer to investments in financial assets which may comprise of the various financial instruments or bank deposits or in other fixed income schemes. Economists usually refer to real investments which deal with investments in tangible assets such as land, buildings etc. This chapter will concentrate more on the financial investment part. Only financial instruments have been elaborated upon with a brief introduction to real investments.

Financial investments can in turn be categorized into fixed income securities and variable income securities. Fixed income securities are also referred to as the non-security form of investments while variable income securities are known as security form of investments.

Security Form of Financial Investments

We know that the recipient of money in a financial investment issues a document or a piece of paper to the investor (supplier of money), evidencing the liability of the former to the latter to provide returns. This document also outlines the rights of the investor to certain prospects and/or property and sets the conditions under which the investor can exercise his/her rights. This document is variously called 'Security Certificate', 'Note' and so on.

The term 'security' is a generic term used generally for those documents evidencing liabilities that are negotiable – that can be bought and sold in the stock market. The security form of investment has received great impetus since 1980 following the Central Government's liberal policy towards foreign investments – direct and portfolio, streamlining of licensing, capital issues and other procedural formalities to facilitate faster capital formation; providing incentives for exports and encouraging private sector to tap the primary market for meeting their long-term capital requirements.

There are different types of securities conferring different sets of rights on the investors and different sets of conditions under which these rights can be exercised. They are gilt-edged securities, corporate debentures, preference shares and equity shares. The important characteristic features of these securities are described below:

VARIOUS FINANCIAL INSTRUMENTS

Gilt-Edged Securities

The debt securities issued by the government and semi-government bodies are called gilt-edged securities. They comprise the treasury bills and the dated securities (also called bonds or dated loans) of the central government, state government and semi-government bodies like Port Trusts and State Electricity Boards.

TREASURY BILLS

These short-term securities are issued by the RBI on behalf of the Central Government. No interest is paid on these bills. Instead, they are sold at a discount.

CENTRAL GOVERNMENT DATED SECURITIES

These securities of the central government have a maturity period longer than one year and carry a fixed rate of interest. The coupon rate on the central government dated securities is higher than the discount rate on treasury bills as dated securities have longer maturities.

SEMI-GOVERNMENT DATED SECURITIES

These are the promissory notes issued by the institutions and corporations set up by the central/state governments like – NTPC, NMDC, HPCL, Indian Oil Corporation, Bharat Petroleum, to mention a few.

Bonds

A bond is the basic form of fixed income security. It is issued by a borrower (borrowing company) to the lender (the investor). The bondholder receives coupon payments at periodical intervals say annually, semi-annually or quarterly and the redemption amount on the maturity date. For example, when an individual invests Rs.1,000 in a bond that pays interest at the rate of 10% semi-annually, he/she can expect to receive Rs.50 semi-annually (i.e., 10% x 100 x 0.50) and at the maturity he/she will recover Rs.1,000, if the bond is redeemed at par. Sometimes, bonds are issued as zero coupon bonds where no interest is paid to the investors. Instead, these bonds are issued at a discount to the face value and are redeemed at par. The difference between the two is the return to the investor. For example, a bond with a face value of Rs.10,000 may be issued at a discounted value of say Rs.8,500. The bond would be redeemed after, say, 10 years and at that time the investor would get Rs.10,000.

Corporate Debentures

Corporate debentures are the promissory notes issued by joint stock companies in the private sector. They are thus, the debt obligations of the issuing corporation. Like government securities, they have an issue price at which they are originally issued, a coupon interest rate and a specified maturity date.

TYPES OF DEBENTURES

Debentures can be classified into two or more categories along the following dimensions: security, transferability and convertibility.

Straight and Mortgage Debentures: Based on security dimension, debentures can be classified as unsecured (or straight) debentures and secured (or mortgage) debentures. Unsecured debentures have no charge on any specific asset(s) of the company while secured debentures carry a fixed or floating charge on the assets of the company.

Registered and Bearer Debentures: On the basis of transferability, debentures can be classified as registered and unregistered debentures. Unregistered debentures (or bearer debentures) are freely negotiable and can be transferred by a simple endorsement. On the other hand, registered debentures can be transferred only by executing a transfer deed and filing a copy of it with the company.

Convertible and Non-convertible Debentures: Debentures can also be classified into convertible and non-convertible debentures depending upon whether they carry a conversion feature or not. Convertible debentures are the ones which can be converted into equity shares at the option of the debenture holders.

Shares

The Companies Act provides for two classes of shares: Equity and Preference shares.

EQUITY/ORDINARY SHARES

Equity/ordinary shares are a long-term source of finance and represent ownership interest of the shareholders in the company. These shareholders carry the reward and risk associated with the ownership of corporate enterprises and the rights and privileges conferred on the shareholders are enjoyable in proportion to one's shareholdings. Equity shares are also called ordinary shares in contrast with preference shares which carry certain preferential rights with regard to income and redemption.

When a company is formed, it first issues equity shares to the promoters. As the need for financing increases, the company may issue ordinary shares in specific and small number privately to promoter's relatives, friends, business associates, employees, financial institutions, mutual funds, venture capital funds and so on. As the company grows further, it raises capital from the public. The first issue of equity shares to the public by an unlisted company is called the Initial Public Offering (IPO). Subsequent offerings are called further issues/offerings.

The investment community in India categorizes equity stocks based on the behavior of prices (and returns). The categories include Blue chips, Growth stocks, Income stocks, Cyclical stocks, Defensive stocks, Speculative stocks, Glamour stocks and so on.

PREFERENCE SHARES

These are a hybrid variety of securities which have some features of equity shares and some features of debentures. As a form of financing, they are similar to debentures as they: (i) carry a fixed/stated rate of dividend, (ii) rank higher than equity as a claimant to the income/assets, (iii) normally do not have voting rights, and (iv) do not have a share in residual earnings/assets. They also include some of the features of equity capital, namely, (i) dividend on preference capital is paid out of divisible/after tax profit, (ii) payment of preference dividend depends on the discretion of management, that is, it is not an obligatory payment and non-payment does not force insolvency/liquidation, and (iii) irredeemable type of preference shares have no fixed maturity date.

Mutual Funds

The concept of mutual funds is not new. Originating in the USA and moving on to the UK in the 1930s, this culture started in India only in 1960s with the setting up of UTI in 1963. Mutual funds are financial intermediaries in the investment business. In a mutual fund, the resources of many investors are pooled and invested to create a diversified portfolio of investments. The main objectives behind setting up mutual funds is to provide an opportunity for lower income groups to acquire property without much difficulty in the form of shares, to cater to the needs of individual investors whose means are small and to manage the investor's portfolios in a manner that provides regular income, growth, safety, liquidity and diversification.

Derivative Instruments

Derivatives are financial instruments that derive their value from the value of an underlying asset. These underlying assets could be fundamental securities like stocks and bonds, commodities, foreign exchange. The different types of derivative instruments are forwards, futures, options and swaps.

FORWARDS

A forward contract is an agreement to buy or sell an asset at a certain price on an agreed future date.

FUTURES

A futures contract is a highly standardized version of forward contract to buy or sell a certain asset after a specified period during a specified time at a specific price.

OPTIONS

An option contract is between two parties, in which the holder of an option gets the right but not the obligation to purchase or sell an underlying asset at a specified price called the strike price (or exercise price) during a certain time.

SWAPS

A swap contract is basically an exchange of payment streams between two counterparties based on the underlying asset or liability which could be a currency or interest to maximize revenues and minimize the finance costs.

While forwards, futures and options are usually used to hedge risks, swaps are used to lengthen or shorten maturities, and raise or lower coupon rates.

Non-Security Forms of Financial Investments

These financial investments can be classified into (i) National Savings Schemes, (ii) Post Office Savings Deposit Schemes, (iii) Deposits with Commercial Banks, (iv) Corporate Fixed Deposits, and (v) Unit Schemes of UTI. As can be seen from the above classification, most of the non-security forms of investment are the schemes or the plans of the central government and the bodies controlled by it. These schemes are meant to mobilize small private savings for public use. Although nominal returns on these investments are low vis-à-vis security returns, the features of tax advantage and safety can swing many small investors into their fold, particularly the conservative investors. In fact, statistics indicate that nearly 80% of the household savings are in these forms of investment.

We will discuss now the salient features of the major non-security forms of investment available in India.

NATIONAL SAVINGS SCHEMES

Over the years, the Government of India has floated several national savings schemes with a view to mobilize private savings for public use. These schemes are operated mainly through the post offices because of the familiarity of these places to the masses.

PUBLIC PROVIDENT FUND SCHEME (PPF)

This was introduced on July 1, 1968 and is primarily meant for self-employed individuals. The salaried individuals are allowed to make contributions to this scheme in addition to their contributions to the recognized provident funds in their organizations. It is a 15-year scheme with a facility to accept the last contribution in the 16th year.

POST OFFICE SAVINGS DEPOSITS SCHEMES

These include savings bank, time and recurring deposit accounts. These accounts can be operated in post offices throughout the country. Interest so earned is totally tax-free under Section 10 of the Income Tax Act. Interest on the time deposit schemes qualifies for deduction under Section 80L of Income Tax Act. Investment in post office/bank accounts also qualifies for exemption under the Wealth Tax Act subject to the overall exemption limit.

Investments

DEPOSITS WITH COMMERCIAL/COOPERATIVE BANKS

The major deposit schemes of the Commercial/Cooperative banks include the savings bank accounts, fixed deposits, recurring deposits and annuity deposit schemes.

A savings bank account at a commercial bank carries a nominal interest of 3.5% p.a. with some limit on the number of withdrawals (usually 25 times a quarter). Banks accept fixed (i.e., term) and recurring deposits. Under the fixed deposit scheme, the deposit is made in lump sum initially for a set term, whereas, under recurring deposit scheme, the deposit scheme, the depositor deposits a certain amount periodically on a regular basis over a specified period of time. Banks also offer annuity deposit schemes.

It is to be noted that besides these deposit schemes, banks do have other schemes to attract small savings like cash certificate scheme, perennial income scheme, etc. The other points worth noting about bank deposits are (i) premature encashment is possible, (ii) the interest on these deposits is covered under Section 80L of the Income Tax Act, and (iii) the Deposit Insurance Corporation offers a cover up to Rs.1,00,000 per account.

CORPORATE FIXED DEPOSITS

Investors can also consider depositing their money for a fixed term with companies. These fixed deposits, which are considered as a part of the unsecured liabilities of the company, have a maximum maturity period of 3 years and carry a maximum rate of interest of 9.5%.

Insurance

The insurance device is an integrated and interdependent system. The purpose of the device is to provide security and protection to individuals and corporates who face disastrous risks, which may or may not occur. One of the definitions given to insurance is "From an individual point of view, insurance is an economic device, whereby the individual can substitute a relatively small and definite cost (the premium) for a large uncertain financial loss (the contingency insured against) that would have to be borne if insurance was not available."

The primary function of insurance is the creation of a counter balance for risk, which is security. Insurance does not eliminate or decrease the uncertainty and it does not protect the subject matter from the loss, nor does it alter the possibility of occurrence. The only thing that it does is reduce the extent of financial loss connected with the event. It may be death or injury or sickness to a person, loss or damage to the property, either movable or immovable, exposure to legal liability arising out of tort, statute and contract, and any other contingency which is described in the policy.

In India, insurance business is classified primarily as life and non-life or general. Life insurance includes all risks related to the lives of human beings and general insurance covers the rest. Life insurance is viewed as an investment or a means of saving. General insurance has three classifications viz., Fire, Marine and Miscellaneous. The premium is based on expectations of the losses.

FORMS OF REAL INVESTMENT

Real investment is the investment in tangible or physical goods which are different from monetary assets or financial claims. The important categories of real assets are:

- a. Land and house property.
- b. Real Estate Investment Trust.
- c. Bullion.
- d. Precious stones.
- e. Art objects.
- f. Paintings.
- g. Antiques.

LAND AND HOUSE PROPERTY

Investors can invest in different forms of real estate such as land, flats, independent houses or commercial property. Real estate is not exchangeable and transferable easily. The return from real estate investment can be in the form of rent, capital gains and certain tax benefits. Investors have to consider various factors such as location, design and potential for appreciation while investing in real estate. Among these factors, location is an important parameter because it determines the value of the real estate.

Land and House property is also called real estate. This investment is taken by a large number of people for hedging against inflation risks. A real estate represents a very attractive investment proposition as capital appreciation of real estate is, in general, very high. Real estate prices in most of the towns in India have appreciated ten times or so in the last 10-15 years. Investment in real estate is also very risky although the average rate of return is high.

REAL ESTATE INVESTMENT TRUST (REIT)

A REIT is a company that owns, and operates income-producing real estates such as apartments, shopping centers, offices, hotels and warehouses. In most cases, REITs own and operate the real-estate property.

Some REITs also finance real estate. The shares of many REITs are freely traded, usually on a major stock exchange. To qualify as an REIT, a company must distribute at least 90% of its taxable income to its shareholders annually. A company that qualifies as an REIT is permitted to deduct dividends paid to its share holders from its corporate taxable income. As a result, most REITs remit at least 100% of their taxable income to their shareholders and therefore owe no corporate tax. However, in India, REITs are yet to be allowed. The Indian government is still examining the possibility to allow real estate mutual funds.

The REIT industry offers a choice to investors. REITs are classified as equity, mortgage or hybrids. Equity REITs own and operate income-producing real estate; these are primarily real estate operating companies engaged in a wide-range of real estate activities, including leasing, property development and tenant services. One major distinction between REITs and other real estate companies is that an REIT must acquire and develop its properties primarily to operate them as part of its own portfolio rather than resell them once they are developed. Mortgage REITs lend money directly to real estate owners and operators or extend credit indirectly through the acquisition of loans or mortgage-backed securities.

REITs invest in a variety of property types: shopping centers, apartments, warehouses, office buildings, hotels, and others. Most REITs specialize in one property type only, such as shopping malls, self-storage facilities or factory outlet stores. Health care REITs specialize in health care facilities, nursing homes and assisted living centers.

BULLION

Bullion comprising gold and silver is a favorite avenue of investment to Indian investors as: it provides a hedge against inflation, it has sentimental and social value, and it has ornamental value.

GOLD

Gold is one of the most valuable assets in any economy. It has been used in India primarily as a form of saving by housewives. It used to be a money metal universally acceptable as a medium of exchange and it is now used for its 'Store of Value' function. Although the price of gold is always on the rise and it fetches higher resale value, in India, it is retained for the feeling of security and status it gives rather than for sale or with the intention of making profit or income on this investment. Gold to the investor in the recent years has become very important mainly because of the rise in prices due to inflation. Investment in gold may be in the form of gold coins, gold bars or gold jewelry.

SILVER

Like gold, silver is a useful hedge against inflation. The price of silver though less than gold, also keeps rising the same way as gold's.

Gold and silver are currently traded in the commodity exchange. Commodities are dealt in brief in the later part of this chapter.

PRECIOUS STONES

Diamonds, rubies, emeralds, sapphires, and pearls have appealed to investors from times immemorial because of their aesthetic appeal and rarity. Diamonds, in particular, are attractive because of their high per carat value. The quality of a diamond is basically judged in terms of the four Cs, viz., carat, color, cut, and clarity.

ART OBJECTS

Objects which possess aesthetic appeal because their production requires skill, taste, creativity, talent, and imagination may be referred to as art objects. According to this definition, paintings, sculptures, etchings, and so on may be regarded as art objects. The value of an art object is a function of its aesthetic appeal, rarity, reputation of the creator, physical condition, and fashion.

PAINTINGS

Paintings appear to be the most popular among objects of art. In the last decade or so, interest in paintings has grown considerably, thanks to the substantial appreciation in the market value of paintings of Hussain, Raza, Menon, and others.

ANTIQUES

An object of historical interest may be regarded as an antique. It could be a coin, a manuscript, a sculpture, a painting, or any other object. Antiques tend to appreciate in value over time, but in a very unpredictable manner.

COMMODITIES

Commodities are tangible goods that can be used for various purposes. They include goods like agricultural products such as grains, oil seeds, wheat etc., and metals like sponge iron, aluminum ingots, etc., to name a few, except financial assets. Commodities are traded through a mutual agreement between the buyer and the seller to exchange a commodity at a given price. The commodity contracts are highly standardized except for the price and are influenced by the demand and supply forces. Commodity contracts are generally in the form of futures and options.

COMMODITY EXCHANGES

Commodity exchanges are the places where the buyers and sellers meet to transact business in commodities. These exchanges neither establish prices, nor buy or sell commodities or contracts; however, they exist to provide an orderly market by enforcing rules and regulations for the conduct of operations in the market.

Some of the popular commodity exchanges in India are Multi Commodity Exchange of India, Ltd., National Commodity & Derivatives Exchange Ltd., the Bombay Commodity Exchange Ltd., Ahmedabad Commodity Exchange Ltd., First Commodity Exchange of India Ltd., to name a few.

Among the commodities, gold and silver bullions are currently traded on Multi Commodity Exchange of India (MCX), and National Commodity and Derivatives Exchange (NCDEX).

COMMODITIES FUTURES AND OPTIONS

Commodities futures and options are contracts to buy and sell goods such as cotton, corn, wheat, coffee and cocoa, silver, oil etc. These contracts are traded all around the world for various purposes and in various modes in both organized and unorganized markets.

Gold is traded on the Indian commodity exchanges – Multi Commodity Exchange of India (MCX) and National Commodity and Derivatives Exchange (NCDEX). The market is regulated by the Forward Markets Commission (FMC), a regulator similar to the SEBI. Other products in the commodities exchange include:

- Bullion
- Cement
- Chemicals
- Edible oil
- Food grains
- Fuels
- Industrial metals
- Other agricultural commodities, and
- Plastics.

Basically, the commodity futures and options are used as hedging or speculative instruments.

SUMMARY

- Investment is carried out with the objective of getting a safe return without speculating or gambling.
- Investment can be categorized in two ways: one as financial investment and another as real investment. Financial investment can be further classified as security form of investment and non-security form of investment.
- An investor can choose from a wide array of investments. The security form of investment includes stocks, bonds, and mutual funds, to name a few. The non-security form of investment includes national savings certificates and real investments such as gold, precious metals, real estate, etc.
- There are other financial instruments called derivative instruments like forwards, futures, swaps and options which do not have any value of their own but derive their value from the underlying asset.
- Derivative instruments are usually used as hedge or speculative instruments.
- Mutual funds are another most preferred instrument, especially among people with meager savings and those who do not have the time and necessary knowledge to monitor a portfolio of assets.
- Of late, commodity futures and options have gained popularity as they provide an opportunity to hedge or speculate in commodities.

<u>Chapter V</u> Wealth Management Scenario

After reading this chapter, you will be conversant with:

- The Wealth Management Market
- The State of the World's Wealth 2006
- Wealth Management Industry in India
- The Outlook for 2008

Introduction

Wealth management refers to an advanced type of financial planning that provides high net worth individuals with services like private banking, estate planning, asset management, legal advice and investment management, with the goal of sustaining or enhancing their wealth. Thus, while financial planning is done to acquire wealth, wealth management is done to sustain the wealth acquired.

As a term, wealth management originated in the 1990s in the US with the brokers, dealers, banks and insurance companies. It has gradually evolved from being high net worth financial consulting for persons who are top clients of any firm, to a high level form of private banking that provides various types of investment, insurance, and banking services. Target clients of wealth managers are typically called as High Net Worth Individuals (HNWI) who are defined as individuals having a net worth or positive asset base of US \$ 10,00,000 (1 million).

This chapter details the spread of the wealth management market with a focus on the world wealth report given by Capgemini and Meryll Lynch in 2007.

THE WEALTH MANAGEMENT MARKET

How much is the wealth management market worth?

The wealth of High Net Worth Individuals grew at an annual rate of 11.4% to reach \$37.2 trillion in 2006 from \$16 trillion in 1996. Between 1996 and 2000, the wealth of HNWIs grew at an annual rate of 12.9% and 8.1% between 2003 and 2005. It is expected that, by 2011, it would reach \$51.6 trillion at an annual growth rate of 6.8%.

Sl. No.	Region	HNWI I	opulation	HNWI Wealth	
		(Millions)	% Change	(Trillions)	% Change
1	North America	3.2	9.2	11.3	10.3
2	Europe	2.9	6.4	10.1	7.8
3	Asia Pacific	2.6	8.6	8.4	10.5
4	Latin America	0.4	10.2	5.1	23.2
5	Middle-East	0.3	11.9	1.4	11.7
6	Africa	0.1	12.5	0.9	14.0
Total		9.5		37.2	

Table 1: Region-wise Distribution of HNWI Population andHNWI Wealth in 2006

Source: http://www.at.capgemini.com/m/at/t1/World-Wealth-Report-2007.pdf

HNWIs benefited mainly from Latin America, Middle-East, Africa, Eastern Europe and Asia-Pacific markets. While the Asia-Pacific region was particularly significant with high growth rates of GDP and market capitalization, Latin America and the Middle-East regions with strong growth were beneficial to the HNWIs who invested domestically as well as in other parts of the world.

Where does the HNWI populace invest its wealth?

Sl. No.	Asset Class	2004 (%)	2005 (%)	2006 (%)
1	Equities	28	30	31
2	Fixed Assets	24	21	21
3	Cash/Deposits	13	13	14
4	Real Estate	16	16	24
5	Alternative Investments	19	20	10
		100	100	100

Table 2: HNWI Asset Allocation by Investment Class in 2004, 2005 and 2006

Source: http://www.at.capgemini.com/m/at/t1/World-Wealth-Report-2007.pdf

Equity has been the preferred mode of investment of these individuals. Though HNWIs adopted a conservative approach in 2004, the strong global performance helped them regain their optimism and prompted them to increase their equity investments by two percentage points in 2005. However since 2006, there has been a significant shift of HNWI's assets from alternate investments to real estate. This is primarily due to an increased transparency and improved liquidity in the global real estate market.

The following figure shows the HNWI asset allocations from 2004 and the forecast for 2008:

```
Figure 1: HNWI Asset Allocations by Investment Class, 2004-2008F
```





Why do HNWIs invest in equity and real estate?

Let us now look at the returns achieved by the different investment assets. The long-term historical returns for different assets for the period 1960-1984 in the world are given in table 3:

Asset Return (%) Equities 9.08 Bonds 6.36 Cash Equivalents 6.38 Real Estate 9.26 Metals (Gold/Silver) 9.11 World Market Wealth Portfolio 8.32 **US** Inflation 5.24

Table 3: Historical Returns for Different Assets for the Period 1960-1984

Source: Roger, G. I., and Gary, P. B. Investment Markets. McGraw Hill Book Company.

Wealth Management

Equities, real estate and metals offer highest returns, combined with ease of operations hence, they are preferred over others.

If equity and real estate are expected to give high returns combined with ease of operations, why is it that institutions/HNWIs invest in other assets and in foreign assets? The answer is, diversification to reduce risks.

Ultra-High Net Worth Individuals (Ultra-HNWI)

The Ultra-High Net Worth Individuals * (Ultra-HNWIs) are more sophisticated and knowledgeable about wealth management. Research indicates that these individuals have diversified and aggressive portfolios than HNWIs with a greater allocation to alternative investments which helps them minimize and defer taxes. They allocate fewer funds to equities and invest more in hedge funds, private equities and other complex investment products. Having good exposure to international markets helps them diversify their portfolios geographically. In the past few years, they have established both physical and financial presence across various countries. The total population of Ultra-High Net Worth Individuals reached 94,970 in 2006 and their total wealth amounted to US \$ 13.1 trillion. While North America leads with the largest number of these individuals, Europe follows next.



Figure 2: Geographic Distribution of Ultra-HNWIs, 2006

Source: http://www.at.capgemini.com/m/at/t1/World-Wealth-Report-2007.pdf

THE STATE OF THE WORLD'S WEALTH - 2006

For 11 years, Capgemini and Merrill Lynch have collaborated to identify and objectively analyze the investment needs of the world's High Net Worth Individuals (HNWIs) – defined as people with more than US \$1 million in financial asset wealth, excluding primary residence. The World Wealth Report (WWR) is widely read by top executives in the banking, securities and insurance industries as well as those in the luxury goods markets. It is viewed as the global benchmark in terms of numbers and wealth of HNWIs and is sourced in hundreds of media reports throughout the year. No other report provides as comprehensive a view of Global HNWIs: their size, behaviors and implications for the financial services industry. The WWR is updated annually and uses a proprietary Lorenz curve methodology.

World Wealth Report

The report has built a strong and lasting reputation as the industry benchmark for HNWIs market sizing – originally at a global and regional level but increasingly at a country level. The report includes three sections that cover:

• HNWI market sizing and review of global economic drivers impacting HNWI behavior.

Ultra – HNWIs are individuals with more than US\$30 million in financial assets.

- Investing behaviors and asset allocation trends of HNWIs.
- Key industry issues facing financial services institutions, financial advisors and HNWIs alike.

Over the years, the WWR has covered a variety of research topics in its featured spotlight section including:

- 2000: Focus on the Ultra-HNWI sub-segment.
- 2001: Size, growth, nature and types of specialized investments.
- 2002: Comparison of European and North American high net worth individual behaviors and operating models.
- 2003: Impact of new market realities Changes in needs, behavior and investment attitudes of HNWIs.
- **2004:** The demand for institutional-like services and the implications for wealth management providers.
- 2005: The challenges facing mid-tier millionaires and rise of the Virtual Service Network.
- **2006:** Increased international awareness led to internationalization of portfolios and the need for the creation of specialist teams for wealth strategies.
- **2007:** Focus of HNWI's portfolio allocations in "investments of passion". These include luxury collectibles (automobiles, boats, aeroplanes, etc), jewelry, art, sports related investments and other collectible (antiques, wines) categories.

HNWI SECTOR GAINS IN 2006

- Globally, 9.5 million people each hold at least US\$1million in financial assets an increase of 8.3% over 2005.
- HNWI wealth in 2006 grew to US \$37.2 trillion, a gain of 11.4% over 2005.
- Wealth generation was driven by gains in real GDP and the continual market capitalization growth.
- Emerging markets like Latin America, Eastern Europe and Asia-Pacific registered strong progress in market capitalization and aided in wealth creation.
- Singapore, India, Indonesia and Russia witnessed the highest growth in HNWI population.
- HNWI financial wealth to reach US \$ 51.6 trillion by 2011, growing at an annual rate of 6.8%.

The two primary factors of wealth creation – GDP rates and market capitalization grew more or less at a stable rate in 2006 in comparison with previous years.

Figure 3: Real GDP Growth in Selected Economies, 2005-2006



Source: http://www.at.capgemini.com/m/at/t1/World-Wealth-Report-2007.pdf



Figure 4: HNWI Population Growth by Country, 2005-2006

Note: Growth rates and absolute HNWI numbers have been rounded off.

Source: http://www.at.capgemini.com/m/at/t1/World-Wealth-Report-2007.pdf



Figure 5: HNWI Population by Region 2003-2006 (in million)

Source: http://www.at.capgemini.com/m/at/t1/World-Wealth-Report-2007.pdf

The last couple of years have witnessed consistent economic growth across major parts of the world. With economic gains returning to the levels last seen in 2003 and 2004, real GDP and market capitalization accelerated in most regions of the world. The rise in oil prices in the first half of 2006 helped bolster real GDP gains in oil producing nations of the Middle-east. The subsequent fall of oil prices, benefiting oil importing nations, coupled with relatively low inflation, helped drive real GDP growth worldwide to 5.4% compared to 5.0% gains posted in 2005. Global GDP growth in 2006 was especially buoyed by continued strong performance in the Asia Pacific and Eastern European region.

While the accelerating pace of the real GDP growth partially reflects steady performance of the world's most mature economies, emerging markets continued to outperform the rest of the world, which had a positive effect on wealth creation in those particular economies. In 2006, China and India, for example, sustained real GDP growth rates of 10.5% and 9.0% respectively, among the highest in any economy in the world. Similarly, certain areas of Latin America and Eastern Europe also enjoyed real GDP growth rates that outperformed the global average of 5.4%. This was most evident in oil producing nations of Venezuela and Russia.

Stabilized market capitalization growth rates in 2005 set the stage for record stock market performance in 2006 and a return to the levels of 2003 and 2004. Although performance varied across the world, almost all indexes posted gains, some were rather substantial. For instance, the Dow Jones World Stock Index

grew by 16.4% in 2006, compared to 9.5% in 2005. Overall, however, markets outside the US performed better with strong returns delivered by Europe, Asia-Pacific and Latin America.

WEALTH MANAGEMENT INDUSTRY IN INDIA

Wealth management industry in India is on a noteworthy growth trail with considerable growth in the levels of income and wealth over the last few years. India, an emerging economy and one of the BRIC (Brazil, Russia, India and China) countries, consists of a large proportion of young population with 54% of the population below 25 years of age. There has been a considerable growth in India's economy and GDP as also the young employed population. Coupled with this, the increase in the number of HNWIs and the size of middle class has led to increased scope for growth in the wealth management business. Financial intermediaries have started recognizing the wealth management business as a profitable avenue.

The recent World Wealth Report-2007, on the state and future of the world's wealth by Capgemini and Merrill Lynch, indicates that the number of HNWIs in India grew by 20.5%, which is more than twice that of the World's growth in 2006. The number of HNWI's in India touched 1,00,000 in 2006. The average networth of an Indian HNWI, was the fourth largest in Asia with \$3.5 million per person. Their portfolio primarily constituted of equities to an extent of 31%, and alternative investments and fixed-income investments constituted 20% and 19% respectively. These indicate that the avenue is a most profitable one.

There is a shift in the attitude of Indian investors towards savings and investments. From a generation of savers, India is gradually moving towards a generation of investors. It therefore has become, necessary for the wealth managers, private bankers and financial planners to play an important role for a smooth transition. Further, the wealth managers need to identify and create an optimum portfolio in accordance with the clients' objectives and convey clearly that they have no intention of selling any particular financial product to them.

Wealth managers are much in demand for their ability to set a trend and provide investment advice to their clients.

Indians mostly invest in equities, derivative instruments, mutual funds and commodities. However, the wealth management portfolio these days has been extended to include art, real estate and jewelry.

Wealth Management in India – The Road Ahead

Financial instruments have become too complex for a common investor to comprehend. Added to this, the introduction of derivative instruments, increase in the number of mutual fund schemes, volatile interest rates and the increase in the number of individuals wanting to hedge a part of their wealth against business risks have contributed to the expansion of wealth management services.

As one of the major providers of wealth management services, banks find the operations involved in the service more flexible. The security and confidentiality which the service calls for is inherent in the banking industry.

By and large, HNWIs avail these wealth management services irrespective of which profession they belong to. These professionals could be doctors, lawyers, businessmen, IT employees who are provided ESOPs, film stars or CEOs. Further, these services can also be availed by commodity merchants, wealthy farmers, etc.

Individuals usually avail these services as they lack the time to research and deal in their personal financial matters. Therefore, the wealth management services are for people who do not have the time to study the different investment opportunities or lack accessibility to expert advice and take knowledgeable decisions.

Wealth Management

Banks, that provide wealth management services, realize that they need to be extremely flexible while managing assets, executing deals and offering innovative investment products for their wealthy and affluent clients. In situations where they cannot provide these services in-house, they either outsource them or tie-up with other service providers and usually select the best fund managers for stocks.

With the growing importance of wealth management services, banks and other major players are targeting the affluent^{*} population. The market size estimates differ from Rs.20,000 crore to Rs.2,00,000 crore. The range has been kept wide as, different banks define entry level wealth for availing these services differently. For some, it may be from Rs.5 lakh/Rs.10 lakh and for others, it may be Rs.5 crore.

The players in the wealth management services industry include HSBC, Standard Chartered, Citibank, BNP Paribas, ICICI Bank, HDFC Bank, Kotak Mahindra Bank, ABN-Amro Bank and brokers, DSP Merrill Lynch and JM Morgan Stanley.

In India, though the minimum level of wealth to avail wealth management services is kept low at Rs.1.5 crore, the minimum asset size necessary for such services is high. As such, a huge proportion of the wealthy population is ignored. In Asia and more particularly in India, the ratio of wealth managed by individuals themselves to that managed by the professionals is higher when compared to that in developed economies like the US. Given these trends, many still feel that the wealth management industry is in a nascent stage and will take some time to catch up.

THE OUTLOOK FOR 2008

In the past one year, economies have continued to build on the gains from strong market capitalization and the recovery of GDP across a number of countries. Economists expect these factors may still continue to drive many markets on the growth path for the next few years. However, there could be dissipation in the impact of the growth. North America may experience a slowdown in the real GDP growth as the investor and consumer confidence moderates. The interest rate hike is likely to come to an end of its upward cycle and with increase in external deficit, the US currency might come under pressure. The sluggishness in the European economy which is dictated by a lag in the real GDP and labor utilization is likely to pick up by 2010 and this lift is likely to be led by an increase in the consumer confidence, spending and fall in inflation. The Asia-Pacific region, already on a growth path, is expected to continue with this growth but at a declining rate. India and China would be the drivers in the region helping it to capture a greater share of the output. On the contrary, the expected fall in the labor force and low growth in productivity might restrain Japan's growth prospects. Though there are regions which are experiencing strong economic growth, the gradual slowdown in the global economy coupled with the continuing risk of growing energy prices and higher levels of debt, still persists.

SUMMARY

- The rising growth levels of the economy and GDP have contributed to the increase in wealth creation and the number of HNWIs in the world.
- Wealth creation during 2006, was mostly visible in emerging economies of Asia-Pacific, Latin America, Eastern Europe and Middle-East.
- The HNWIs and more particularly ultra-HNWIs have diversified their portfolios geographically to make the most of investment opportunities around the world.

Affluent individuals are those who have personal wealth ranging from Rs.10 lakh to Rs.2 crore or above.

- Increasing opportunities of investments in India are expected to show a tremendous growth in the wealth management industry.
- The rise in the number of investment avenues and lack of time or knowledge of HNWIs to manage wealth have increased the scope for wealth management services.
- The wealth management industry is clearly undergoing a sea change. As their needs are shifting, investors are demanding more from their advisors in terms of planning investment strategies, estate planning, and customized solutions that address their specific goals considering their total wealth management needs. At the same time, financial service providers are moving away from proprietary products to solution-oriented services that cater to diverse client needs. The key to success in this changing environment will be adaptability. Advisors are well positioned to meet this challenge, but more than ever they will need to tailor their services to their clients' changing needs.

<u>Chapter VI</u> Stock Market in India

After reading this chapter, you will be conversant with:

- Financial Markets Functions and Classification
- Capital Markets
- Evolution and Functioning of Stock Market in India
- Trading Mechanism in Stock Market in India
- Recent Developments

Introduction

A market is a location where buyers and sellers come into contact to exchange goods or services. Markets can exist in different forms depending upon the nature of location and mode of contact. There can have a physical location where buyers and sellers come in direct contact with each other or a virtual location where the buyers and sellers contact each other employing advanced means of communication. Sometimes, actual buyers and sellers can achieve their objectives through intermediaries.

The essential features of a market are:

- i. Existence of the buyers (demand side of the market) and sellers (supply side of the market),
- ii. Existence of price for every asset,
- iii. Allocation of resources, and
- iv. Existence of regulatory mechanism.

With reference to the goods and services traded, markets can be classified into commodity markets and financial markets. Commodity markets refer to the markets for tangible goods or products. On the other hand, financial markets deal with financial instruments. This chapter focuses on the various participants in financial markets with detailed study on stock markets.

FINANCIAL MARKETS – FUNCTIONS AND CLASSIFICATION

Financial markets are the markets where financial instruments are traded. Financial markets play a pivotal role in allocating resources in an economy by performing three important functions.

- i. **Financial markets facilitate price discovery:** The continual interaction among numerous buyers and sellers who throng financial markets helps in establishing the prices of financial assets. Well-organized financial markets seem to be remarkably efficient in price discovery.
- ii. **Financial markets provide liquidity to financial assets:** Investors can readily sell their financial assets through the mechanism of financial markets. In the absence of financial markets which provide such liquidity, the motivation of investors to hold financial assets will be considerably diminished.
- iii. Financial markets considerably reduce the cost of transacting: The two major costs associated with transacting are search costs and information costs. Search costs comprise explicit costs such as the expenses incurred on advertising when one wants to buy or sell an asset and implicit costs such as the effort and time one has to put in to locate a customer. Information costs refer to costs incurred in evaluating the investment merits of financial assets.

Financial markets consist of the following:

- Borrower
- Lender
- Instruments
- Intermediaries.

Financial markets are further divided into two parts – Money market and Capital market.



Figure 1: Financial Markets Classification

Money markets are the markets for short-term funds, while capital markets are the markets for long-term funds. Corporate entities borrow money through the issue of long-term instruments in the primary market. The secondary market refers to the place where such instruments are traded in the stock exchanges. As the secondary market is created for the securities raised in the primary markets, the depth of the secondary market depends upon the primary market. From the investor's point of view, while he can obtain the instruments both by applying for them in the primary market or purchasing them in the secondary markets. Hence, the movements in both these markets are important for an investor.





The capital market consists of the primary markets and the secondary markets and there is a close link between them. The primary market creates long-term instruments through which corporate entities borrow from the capital market. But, secondary market is the one which provides liquidity and marketability to these instruments. These markets interact. If the secondary market is active and buoyant, it enables the corporate entities to enter the new issue market or the primary market and raise funds. The depth of the secondary market depends upon the activities of the primary market because it is only when more corporate entities enter into the primary market and raise funds through it that more instruments are available in the secondary market.

Functions of Capital Market

The functions of capital market can be explained as follows:

- The organized and regulated capital market motivates individuals to save and invest funds. The availability of safe and profitable sources of investment is an essential criterion to create propensity to save and invest on the part of the earning public.
- It provides for the investors safe and productive channels for investment of savings and to secure the recurring benefit of return thereon, as long as the savings are retained.
- It provides liquidity to the savings of the investors, by developing a secondary capital market, and thus makes even short-term savings, consistently available for long-term users.
- It thus mobilizes savings of large number of individuals, families and associations and makes the same available for meeting the large capital needs of organized industry, trade and business and for progress and development of the country as a whole and its economy.

To discharge these functions, the organized capital market accepts a dual responsibility -

- To develop the market and to promote savings and Investment;
- To regulate the players in the market vis-a-vis the investor and to enforce market discipline through market regulators and registered intermediaries. Such that, the unorganized small man is able to deal through these regulatory bodies and the intermediaries, and need not necessarily has to come into direct contact with the ultimate seekers of his savings.

The capital market in India has several regulatory bodies such as

Securities & Exchange Board of India (SEBI): An autonomous and statutory body acts as the market regulator and market developer. It regulates and controls the capital users and all functionaries between the users and the investors.

Stock Exchanges: There are 23 Stock Exchanges registered with the SEBI and under its regulation. They provide a transparent and safe market for investors to transact and invest their funds.

Depositories: The depositories are innovative institutions, who are able to render the market paperless by holding securities electronically, providing ease and speed for those transacting in the market.

Registered Intermediaries: Registered Intermediaries consist of brokers, sub-brokers, trading and clearing members, portfolio managers, bankers to issue, merchant bankers, registrars, underwriters and credit rating agencies. They all provide a basket of services to the investors to lesson risk and make Transacting easier and smooth. They are all registered with the SEBI and act under its regulation of SAEBI abiding by the Code of Conduct prescribed for each of them governing their respective roles.

Primary Market

To meet the financial requirements of their projects, companies raise capital through issue of securities (shares and debentures) in the primary market.

Capital issues of the companies were controlled by the Capital Issue Control Act, 1947. Pricing of the issues was determined by the Controller of Capital Issues. The main purpose of control on capital issues was to prevent the diversion of investible resources to non-essential projects. Though the necessity of retaining some sort of control on issue of capital to meet the above purpose existed, the CCI was abolished in 1992 as the practice of Government control over capital issues as well as overpricing of issues lost their relevance in the changed circumstances.

SEBI

The CCI Controls on capital issues by the companies have been substituted by the transparent and simplified guidelines issued by the Securities and Exchange Board of India under the SEBI Act, 1992.

Functions and Powers of the SEBI

The ever expanding investors population led to a horde of malpractices on the part of the companies, brokers, merchant bankers, investment consultants and various other agencies involved in new issues. This led to an erosion of investor confidence and multiplied their grievances. The government and the stock exchanges were helpless because the existing legal framework was just not enough. Realizing this, the SEBI was constituted by the government in April 1988, and given legal status in 1992, as a supervisory body to regulate and promote the securities market. The main objectives were to

- promote fair dealings by the issuers of securities and ensure a market place where funds can be raised at a relatively low cost.
- provide a degree of protection to the investors and safeguard their rights and interests so that there is a steady flow of savings into the market.
- regulate and develop a code of conduct and fair practices by intermediaries in the capital market like brokers and merchant banks to make them competitive and professional.

To carry out its functions, the SEBI has been given various powers which were previously vested with the Central government. They include:

- Power to call for periodical returns from Stock Exchanges. Subject to the fulfillment of certain criteria.
- Power to call upon the Stock Exchange or any member of the exchange to furnish relevant information.
- Power to appoint any person to make inquiries into the affairs of the Stock Exchange.
- Power to amend bye-laws of Stock Exchanges.
- Power to compel a public company to list its shares in any Stock Exchange.

Guidelines as Per SEBI and Companies Act

The SEBI has issued elaborate guidelines on matters relating to public issues, rights issues, bonus issues, issue of debentures, underwriting, private placement, pricing of issues, etc. These guidelines virtually affect all activities relating to capital issues. Under the new guidelines, no prior approval of the SEBI is required by the companies for raising capital through public issues, or rights issues, in the capital market, subject to fulfillment of certain criteria.

A company, while raising its capital through issues in the capital market, must give due regards to the Guidelines and clarifications issued by the SEBI and the provisions of the Companies Act, 1956.

As far as the Companies Act, 1956 is concerned, capital issued by a company should comply with the provisions relating to prospectus, allotment, issue of shares at premium/discount, further issue of capital, etc.

As per the Companies Act, all application forms for shares or debentures should be accompanied by a memorandum containing salient features of a prospectus like general information of the company, terms and particulars of the issue, company's management, risk factors as perceived by the management, etc., which may possibly have a bearing on the assessment of the soundness of the proposition of the company in connection with which the public issue is offered.

In February, 1993, there had been a case against public issue of Skypak Couriers Ltd., regarding the above point. The company had not mentioned in its memorandum accompanying the application, a Rs.26 crore claim against it by TNT International Ltd., and a winding-up petition in that connection was pending in the Mumbai High Court. It was held that the prospectus of the company should have mentioned the above facts and asked the company to return the application money if any investor demands so, before the allotment was completed.

Under the SEBI guidelines, companies are allowed to raise capital provided the issues are in conformity with the published guidelines relating to disclosure and other matters about investors' protection.

Types of Issue

A company can raise its capital through issue of shares and debentures by means of,

- Public issue,
- Rights issue,
- Bonus issue,
- Private placement, and
- Bought-out Deal.

Public Issue: Public issue is the most popular method of raising capital and involves raising of funds directly from the public.

Rights Issue: Rights issue is the method of raising additional finance from existing members offering securities (shares and debentures) to them on *pro rata* basis.

A company proposing to issue securities on rights basis should send a 'letter of offer' to the shareholders giving adequate disclosure as to how the additional amount received by the issue will be used by the company.

Bonus Issue: Some companies distribute profits to existing shareholders by way of fully paid bonus shares in lieu of dividend. Bonus shares are issued in the ratio of existing shares held. The shareholders do not have to make any additional payment for these shares.

Private Placement: Private Placement Market (PPM) financing is the direct sale by a public limited company or private limited company, of private as well as public sector, of its securities (shares and debentures) to a limited number of sophisticated investors like UTI, LIC, GIC, State Finance Corporations and Pension and Insurance Funds. The intermediaries are credit rating agencies and trustees (e.g., ICICI) and financial advisors such as merchant bankers.

Private companies that do not wish to disclose information to the public seek this type of market. Public limited companies too small to finance public issue, as it is costly due to various statutory and non-statutory expenses, can resort to this type of capital raising. The maximum time-frame required for private placement markets is only two to three months. Private Placement can be made out of promoter's quota but it cannot be made with unrelated investors.

Wealth Management

Bought-out Deals: A small project costing around Rs.5-6 crore finds it costly to go in for a public issue which would eat up 20% of project funds. Bought-out deals come to the rescue of the promoters of such a project.

What exactly is a Bought-out Deal (BOD)? In its simplest form, a company initially places its equity shares, which are to be offered to the public at a later date, to a sponsor/merchant banker, who in turn offloads the shares at the appropriate time. In a direct offer, the merchant banker (or sponsor) is a conduit through whom a company routes shares to the public whereas in a BOD, the sponsor is also an intermediate investor who buys stakes in the company and disinvests in favor of the public at an appropriate time.

Bought-out deals which are known as Angels in the UK and elsewhere have made a quiet entry into the Indian corporate world with the Co-nick Alloys' (India) 'offer for sale' at a premium sponsored by Industrial Credit and Investment Corporation of India Limited. In a BOD, the shares are generally offloaded through the mechanism of the Over the Counter Exchange of India (OTCEI) or a recognized stock exchange.



The OTCEI mechanism ensures a total fair play because the bought-out agreement between the sponsor and the company has to be registered with the OTCEI. In case of any default by the sponsor, the matter is referred to an arbitration committee set up by the OTCEI and in case any member fails to abide, the arbitration award can even be expelled by the OTCEI Committee.

At the OTCEI, offloading of shares by a sponsor is subject to certain conditions.

The promoters' post-issue holding will be at least 25%, with a 5-year lock-in period.

The sponsor agrees to act as a market maker for the company's shares for 18 months and also identifies an additional market maker for such compulsory market making. These two market makers must, between themselves hold up to 5% of the equity offered to the public.

• If the sponsor offers two way quotes, based on the minimum and maximum trading prices, the difference between the buy and sell quote will be the jobbing profit for the sponsor.

If the sponsor opts the stock exchange route, his responsibilities are over as soon as he offloads his stake on the stock exchange and there is an element of fear to the company as the sponsor may offload the shares to another intermediary who may be the rival group of the company concerned.

Advantages

- Promoters are assured of immediate funds.
- Companies can avoid the time consuming and costly public issue.
- Easier to convince a wholesale investor rather than the general public about the merits of a project.
- Cheapest and quickest source of finance for small to medium-sized companies.

Disadvantage

Misuse of power by the sponsor.

Secondary market

The secondary market is that segment of the capital market where the outstanding securities (securities already issued) are traded. From the investors' point of view, the secondary market imparts liquidity to the long-term securities held by them by providing an auction market for these securities.

The secondary market operates through the medium of stock exchanges which regulates the trading activities in this market and ensures a measure of safety and fair dealing to the investors.

The stock market is a pivotal institution in the financial system. A well-ordered stock market performs several economic functions like translating short-term and medium-term investments into long-term funds for companies, directing the flow of capital in the most profitable channels, etc.

FUNCTIONS OF SECONDARY MARKETS

The functions of secondary markets are:

- 1. The investor should be able to dispose of his stock at the most competitive price. The most competitive price in case of selling is the highest price, while for buying it is the lowest price.
- 2. They should provide liquidity to the investors without any loss. That is, an investor should be able to convert stock into cash at a short notice.
- 3. The transaction costs are minimum for the investor.

PERSONS AT STOCK EXCHANGE

The stock exchange is an auction market in shares and other securities and is mainly characterized by a bull and a bear. A bull is the buyer in the market. He always takes an optimistic view of the market.

A bear on the other hand is the seller. He is basically a pessimist and always considers that the things have reached its peak. He believes in selling at the sight of minimum of profits. He sometimes sells even without owning the shares. This maneuver is referred to as a short sale.

The Order: The orders can be classified into:

- a. *Limit Orders:* Order limited by a fixed price. It may or may not include brokerage.
- b. Best Rate Order: To execute the buy/sell order at the best possible price.
- c. *Immediate or Cancel Order:* Order shall get canceled if not executed immediately at the quoted price.
- d. *Limited Discretionary Order:* To provide discretion to the broker to execute order at a price which is almost approximate to the price fixed by the client.

- e. *Stop Loss Order:* A particular limit is given for sustenance of loss. If the price falls below that, the broker is authorized to sell immediately to stop further occurrence of losses.
- f. *Open Order:* When client does not fix any time or price limit for execution of order.

Execution of Order: Order is normally executed on any of the trading days. After the setting up of electronic trading, the orders are executed by the quotes available on the screen.

FINANCIAL PRODUCTS TRADED IN STOCK MARKETS

Following are the main financial products/instruments dealt in the Secondary Market:

Equity: The ownership interest in a company of holders of its common and preferred stock. The various kinds of equity shares are as follows:

- Equity Shares: An equity share, commonly referred to as ordinary share also represents the form of fractional ownership in which a shareholder, as a fractional owner, undertakes the maximum entrepreneurial risk associated with a business venture. The holders of such shares are members of the company and have voting rights. A company may issue such shares with differential rights as to voting, payment of dividend, etc.
- **Rights Issue/Rights Shares:** The issue of new securities to existing shareholders at a ratio to those already held.
- **Bonus Shares:** Shares issued by companies to their shareholders free of cost by capitalization of accumulated reserves from the profits earned in the earlier years.
- **Preferred Stock/Preference Shares:** Owners of this kind of shares are entitled to a fixed dividend or dividend calculated at a fixed rate to be paid regularly before dividend can be paid in respect of equity share. They also enjoy priority over the equity shareholders in payment of surplus. However, in the event of liquidation, their claims rank below the claims of the company's creditors, bondholders/debenture holders.
- **Cumulative Preference Shares:** A type of preference shares on which dividend accumulates, if remains unpaid. All arrears of preference dividend have to be paid out before paying dividend on equity shares.
- **Cumulative Convertible Preference Shares:** A type of preference shares where the dividend payable on the same accumulates, if not paid. After a specified date, these shares will be converted into equity capital of the company.
- **Participating Preference Shares:** The right of certain preference shareholders to participate in profits after a specified fixed dividend contracted for is paid. Participation right is linked with the quantum of dividend paid on the equity shares over and above a particular specified level.
- Bond: A negotiable certificate evidencing indebtedness. It is normally unsecured. A debt security is generally issued by a company, municipality or government agency. A bond investor lends money to the issuer and in exchange, the issuer promises to repay the loan amount on a specified maturity date. The issuer usually pays the bond holder periodic interest payments over the life of the loan. The various types of Bonds are as follows:
 - Zero Coupon Bond: Bond issued at a discount and repaid at a face value. No periodic interest is paid. The difference between the issue price and redemption price represents the return to the holder. The buyer of these bonds receives only one payment, at the maturity of the bond.

- Convertible Bond: A bond giving the investor the option to convert the bond into equity at a fixed conversion price.
- Debentures: Bonds issued by a company bearing a fixed rate of interest usually payable half yearly on specific dates and principal amount repayable on particular date on redemption. Debentures are normally secured/charged against the asset of the company in favor of debenture holder.
- Commercial Paper: A short-term promise to repay a fixed amount that is placed on the market either directly or through a specialized intermediary. It is usually issued by companies with a high credit standing in the form of a promissory note redeemable at par to the holder on maturity and therefore doesn't require any guarantee. Commercial paper is a money market instrument issued for the tenure of 90 days.
- **Coupons:** Tokens for payment of interest attached to bearer securities.
- **Treasury Bills:** Short-term (up to one year) bearer discount securities issued by governments as a means of financing their cash requirements.

EVOLUTION AND FUNCTIONING OF STOCK MARKETS IN INDIA

Evolution

The origin of stock markets in India goes back to the later part of the Eighteenth Century. The earliest security dealings were transactions in loan securities of the East India Company, the dominant institution of those days. Corporate shares came into picture by the 1830s, and assumed significance with the enactment of the Companies Act in 1850. The introduction of limited liability marked the beginning of the era of modern joint stock enterprises. This was followed by the American Civil War in 1860-65. However, the bubble burst with the end of the Civil War and a disastrous slump followed. It was long and severe. It also resulted in complete ostracism of the broker community. The tremendous social pressure on the brokers led to their forming an informal association which later gave birth to 'The Native Share and Stock Brokers' Association', (now known as the Bombay Stock Exchange) in 1887. This stock exchange played a major role during the phase of recovery from the seven-year depression. It continued to grow in stature and size of operations and became the nerve center of all financial activity and the first one to be recognized by the Government of India.

The cotton textile industry which contributed a lot in the establishment of the Bombay Stock Exchange, was also the prime factor in the development of Ahmedabad as a center for dealing in stocks and shares. As new cotton textile mills were floated and the volume of business grew, the 'Ahmedabad Share and Stock Brokers Association' was formed in 1894, which later came to be known as the Ahmedabad Stock Exchange.

The next stock exchange was established in Calcutta in 1908. The industries that contributed to its birth and subsequent development were jute, coal and mining. Like the Bombay Stock Exchange, it was born out of a crisis – when the boom of 1904-08 broke and a need was felt for an organized body for mutual protection of brokers and safety of the trade.

With the World War I, all imports into India ceased and the Indian manufacturers witnessed a boom. The three stock exchanges flourished during the period of prosperity. However, the boom also led to the formation of many rival stock exchanges. The World War II also resulted in a boom and mushroom growth of stock exchanges. However, many of them perished during the slump that followed. Most of the other stock exchanges languished till 1956 when the government came out with a comprehensive legislation called the 'Securities Contract (Regulation)

Act' to regulate the functioning of stock exchanges. This legislation made it mandatory on the part of the stock exchanges to secure recognition from the Central Government. Only the established stock exchanges in Mumbai, Ahmedabad, Calcutta, Chennai, Delhi, Hyderabad and Indore were recognized under the Act. More stock exchanges were recognized subsequently. At present there are twenty three such recognized stock exchanges in India including the OTCEI and National Stock Exchange. The names of these stock exchanges with their geographical location, and the date of receiving government recognition are given in Table 1.

Sl. No.	Name of the Exchange & Location	Date of Initial Recognition
1.	The Bombay Stock Exchange, Mumbai.	31-03-1957
2.	The Ahmedabad Stock Exchange Association Ltd.	16-09-1957
3.	The Calcutta Stock Exchange Ltd., Kolkata.	10-10-1957
4.	Madras Stock Exchange Ltd., Chennai.	15-10-1957
5.	The Delhi Stock Exchange Association Ltd., New Delhi.	09-12-1957
6.	The Hyderabad Stock Exchange, Hyderabad. (Derecognised from August 29, 2007)	29-09-1958
7.	Madhya Pradesh Stock Exchange, Indore.	24-12-1958
8.	Bangalore Stock Exchange Ltd., Bangalore.	16-02-1963
9.	Cochin Stock Exchange Ltd., Ernakulam, Cochin.	10-05-1979
10.	The Uttar Pradesh Stock Exchange Association Ltd., Kanpur.	03-06-1982
11.	Pune Stock Exchange Ltd., Pune.	02-09-1982
12.	Ludhiana Stock Exchange Association Ltd., Ludhiana.	29-04-1983
13.	The Gauhati Stock Exchange Ltd., Gauhati.	01-05-1984
14.	Kanara Stock Exchange Ltd., Mangalore.	09-09-1985
15.	The Magadh Stock Exchange Ltd., Patna. (Derecognised from September 3, 2007)	11-12-1980
16.	Jaipur Stock Exchange Ltd., Jaipur.	09-01-1989
17.	Bhubaneswar Stock Exchange Association Ltd., Bhubaneswar.	05-06-1989
18.	Saurashtra Kutch Stock Exchange Ltd., Rajkot. (Derecognised from July 6, 2007)	10-07-1989
19.	The Vadodara Stock Exchange Ltd., Baroda.	05-01-1990
20.	The Coimbatore Stock Exchange Ltd., Coimbatore.	18-09-1991
21.	The Meerut Stock Exchange Ltd., Meerut.	20-09-1991
22.	National Stock Exchange.	26-04-1993
23.	Over The Counter Exchange of India (OTCEI), Mumbai.	23-08-1994

Fable 1	l: R	Recognized	Stock	Exchanges	in India
		~ ~			

The recognition accorded to a stock exchange is normally valid for a period of 5 years or a shorter period as prescribed. It is renewed after the expiry of that period, subject to a satisfactory performance of the exchange during this period. The stock exchanges located at Mumbai, Kolkata, Chennai, Ahmedabad, Delhi, Hyderabad, Madhya Pradesh and Bangalore have been granted permanent recognition.

The Bombay Stock Exchange is the principal stock exchange in the country accounting for nearly 70 percent of the aggregate paid-up share capital of all listed companies¹ and 80 percent of the aggregate market capitalization² of the listed companies.

Management of Stock Exchanges

The Indian Stock Exchanges are regulated by the Ministry of Finance, the Securities and Exchange Board of India (SEBI), and the Governing Boards of the Stock Exchanges within the legal framework provided by the Securities Contracts (Regulation) Act, 1956 and the Securities and Exchange Board of India Act, 1992. The internal governance of stock exchanges is done through the framework of Rules, Bye-laws and Regulations, duly approved by the Government of India.

The Ministry of Finance, through the Stock Exchange Division, administers the SCRA, 1956. It has powers to apply the provisions of the said Act, provide licenses to dealers, grant recognition to Stock Exchanges and regulate their operations. Further, under the SEBI Act, 1992, it has the appellate and supervisory powers over the SEBI.

The power to nominate the Presidents and Vice Presidents of Stock Exchanges and to approve the appointment of Executive Chiefs and the nomination of the public representatives on the Governing Boards of Stock Exchanges are vested in the Ministry of Finance by the Rules, Bye-laws and Regulations of Stock Exchanges.

The Securities and Exchange Board of India has powers vested in it by the SEBI Act, 1992 to regulate the business of Stock Exchanges and other securities markets, registration and regulation of market intermediaries, regulation of mutual funds, prohibition of fraudulent and unfair trade practices, and insider dealings. Under the Securities Contracts (Regulation) Act, the SEBI has powers to call for periodic and annual returns from stock exchanges, amendments to Rules and Bye-laws of the Stock Exchanges, licensing of dealers in securities and suspension of business of recognized stock exchanges.

A broker is a member of a recognized stock exchange, who is permitted to do trades on the floor of the exchange. He is enrolled as a member with the concerned exchange and is registered with the SEBI. The stock exchange does not prescribe any functional distinction between members. However, the BSE has a fairly well established specialization under the following categories: (a) the commission broker, (b) the floor broker, (c) the taravaniwalla (akin to a jobber or specialist), (d) the odd-lot dealer, (e) the budliwalla or the financier, (f) the dealer in non-cleared securities, (g) the arbitrageur, and (h) the security dealer (dealer in government securities).

- **Commission brokers** are members who execute buy and sell orders on the floor of the exchange received from their individual and institutional clients. They charge commission or brokerage at rates not exceeding the ceiling, which is presently 2.5% of the value of the contract.
- **Floor brokers** constitute those members who execute orders for any member of the exchange. They receive as compensation, a share of the brokerage fees which the client pays to the commission broker.
- **Taravaniwallas** constitute that segment of members who operate mostly for their own account and profit. They specialize in one or more listed securities. By trading in and out of the market for a small difference in price, they help in maintaining a liquid and continuous market for the stocks in which they specialize.

¹ Listing is the means for admitting the securities of a company to the trading privileges of a stock exchange. All companies whose shares and/or debentures have been listed on the recognized stock exchange(s) are called listed companies.

² The aggregate market capitalization is the aggregate market value of the paid-up share capital of listed companies.

- **Odd-lot dealers** are those members who specialize in buying and selling odd-lots. They either buy odd-lots and convert them into marketable lots that can be sold or sell odd-lots by buying and splitting round (or marketable) lots. The marketable lot is 50 shares where the face value of the share is Rs.10 and 5 shares where the face value is Rs.100.
- **Budliwallas** are members who play the role of financiers. They lend securities to those who have sold short and have to give delivery at the end of the clearing period or money to those who need funds to take delivery of the securities they have bought. In the former case, the budliwallas earn 'backwardation' charges and in the latter case, the 'contango' charges. The loan is fully secured and the return is governed by the technical position of the market and the ruling rate of interest.
- **Dealers** in non-cleared securities are akin to taravaniwallas in their role but they specialize in buying and selling securities, which are not on the active list.
- Arbitrageurs are the stock market operators who specialize in the business of buying or selling securities in one market with the intention of reversing such transactions in another market to profit from the price differences between such markets. The arbitrageurs are likely to be phased out of the market in the near future with the proposal for linking the major stock exchanges through an electronic communication system being implemented. This service called the stock scan facility will receive and transmit data on share price movement during trading hours to all exchanges hooked up on the network.
- Security dealers are members who specialize in buying and selling gilt-edged securities. Considering the fact that the market for gilt-edged securities is mainly confined only to institutional investors, the numbers of security dealers are few in number. A member must obtain the approval of the Reserve Bank of India to deal in gilt-edged securities.

Apart from their functional specialization in the secondary market, the members also serve as underwriters and brokers to public issues in the primary market.

Registration of Share Brokers

Applications for registration shall be made by share brokers in "Form A" through the stock exchange(s), which shall be forwarded by the latter within 30 days of its receipt. Applicants need to provide such information as required by the board with regard to dealings in securities and related matters considerable for registration. The applicant or, its principal officer, may be asked to appear before the board for personal representation.

The board considers whether the stockbroker is eligible for admission, has the necessary infrastructure for discharge of his activities, has any past experience dealing in securities, and whether he was subject to any disciplinary proceedings with regard to his business as a stockbroker as per the rules, regulations and bye-laws of the stock exchange.

Those considered eligible by the board shall be granted a certificate in "Form D". The stock exchange(s) shall be intimated to that effect.

Where a stockbroker does not fulfill the necessary requirements, the board rejects his application and the same is communicated within 30 days to the stock exchange(s) and the stockbroker stating the grounds for rejection. The applicant is given a reasonable opportunity of being heard.

Aggrieved applicants may apply within 30 days of such intimation to the board for reconsideration of its decision. The board reconsiders and, as soon as possible, communicates in writing, its decision to the applicant and the stock exchange(s).

Stockbrokers who are refused admission shall not, from the date of receipt of the intimation, buy, sell, or deal in securities in such capacity.

Fees Payable by Stockbrokers

Every stockbroker shall pay the prescribed fee on or before the 1st of October of the financial year to which such payment relates, the fees being computed with reference to the annual turnover relating to the preceding financial year.

The fee remittance shall be accompanied by a certificate as to the veracity of the turnover mentioned based on which fees have been computed, duly signed by the stock exchange of which the stockbroker is a member, or by a qualified auditor. Annual turnover includes sales and purchases made on his own account as also on account of his clients during any financial year.

Registration of Sub-brokers

Sub-brokers seeking registration shall apply in "Form B", along with a recommendation letter in "Form C" by a stockbroker of a recognized stock exchange with whom he is to be affiliated along with two references including one from his banker, to the stock exchange of which the stockbroker is a member.

The eligibility criteria for registration as a sub-broker are:

- a. In the case of an individual, he is twenty-one years and has not been convicted of any offence involving fraud or dishonesty, and has passed 12th standard examination from any institution recognized by the government. The last said clause may be relaxed by the government on merits having regard to the applicant's experience.
- b. In the case of a partnership firm or a body corporate, the partners or directors comply with the requirements mentioned above for individuals.

The stock exchange shall forward the application of those who qualify for the above conditions to the board within thirty days of its receipt.

The board grants a certificate in "Form E" to the eligible sub-brokers and intimates the person as also the stock exchange(s) or grants a certificate of registration to the applicant subject to the terms and conditions mentioned above.

The board may reject applications where the sub-broker does not fulfill the conditions mentioned above and communicate the same to the applicant and the stock exchange(s) within 30 days, in writing, stating the grounds for rejection. The applicant may apply, within 30 days of receipt of the intimation, to the board to reconsider its decision, which it does and intimates its decision to the applicant and the stock exchange(s) as soon as possible.

Those who have been refused admission shall, from such date, cease to function in the capacity of a sub-broker.

The sub-broker needs to enter into an agreement with the share broker with whom he is to be affiliated specifying the scope of his authority and responsibilities and maintain such books and documents as specified.

TRADING MECHANISM IN STOCK MARKETS IN INDIA

Trading on all stock exchanges was being carried out by "public outcry" in the trading ring. This was an inefficient system and also resulted in lack of transparency in trade. The 'Over The Counter Exchange of India' (OTCEI) was the first exchange to introduce screen based trading in India. Listing on OTCEI was restricted to small and midcap companies. Screen based trading received a big boost with the setting up of the National Stock Exchange. NSE provided nationwide access to investors by setting up trading terminals all over the country. These terminals were networked through satellite links.

Box 1: Basic Steps in How Stock Trading Works

Trading stocks. You hear that phrase all the time, although it is really wrong. You don't trade stocks like baseball cards (I'll trade you 100 ISMs for 100 Intels).

Trade = Buy or Sell

To "trade" means to buy and sell in the jargon of the financial markets. How does a system that can accommodate one billion trades in a single day works is a mystery to most people. No doubt, our financial markets are marvels of technological efficiency.

Yet, they still must handle your order for 100 shares of A K with the same care and documentation as my order of 100,000 shares of M C.

You don't need to know all of the technical details of how you buy and sell stocks. However, it is important to have a basic understanding of how the markets work.

There are two basic ways to execute a trade. They are as follows:

1. Exchange floor

Thanks to television and movies, we know how the markets work, and trading on the floor of the New York Stock Exchange (the NYSE) takes place in the US. When the market is open, you see hundreds of people rushing about shouting and gesturing to one another, talking on phones, watching monitors and entering data into terminals. It could not look any more chaotic.

Yet, at the end of the day, the markets workout all the trades and get ready for the next day. Here is a step-by-step walk through the execution of a simple trade on the NYSE.

- i. You tell your broker to buy 100 shares of A K at market price.
- ii. Your broker's order department sends the order to its floor clerk on the exchange.
- iii. The floor clerk alerts one of the firm's floor traders who finds another floor trader willing to sell 100 shares of A K. This is easier said than done because the floor trader has to know which floor traders make markets in particular stocks.
- iv. The two agree on a price and complete the deal. The notification process goes back up the line and your broker calls you back with the final price. The process may take a few minutes or longer depending on the stock and the market. A few days later, you will receive the confirmation notice in the mail.

Of course, this example was of a simple trade. Complex trades and large blocks of stocks involve considerable detail.

2. Electronically

There is a strong push to move more trading to the networks and off the trading floors; however, this push is meeting with some resistance. At present, most markets trade stocks electronically. The futures markets trade on the floor of several exchanges.

In this fast moving world, some are wondering how long a human-based system like the NYSE can continue to provide the level of service necessary. The NYSE handles a small percentage of its volume electronically, while the rival NASDAQ is completely electronic.

The electronic markets use vast computer networks to match buyers and sellers rather than human brokers. While this system lacks the romantic and exciting images of the NYSE floor, it is efficient and fast. Many large institutional traders, such as pension funds, mutual funds, hedge funds and so forth, prefer this method of trading. For the individual investor, you frequently can get almost instant confirmations on your trades, if that is important to you. It also facilitates further control of online investing by putting you one step closer to the market.

You still need a broker to handle your trades – individuals don't have access to the electronic markets. Your broker accesses the exchange network and the system finds a buyer or seller depending on your order.

Conclusion

What does this all mean to you? If the system works and it does most of the time, all of this will be hidden from you. However, if something goes wrong, it's important to have an idea of what's going on behind the scenes.

The fully automated trading system enabled market participants to login orders, execute deals and receive online market information. The competition from the NSE forced the regional stock exchanges including the BSE to switch over to screen based trading. The NSE trading system is order driven while the OTCEI system is quote driven. In an order driven environment, the system captures all the orders and matches them with each other to execute the transaction. A quote driven system is based on the market making concept (dealer giving two way quotes) and the order logged in is matched against the best quote given by the market maker. BSE Online Trading (BOLT) is a mixture of both quote driven and order driven systems as it permits both jobbing and direct matching of orders.

Depositors: One of the major drawbacks of Indian capital markets was that securities were held in the form of certificates. This led to problems in physical storage and transfer of securities. There was also the risk of bad delivery for the buyer. The transaction costs were also higher due to physical movement of paper and the incidence of stamp duty. National Securities Depository Ltd. (NSDL) was set up in 1996 as India's first depository. A depository is an entity, which holds the securities in electronic form on behalf of the investor. This is done through dematerialization of holdings at the request of the investor. Dematerialization is a process by which physical certificates of the investor are destroyed and an equivalent number of securities are credited to his account. This also enables transfer of securities by book entries. The risk of bad deliveries is also eliminated. The transaction costs are reduced due to less flow of paper and also transfer of securities through depositories does not attract stamp duty. Further, the depository also handles all the corporate actions like exercising for rights, collection of dividends, credit for bonus, exercising of warrants, conversion option, etc., on behalf of the investor. The SEBI has made it mandatory for institutional investors.

Clearing Mechanism: The clearing houses attached to the stock exchanges functioned only as conduits to delivery of securities and money. The default risk by the counterparty in the transaction continued to remain. The NSE was the first stock exchange to set up a clearing corporation. The National Securities Clearing Corporation (NSCC) assumes the counterparty risk in all trading deals made on the exchange.

NSCC acts as the counterparty for all the trades and the default risk in the deal is borne by it. The NSE has created a special Trade Guarantee Fund for this purpose and loss due to default will be met from its corpus.

Carry Forward System: Earlier, the Indian Stock Exchanges had been an amalgamation of cash market and forward market. The prices of the scrips on the exchange did not reflect their 'true' price in the underlying cash market. Further, there was indiscriminate and rampant speculation in the market. Defaults were common and other members were forced to "accommodate" the defaulting members. Often, the defaults had a snowballing effect and the entire market would be on the verge of a major payment crisis. This frequently resulted in the closure of the exchanges for a few days. In order to curb the prevailing malpractices, the SEBI banned carry forward transactions on all stock exchanges in 1993. Later,
Wealth Management

based on the recommendations of the G S Patel committee, which worked out the modalities to re-introduce the system, a modified carry forward system was introduced. The badla procedure was also streamlined. However, this modified system was again banned from July 2, 2001. In order to give the market adequate time to orderly unwind the positions, the board recommended a transitional mechanism. It was decided that all scrips listed on all the stock exchanges should be traded only under rolling settlement mode w.e.f., January 2, 2002 and no scrip shall be traded on weekly settlement basis.

Box 2: Advantages of Rolling Settlement

Rolling settlement has many virtues. One, it reduces speculation and arbitrage in scrips as settlement occurs on a daily basis. Thus, there would be increase in delivery-based transactions reducing the speculation currently existing by way of carry forward of position in various scrips. Apart from this, shifting the positions from one stock exchange to another will reduce which in turn, will eliminate arbitrage opportunities in scrips. Two, it reduces pricing glitches and manipulation and explores a better price discovery process. With the rolling settlement in place, all open positions at the end of each day would come up for delivery thereby improving the quality of cash market transactions. Thus, price formation process on daily basis would be improved thereby resulting in improved price discovery process. Three, it reduces end of settlement period pressure as shares are delivered and cash is paid everyday instead of a week. Thus, the rolling settlement spreads the delivery and payment throughout the week. Four, it narrows the bid-ask spreads, reduces the settlement risk and eliminates the need to synchronize the settlement dates on NSE and BSE or for that matter across the exchanges. And, of course, with the implementation of rolling settlement investors will be benefited, as settlement will not take long and the price an investor pays or receives will be closer to the market price. Securities and money will be transmutable.

At present Indian Stock Exchanges are working on T + 2 rolling settlement system. Under T + 2 rolling settlement system all trades executed on a day are netted and only net obligations are to be settled by way of delivery or payment. In case of sale of shares, the seller is required to give the delivery by 6 p.m. in electronic form and by 4 p.m. in physical form on T + 1 day to the depository participant. The DPs execute pay-in instruction by 10.30 a.m. on T + 2. The depository transfers the securities to the clearing house/exchange/clearing corporation by 11 a.m. on T + 2 day. The clearing house/exchange/clearing corporation executes the pay-out of securities and funds latest by 1.30 p.m. on T +2 to the depositories and clearing banks and the depositories and the clearing banks in turn complete the process by 2.00 p.m. on T + 2 day.

National Stock Exchange of India

The National Stock Exchange is India's latest bourse, after the regional stock exchanges and the OTCEI.

Like OTCEI, it is also computerized. However, it is not confined to scattered pockets and has a national reach through satellite linkage. Like the BSE only members conduct transactions but professionals who do not have a stake in the system run it.

The idea of was conceived by late Mr M. J. Pherwani, who was then the Chairman of National Housing Bank.

Trading on NSE commenced with debt instruments from June 30, 1994.

The NSE launched its equity market segment on the 3rd of November, 1994. The first trade was for 100 shares of Reliance. On this day, during the three hour session, 1,498 trades were executed in 200 securities with the value being put at Rs.9 crore.

The main objectives of the NSE are to provide speedy transactions, faster settlements and benefit to the small investors who often find it difficult to trade at the BSE.

The Settlement Procedure at NSE

The NSE has a computerized trading mechanism. The mechanism is hooked nationwide via satellite to increase the scope and depth of the market.

The automated environment moreover ensures that all the orders floating in the system whether they are best buy or best sell quotes are available on the system.

Each trading member of the NSE has a computer located in his office wherever that may be in India. The computer is connected to the central computer system at the NSE, by a satellite link using VSAT (Very Small Aperture Terminals). During the trading time, the member can go on entering the buy or sell orders with the best price and the time-frame within which he wants his orders to be executed.

The computer will bear the various orders and within 30 seconds the transaction is executed and the unmatched orders are stored in the memory and executed when they are matched. Thus, the role of jobbers is eliminated.

The trading time on the NSE is from 9.55 a.m. to 3.30 p.m.

The NSE trading system allows flexibility while placing an order, allowing brokers to place limits on price or on the order or even on the time-frame. The trading member can break large lots into smaller lots or cancel the outstanding orders in one go.

The computer sorts out orders on the basis of price-time priority i.e., sorts out orders as and when they are received in terms of the price of each security and the time entered.

Protection of Identity of the Investor

Till the transaction is executed the identity of brokers is not disclosed. As the participants' identity is protected, the trading member can even enter high volume transaction.

For NSE, the dealing room in the brokers office is as exciting as a stock exchange trading floor.

Settlements

The settlement for debt is to take place via a book entry transfer system in a depository. The book entry transfer system is easy to operate and similar to a bank passbook. The accounts would be maintained against each member, detailing securities held in the members name.

The Central Depository

In the Central Depository, the funds and securities position would be debited/credited through electronic book entry transfers which are expected to speed up payments. Each member is to have a passbook account in the depository where the securities deposited in the members' name is recorded, by electronic book entry transfer.

At the end of each day's transaction, the computer generates a report of matched transactions and the net positions of each trading member.

Dematerialization of Shares

Investors face a number of difficulties in the course of dealing with securities. Difficulties like losing certificates in transit or by theft, certificates getting mutilated or displaced, the amount of time it takes in processing them at clearing house every time an investor buys or sells shares etc., can be lessened to a great extent if they are held in non-physical form such as the electronic form. To address these problems and to make the whole process more meaningful and efficient, National Securities Depository Limited (NSDL) was established in November 1996, which is sponsored by the IDBI, UTI and the NSE.

The depositories and Depository Participants will be regulated by "The Depositories Act, 1996", and guidelines issued by the SEBI.

The various participants in this system are:

- i. National Securities Depository Limited,
- ii. Depository Participants,

NATIONAL SECURITIES DEPOSITORY LIMITED

As the name suggests, it is an organization where the securities of the participating investors are held in an electronic form (fungible form). It functions in a similar fashion as a bank. Any investor (the beneficial owner) who wants his shares dematerialized should open an account at the depository through a depository participant. The depository not only provides custodial services but also legally transfers the ownership of the securities. This essentially minimizes the tedious paper work involved in the ownership, trading and transfer of securities records. It also carries out settlement of off-market trades provided that the securities are held in electronic form. Investors can obtain the list of Depository Participants by writing to the NSDL.

DEPOSITORY PARTICIPANTS (DPS)

They function similar to brokers in the stock market. Depository participants are the conduits through whom one can deal with the NSDL. They maintain the investor's securities account balances from time to time and intimate the investor about his status of holding. This also helps to sort out any discrepancy that arises in the due course of trading.

According to the SEBI Guidelines, financial institutions, banks and stock brokers can act as Depository Participants. As with banks, investors can open account with more than one depository participant.

Trading Mechanism

Now, we look at the actual procedure as to how this system works and in the process can understand the role played by Registrars and Transfer Agents.

An investor who wants to hold his securities in electronic form has to approach a Depository Participant and through him he can open an account at the NSDL. If he wants to dematerialize the shares of say Reliance Industries, then he has to fill up a Dematerialization form available with the DP and submit along with it share certificates to be dematerialized after writing "Surrendered for Dematerialization" on the face of each certificate.

The DP will then intimate the NSDL about the investor's intention through the system and then submits the share certificates to the Registrars and Transfer Agents. The Registrars after confirmation of the genuineness of the certificates destroy them and send the confirmation of Dematerialization of shares to the NSDL.

NSDL then makes appropriate entries and updates its system and informs the DP, which in turn updates its records and conveys the same to the investor.

We observe that there is one-way correspondence between the depository participant and the registrar. Also, the request from the DP and the confirmation of the same from the registrars acts as a crosscheck for NSDL. The whole process takes fifteen days.

This mechanism also provides for rematerialization of shares if the investor so desires. The procedure is similar to dematerializing. First, the investor sends a requisition to the DP who in turn intimates the same to the NSDL. Then NSDL confirms the same with the Registrar. The Registrar then updates the accounts and provides for printing the share certificates with new range of certificate numbers and the same folio number if he had any before dematerialization and then confirms back to the NSDL. NSDL then updates its account and intimates the same to the DP. The registrar dispatches the certificates to the investor who also receives intimation from the DP.

Buy-back of Shares

The Union Cabinet cleared the much-awaited proposal for buy-back of shares on 26th October, 1998. The prudential norms for buy-back of shares in case of listed shares will be evolved by the SEBI, while for unlisted shares the Department of Company Affairs will evolve them.

The buy-back of shares will be permitted only for restructuring the equity and not for treasury operations. The cabinet also ruled against evaluating the buy-back proposal on a case-to-case basis, but allowed for such provisions, which call for stringent punishment including provisions for imprisonment in case of any violations.

Any company which wants to buy-back its shares, should do so only after the shareholders have given their mandate in that direction through a special resolution following an approval from the Board of Directors.

However, the government did not come up with any specific measures regarding the applicability of buy-back of shares provision for FERA companies. These companies by using the buy-back route, may buy the shares from the public and extinguish them, resulting in the increase of the promoter's stake. This obviates the need for seeking FIPB/RBI approval for enhancing promoters' stake.

RECENT DEVELOPMENTS

In the past few years, the Indian Capital Markets have grown phenomenally. This has to be attributed to the various changes which have been brought about especially by the SEBI. Since the abolition of the Office of the Controller of Capital Issues and the repeal of Capital Issues Control Act and the conferring of statutory status to the SEBI, one has observed qualitative as well as quantitative changes in the nature of capital markets – foremost amongst these being the institutionalization of the capital markets.

Listing is the means for admitting the securities of a company to the trading privileges of a stock exchange. All companies whose shares and/or debentures have been listed on the recognized stock exchange(s) are called listed companies.

The aggregate market capitalization is the aggregate market value of the paid-up share capital of listed companies.

Mutual Funds have also witnessed an increase in popularity, as can be gauged from the fact that they have assets under management of over Rs.3,10,171 crore¹. The entry of private sector mutual funds such as Kothari, Morgan Stanley, HSBC, Sahara, and Reliance led to an increase in competition. One can observe new products being introduced and better service being made available to customers on a regular basis.

In order to regulate their functioning, the SEBI has come out with the SEBI (Mutual Funds) Regulations in 1993 which lays down the framework for governing the functioning of Mutual Funds in India. Mutual Funds are required to set up Asset Management Companies with 50% independent directors, separate trustee boards or companies with a minimum of 50% independent trustees and to appoint independent custodians to ensure an arm's length relationship between trustees, fund managers and custodians.

The entry of Foreign Institutional Investors (FIIs) has been another major development. The SEBI has permitted foreign portfolio investment only through broad based funds such as mutual funds, etc. Foreign participation has also been permitted in various areas of financial services through joint ventures with the approval of the Foreign Investment Promotion Board.

¹ On the basis of First Half Year of 2006-07.

Wealth Management

Intermediaries in the primary and secondary markets such as merchant bankers, bankers to the issue, share transfer agents, registrars to the issue, underwriters, brokers, sub-brokers, etc., must be registered with the SEBI. Regulations have been issued by the SEBI to govern their functioning. Codes of Conduct, Capital Adequacy and other norms and a system of monitoring and inspecting their operations have been instituted to enforce compliance.

One important development which has had far reaching consequences is the emergence of Credit Rating Agencies such as the CRISIL, ICRA and CARE. This shall go a long way in protecting the interests of investors.

Above all, the recognition of OTCEI and NSE shall promote fair and transparent dealings in stock markets.

Since its establishment, the SEBI has taken several steps to reform the securities market. Some of the important steps are summarized below:

- All companies accessing the capital markets are free to price their issues, subject to certain conditions.
- Restrictions on rights and bonus issues have been removed.
- Issuers are required to meet SEBI guidelines for disclosure and Investor protection.
- The use of "Stock Invest" by individuals and mutual funds to mitigate the locking-in of funds permitted.
- In case of oversubscription, the SEBI has directed the issuers to have a system of proportionate allotment.
- Indian Development Financial Institutions and Mutual Funds can be allotted up to 75% of the issue amount.
- Allotment to FIIs and NRIs/OCBs is up to a maximum of 24%, which can be further extended to 30% with the approval of the RBI.
- Number of collection centers has been reduced to a minimum of 30. Advertisement codes have been issued with regard to public and rights issues. Capital gains through investment in new issues are exempted from taxes. Underwriting of issues has been made optional.
- Firms have been allowed to raise funds through the scheme of bought-out deals to reduce the cost of raising funds through the capital markets.
- The SEBI has decided to put in place a broad Integrated Market Surveillance System (IMSS) in all exchanges.
- The SEBI (Delisting of Securities) Guidelines, 2003 were amended making it possible for stock exchanges to delist shares of companies.
- The SEBI has permitted the BSE to have the BOLT extension.
- To regulate stockbrokers and sub-brokers, registration is compulsory. In addition, now brokers are required to maintain separate accounts of their transactions on behalf of clients and on their own behalf.
- Special sessions for odd lot dealings have been introduced.
- Corporate membership has been permitted subject to certain conditions.
- SEBI introduced jumbo transfer deeds, rolling settlements, derivative options, and futures.

- The stock market is a place (physical/electronic) where buyers and sellers meet to carry out transactions in securities.
- The markets are classified as securities market and forex market.
- The securities market can be further sub-divided into primary and secondary market.
- The Indian stock market has evolved from an outcry system under a banyan tree to an electronic nation wide matching system (NSE) whereas, in the USA, NYSE still functions as an outcry system under electrical flood lights.

<u>Chapter VII</u> Mutual Funds

After reading this chapter, you will be conversant with:

- Objectives and Types of Mutual Funds
- Advantages of Mutual Funds
- Mutual Fund Services
- Organization and Management of Mutual Funds
- The Mutual Fund Scene in India

Introduction

The concept of mutual funds is not new. As already discussed in previous chapters, mutual funds are investment companies which obtain funds from a large number of investors through the sale of shares (units). These funds are then placed in a pool managed by professionals and securities are purchased for the benefit of all shareholders. Thus, the savings of many investors are combined to form a fairly large and well diversified portfolio of investments. Originating in the USA and moving on to the UK in the 1930s, this culture started in India only in 1960s, with the setting up of UTI in 1964.

OBJECTIVES AND TYPES OF MUTUAL FUNDS

Objectives

The objectives of a Mutual Fund are as follows:

- To provide an opportunity for lower income groups to acquire property without much difficulty in the form of shares.
- To cater mainly to the needs of individual investors whose means are small.
- To manage investors' portfolios in a manner that provides regular income, growth, safety, liquidity and diversification.

Types of Mutual Funds

Mutual funds can be categorized on the basis of

- i. Portfolio Classification.
- ii. Functional Classification.
- iii. Geographical Classification.

PORTFOLIO CLASSIFICATION OF MUTUAL FUNDS

Mutual funds differ with reference to the type of instruments in which the money has been invested as per the requirements of the investors. These are specified mutual funds structured for feeding a particular investible purpose. Therefore, different mutual funds are designed to meet the objectives of different types of savers and are named as such:

Bond Funds

Bond Funds provide fixed return for those who desire safety. The savings are invested in various kinds of bonds that are more liquid, diversified and conservative investments with modest capital gains. Prices of bond funds fluctuate with changing interest rates. In India, income from mutual funds is tax exempt and as such no classified Mutual Funds have come to exist as in the USA where taxfree income in municipal bond funds or other fixed income bearing securities is an attractive investment.

Stock Funds

Stock Funds are established for those who are willing to accept significant risks in the hope of very high returns. These are called common stock funds. The assets held in the fund are entirely the common stocks of diversified industrial corporations. These may be further classified as 'growth funds' which assume high risk to obtain stocks expected to yield high returns. When these funds are invested in stocks which pay consistently high dividend, they are known as income funds.

Income Fund

An income Fund is established to maximize the current income (i.e., interest and dividend) of investors. There are two aspects of Income Funds namely, low investment risk, generating constant income and high investment risk generating maximum income. Investment is made in various combinations of high yielding

common stocks and bonds with a view to extract income on regular basis with the principal amount of investment enjoying safety. Conservative investment strategy characterizes the Income Funds with modest amount of risk.

Money Market Funds

Money Market Funds are used in short-term liquid assets like Certificate of Deposits [CD(s)] or commercial papers. Capital is raised by selling shares to the investing public at a price equal to the asset value of the then existing shares outstanding plus a loading fee or service charge. These are known as high liquid asset funds with very low risk and virtually no capital loss. Interest income fluctuates because of volatile interest rates, but investors get better yield than is available from passbook savings accounts. In the USA, Money Market Mutual Funds came into being in November 1972 and have been very successful in savings mobilization. In India, the government has only recently taken a decision to allow establishment of MMMFs.

Specialized Funds

Specialized Mutual Funds envisage to specialize investment in securities of firms of certain industries or specific income producing securities. Such funds carry more risk for lack of diversification.

Leveraged Funds

Leveraged Funds or borrowed funds are used in order to increase the size of the value of the portfolio and benefit the shareholders by gains exceeding the cost of the borrowed funds. Such funds are used in speculative and risky investments like short sale to take advantage of declining market to realize gains.

Balanced Funds

Some Mutual Funds are called 'Balanced Funds' where assets are a judicious mixture of industrial stocks and bonds. To embrace modest risk of investment and secure reasonable rate of return, the funds are employed in high grade common stock with 25% to 40% investment in conservative fixed income securities like debentures, bonds, and preference shares.

Growth Funds

Growth funds have the principal objective of capital appreciation of the investment over a period of time. The investment is made in equity stock which has above average growth potential. This is a high risk investment fund with high capital gain potential and low current income assurance.

Performance Funds

Performance Funds were established in the USA in the 1960s to seek large profits from investments in high-flying common stocks. The investment is made in buying equity shares of small unseasoned companies with relatively high priceearnings ratio and higher price volatility.

Specialty Funds

These funds, as the name goes, are invested in equity shares of good track record companies which offer long-term capital growth and provide handsome dividend income. In the USA, specialty companies include electronics, chemicals or the foreign securities like Japanese stocks, etc. Sometimes, Specialty Mutual Funds are established to cater to financial requirement of one particular type of industry or unit within it, for example, commodity funds, offshore drilling funds, etc. These are highly risky investment funds and require deep knowledge and expertise and extensive experience.

Dual Purpose Funds

Income and growth are two objectives, which are achieved by offering half of the amount of funds to those investors who wish regular income and half to those who wish growth. The funds thus received are pooled together and used for investment.

Any income derived from the portfolio goes to the investors who hold income shares. The investors who hold capital shares receive no income. Instead, they receive capital gains or losses that result from investments of total portfolio.

Real Estate Funds

Real Estate Fund is of close-ended type. The fund is named so because the primary investment is in real estate ventures. Such funds are of various types depending upon real estate transactions.

Thus, a mutual fund depends upon the nature of securities it issues or sells and purchases. In this way, it is observed that a mutual fund can be named keeping in view the immediate objective behind its creation.

FUNCTIONAL CLASSIFICATION OF MUTUAL FUNDS

Functional classification of Mutual Funds is based on the basic characteristics of the mutual fund schemes for subscription. Mutual Funds on this account are classified into two broad types namely,

- i. Open-ended Mutual Funds.
- ii. Close-ended Mutual Funds.

Open-ended Mutual Funds

The holders of the shares in these funds can resell them to the issuing mutual fund company at any time. They receive in turn the Net Assets Value (NAV) of the shares at the time of resale. Such mutual fund companies place their funds in the secondary securities market. Thus, they influence market price of corporate securities. Open-end investment companies can sell an unlimited number of shares and thus keep growing larger. An open-end mutual fund company buys or sells its own shares. Such companies sell new shares at NAV plus a loading or management fee and redeem shares at NAV. In other words, the target amount and the period both are indefinite in such funds. Unit Scheme 1964, UTI's Magnum Multicap Fund, DWS Alpha Equity-G, FT India balanced Fund, and Sahara Income Fund, Franklin India Blue Chip Fund, are few examples. For open-ended schemes, mutual fund units are sold and bought at NAV with or without loading charges.

Net Asset Value (NAV)

It is the actual value of the investments made by the mutual fund for each unit issued by it. It changes almost on a daily basis as the market prices of individual securities in its portfolio fluctuate. It is computed by the formulae given below:

 $NAV = \frac{Assets - Liabilities}{Number of Units Outstanding}$

More specifically, it will be

NAV - Value of Investments + Receivables + Accrued Income + Other Current Assets - Liabilities - Accrued Expenses

Number of Units Outstanding

Illustration 1

Consider the following data of a Mutual Fund Trust (all figures in Rs. millions):

Value of Investments	=	10.00
Receivables	=	0.75
Accrued Income	=	0.25
Other Current Assets	=	3.00
Liabilities	=	2.25
Accrued Expenses	=	0.50
Number of Outstanding Units	=	2.00 million.

Solution

Given this data, the NAV is calculated as shown below:

$$= \frac{10+0.75+0.25+3-2.25-0.50}{2}$$

= Rs.5.625.

We know that the value of the mutual fund varies with the value of the portfolio, as the prices of the securities which constitute the portfolio fluctuate day to day. As the intrinsic value of the security represents the fair value of the security, the NAV represents the fair value of a unit in a mutual fund.

Usually, the fund units, at the time of application, are sold at Public Offering Price (POP). The difference between the NAV and the public offering price is the sales charge recovered by the Asset Management Company from the scheme to cover costs of raising funds on a continuous basis. The public offering price is generally calculated as follows:

$$POP = \frac{NAV}{1 - Sales Charge}$$

Example: If the maximum sales charge is 3% on the NAV of Rs.13.50, the public offering price is given as,

POP =
$$\frac{\text{NAV}}{1-\text{Sales Charge}} = \frac{13.50}{1-0.03}$$

= $\frac{13.50}{0.097} = \text{Rs.}13.92.$

Close-ended Mutual Funds

A close-ended mutual fund is a publicly traded investment company that raises a fixed amount of capital through an IPO. The fund is structured, listed and traded like a stock on a stock exchange. It raises the prescribed amount of capital only once through an IPO by issuing a fixed amount of shares, which are purchased by investors as stock. Unlike regular stocks, close-ended fund stocks represent an interest in a specialized portfolio of securities that is actively managed by an investment advisor and which typically concentrates on a specific industry, geographic market and sector. The stock prices of close-ended mutual funds fluctuate according to market forces as well as the changing values of the securities in the fund's holdings.

Close-ended Mutual Funds are different from open-ended Mutual Funds in the following respects:

- i. A Close-ended Mutual fund investment company has a definite target amount for the funds and cannot sell more shares after its initial offering. Its growth in terms of number of shares is limited. Its shares are issued like any other company's new issues and quoted at the stock exchange.
- ii. The shares of close-ended funds are not redeemable at their NAV as are open-ended funds. On the other hand, these shares are traded in secondary market on stock exchanges at market prices that may be above or below their NAV.
- iii. Close-ended funds channelize funds in secondary market in acquisition of corporate securities.
- iv. The NAV and the price at which units of mutual funds are traded in the market need not always be equal: the units may sell for the current NAV per share, for more (at a premium), or for less (at a discount). Financial papers

like The Economic Times and magazines like Business Today regularly report the NAVs of close-ended funds and present a comparison of the current price with the NAV. The reasons for the current market price being less than the NAV can be as follows:

- Investors' doubts about the abilities of the fund's management.
- Lack of sales effort (brokers earn less commission on close-ended schemes than on open-ended schemes).
- Riskiness of the fund.
- Lack of marketability of the fund's units.

The examples of close-ended Mutual Funds include: Canstock, Canshare Mastershare, Magnum, Can 80CC, Dhanashree, etc., which have the above features. It is to be noted that unlike in foreign countries where closed-ended and open-ended Mutual Funds are totally separate schemes, in India, this difference is not clearly demarcated. For example, UTI as Mutual Fund Manager has floated both close-ended schemes (Master share, Master plus, GMIS '92, etc.) and open-ended schemes (Unit Scheme 64, ULIP 71, Omni Unit Plan, etc.).

GEOGRAPHICAL CLASSIFICATION OF MUTUAL FUNDS

Nations' boundaries provide territorial restrictions on the sale and purchase of mutual fund units or shares as is the case with commodity trading or services. In view of this, mutual funds which operate within the nations' boundaries are different from those which are meant for subscription of foreigners or the country's nationals living away from its shores. This classification is broadly of two types namely,

- i. Domestic Mutual Funds.
- ii. Offshore Mutual Funds.

Domestic Mutual Funds

Domestic Mutual Funds are the saving schemes which are opened for mobilizing savings of the nationals within the country. These schemes may be of different types as discussed above under portfolio classification and functional classification. The existing Mutual Funds namely, UTI, GIC Mutual Fund, LIC Mutual Fund, SBI Mutual Fund, Canbank Mutual Fund, BOI Mutual Fund, PNB Mutual Fund and Indbank Mutual Fund are all domestic schemes.

Offshore Mutual Funds

The basic objective of opening an offshore mutual fund scheme is to attract foreign capital for investment purposes in the country of the issuing company. Offshore Mutual Funds, thus facilitate cross-border fund flow which is a direct route for getting foreign currency without political strings or domination on the issuer country. From investment point of view too, offshore mutual funds open up domestic capital markets to the international investors and global portfolio investments.

The major point of difference between offshore mutual funds and domestic mutual funds is the currency and country risk for the global investors as the source of fund is from abroad. Due to the high risk, higher returns in the invested funds can be expected.

Like domestic mutual funds, the offshore mutual funds could also be functionally classified into close-ended or open-ended funds.

The major offshore mutual funds opened so far comprised close-ended schemes providing redemption of the units for individual investors only at the end of the specified period of the scheme. UTI's India Fund 1986, India Growth Fund, SBI's India Magnum 1989, Canbank's Indo-Swiss Himalayan Fund, 1990 and Commonwealth Equity Fund were all close-ended offshore funds.

ADVANTAGES OF MUTUAL FUNDS

Mutual Funds are advantageous to individual investors in relation to their direct involvement in investment portfolio activity covering the following aspects:

Reduced Risk

Mutual funds provide small investors access to reduced investment risk resulting from diversification, economies of scale in transaction cost and professional finance management.

Diversified Investment

Small investors participate in larger basket of securities and share the benefits of efficiently managed portfolio by experts, and are freed of keeping any records of share certificates, etc., of various companies, tax rules, etc.

Stress-free Investment

Investors get freedom from emotional stress involved in buying or selling securities. Mutual funds relieve them from such stress as they are managed by experts who act scientifically while buying and selling for their clients.

Revolving Type of Investment

Automatic reinvestment of dividends and capital gains provide relief to the members of mutual funds.

Selection and Timings of Investment

Expertize in stock selection and timing is made available to investors, so that invested funds generate higher returns.

Wide Investment Opportunities

Wide investment opportunities that create an increased level of liquidity for the fund holders become possible because of a package of liquid securities. These securities could be converted into cash without any loss of time.

Investment Care

Care for securities is available through mutual funds to the investors relieving them of various rules and regulations.

Tax Benefits

Income tax exemption has been ensured for Mutual Funds. While originally, only such Mutual Funds as are set up by public sector banks or a public financial institution were exempt from tax, now the benefit of tax exemption has been extended to all Mutual Funds. Investors are eligible for deduction under section 80L of the Income Tax Act in respect of the dividends from units or shares of Mutual Funds and under section 88CC in respect of contributions made by investors to unit-linked insurance plans of UTI and LIC Mutual Fund.

The above advantages are only illustrative and are not exhaustive as there is a scope of more to be added to the list in light of individuals own experience(s).

MUTUAL FUND SERVICES

Mutual Funds launch schemes to cater to the needs of the different categories of investors. They provide special services in addition to the returns which mutual funds offer to the investors. These services serve to attract the investors to invest their savings in mutual funds that meet their various needs. For example, regular income plan, savings and reinvestment plans, health insurance schemes, equity-linked savings plans for tax exemption purposes, etc.

Some of the important services offered by mutual funds globally are discussed below:

Saving Scheme

Voluntary savings plan can be added to buy units of Mutual Funds through which an investor can save on monthly or quarterly basis.

The important features of such plans are:

- a. Through voluntary saving plans, the investor has the option and free will to contribute any sum at any time on regular or irregular basis.
- b. Alternatively, savings could be made through contractual saving plans pursuant to some agreement envisaging a long-term investment plan binding upon the investor.

In the US, these plans are quite in vogue and are under regulation of the Securities Exchange Commission. These plans charge investors substantially high front-end loads. An investor is required to pay commissions over the life of the contract recovered in advance in the initial year of the contract through initial installments in the form of front-end loads.

c. The investors who drop out from the contractual plans as stated in (b) above, remain at a disadvantage as the prepaid commission is not refunded to them. The Securities Exchange Commission has made rules requiring Mutual Funds to refund the full amount of prepaid commission to investors if the investor cancels the plan within 45 days and 85% of the amount, if the investor cancels within 18 months of joining the saving plan. Those who cancel the commitment after 18 months get no refund.

Automatic Reinvestment Plan

Like in the US, UTI has also started this plan where the amount of dividend and other incomes accrued on mutual fund investments are automatically reinvested in purchasing additional units or shares in the open-ended funds. Other mutual funds in the public sector have followed suit.

Regular Income Plan

Investors enjoy systematic withdrawal of their money locked in mutual fund investments in the form of regular income by way of monthly or quarterly installments to meet their regular financial needs. Initial investment in such plans is stipulated which carries interest at the specified rate. The repayment installments are so formulated as to pay out the earnings first and then the principal amount.

Shifting Advantage or Conversion Privileges

Many mutual fund companies offer different investment plans for investors and others provide the facility to investors within the family of the plans to shift or convert or exchange them afterwards from one plan to another at nominal costs or at no costs subject to tax advantages, if any, available to the investors.

Retirement Pension Plans

Mutual funds are now very much linked with retirement pension plans. They facilitate setting up by individuals and companies, the tax deferred retirement plans for self or their employees respectively. Regular monthly income plans in India offered by UTI and other mutual funds established by nationalized banks are alike.

Insurance Plan

Mutual funds offer in the US a relatively new service in the form of insurance program that protects an investment in mutual fund against a long-term loss. The insurance cover is available for a period ranging from 10 to 15 years, for the amounts ranging from Rs.3,000 to Rs.2,00,000 at a premium of about 6% of the insured sum for a period of 10 years. In dollar terms the insurance of a sum of Rs.1,00,000 will cost Rs.600 for a period of 10 years. One has to assess the loss on the insured sum. Capital loss of Rs.10,000 will be completely met by the insurance company to cover up the insurance sum of Rs.1,00,000.

In India, LIC Mutual Fund and UTI have come out with schemes providing life insurance covers to the investors.

Cheque-writing Facilities

In the US, all mutual funds offer to the investors the facility to draw the money invested in mutual funds. These cheques are drawn and paid through the funds' banks. This service is rendered frequently by all the Mutual Funds in the US. In its mid-term review of monetary and credit policy for 1999-2000, the RBI permitted Money Market Mutual Funds (MMMFs) to offer cheque writing facility to the unit holders. In response, some Mutual Funds introduced limited cheque writing facility by allowing their unitholders to issue cheques against a savings account with a designated bank. This policy permitted scheduled commercial banks to offer "cheque writing" facility to Gilt Funds and those liquid income schemes of Mutual Funds which predominantly (not less than 80% of the corpus) invest in money market instruments.

To conclude, real service to investors is done by mutual funds by offering the schemes which directly offer income, capital gains and solutions to their personal individual problems. For this purpose, mutual funds should maintain a marketing research wing always looking for new opportunities and conceiving innovative schemes to meet the conceptual needs of the investors apart from systematic income and gains in monetary terms.

ORGANIZATION AND MANAGEMENT OF MUTUAL FUNDS

Structural Pattern

Mutual funds, usually formed as trusts, generally involve three parties viz.,

- Settler of the trust or the sponsoring organization.
- The trust formed under the Indian Trust Act, 1882, or the trust company registered under the Indian Companies Act, 1956.
- Fund managers or the merchant banking unit.
- Custodians.

While in the US and other countries an "arms length" distance is maintained between settlers, trustees and fund managers, in India, very often, there is an overlapping of roles. For example, in the case of Canbank Mutual Fund, Canara Bank is the settler or sponsor, members of Canara Bank's board form the trust company as trustees and the subsidiary of Canara Bank Canbank Financial Services Ltd., serves as fund manager.

Let us take a look at the organization and management pattern of UTI vis-a-vis the organization and management pattern of some other mutual funds established by banks or insurance companies.

Organization and Management Pattern of UTI

UTI has a full-time Chairman with an Executive Trustee reporting to him. The executive trustee looks after the corporate office, zonal offices and branch offices. Mutual funds are managed through various well organized and staffed departments viz.,

• Business Development and Marketing Department which formulates market schemes and manages the network of branches and agents;

- Operations and Vigilance Department which divides the scheme-wise responsibilities of branches, organizes the computer network for investor services, issues certificates and repurchases units;
- Investment Department which makes investments in short-term and long-term debt securities;
- Market Operations Department which invests in equity shares, convertible securities and engages in secondary market operations;
- International Department which looks after the offshore funds;
- Support Departments like Accounts, Research and Planning, Personnel and Administration, etc.

Parties to Mutual Fund Trust

As is common to any trust covered under the Indian Trusts Act, the parties involved in a mutual fund trust are the sponsor or settler, the trustees, the investor as beneficiary and the trust property. In a mutual fund trust, subscription made by the investor to the scheme, investments made by the mutual fund of the moneys received into capital market or money market instruments, the income received from such investments after incurring expenses incurred by the trust and any other assets bought by the mutual fund out of the investors money are trust property and the investors are entitled to all these properties as per the terms of the scheme and the provisions of the trust deed.

Sponsor/s	Name of the Fund	Trustee	Asset Management Company	Custodians
Sate Bank of India	SBI Mutual Fund	SBI Mutual Fund Trustee Company Private Limited.	SBI Funds Management Private Limited.	HDFC Bank Ltd.
Bank of Baroda (BOB), Punjab National Bank (PNB) and State Bank of India (SBI) and Life Insurance Corporation of India (LIC)	UTI Mutual Fund	UTI Trustee Company Private Limited.	UTI Asset Management Company Private Limited.	Stock Holding Corporation of India and HDFC Bank Ltd.
Life Insurance Corporation of India	LIC Mutual Fund	LIC Mutual Fund Trustee Company Private Limited.	LIC Mutual Fund Asset Management Company Ltd.	Stock Holding Corporation of India and HDFC Bank Ltd.
Prudential Corporation Plc and ICICI Limited	Prudential ICICI Mutual Fund	Prudential ICICI Trust Limited.	Prudential ICICI Asset Management Company.	HDFC Bank Ltd.
Principal Financial Services Inc., USA	Principal Mutual Fund	Principal Trustee Company Pvt. Ltd.	Principal Pnb Asset Management Company Pvt. Ltd.	Citibank, Mumbai.
Templeton International Inc.	Franklin Templeton Mutual Fund	Franklin Templeton Trustee Services Pvt. Ltd.	Franklin Templeton Asset Management (India) Pvt. Ltd.	Citibank, Mumbai.
Deutsche Assets Management (Asia) Limited	Deutsche Mutual Fund	Deutsche Trustee Services India Pvt. Ltd.	Deutsche Assets Management (India) Pvt. Ltd.	JP Morgan Chase Bank.
J.M. Financial and Investment Consultancy Services Pvt. Ltd.	JM Financial Mutual Fund	JM Financial Trustee Company Private Ltd.	JM Financial Asset Management Private Limited.	JM Financial Ltd.

Table 1: Existing Organization of Some Mutual Funds

Till recently, in all the Mutual Funds including UTI, the sponsors, trustees, fund managers and custodians were the same persons with no difference of organization and management. But after the issue of certain guidelines by the Government of India on 14.2.1992, sponsors, trustees, custodians and fund managers are to be separate entities with independent legal standing. This has been done with a view to eliminate mismanagement of mutual funds.

Wealth Management

Let us take a closer look at the four constituents of mutual funds, i.e., sponsors, trustees, fund managers and custodians.

Sponsors

The sponsor of a mutual fund can be a public limited or private limited company registered under the Companies Act, 1956. One or more public and private limited companies can jointly sponsor a mutual fund. The following are the requirements of a competent sponsor:

TRACK RECORD

The sponsor company should have a track record of five years, established through its audited final accounts exhibiting consistency in operating profits, dividend payments, rising cash accruals, etc.

GENERAL REPUTATION

The sponsor should have a good general reputation having directors with clean business records.

FAIRNESS IN ALL BUSINESS TRANSACTIONS

The sponsor company should have good credit record, default-free dealings with suppliers of material, good and tension-free personal relations and should not have any outstanding dues with bankers, creditors, income tax or sales tax authorities.

The sponsor should contribute at least 40% to the net worth of the asset management company.

ROLE OF SPONSOR

In the establishment of a mutual fund trust, the main role is played by the sponsors. Both the trustees and the fund managers or the asset management company have to be located and appointed by the sponsor. Alternatively, the sponsor has to appoint a Board of Trustees and incorporate an asset management company. It has to submit to the SEBI the drafts of the Trust Deed for creation of mutual fund trust with particulars of the persons consenting to be the Trustees both from the sponsor company and the outsiders. It has also to submit draft Memorandum and Articles of Association of Asset Management Company to the SEBI with particulars of Directors, i.e., the persons to be appointed from the sponsors' Board and those to be taken from outside. It has also to suggest the name and particulars of the custodians to be engaged for the mutual fund. Once the mutual fund trust is authorized by the SEBI, the role of the sponsor diminishes as it is the Trust that will interact with the SEBI.

Mutual Fund Trust

A Mutual Fund Trust is created by the sponsors under the Indian Trust Act, 1882.

The main functions of a Mutual Fund Trust are as follows:

- Planning and formulating mutual fund schemes.
- Seeking SEBI's approval and authorization to these schemes.
- Marketing the schemes for public subscription.
- Seeking RBI approval in case NRIs' subscription to mutual fund is invited.
 - Attending to trusteeship functions. This function as per guidelines can be assigned to separately established trust companies too.

In the absence of such companies, existing debenture trustees, banks and financial institutions may be contracted to act as mutual fund trustees with the approval of the SEBI. Alternatively, a separate Board of Trustees consisting of individuals of sufficient repute and experience may act as mutual fund trustees. Two third of the trustees shall be independent persons and shall not be associated with the sponsors or be associated with them in any manner whatsoever. The trust company, companies as aforesaid or the Board of trustees including the eligibility of each member shall be intimated to the SEBI as per the Guidelines.

Each trustee shall file the details of his transactions of dealing in securities with the mutual fund on a quarterly basis. Trustees are also required to submit an annual report to the investors in the fund.

Fund Managers or the Asset Management Company (AMC)

The role of the fund managers is highly significant in mutual fund operations. So far, this role is being played by the mutual funds through the subsidiary company of the sponsoring bank or inside the banks through a separate department or division. Under the Guidelines, fund managers will have to be a separate company specialized and skilled in investment activities.

An AMC has to discharge mainly three functions as given below:

- Taking investment decisions and making investments of the funds through market dealer/brokers in the secondary market securities or directly in the primary capital market or money market instruments;
- ii. Realize fund position by taking account of all receivables and realizations, moving corporate actions involving declaration of dividends, etc., to compensate investors for their investments in units; and
- iii. Maintaining proper accounting and information for pricing the units and arriving at Net Assets Value (NAV), the information about the listed schemes and the transactions of units in the secondary market. The AMC has to give feedback to the trustees about its fund management operations and maintain a perfect information system.

FORMATION OF THE BOARD OF AMC AND RESTRICTIONS ON DIRECTORS

Having regard to the significant role of the Board of Directors of the AMC in rendering the company's operations efficiently, the Government has prescribed stringent qualifications for the members of the Board. According to the Guidelines, the AMC should have persons on its Board of high repute and adequate professional experience in the relevant fields such as portfolio management, investment analysis, financial administration, etc. At least 50% of the directors on its Board should be independent persons not connected with the sponsoring organizations. The names of the directors and any subsequent changes must be intimated to the SEBI. A director on the Board of AMC shall not be director on the Board of any other AMC. Further, a person who is a director of an AMC shall not hold the position of a trustee or director in a trust company of a fund operated by the same AMC. No person should be a Director/Trustee of more than one Trust Company/Board of Trustees.

SBI Mutual Fund and Canara Bank Mutual Fund have already incorporated their respective asset management companies. The asset management company should have a net worth of not less than Rs.10 crore.

Custodians for Mutual Funds

Mutual funds run by the subsidiaries of the public sector banks had their respective sponsor banks as custodians like, Canara Bank, SBI, PNB, etc. Foreign banks with higher degree of automation in handling the securities had assumed the role of custodians for mutual funds. Citibank has been a very prominent bank in this regard and acts as a custodian for UTI and SBI's funds. The Stock Holding Corporation of India is the custodian for various mutual funds. A few other foreign banks are also eager to act as custodians as they are well equipped with a network of telecommunication facilities and software support systems essential for efficient discharge of the role of the custodian. It is only because of this quality, the Indian Growth Fund (promoted by UTI Merrill Lynch) was shifted from SHCI to

Wealth Management

Citibank. Now, SHCI is also fully equipped with the software support system and acts as a custodian for mutual funds of SBI and others. Automation eliminates manual handling, reduces requisition and delivery time, and brings efficiency in operations of a custodian.

Besides, the Industrial Investment Trust Company acts as sub-custodian for SHCI for domestic schemes of UTI, BOIMF, LICMF, etc.

ROLE OF CUSTODIANS

The Securities and Exchange Board of India on 5th May, 1996, through its Notification No.S.O.344 (E), has issued the SEBI (Custodian of Securities) Regulations, 1996 (amended on January 2006). If any person, wishes to act as a custodian of securities on or after the regulations have come into vogue; he has to obtain a certificate to that effect from the SEBI. Generally, custodian services are availed of in-house by the mutual funds. However, the institutions which are acting as professional custodians are Stock Holding Corporation of India (SHCI), Citibank, Industrial Investment Trust Ltd., (IITL), Hong Kong Bank, ABN Amro, ICICI Bank, Citi Bank, and BOI Shareholdings Ltd.

Responsibilities to be discharged by the custodians on behalf of mutual funds include receipt and delivery of securities, holding of securities, collecting income, holding and processing cost, corporate actions, etc.

Functions of custodians widely cover safe keeping of securities, corporate actions and transfer agents. Salient features of each of these functions are given below:

Safe Custody

Safe keeping of securities covers a wider range of services rendered to the customer viz., scheme-wise segregation of assets, regular checking and verification of securities, registration of securities for proper verification, regular reconciliation of assets to accounting records, etc.

Trade Settlement

Trade transactions take place at the instance of fund managers, but settlements are done at the instance of the custodian who is responsible for the timely receipt and delivery of cash and securities i.e., securities will be delivered on receipt of cash and payment will be made only on receipt of securities. Any discrepancies arising out of the trade settlements are resolved at the end by the custodian.

Corporate Action

The custodian also assists in taking corporate actions viz., dividend declarations, exercising the rights of equity holders, collection of dividends, rights, etc.

Transfer Agents

Custodians perform various important functions, in addition to attending to shareholders' transactional activities. Some of the activities include maintaining detailed records of transactions receipt of dividends, reimbursement of dividend, purchase of securities etc. They also maintain records of confirmations of transactions, cheque registers, certificates, files, commission reports, tax reporting, etc.

To sum up, the consolidated activities of sponsors, trustees, AMCs and custodians form the basis of the organization and management of the mutual fund.

Figure 1 presents a compact representation of the organization and management of mutual funds.





Advantages of Private Mutual Funds

It is felt that the entry of private mutual funds would encourage competitiveness in the financial sector and promote the existing investment climate. At present, many of the leading industrial houses, through their investment companies are already providing financial support to their group companies besides deploying their investible funds in a profitable manner. Thus, many of these private corporate investment companies have already carved a niche for themselves by registering excellent performance in deployment of their funds through their rich experience in portfolio management. Therefore, many of the private sector companies that have applied for setting up mutual funds are already proven companies and are ready for playing the game. The entry of private mutual funds could also lead to a lot of accountability about the transparency of their transactions, which had till now not been followed by a few existing mutual funds. With the government stressing upon the private corporate sector and mass mobilization of funds by the private sector in the Eighth Plan, the entry of private mutual fund companies will certainly fill up the slot.



(Rs. in crore)

Category	No. of Players	Assets under Management as on 31-3-2007
Indian	10	80,157
Joint Ventures – Predominantly Indian	5	1,04,779
Joint Ventures – Predominantly Foreign	10	77,239
Total	24	2,41,406

Source: http://www.amfiindia.com/spages/aqu-vol6-issueIV.pdf.

Money Market Mutual Funds

Even as the mutual funds show a promise of becoming a major instrument of household savings, another concept which is being talked about and waiting to make an entry into the Indian capital market is Money Market Mutual Funds (MMMFs). Though MMMF has taken a foothold in the West almost a couple of decades ago owing to a widespread and well-knit infrastructure and communications network, its arrival in India is fraught with procedural delays and conceptual difficulties.

Basically, the idea is to take advantage of the surplus funds lying with the mutual fund institutions (LIC, UTI, Banks, etc.) by investing them in the money market. This might serve two important purposes: One, individual savers may have access to the short-term capital market. Two, the MMMF may exercise its stabilizing influence on the volatile interest rates, particularly when liquidity pressure is high. In 1990, for instance, call money market rates had zoomed through the roofs owing to tight money conditions in the market.

Presently, mutual funds operate in the money market only to a limited extent owing to a number of restrictions imposed on them. They just manage to invest around 20 percent of their funds in the Money Market. A separate mutual fund to participate exclusively in the money market was hence thought of this would help to increase the size of the mutual fund's investible resources in the money market and also allow an individual investor who hitherto stayed away from the money market to indirectly participate in the money market through MMMF.

THE MUTUAL FUND SCENE IN INDIA

Mutual funds made their entry into India in 1964 with the setting up of UTI. However, their progress has not been encouraging in the past 44 years in terms of offering investor friendly products and features.

In November 1993, India's first private sector mutual fund was launched in the form of Kothari Pioneer mutual fund. This started a spate of other private sector mutual funds.

The present trend in the industry is in favor of open-ended schemes as all close-ended schemes have disappointed the investors by continuously quoting at a discount to their NAVs. The promoters of some recent issues have reacted to this development by coming out with open-ended schemes. These schemes also are innovative and cater to different segments of the market. This change has come about with growing awareness among investors about the functioning of mutual funds. Also, the individual investor is increasingly getting alienated from the primary and secondary markets, which make mutual funds an attractive avenue for investments. The concept of mutual fund rating too has caught on with the market, and thus an individual investor can ask for unbiased source of information on the performance of various funds. The emergence of industry specific funds is a good sign for the choosy investor to enter the mutual fund industry. It will only be a matter of time before the mutual funds really dominate the market, though at present they are not very strong.

Performance of Mutual Funds

The performance of mutual funds can be evaluated by calculating the rate of return earned during the relevant comparison period. The return will include changes in the value of the fund during the performance period plus any income from contributions to the fund minus any outgoing fund due to withdrawal from the fund.

Guidelines for Mutual Funds

The Securities and Exchange Board of India on 9th December, 1996, through its notification No. S.O. 856(E), Issued a set of comprehensive guidelines applicable to mutual funds. In January, 1998 some amendments were made by the SEBI in these regulations. The highlights of the regulations are given below:

FORMATION AND REGULATIONS

- i. Mutual Funds are to be established in the form of trusts under the Indian Trusts Act and are to be operated by separate Asset Management Companies (AMCs);
- ii. AMCs shall have a minimum net worth of Rs.10 crore;
- iii. AMCs and trustees of Mutual Funds are to be two separate legal entities and that an AMC or its affiliate cannot act as a manager in any other fund; and
- iv. All the schemes launched by the Asset Management Company should be approved by the trustees and a copy of the offer document should be filed with the SEBI.

SCHEMES

- i. The AMC should mention in the offer document,
 - a. The minimum amount it wishes to raise under the scheme, and
 - b. The amount of funds it may retain in case of oversubscription. In this case, all the applicants who apply for five thousand units or less should be given full allotment keeping in view the oversubscription levels.
- ii. The mutual fund as well as the AMC are liable to refund the application money wholly or in part if
 - a. The mutual fund does not receive the minimum amount which it mentions in the prospectus, and
 - b. If the amount received for units is in excess of subscription referred in i(b).
- iii. Every close-ended scheme launched by the AMC should be listed on a recognized stock exchange within a period of six months from the date of closure of the subscription.

However, this is not mandatory in cases where,

- a. There is a provision in the scheme for periodic repurchase facility to all the unitholders;
- b. The scheme provides for monthly income or if it takes into account the needs of certain classes of persons like senior citizens, women, widows or physically handicapped and children with a provision for periodic repurchase of units;
- c. The details of the repurchase facility are disclosed in the offer document; and
- d. The scheme opens for repurchase within a period of six months from the date of closure of the subscription.
- iv. The AMC at its discretion can repurchase or reissue the units repurchased under the close-ended scheme.
- v. The units of a close-ended scheme can be converted into an open-ended scheme provided that:
 - a. The offer document discloses the option and the period of such conversion; or
 - b. The unit holders are provided with an option to redeem their units in full.

vi. The close-ended scheme should be redeemed completely at the end of its maturity period. However, a close-ended scheme may be allowed to rollover if the purpose, period and other terms of the rollover and all other material details of the scheme including the composition of assets immediately before the rollover, and the net assets and net asset value of the scheme, are disclosed to the unitholders and a copy of the same has been filed with the Board. However, such rollover will be permitted only in case of those unit holders who express their consent in writing. Those who do not opt for the rollover or have not given written consent shall be allowed to redeem their holdings in full at net asset value based price.

Restrictions on Investments

A mutual fund scheme shall not invest more than 15% of its NAV in debt instruments issued by a single issuer, which are rated not below investment grade by a credit rating agency authorized to carry out such activity under the Act. Such investment limit may be extended to 20% of the NAV of the scheme with the prior approval of the Board of Trustees and the Board of Asset Management Company, provided that such limit shall not be applicable for investments in government securities and money market instruments. Provided further that investment within such limit can be made in mortgage backed securitised debt, which are rated not below investment grade by a credit rating agency, registered with the Board.

A mutual fund scheme shall not invest more than 10% of its NAV in unrated debt instruments issued by a single issuer and the total investment in such instruments shall not exceed 25% of the NAV of the scheme. All such investments shall be made with the prior approval of the Board of Trustees and the Board of Asset Management Company.

No mutual fund under any scheme should own more than 10% of any company's paid up capital carrying voting rights. Transfers of investments from one scheme to another scheme in the same mutual fund shall be allowed only if, -

a. Such transfers are done at the prevailing market price for quoted instruments on spot basis.

Explanation – "spot basis" shall have the same meaning as specified by the stock exchange for spot transactions.

b. The securities so transferred shall be in conformity with the investment objective of the scheme to which such transfer has been made.

A scheme may invest in another scheme under the same asset management company or any other mutual fund without charging any fees, provided that aggregate interscheme investment made by all schemes under the same management or in schemes under the management of any other Asset Management Company shall not exceed 5% of the net asset value of the mutual fund.

The initial issue expenses in respect of any scheme may not exceed six percent of the funds raised under that scheme.

Every mutual fund shall buy and sell securities on the basis of deliveries and shall in all cases of purchases, take delivery of relative securities and in all cases of sale, deliver the securities and shall in no case put itself in a position, whereby it has to make short sale or carry forward transaction or engage in badla finance. Provided that mutual funds shall enter into derivatives transactions in a recognized stock exchange for the purpose of hedging and portfolio balancing, in accordance with the guidelines issued by the Board.

Every mutual fund shall, get the securities purchased or transferred in the name of the mutual fund on account of the concerned scheme, wherever investments are intended to be of long-term nature.

Pending deployment of funds, a mutual fund can invest the same in short-term deposits of scheduled commercial bank's.

No mutual fund scheme shall make any investment in:

- a. Any unlisted security of an associate or group company of the sponsor; or
- b. Any security issued by way of private placement by an associate or group company of the sponsor; or
- c. The listed securities of group companies of the sponsor which are in excess of 25% of the net assets.

No mutual fund scheme shall invest more than 10 percent of its NAV in the equity shares or equity related instruments of any company provided that, the limit of 10 percent shall not be applicable for investments in case of index fund or sector or industry specific scheme.

A mutual fund scheme shall not invest more than 5% of its NAV in the unlisted equity shares or equity related instruments in case of open-ended scheme and 10% of its NAV in case of close-ended scheme.

Rights of Investors

CERTIFICATES

An investor is entitled to receive unit/shares certificates allotted to him within a period of six weeks from the date of closure of the subscription.

TRANSFER

An investor is entitled to get the unit/share certificates transferred within a period of 30 days from the date of lodgment for transfer.

REFUND

If the total collection of the funds by a mutual fund is less than the minimum amount of subscription planned to be raised, as mentioned in the prospectus, the applicants are entitled to receive the entire application money as refund, within a period of six weeks from the date of closure of subscription. Should the refund be delayed beyond this period, the applicants are entitled to receive, along with the application money, interest at the rate of 15% p.a., for the period of delay.

DISCLOSURES

- a. An investor under a mutual fund scheme is entitled to receive information about the 'Net Asset Value' at intervals not exceeding one week. This information should be published in at least two daily newspapers.
- b. Every mutual fund is required to publish the audited annual report and unaudited half-yearly report, through prominent newspapers in respect of each of its schemes, within six months and two months respectively of the date of closure of accounts.
- c. A mutual fund shall before the expiry of one month from the close of each half year send to all unit holders a complete statement of its scheme portfolio. However, the statement of scheme portfolio may not be sent to the unit holders if the statement is published, by way of an advertisement in one English daily circulating in the whole of India and in a newspaper published in the language of the region where the head office of mutual fund is situated.

This set of guidelines will go a long way in providing a level playing field to all Mutual Funds.

SUMMARY

- The main objectives of Mutual Funds are to provide an opportunity to the small investor to acquire property in the form of shares without much difficulty, and to manage investors' portfolio in a manner that provides regular income, growth, safety, liquidity and diversification.
- Mutual funds can be categorized on the basis of portfolio classification, functional classification, and geographical classification.
- Portfolio Classification: Based on the security in which the funds are invested, the mutual funds are divided into bond funds, stock funds, income funds, money market funds, specialized funds, leveraged funds, balanced funds, growth funds, performance funds, specialty funds, dual purpose funds and real estate funds.
- Functional Classification: Open-ended mutual funds and close-ended mutual funds come under this category.
- Geographical Classification: Domestic mutual funds and offshore mutual funds.
- Net Asset Value: It is the difference between assets and liabilities of a mutual fund divided by the number of units outstanding.
- Advantages of Mutual Funds: Reduced risk, diversified investment, botheration-free investment, automatic reinvestment of dividends, tax benefits such as dividend received from equity or debt-oriented funds is tax free in the hand of investors and investment in tax saving funds (ELSS) would be eligible for deduction under Section 80C.
- Mutual funds can be sponsored by either public or private limited companies. The sponsors will appoint the trustees and the fund managers or asset management company. A mutual fund is created by the sponsors under the Indian Trust Act.

Chapter VIII Introduction to Marketing of Financial Services

After reading this chapter, you will be conversant with:

- Concept and Types of Financial Services
- Characteristics of Financial Services
- Recent Trends in Financial Services

In the previous chapter we discussed financial markets and their classification. When we speak financial services, we need to consider the services provided by various intermediaries such as banks, financing companies, insurance companies, etc. This chapter deals with the meaning of financial services and the various types of intermediaries who provide these services.

CONCEPT AND TYPES OF FINANCIAL SERVICES

Financial services basically mean all those kinds of services provided in financial terms, where the essential commodity is money. Financial services can be defined as 'the products and services offered by institutions like banks of various kinds for the facilitation of various financial transactions and other related activities in the world of finance like loans, insurance, credit cards, investment opportunities and money management as well as providing information on the stock market and other issues like market trends'. These services include, leasing, hire purchase, consumer credit, investment banking, commercial banking, venture capital, insurance, credit rating, bill discounting, mutual funds, stock broking, housing finance, vehicle finance, mortgages and car loans, factoring among other things. Various entities that provide these services are basically categorized into (a) Non-Banking Finance Companies, (b) Commercial Banks, and (c) Merchant Banks. Any discussion on financial services in India cannot be done at one go. Financial services in India is too vast and varied to have evolved at one place and at one time. To trace the origin of all these services and to dwell comprehensively on the evolution of each of these services is too voluminous to be covered in this chapter. Hence, a brief description on each of the activities is covered in this chapter.

Banking

Banking primarily deals with money and instruments of credit. The firms which provide banking services are known as banks. These were traditionally differentiated from other financial institutions by their principal functions of accepting deposits – subject to withdrawal or transfer by cheque – and of providing loans. There are many types of banks such as commercial banks, which include national and state-chartered banks, trust companies, stock savings banks, and industrial banks. These have traditionally rendered a wide-range of services in addition to their primary functions of giving loans, making investments and handling demand, savings and other time deposits. Mutual savings banks, until recently, accepted only savings and other time deposits, and offered limited types of loans and services. The fact that commercial banks were able to expand or contract their loans and investments in accordance with changes in reserves and reserve requirements, further differentiated them from mutual savings banks, where the volume of loans and investments were governed not by changes in reserve requirements but by changes in customers' deposits.

Insurance

Insurance is an agreement where the insurer agrees to make good a loss suffered by the insured against a specific risk, in consideration for some specified amount. The insurer is generally an insurance company that pools all the risks of many such insured entities and provides insurance on the basis of probability. By pooling many such risks, insurance companies convert the uncertainty of individual loss into predictable expense. The insured has to forego a part of amount of money periodically in return for the assurance given by the insurer against any risk of loss. Insurance provides a sense of security for the insured that will allow him to perform normal business.

The activity of insurance as a financial service can never be under-emphasized. Insurance companies play an important role in the financial system all over the world. Insurance companies hold substantial amount of assets and are capable of transferring funds quickly from one sector of the economy to another. In India, apart from being perceived as a typical 'insurer' for covering risk of loss, insurance is seen as a viable and safe investment alternative. Adequate tax breaks are also provided for the cause of furthering the attitude of saving through insurance in the general public.

Life insurance has been in existence in India since 1818, but it was only in 1956 that all 245 insurance companies were merged and nationalized to form the Life Insurance Corporation of India. Some companies that offered general insurance as their main business were merged to form the General Insurance Corporation of India in 1972. General Insurance Corporation and four subsidiaries viz., National Insurance Co. Ltd., New India Assurance Co. Ltd., Oriental Insurance Co. Ltd., and United India Insurance Co. Ltd., offered general insurance business in India. These four subsidiaries were later delinked from GIC and started functioning as independent general insurance companies. The GIC was converted into an exclusive reinsurance company. The Insurance Regulatory Authority was set up in 1992 as a regulator of insurance companies in India taking over from the ministry of finance. This authority is intended to oversee smooth entry of private operators into the insurance industry and regulate the insurance schemes floated by the players. Private players, most of them having tie-ups with foreign insurance giants are actively entering the market both in the life and general insurance sectors.

Leasing

Leasing as a financial service is a contractual arrangement where the owner (lessor) of the equipment transfers the right to use the equipment to the user (lessee) for an agreed period of time in return for a rental. At the end of the lease period, the asset reverts to the lessor unless there is a provision for the renewal of the contract or there is a provision for transfer of ownership to the lessee. If there is any such provision for transfer of ownership, the deal is treated as hire purchase.

Leasing was prevalent during the ancient Sumerian and Greek civilizations when leasing of land, agricultural implements, animals, mines, and ships was in practice. The practice of 'equipment leasing' came into being sometime in the later half of the 19th century when the railroad manufacturers in the US resorted to leasing of rail cars and locomotives. The spectacular performance of the railroad companies brought into sharp focus the role of equipment leasing in promoting capital formation. After the World War II, the railroad companies in Europe took to equipment leasing. By the early sixties, equipment leasing became popular in many industries in the US and in Europe.

Hire Purchase Services

A hire purchase is a contractual arrangement under which the owner lets his goods on hire to the hirer and offers an option to the hirer to purchase the goods in accordance with the terms of contract. A hire purchase has two aspects: one, bailment of goods subject to the hire purchase agreement and two, element of sale when the option to buy the good is exercised by the user. Hire purchase is fundamentally different from leasing and installment purchase. Installment purchase allows the user to be the owner of the good immediately after the first installment is paid, whereas in hire purchase ownership of the equipment is transferred only after the user exercises his option to purchase it. As mentioned earlier, leasing does not allow the user of the equipment to purchase it at a later point of time. The growth of hire purchase services in India has been concurrent with consumer credit and installment payment services in the financial services industry. Most of the companies which offer the service of leasing tend to offer hire purchase also and therefore, it is seen as a near relative to leasing. In fact, the RBI in its classification of NBFCs has segregated those companies which offer leasing/hire purchase services into a single type of company.

Hire purchase is available for a wide-range of products and equipments. Products like televisions, audio systems, refrigerators, holiday trips and so on are now financed with the help of such credit. One of the most sought after products through hire purchase system is automobiles. Automobiles like trucks, motor cars, two wheelers and autos are sold on hire purchase to a wide-range of borrowers. Users range from transport operators to individuals.

Consumer Finance and Installment Credit

As distinguished from the above, consumer finance essentially means providing finance to the consumer for the sake of acquisition of a product or a service. That is, the ownership is transferred to the user immediately after the financing transaction takes place and is generally between the finance company and the consumer directly. The consumer finance company provides finance to the consumer for the purpose of buying a product from the manufacturing company (which will be directly paid to the manufacturing company). Subsequently, the manufacturing company 'sells' the product to the consumer, for which the consumer pays back the money financed with interest to the finance company.

Installment credit essentially is between the consumer and the manufacturing company either directly or through a dealer network. The latter is more predominant. The ownership of a product is transferred to the user by the manufacturing company immediately after entering into the agreement. The consumer pays back the cost of the product with interest in installments.

The growth of consumer finance has been concurrent with the boom in the white goods market witnessed in the late '80s. Consumers of these services normally are from middle-income and upper middle-income salaried groups who can afford to pay the installments (albeit with a decent interest) rather than gather the required capital for the acquisition. The interest rates are normally charged on a flat rate basis and the installment paid includes repayment for the principal and the interest. There are quite a few finance companies which offer both hire purchase and consumer finance for the consumers. Companies like Ceat Finance, specialize in office equipment, whereas some companies such as Apple Credit, Countrywide, Sundaram Finance, Cholomandalam Finance and Kotak Mahindra Finance among others specialize in automobile financing (either by hire purchase or consumer finance).

Housing Finance

Housing finance constitutes providing funds for the purpose of constructing or buying houses. It is generally given to companies, individuals, co-operative societies, and government organizations. Housing finance is provided by various public and private institutions in India. One such organization is HUDCO (Housing and Urban Development Corporation), establised in 1970 to essentially provide long-term finance for construction of houses for residential purposes or finance or undertake housing and urban development programs in the country. Also, commercial banks are compulsorily made to lend certain amount of their total credit outlay for the purpose of constructing/buying houses as part of their priority sector lending requirements.

Housing finance was one of the early attempts of the office of Housing and Urban Programs of USAID (United States Agency for International Development). It was in Latin America that the Regional Housing and Urban Development offices of the Housing Corporation supported the creation of Savings and Loan System in Honduras, Peru, Ecuador, Bolivia, Venezuela, Brazil, Chile and Argentina to name a few. Today, the Savings and Loans systems in Latin America continue to bring resources into the housing sector and have contributed to the overall development of the capital market in their respective countries. In India, USAID support for shelter programs was initially directed to The Housing Development Finance Corporation (HDFC), a fledging private sector institution at that time. HDFC is one of the leading providers of loan assistance for construction/purchase of houses in India. LIC Housing Finance and SBI Housing Finance are the other players.

Venture Capital

Venture capital refers to financing risky and untested ventures to encourage new and untried projects. Normally, venture capital is provided for newly started companies for which capital is necessary for establishing infrastructure on location. Venture capital also provides funds for the expansion of companies that have already demonstrated their business potential, but do not yet have access to public securities market or to credit-oriented institutional funding sources. It also finances management/leveraged buyouts.

Venture capital industry in India is of recent origin. Before its actual advent, Development Finance Institutions (DFIs) have partially been playing the role of venture capitalists by providing assistance for direct equity participation to ventures that were in a nascent stage. Venture capital was conceptualized in the Long-term Fiscal Policy presented in the Parliament by the Ministry of Finance in December, 1985. A beginning was made in the budget for 1987-88 when a cess of up to 5 percent was introduced on all technology import payments to create a pool of funds, so as to assist venture capital undertakings. The venture capital fund that was created out of this cess was to be administered by the Industrial Development Bank of India (IDBI) through Technology Development and Information Company of India (TDICI) for providing financial assistance to industrial concerns attempting commercial application of indigenous technology or adapting imported technology to wider domestic applications. Indian Venture Capital Industry has evolved over a period of time with the entry of venture capital funds promoted by (a) Banks, (b) Developmental Financial Institutions, and (c) Private Sector Financial Enterprises.

Mutual Funds

Mutual funds constitute part of a wide spectrum of financial services involving management of funds by investing in various financial instruments on behalf of various individuals among others. Individuals interested to invest in these financial instruments provide the money to the mutual funds who do the requisite research and invest it appropriately. Thereby, the investor is avoiding direct involvement with the financial market and hence avoiding any disadvantage that may accrue to him because of 'assymetric information'. Mutual funds earn income on commission basis on the funds invested.

Mutual funds, in their modern version, owe their origin to 'Foreign and Colonial Government Trust' that collected funds in 1886, for colonial expansion of the British Empire. The concept of mutual funds caught up in the United States in the 1920s and the establishment of the Securities and Exchange Commission in 1936 saw a proper regulated and controlled growth of mutual funds in that country. The growth of mutual funds was tremendous in the 1980s when the mutual fund industry grew by 25% annually. In countries like the US, Japan, the UK, Germany and Italy, mutual funds continue to be one of the important avenues available for investment.

The first mutual fund in India was Unit Trust of India (UTI) which was set up in 1964. The first scheme launched by UTI – US-64 – is the largest grosser of household money in the world. From 1964 to 1983, there was a literal monopoly in the market with UTI floating more schemes in the interim period. Subsequently, SBI and Canara Bank broke the monopoly of UTI by venturing into mutual fund business. In 1993, the private sector was allowed to venture and Kothari Mutual became the first private sector mutual fund. In 1994, foreign participation was allowed with Morgan Stanley being the first private sector foreign mutual fund. At present, the largest private sector mutual fund is the Birla Sun Life Mutual Fund. Presently there are 33 mutual fund companies in India.

All along, mutual funds have been mainly investing in equity. They are also allowed to invest in debt market and money market. Since 1992, SEBI has been the regulator of mutual funds with regulations mainly contained in SEBI (Mutual Funds) Regulations, 1992. A mutual fund can float any number of schemes provided each scheme has an Asset Management Company. There are currently 613 (both close-ended and open-ended) mutual fund schemes investing in a whole array of financial instruments with various options in India. As mentioned earlier, every mutual fund scheme floated by the mutual funds should have an Asset Management Company (AMC) not necessarily unique to the scheme. The AMC manages the money provided by the mutual fund that is collected from the general public and charges commission for investing and maintaining the asset base of the mutual fund. Various schemes are floated keeping in view alternate investible opportunities. While a few schemes invest totally in equity shares, few invest partly in debt and partly in equity, and others invest part in equity, debt and money market separately or combinedly. It has been observed that the main motto of mutual funds is to invest the funds of small and unorganized investors in the stock market. Most of them failed dismally in their task, resulting in heavy losses.

Portfolio Management Services

Portfolio management services refer to the financial services provided by a stock broker, NBFC or a bank (referred as portfolio managers) to high net worth investors interested in reaping returns from the stock market. Portfolio managers invest in a range of financial instruments diversifying the risk involved thereby managing to get higher returns as compared to the inherent risk. Normally, investors are not directly involved in the investment process and thereby there is no 'discretion' in such constituted portfolio. Such arrangement is known as Discretionary Portfolio Management. In non-discretionary portfolio, the investor is directly involved in selection of instruments for investment. Thus, the role of portfolio manager is limited to servicing the client for the investment made. Regulations drafted under the purview of SEBI prohibit guarantee of returns on portfolio management schemes.

Credit Rating

Credit rating refers to rating of a financial instrument on the criteria of repayment capability of the interest and principal. Various parameters are looked into by the credit rating agencies (that give rating) on the company/entity seeking credit rating. The parameters include management, financials, track-record and range of products among other things. Credit rating is specific to a debt/financial instrument and is intended to grade different and specific instruments in terms of credit risk associated with a particular instrument. The rating is an opinion expressed by an independent professional organization and does not directly contain any recommendations to buy/sell the financial instrument.

Capital Issue Management

Capital Issue Management refers to that professionalized activity performed by the merchant bankers involving management of a public issue on behalf of a corporate. Often referred to as 'Lead Managing', capital issue management may involve either or all of the following activities:

- i. Seeking relevant approvals for the purpose of public issue.
- ii. Helping in determining the issue price.
- iii. Assisting in contracting with underwriters, printers, co-lead managers, registrars, brokers, etc.
- iv. Arranging for marketing and placing of the issue.
- v. Complying with allotment procedure and following other post-issue regulations.

CHARACTERISTICS OF FINANCIAL SERVICES

The four major characteristics of financial services are:

(i) Intangibility, (ii) Heterogeneity, (iii) Inseparability, and (iv) Perishability.

Intangibility

A product is a physical entity which can be touched. It can be seen, heard, touched, smelt, tasted and tested even before purchasing it or consuming it. For example, when a consumer decides to buy a car, he can see it, touch it and test drive it to understand its performance. Therefore, he has a better idea of the product before deciding whether to buy it or not. But a service is not tangible unless it is experienced or consumed. The quality of a service cannot be established as clearly as it can be in the case of a product. For example, when a customer decides to employ the services of a bank in obtaining a credit card for the first time, he does have an idea about the services offered by the bank, but he can really assess the services only after he avails them. A car can be defined in terms of its HP and mileage, but a service cannot always be defined in absolute terms.

Different people have different expectations with regard to the same service. Also, since the quality of the service is not always strictly measurable owing to the intangible nature of services, it is sometimes difficult for service organizations to determine quality markers and market their services accordingly. For example, in the case of a bank, some customers may consider being given personal attention by customer service executives as a vital aspect of service quality while some customers may consider faster transactions more important. Since all customers do not have the same preferences, the service provider does not know what exactly should be offered to ensure complete customer satisfaction.

When compared to product manufactures, it is more difficult for service organizations to ensure consistency in service delivery. For example, HLL can ensure that all the soaps manufactured by it are of same quality but a service organization such as Prudential Insurance Company might not be able to ensure the same quality of service to every customer as and when asked for. However, more and more service organizations are employing stringent measures to ensure that the quality of their services is standardized. Another point to be noted is that it is not always possible for the manufacturing firms to maintain 100% consistency in their product quality.

Heterogeneity

A machine can produce units identical in size, shape and quality. But a human being cannot work as uniformly and consistently throughout the day. Since a service is offered by a human being, there is a high probability that the same level of service may not be delivered all the time. The service offered by one employee may differ from the service offered by another although they may belong to the same company. Even the service offered by the same employee may be different at different times of the day. After serving customers continuously for several hours during the day, an employee may not be able to offer the same level of service towards the end of the day. Also, the quality of service offered by employees at one branch of a service organization may differ greatly from the service offered at another branch. But if the variation in service quality becomes extremely obvious, customers may act dissatisfied and switch to a competing firm. Also, the customers may not be able to predict the level of service they would obtain from the firm, the next time they visit it. Hence, service organizations should try to maintain consistency in the services they offer by taking special care in recruitment, selection and training of employees.

In some cases, however, heterogeneity can benefit the organization. Some customers want specific services which may not be needed by other customers. In such cases, the organization can offer customized service to such customers and charge a premium from them. For example, a manufacturing firm may purchase limited or customized services from a banking or insurance service provider. Some other firms may hire end-to-end solutions of the services company for their operations.

Inseparability

A service is consumed by the customer as soon as it is delivered by the employee. Thus, production and consumption occur simultaneously in case of services as opposed to products which are manufactured, inventoried and then consumed. Services cannot be inventoried and need to be consumed immediately. Since the delivery and consumption of a service are inseparable, there has to be interaction between customers and employees of a service organization. For example, in case of cash withdrawal from the ATM, the cash has to be received by the customer as soon as his request for transaction is processed by the ATM.

Perishability

Unlike products, services cannot be inventoried or stored for future consumption. When the demand for the service is steady and continuous, perishability does not pose much problem. For example, banks are providing loans to customers and once the loan is sanctioned, the payment has to be received by the customer within a few days of its grant. If the customer fails to take the loan in the specified time period, then the loan facility stands withdrawn.

RECENT TRENDS IN FINANCIAL SERVICES

E-finance will lead to much lower costs and greater competition in financial services through both new entrants from outside today's financial sector and greater competition among incumbent financial service providers. These developments will force banks to lower fees and commissions because providing e-finance is much cheaper than providing traditional financial services. Internet and related technologies are more than just new delivery channels – they are a completely different way of providing financial services.

Trading systems (equities, fixed income and foreign exchange) are moving toward electronic platforms not tied to any location. Electronic trading and communication networks have lowered the costs of trading and allow for better price determination.

SUMMARY

- The term Financial Services encompasses all those services that have money as the raw material.
- Financial services include, (i) Banking, (ii) Insurance, (iii) Leasing, (iv) Hire Purchase, (v) Consumer Finance and Installment Credit, (vi) Housing Finance, (vii) Venture Capital, (viii) Mutual Funds, (ix) Portfolio Management, (x) Credit Rating, (xi) Capital Issue Management, etc.
- The insurance industry has been opened for private sector participation and the IRDA has been given statutory powers.
- Leasing and hire purchase have been the oldest of financial services both in India and the world. Financial services such as venture capital and credit rating are relatively of recent origin in India.
- Mutual funds have witnessed ups and downs, with the saving rate going up with a capricious equity market. The characteristics of the service marketing consist of Intangibility, Heterogeneity, Inseparability and Perishability. E-finance is dramatically changing the structure and nature of financial services.
- Financial services have been mostly regulated by the Securities and Exchange Board of India. Some of the services such as banking are regulated by the Reserve Bank of India.

<u>Chapter IX</u> Marketing of Banking and Insurance Services

After reading this chapter, you will be conversant with:

- Banking Industry in India
- Product Innovation and Branding in Banks
- Marketing Mix of Banks
- Commercial Financing
- Recent Trends in Banking in India
- Insurance Industry
- Strategic Alternatives for Insurance Industry
- Marketing Mix of Insurance Industry

Introduction

One of the major participants in financial services industry are the Commercial Banks. The Commercial banks act as intermediaries between those who have money and those who need money. This way, they enhance economic efficiency and growth by allocating capital to its best possible uses. Banks perform the deposit function by obtaining deposits from savers and offering benefits like interest rates, risk-free and high degree of liquidity.

Commercial banks use deposits to give loans to borrowers. Financial intermediation between depositors and borrowers is crucial to the growth and stability of the economy. Economic growth depends on a large volume of savings and the effective allocation of the savings to productive and profitable uses. By offering financial instruments to depositors with desirable risk/return characteristics, commercial banks encourage savings, and also perform the loan function by effectively screening credit requests; they channel funds into socially productive and profitable uses.

BANKING INDUSTRY IN INDIA

Evolution

Banking on modern lines in India, began with the foundation of the Agency Houses of Calcutta and Bombay in the eighteenth and early nineteenth centuries. The Agency Houses financed the movement of crops, issued paper money and paved the way for the establishment of joint stock banks. The first joint stock bank in the country, The Bank of Hindustan, was founded in 1770 by one of the Agency Houses in Calcutta and its business was closely connected with this house. Later, many banks were established such as, the Bengal Bank and the General Bank. The East India Company chartered all these banks.

Another group of banks was established, not by the Charter of the East India Company, but by the Acts passed by the Legislature. These banks may be divided into two types, the first consisting of the three Presidency banks amalgamated into the Imperial Bank of India in 1920, and the second comprising the Indian joint-stock banks.

The first Presidency Bank was established in Calcutta in 1806 under the name of the Bank of Calcutta. Other two Presidency Banks were, the Bank of Bombay and the Bank of Madras, established in 1840 and 1843 respectively. They were private shareholders' banks, though the East India Company also contributed to their share capital. The bulk of the share capital came from private shareholders, mostly the Europeans. These banks were given the monopoly of government banking. After 1823, they were also given the right of note issue, which was taken over by the government in 1862. The Presidency Banks Act imposed restrictions upon all the three banks to safeguard the interests of the government and the public, which deposited funds with them. The restrictions continued even after the banks had built up a very solid position by careful management. In 1920, these Presidency Banks were amalgamated and replaced by a new bank - the Imperial Bank of India to protect these banks against competition of foreign banks. In 1935, The Reserve Bank of India was established as the central bank of the country so as to leave the Imperial Bank entirely free, not only to continue, but also to extend commercial banking activities, the need for which was urgent in the country. The same Imperial Bank of India was nationalized and emerged as the State Bank of India in 1955.

Present Structure

The Indian banking industry, which has the Reserve Bank of India as its regulatory authority, is a mix of the public sector, private sector, and foreign banks. The Indian banking system has three tiers. These are the scheduled commercial banks; the Regional Rural Banks, which operate in rural areas, not covered by the scheduled banks; and the cooperative and special purpose rural banks.

Scheduled and Non-Scheduled Banks

Scheduled commercial banks fall under the aegis of the Second Schedule of The Reserve Bank of India (RBI) Act, 1934. These banks satisfy the criteria laid down vide Section 42 (60 of the Act). Some and not all co-operative banks fall under the category of scheduled commercial banks. There are 19 nationalized banks apart from the State Bank of India (SBI) and its 8 associates, 29 Indian private sector banks, 29 foreign banks; around 196 regional rural banks; 5 non-scheduled commercial banks). The public sector banks – the SBI and the nationalized banks – dominate the banking sector in terms of business.

Public Sector Banks

Banks in which the Government of India or the RBI is a majority shareholder, such banks are called the Public Sector Banks (PSBs). The major PSBs are the SBI and its subsidiaries, other nationalized banks, and the Regional Rural Banks (RRBs). Public sector banks aggregate over 70% of the banking sector in India.

Private Sector Banks

Private sector banks are of the old as well as the new type. The old private sector banks operated before Nationalization in 1969. Their small size and region-based operations made them ineligible for nationalization. New private and foreign banks are their bitter rivals. Banks such as The Bharat Overseas Bank Ltd., Bank of Rajasthan, Karnataka Bank Ltd., Lord Krishna Bank Ltd., The Catholic Syrian Bank Ltd., The Dhanalakshmi Bank Ltd., The Federal Bank Ltd., The Jammu & Kashmir Bank Ltd., The Karur Vysya Bank Ltd., The Lakshmi Vilas Bank Ltd., and INGVysya Bank Ltd., fall in this segment.

The amendment of the Banking Regulation Act in 1993 set the pace for the new private sector banks promoted by the financial institutions. Private sector banks focus on service and technology toward off competition from foreign banks. They are currently facing an expansion drive, spreading into semi-urban areas and satellite towns. The leading private banks include ICICI Bank Ltd., HDFC Bank Ltd., IDBI Bank Ltd., IndusInd Bank Ltd., and UTI Bank Ltd.

Foreign Banks

Though similar in operations to other commercial Indian banks, foreign banks are mainly confined to metropolitan areas. Their entry in a new country depends on reciprocity, and economic and political bilateral relations. Taking advantage of the liberalization wave, they seek expansion and diversification. India has set up an inter-departmental committee to endorse applications for entry and expansion of foreign banks. Leading examples are: Citibank, Standard Chartered Bank, Grindlays Bank, Hong Kong Shanghai Banking Corporation, Bank of America, Deutsche Bank, Development Bank of Singapore and Banque National De Paris.

Regional Rural Banks

The 1976 Act of Parliament set up the Regional Rural Banks to develop the rural economy through promotion of agriculture, trade, commerce, industry and extending credit particularly to small and marginal farmers, agricultural laborers, kisans and small entrepreneurs. The Regional Rural Banks fall under the category of the scheduled commercial banks, having been included in the second schedule of the RBI Act.

Complementing the roles of the nationalized and private banks are the specialized Financial Institutions or Non-Banking Financial Institutions (NBFCs). With their focused portfolio of products and services, these Non-Banking Financial Institutions act as an important catalyst in contributing to the overall growth of the financial services sector. NBFCs offer loans for working capital requirements, facilitate mergers and acquisitions, IPO finance, etc., apart from financial consultancy services. Trends are now changing as banks (both public and private) have now started focusing on NBFC domains like long and medium-term finance, working capital requirements.
Growth

The banking scenario has changed rapidly since the 1990s. The decade of 1990s witnessed a sea change in the way banking is done in India. Technology has made tremendous impact on banking. Anywhere banking and anytime banking have become a reality. Foreign banks and the new private sector banks have embraced technology right from the inception of their operations and therefore, they easily have adapted themselves to the changes in the technology. However, the Public Sector Banks (PSBs) and the old private sector banks (barring a very few of them) have not been able to keep pace with these developments. In this regard, one can cite historical, political and other factors like work culture and working relations (which are mainly governed by bipartite settlements between the managements and the staff members) as the main constraints. Apart from these woes, the PSBs were also saddled with some non-viable and loss-making branches, thanks to the social banking concept thrust upon them by the regulatory authorities in the 1960s.

Introduction of prudential norms and liberalization of the economy has infused severe competition posing several challenges in the banking sector. PSBs and old private banks have lost quality manpower as well as quality advances to their counterparts in foreign banks and new private sector banks. The new guidelines under the prudential norms on asset classification and provisioning have further added to their problems by exposing the non-performing assets that hitherto were concealed under the performing assets.

However, regulatory authorities have taken steps to ensure that the banks pass through this transition phase by and large successfully. The reforms initiated in the banking sector have now reached a crucial stage. The Government's stake in some PSBs has been reduced and as a consequence, public equity in these PSBs too has enlarged. This has led to greater responsibility on the bank management since the level of accountability has increased.

Pressures of performance and profitability will keep the banks on their toes all the time as the public shareholders expect good performance along with good returns on their equity. Many PSBs have already started the exercise of cleaning up their balance sheets by shedding the excess baggage. The VRS scheme in the recent past in some of the banks was aimed not only at downsizing the manpower, but also at cutting down the staff costs and increasing the staff performance levels in the long run. Some of these banks are able to run the show to certain extent with low cost funds that are available, thanks to the branch network spread over the length and breadth of the country.

This is one redeeming feature in retaining the profitability levels in the current competitive environment. Realizing this aspect, the new private banks have decided to take an aggressive stand on expanding their base through mergers and by opening many offsite ATMs in addition to expanding the branch network. This has resulted in gaining access to float funds as well as low cost funds by the new private banks. As a result, in the recent past the market share of PSBs has gradually started declining due to the aggressive approach of the new private banks.

Growing consumerism in the Indian metros and other important towns has further added impetus to the fierce competition amongst banks. New private sector banks are initiating steps to reach the rural sector to cut the share of PSBs in rural banking. One of the leading private banks has already undertaken the exercise of redesigning the ATMs to suit the conditions of rural India, so that their ATMs become rural customer-friendly. This measure will have certainly a snowball effect in taking the technology banking into rural areas in the near future and thereby transform rural banking. Technology-driven banking has not only increased the quality of customer service, but has also raised the expectations levels of the customers posing further challenges to the banks. Since most of the functions of banking operations have been automated, new private banks have started recruiting young people having computer knowledge to conduct the daily routine operations. However, the role of experienced people in specialized areas of banking like credit, foreign exchange, treasury and risk management cannot be fully replaced by automation since decision-making is crucial in those areas. Therefore, PSBs have become targets for new private banks to lure people with expertise in these specialized activities. In spite of all these setbacks and competition from new private banks, it is heartening to note that many PSBs have managed to keep their necks above the waters.

Technology has thrown new challenges in the banking sector and new issues have started cropping up, which are going to pose certain problems in the near future. The new entrants in banking are persons with computer knowledge-background. However, over a period of time they would acquire adequate banking experience. Whereas the middle and senior level people have rich banking experience, their computer literacy is at a low level. Therefore, they feel a handicap in this context since technology has become an indispensable tool in banking. No wonder some of these bankers with dynamism have become so fascinated by the impact of technology that they have started acquiring more computer skills to keep pace with the changing times. Quite a few of them have even ventured into IT consultancy in banking by quitting their jobs at banks. This will be posing several complex issues in HRD in the banking sector in the near future. Retaining the skilled manpower is going to be a challenge to the PSBs. At the same time, retaining the talented manpower, which has the twin skills of banking and IT computers expertise will be a major issue with the new private banks.

New private banks see an opportunity (in PSBs in identifying experienced middle and senior level bankers) to compensate the above loss to a certain extent. However, one thing is certain. To survive in this complex scenario, the manpower in banks has to continuously upgrade its computer skills and develop a positive outlook to adapt to the changes that are taking place rapidly.

Bank management also needs to invest in continuous training to upgrade the technical skills of the staff to be in tune with the changing technology. Added to this, the cost of upgrading the technology, which involves huge capital investment will be a major task. Needless to mention that bank managements with foresight and proactive approach will move ahead of others who will be left behind as bystanders.

The need to become highly customer-focused has forced the slow-moving public sector banks to adopt a fast track approach. The unleashing of products and services through the net has galvanized players at all levels of the banking and financial institutions market grid to look anew at their existing portfolio offering. Conservative banking practices allowed Indian banks to be insulated partially from the Asian currency crisis. Indian banks are now quoting at higher valuation when compared to banks in other Asian countries (viz. Hong Kong, Singapore, Philippines, etc.) that have major problems linked to huge Non-Performing Assets (NPAs) and payment defaults. The Indian banking has finally woken up to the competitive dynamics of the 'new' Indian market and is addressing the relevant issues to take on the multifarious challenges of globalization. Banks that employ IT solutions are perceived to be 'futuristic' and proactive players capable of meeting the multifarious requirements of the large customer base. Private banks have been fast on the uptake and are reorienting their strategies using the internet as a medium. The internet has emerged as the new and challenging frontier of marketing with the conventional physical world tenets being just as applicable like, in any other marketing medium. The Indian banking has transformed itself, from being a sleepy business institution to a highly proactive and dynamic entity. This transformation has been largely brought about by the large dose of liberalization and economic reforms that allowed banks to explore new business opportunities rather than generating revenues from conventional streams (i.e., borrowing and lending). The banking in India is highly fragmented with 30 banking units contributing to almost 50% of deposits and 60% of advances. Indian nationalized banks (banks owned by the government) continue to be the major lenders in the economy due to their sheer size and penetrative networks, which assure them high deposit mobilization.

PRODUCT INNOVATION AND BRANDING IN BANKS

Product innovations are a must in today's competitive environment as they send out the message to the customers that banks are constantly striving to offer them enhanced value and convenience. Many new products like mobile banking, real time net banking, have made online shopping much safer. Banks are customizing their solutions according to the customer's requirements. Different types of products are being offered to customers according to their requirements. Innovations are not limited to the product and services offerings. Banks are also looking at their customer databases and seeking ways to improve their relationships with their customers resulting in data-led marketing efforts. This, in turn, leads to relationship pricing, which while not an innovation in product is certainly one in terms of a banks' effort to build relationship with its customers and enhance the brand name.

In the banking industry, 'branding' means the reputation that a bank has established and the trust and confidence that it evokes in the minds of the customers. Branding is being used extensively to ward off the competition.

Box 1: Bank of Baroda – New Initiatives

Recent change in leadership, a new logo and introduction of Core Banking Solution (CBS) have transformed the future prospects of Bank of Baroda. New initiatives like introduction of 12 and 24 hrs branch banking and building performance driven culture have underpinned the growth in business.

Bank of Baroda (BoB) is India's fifth largest government bank asset-wise. Anil Khandelwal was appointed as CMD of this bank on March 1, 2005 for a period of three years. He has been trying to implement a new business model, essentially driven by technology and focus on customer services.

Rahul Dravid, the captain of the Indian cricket team, is the new brand ambassador for the bank.

Bank of Baroda's recent issue of share capital has brought down the government shareholding to 53.81%, post-issue, from 66.83%. The new capital will swell the lending portfolio of the bank and net profit in the coming years.

Leveraging on Technology

The bank has huge plans to leverage on technology for further prosperity. It has embarked on a gigantic project by the name, 'Technology-Enabled Business Transformation Project'. The objective of this project is to make optimum use of technology as a key driver for the growth of business.

Under this project, the bank plans to bring 600 branches under the CBS by March 31, 2007 and all national and international branches and subsidiaries by March, 2009 (See Table). Implementation of CBS will help the bank to interconnect its different delivery channels like ATM, Internet, phone, mobile, kiosk and call center to provide various services 24 x 7.

The other major benefits would be effective risk management, online trading, treasury management at global level, data warehousing and effective use of real time gross settlement, customer relationship management, etc.

To augment its ATM network, the bank has plans to deploy low-cost ATMs in rural areas. The current level of ATM network stands at 1095. Although the bank is trying to strengthen its fleet of ATMs, the best way to do so would be outsourcing or collaborating with other banks. Outsourcing is preferred in developed markets as it reduces the cost and the bank can concentrate on its core activities. To this effect, the bank has taken membership in National Financial Switch, developed by IDRBT, which has 16 other members. The customers of BoB could access the ATMs of other member banks at a reasonable cost.

Table: Core Banking Solution Implementation Pla		
By March 31, 2006	125 Branches	
By March 31, 2007	600 Branches	
By March 31, 2008	1200 Branches	
By March 31, 2009	All branches and subsidiaries	

Source: www.bankofbaroda.com

Customer Services

To build a long-term relationship and retain loyal customers, the bank has been trying to become a one-stop shop for its customers. The bank has recently introduced five new products (Baroda Home Improvement Loan, Baroda Festival Loan, Baroda Professional Loan, Baroda Eco-Friendly Gas Kit Loan and Baroda Loan for Executive Development) and entered into an MOU with National Insurance Company Ltd., for selling insurance products.

Bank of Baroda's debit card has wide accessibility. It can be used at over 15000 visa ATMs in India and over 850000 ATMs around the world. Its card is also accepted at over 100000 Points of Sales (POS) across the country and around 13 million POS around the world. The bank has more than 9.0 lakh debit-cum-ATM cards at present and its wide acceptance benefits customers.

Risk Management

Risk in the banking industry is getting complex day-by-day and to manage it, novel approaches are needed. Risk management in Bank of Baroda seems to be strong. For large and medium exposures, the bank is implementing credit rating system based on rating models. For small and retail exposures, it is using simple rating system. To check its exposure to various industries, it is using the RBI's industry and product classification. The bank also reviews its portfolio of total loans regularly to check whether the overall risk taken by it is in line with the policy adopted.

To manage the market risk with regard to various segments like interest rate, liquidity and foreign exchange, the bank is using VaR (Value at Risk), stress tests and Duration Analysis approaches.

For operational risk, the bank has adopted the recommendations of its consultants and guidelines issued by the RBI. Strong risk management is reflected in the low level of NPAs and profitability.

As per the RBI's guidelines, the bank should adopt Basel II by March 31, 2007. To implement the same, the bank is preparing well and is expected to meet the deadline. The bank will adopt a standardized approach for credit and market risk and basic indicator approach for operational risk.

On the whole, the bank has performed satisfactorily on many parameters and its strong asset management quality and visionary leadership could take it to further heights.

Source: http://www.icfaipress.org/506/PB BankofBaroda17.asp

MARKETING MIX OF BANKS

The marketing mix is generally accepted as the use and specification of the four P's describing the strategic position of a product in the market place. Though some marketers have added other P's such as 'Personnel and Packing', the four basic P's of marketing mix are – Product, Price, Place and Promotion. A right balance or mix of these four elements ensures effective marketing of products or services. Let us now study the marketing mix of banks.

Product

A product mix refers to all the products offered for customer by a particular seller. The product mix of a large bank may include a large number of financial services, provided under one roof. The products offered by the banks are in core or augmented form. Some of the products commonly offered to the customers are:

- Savings Account.
- Current Account.
- Salary Power.
- Power Salute.
- Priority Banking.
- RFC (D) Account.
- Fixed Deposits.
- Recurring Deposits.
- Lockers.
- Debit Card.
- Travel Currency Card.
- Power Drive.
- Power Home.
- Personal Power.
- Loans against Securities.
- Consumer Power.
- Study Power.
- Interest Rate Charts.
- Cash Management Services.
- Lending/Financing.
- Trade Services.
- Foreign Exchange Desk.
- Newsletter.
- Broker Financing.
- Issue Management.
- M&A Advisory.
- IPO Funding.
- Online Trading.
- Utility Provider.
- Bill Archiving.
- Investment Advisory.
- Credit Card.
- No Frills Account.

Box 2: Special Features of Product Offerings

Citibank Offers Loans with no Guarantors: Most banks require that you present a guarantor who will back you up if you default on your loan repayment. It can often be embarrassing to ask friends to stand guarantor, as most banks do not accept relatives as guarantors. Citibank gives home loans upto 90% of the property value, the highest from any bank (only Tata Housing Finance matches this offer).

Citibank Offers a Flexi-savings Account to Reduce Your Cost of Borrowing: The bank will automatically open a Saving Account from which you can give standing instructions to deduct the EMI payments for the loan. You can then prepay the loan at any point in time and be given instant credit for the same, in case you get a large lump sum annual bonus from your employer. Should you require money in an emergency at any point, you can avail an overdraft on this savings account at an interest rate that is the same as that on your Home loan. This works out much cheaper than taking an overdraft on a normal savings account.

HDFC Offers Flexible (Customized) Repayment Schemes: Keeping in mind the fact that each individual has a unique problem requiring unique solutions, HDFC has developed various repayment options like Step-up Repayment Facility, Flexible Loan Installment and Balloon Payment Scheme.

Pari Passu /Second Mortgage Arrangements: HDFC has a tie-up with a large number of Public Sector Organizations and banks which enable it to offer loans to its employees with the flexibility of their spouse also availing a loan from his/her own employer.

Safe Document Storage Facilities: HDFC has state-of-the art storage facilities, which are theft and fire proof, at various locations where loan and property documents are stored. In this way, valuable documents are stored safely over the period of the loan and are released almost immediately after a customer repays his loan. A customer, after availing of a loan can approach HDFC anytime thereafter to increase the Equated Monthly Installments which will help him repay the loan faster.

Home conversion loan is offered to its existing customers who are interested in moving to a new house. Through this scheme, customers can apply to have their existing loan transferred towards the purchase of the new home. Customers may also apply for an additional loan amount for the purchase of the new house. This gives the customer the option of selling their existing house, if they wish to, without having to repay their old loan. The fixed rate loan can be converted into floating rate without any penalty charges. However, the customer will be charged 2% if he refinances the loan from another company.

HSBC offers flexible interest rate loans that can be reset every year depending on the prevailing interest rates at that point. The new interest rate will be applicable for the rolling one year. Guarantor is required only for loans more than Rs.10 lakh.

ICICI launches a 30-year tenure home loan, the longest available. ICICI also launches a variable rate loan with a monthly rest-basis versus the regular fixed rate loan that is on an annual rest-basis. No guarantors are required for loans up to 20 years in most cases. No pre payment fees for any part payment as long as the loan is not fully retired, else 2% charge on pre-paid amount. The customer can repay up to 33% of the outstanding loan in any year without paying penalty.

Box 2: Special Features of Product Offerings

SBI Offers Home Loans with no Start-up Costs: Most banks charge as high as 2% as processing and administrative fees. Prepayment is 2% if the entire loan is pre-paid, else it is 0%. The customer can avoid this penalty by prepaying up to 99% of loan.

IDBI Bank Offers Balance Transfer Scheme: If the customer has taken a fixed rate loan at a high rate of interest a few years back, he can enter into an arrangement with IDBI bank to transfer the loan to them at the current lower rate of interest. The customer will also get free gifts to compensate him for the difference between the old and new EMI. The original EMI cheques will be used by IDBI to recover the loan amount from the customer over the remaining tenure of the loan. The customer will not get the benefits of any further fall in interest rates in this product.

Source: www.abodesindia.com/Loan.asp

Pricing

Pricing of any product or service affects its profitability because the price paid by the customers determines the demand for the offering and also the revenues and margins generated by it. Traditionally, the main source of revenue for any bank was the interest rate differential between the interest paid on investment and that charged on loans. The main pricing strategies adopted are:

- Cost-based pricing.
- Competition based pricing.
- Customer-based pricing.
- Risk-return payoff based pricing.

Pricing should be done taking the following factors into consideration:

- Cost of funds.
- Administrative expenses.
- Credit losses incurred.
- Expected profits.

Place

The new era has brought about efficiency in the distribution channels for marketing of banking service. Earlier, perishability of banking services posed a lot of problems, but the advancement in technology has made the service easily accessible to the customer in the following forms:

- Telephone and call centers.
- ATMs and ALMs (Automatic Lending Machines).
- Internet Banking and home banking.
- Plastic cards (virtual, smart and mini credit and debit cards).
- Virtual branches and automated video banking (where ATMs, phones can be seen but not the staff).
- Mobile Offices and Mobile ATMs: Some banks have their ATMs and extension counters in university campuses and corporate offices such as Infosys. Other measures for distributing products and services are strategic tie-ups with other banks and Visa Card, Master Card, Cirrus Plus, etc.

Promotion

The banking industry has been experiencing intense competition since the opening up of the economy and the entry of the foreign banks. Banks use different promotional strategies like personal selling, sales promotion, advertising, discounts, melas, etc. For example, ICICI started home loan melas and property fair across the country as the lending rates plummeted and the markets became very competitive. Banks also tie up with companies from other industries for the benefit of both the companies and the customers. For example, ICICI Bank tied up with Toyota and provided loans to the customers who bought Skoda Octavia with an EMI of Rs.14,666.

Banks also advertise their services through print and electronic media. They put large hoardings especially in commercial areas. Banks also target specific segments through advertising. For example, banks are providing educational loans to the students.

People

Delivery channels are various technology-based means through which the customers can transact their business with the Bank at their convenience anywhere and at anytime of the day or night. Thus, the customers will have the choice of transacting business through ATM, Internet Banking, Tele-banking and Mobile banking or through plastic cards such as Credit Card, Debit Card, Smart Card etc., Choice of convenient time, the ATMs, Tele-banking, Internet Banking and mobile banking are available round the clock. Choice of place means the banks can be accessed at multiple locations, including overseas locations.

Process

Process plays a significant role in increasing the market share and winning the customers. The main process of the banking industry is to determine the efficiency of the operation and the quality of the service provided to the customers. Every bank has a set of predetermined process for each of its transactions. For instance, the time required for taking the demand draft has come down from few hours to minutes. The increased competition has forced the banking industry to improve its work process and thus efficiency.

Physical Evidence

It is also an important marketing mix to make the service provided by the banking sector tangible. The physical evidence of the banking sector include:

- Ambience, buildings and lawns.
- Air-conditioned branch offices and ATMs.
- Credit and Debit cards.
- Furnished lounge for customers in queue.
- Amenities like newspapers, drinking water, etc., for customers.
- Displayed awards and certifications like ISO 9001.
- Displayed achievements, financial results, business milestones.
- Displayed associations with reputed bluechip companies.
- Cheque books, communication letters, brochures, etc., that are sent to customers.

COMMERCIAL FINANCING

The commercial financing model in Indian banking can be broadly categorized into project finance and working capital finance. These two segments form the pivot around which banks operate.

Project Finance

Banks offer long-term and short-term loans to business houses, corporations to set up their projects. These loans are disbursed after the approval from the banks' core credit validating committee. In India, there are 11 national level and 46 state level financial and investment institutions that cater to long-term funding requirements of the industry. The project finance segment is highly competitive with various players offering innovative schemes to entice corporates.

Working Capital

In order to meet the diverse needs and requirements of the business community, banks offer working capital funds to corporates. Working capital financing is industry-specialized line of business and is largely dominated by the commercial banks.

The Indian banking industry has witnessed dramatic changes in the last decade or so ever since the advent of liberalization and India's integration with the world economy. With these economic reforms and the entry of private players nationalized banks revamped their service and product portfolio to incorporate new, innovative customer-centric schemes. The Indian banking finally woke up to the surging demands of the ever-discerning Indian consumer. The need to become highly customer-focused (generated by high competitive levels) forced the slowmoving public sector banks to adopt a fast track approach. Taking a leaf out of the private sector banks, the public sector banks too went for major image changes (including corporate brand building exercises) and customer-friendly schemes. These customer-friendly programs included revamping of the product and service portfolio by introducing new product and service schemes (like credit cards, hassle-free housing loan schemes, educational loans and flexi-deposit schemes), integration of the branch network by using advance networking technology and customer personalization programs (through ATMs and anytime banking etc.). Many banks have started capitalizing on the recent stock market surge by adding (Initial Public Offering) IPO financing options and schemes in their product mix. IPO finance has received a positive response from the investors and is becoming popular amongst the business community. The objective of all these strategies was very clear – to bridge the service and product-gap that was inherent in the banking system. To cater to the increasing customer demands and the surge in business volumes, many public sector banks have ploughed back funds to invest heavily in technology upgrades and systems like LANs, WANs, etc.

Marketing and brand building programs were also given a new thrust in the new liberalized banking scenario. Promotional budgets were hiked to cater to the new and large discerning target audience. Banks were now keen on marketing their products and service though various mediums to reach their core customers. Direct marketing, Internet marketing, hoarding, press ads, television sponsorships, image makeovers, etc. became an integral part of a bank's marketing mix. To meet the personalized needs of the customer and in order to differentiate its services, banks repositioned themselves in specialized fields like housing loans, car finance, educational loans, etc. to optimally service the customer. Permission marketing became the new strategy that banks began to propound i.e. feeding the customer (with his or her consent) with product and service information and thereby enticing him towards the bank's product – service portfolio.

RECENT TRENDS IN BANKING IN INDIA

In the recent past, the banking sector has been further liberalized in favor of private and foreign banks. The cap on foreign investment in banks has been increased from 49% to 74%. However, banking reforms led to the Indian banks becoming more competitive and agile in order to survive and thrive in today's market.

Marketing of Banking and Insurance Services

The banking industry has seen wide-ranging changes in the past decade.

- Branding banking services has become very important in view of increased competition and little differentiation between services.
- Banks have geared up to face the competition from NBFCs and other unconventional sources.
- The banking industry is trying to make the best use of technology, while trying to avoid the pitfalls involved.
- There is an increased focus on the high net worth customers as they contribute more to the business.
- Banks have become more customer-oriented and offer customized services to meet individual needs.
- Banks have been offering 24-hour service to customers as they contribute through their customer care centers and anywhere anytime banking services.
- As the RBI has made it mandatory for foreign banks to have a capital of Rs.300 crore if they have to setup a subsidiary in India, the market is expected to see a spate of mergers and acquisitions.
- There have been some major changes in the Indian demographics as there have been changes in the life style of customers with an increased willingness among them to take credit.
- There has been a complete shift in the promotional strategies of banks as they tie up with companies from other sections to leverage the synergies involved.
- Banks are embracing cross-selling to earn fee-based income.

New Generation Banking

The liberalized policy of Government of India permitted entry of private sector in the banking. The industry has witnessed the entry of nine new generations of private banks. The major parameter that distinguishes these banks from all the other banks is the level of service that is offered to the customer. The focus has always been centered on the customer – understanding his needs, preempting him and consequently delighting him with various configurations of benefits and a wide portfolio of products and services. These banks have generally been established by promoters of repute or by 'high value' domestic Financial Institutions. The popularity of these banks can be gauged by the fact that in a short span of time, these banks have gained considerable customer confidence and consequently have shown impressive growth rates. Today, the private banks corner almost 25% share of the total share of deposits. Most of the banks in this category are concentrated in the high-growth urban areas in metros (that account for approximately 70% of the total banking business). With efficiency being the major focus, these banks have leveraged on their strengths and competencies, viz. management, operational efficiency and flexibility, superior product positioning and higher employee productivity skills.

The private banks with their focused business and service portfolio have a reputation of being niche players in the industry. This was a strategy that allowed these banks to concentrate on few reliable high net worth companies and individuals rather than cater to the mass market. These well-chalked out strategy plans have allowed most of these banks to deliver superlative levels of personalized services. With the Reserve Bank of India allowing these banks to operate 70% of their businesses in urban areas, this statutory requirement has translated into lower deposit mobilization costs and higher margins relative to the public sector banks.

INSURANCE INDUSTRY

The constant search for security has been an unending endeavor of human race since the beginning of the civilization. Insurance business like other financial services revolves around the trust of the customer. So, most of the insurance companies in India try to win the trust by advertising. To gain the trust of customers, some insurers recruit such people, who have good relations with the target customer. For example, employees of banks and other financial institutions who have taken VRS, are being recruited by the insurance industries to market their services. The Indian insurance industry is segmented into two distinct markets: the life insurance market and the non-life or general insurance market. The insurance sector in India was valued at nearly Rs.450 billion (US\$ 10 bn) in the year 2006.

Evolution

Insurance in India has its history dating back till 1818, when Oriental Life Insurance Company was started by Europeans in Kolkata to cater to the needs of European community. Pre-independent era in India saw discrimination among the life of foreigners and Indians with higher premiums being charged for the latter. It was only in the year 1870, Bombay Mutual Life Assurance Society, the first Indian insurance company covered Indian lives at normal rates.

At the dawn of the twentieth century, insurance companies started mushrooming up. In the year 1912, the Life Insurance Companies Act, and the Provident Fund Act were passed to regulate the insurance business. The Life Insurance Companies Act, 1912 made it necessary that the premium rate tables and periodical valuations of companies should be certified by an actuary. However, the disparage still existed as discrimination between Indian and foreign companies. The oldest existing insurance company in India is National Insurance Company Ltd, which was founded in 1906 and is doing business even today. Insurance industry, earlier comprised only two state insurers – Life Insurers i.e. Life Insurance Corporation of India (LIC) and General Insurers i.e. General Insurance Corporation of India (GIC). GIC had four subsidiary companies. With effect from December 2000, these subsidiaries have been de-linked from parent company and made as independent insurance company Limited, National Insurance Company Limited, New India Assurance Company Limited, National Insurance Company Limited and United India Insurance Company Limited.

Features of Indian Insurance Market

The features of the Indian insurance market can be outlined as below:

- 1. Low market penetration.
- 2. Ever growing middle class component in population.
- 3. Growth of consumer movement with an increasing demand for better insurance products.
- 4. Adequate fillip from the government in the form of tax incentives to the insured, etc.
- 5. India is one of the least insured countries but the potential for further growth is phenomenal.
- 6. General Insurers (Private Companies) have earned around Rs.1,000 crore income.
- 7. Half of the current demand comes from the corporate segment.
- 8. Insurance Regulatory & Development Authority (IRDA) regulates the insurance business.

Market Players

Presently, there are 26 insurance companies with 5 public sector companies and 21 private sector insurance companies. Although the public sector companies still dominate the insurance business, the private players are slowly gaining a foothold.

The following are the important private players in the insurance industry:

- ICICI Lombard Insurance.
- Tata AIG Insurance Company.
- Bajaj Allianz.
- HDFC Chubb Insurance.
- Reliance Insurance.
- Royal Sundaram.
- Cholamandalam MS Insurance.

STRATEGIC ALTERNATIVES FOR INSURANCE INDUSTRY

The history of growth of the insurance industry since reforms, is marked by an allround growth of all players. Almost all players (including the market leader LIC) have aggressively recruited and trained advisors, appointed agents, launched new products, improved customer service standards and revamped/expanded their distribution networks. If at all there was any major difference between players, it was only in time lag in launching services. Every player would like the customers to believe that its service standards are the best or that its agents are the most informed and ethical, but it is debatable whether there are any significant differences. In other words, each company is trying to be 'everything to everybody'.

Our argument is that the strategy of being everything to everybody is risky. Some players justify the above strategy on the basis that the Indian market is huge and it can accommodate everybody. Still, in a market where it is difficult to distinguish oneself sufficiently on service or any other parameter to be able to charge a premium, it will lead to unmitigated price competition to the detriment of all players. One may achieve sales turnover, but margins and profitability will suffer severely. In the insurance industry where large amounts of capital are required, this is risky. While there is room for a few scale players with a finger in every pie, it is profitable for other players to focus on different segments to survive and thrive in a multi-firm open environment. While each company has to choose its own unique positioning based on its unique strengths, the below mentioned generic positioning alternatives appear worth considering. Needless to say, the positioning choices discussed here are not mutually exclusive and can be overlapping.

Variety-Based Positioning

This type of positioning is based on varieties in products and services rather than customer segments. It is a sensible strategy for those companies who have distinctive advantages or strengths in offering certain products and services. In the insurance industry too, it is possible to achieve a unique position by focusing on certain category of products. One such example is Birla Sun Life Insurance, which has been placing particular focus on investment-related products since its launch in India. Through its superior fund management capabilities, the insurance company can deliver better returns on its investment-linked products and thereby carve for itself a leadership position in this segment. Then, there is the entire category of pension products, which is widely touted to have immense growth potential in India due to imminent pension reforms. It is possible to achieve profitable positioning by focusing and excelling in only pension products.

Needs-Based Positioning

This is the most commonly understood positioning and is based on the differing needs of different groups of consumers. This can be done successfully if a company has unique strengths to service a group of customer needs better than others. The insurance needs of customers vary significantly for different groups of customers. The insurance needs of young family with small children will be quite different from that of a family in which the income earner is close to retirement. However, in India most of the life insurance companies have a wide variety of products tailored to different customer needs and there is no company focusing on a particular customer need. An example would be a life insurance company that focuses only on High Net Worth Individuals (HNIs). The needs of HNIs would be quite different from those of a general consumer and would require an entirely different marketing mix right from the type of products offered and the way they are distributed to the promotion methods employed.

Access-Based Positioning

Customers can also be positioned by the way they are accessible. That is different groups of customers may be accessible in different ways even though they may have similar needs. Access is typically a function of customer geography or customer scale. There is excellent opportunity in the insurance industry to employ access-based positioning by targeting the rural insurance sector. The rural market for life insurance is very different from the urban market in terms of needs, income levels and distribution (seasonality, for example), penetration of media and so on. So far except for LIC, no other player has paid any attention to or focus on the rural sector. Contrary to common perception, it is a big opportunity as emphasized repeatedly by such eminent strategists like Prof. C K Prahlad. Rural market can be a highly profitable position if one is able to carefully plan and tailor an entire set of low-cost activities of advertising, distribution and product design, etc. to successfully exploit the potential.

Looking Ahead

There is presently in India an upsurge in consumer awareness, putting immense and unavoidable pressure on the insurance industry. A lifting of the bar on composite insurance, where companies are allowed to do only life or non-life business can also be expected. Instead of categorizing insurance by class, the focus may shift more to the period for which the cover was offered and the risk underwritten. Already, there is demand for permitting the industry to underwrite pure risk, leaving investment decisions to policyholders.

With the entry of competition, the rules of the game are set to change. The market is already beginning to witness a wide array of products from players whose number is set to grow. In such a scenario, the differentiators among the different players are the products, pricing and service. Meanwhile, the profile of the Indian consumer is also evolving. Consumers are increasingly more aware and are actively managing their financial affairs. Today, while boundaries between various financial products are blurring, people are increasingly looking not just at products, but at integrated financial solutions that can offer stability of returns along with total protection.

To satisfy these myriad needs of customers, insurance products will need to be customized. Insurance today has emerged as an attractive and stable investment alternative that offers total protection – Life, Health and Wealth. In terms of returns, insurance products today offer competitive returns ranging between 7% and 9%. Besides returns, what really increases the appeal of insurance is the benefit of life protection from insurance products along with health cover benefits. Consumers today also seek products that offer flexible options, preferring products with benefits unbundled and customizable to suit their diverse needs.

Marketing of Banking and Insurance Services

The trend in developed economies, where people not only live longer and retire earlier, is now emerging in India where once the fear was one of dying too early, now, with increasing longevity, the fear is one of living too long and outliving one's assets. With the breakdown of traditional forms of social security like the joint family system, consumers are now concerning themselves with the need to provide for a comfortable retirement.

This trend has been further driven by the long-term decline in interest rates, which makes it all the more necessary to start saving early to ensure long-term wealth creation. Today's consumers are increasingly interested in products to help build wealth and provide for retirement income.

This all adds up to major change in demand for insurance products. While sales of traditional life insurance products like individual, whole life and term will remain popular, sales of new products like single premium, investment-linked, retirement products, variable life and annuity products are also set to rise. Firms will need to constantly innovate in terms of product development to meet ever changing consumer needs. However, product innovations are quickly and easily cloned. Pricing will also not vary significantly, with most product premiums hovering around a narrow band.

In this competitive scenario, a key difference will be the customer experience that each life insurance player can offer in terms of quality of advice on product choice, along with policy servicing and settlement of claims. Service should focus on enhancing the customer experience and maximizing customer convenience. Long-term growth in the business will depend greatly on the distribution network, where the emphasis must evolve from merely selling insurance to acting as financial advisors, helping customers plan their finances depending on life stage and personal requirements. This calls for a strong focus on training of the distribution force to act as financial consultants, and build a long lasting relationship with customer. This would help create sustainable competitive advantage which is not easily matched.

Insurance Intermediaries and Distribution Channels

The intermediaries in the insurance business and the distribution channels used by carriers will perhaps be the strongest drivers of growth in the sector. Multi-channel distribution and marketing of insurance products will be the smart strategy for the Indian market. While tied agents will continue to play an important role in distribution, alternative channels like corporate agents, brokers and bancassurance will play a greater role in distribution. Firms will need to forge relationships with the partners for strategic advantage. They need to have strong partner relationship management. For example, local partners may have strong distribution channel in their line of business. That can be used to sell insurance also in a cost-effective manner.

The time has come for the industry to gradually move from traditional individual agents towards new distribution channels, with a paradigm shift in creating awareness and not just selling products. There are 8,50,000 insurance agents in India and the qualitative selection of agents by companies is imperative to gain the cutting edge.

Work-site marketing, relatively inexpensive and easy to launch, is one potential distribution channel. In this scenario, the sale of financial products and other services to employees is through workplace participation and is entirely on a voluntary basis, where the employee pays for the products generally through a payroll deduction. Products must match the needs of the customers. Moreover, protection of policyholders must be paramount.

Wealth Management

Companies must constantly explore avenues to increase the number of distribution channels through a variety of distribution patterns, particularly given the rapidly changing customer profile. Traditional intermediaries have played a very important role as a distribution outlet for insurance services and products. Enter the new players: the Internet and telemarketing, who will play an increasingly critical role in customer relationship.

Like in the European market, bancassurance can be an effective channel. In countries like Italy, France and Spain, insurance companies have taken advantage of customers' typical loyalty to single banks and pattern of long-term banking relationships by successfully selling their products through these banks. Here, banks can leverage their existing resources and earn supplementary fees while widening their range of available services. In the face of strong profitability pressures in their traditional banking services, banks are likely to seize opportunities to expand their offerings by including insurance products.

The movement is more likely to be led by those who adapt. Banks moving towards cutting edge technology would have an upper edge in selling insurance products. At present, 12% of the world's insurance products are sold through the Internet, a figure likely to grow exponentially with a likely increase in customer usage of the internet for their own research and product comparisons.

A cautionary note: Rural and semi-urban sectors are the ones that could be serviced by the bancassurance model. However, there are some reservations against the efficacy of insurance distribution through public sector banks. These banks do not have deep relationships with their customers. Some of these banks were not able to sell even the products of their own Mutual Fund subsidiaries at the branches. Public sector banks will have to gear themselves adequately to undertake this task, since selling insurance calls for specialized skills.

Other approaches, like call-center, direct marketing and the Internet will grow dramatically in importance over the next several years. These ensure direct contact with the customers. It will enable firms to acquire, retain and build loyalty among customers while lowering transaction costs. To make multiple channel delivery work, all channels must be integrated tightly to deliver on the promise of service anytime, anywhere. Information gathered by each channel must be combined to provide a consolidated view of the customer relationship and identify likely financial needs.

A customer accessing any channel should be recognized as a client and not required to provide information again. What's more, a client should be able to move easily from one mode of service to another (for example, from online to face-to-face to online) without disruption in service.

The four main challenges facing the industry are product innovation, distribution, customer services and investments. Unit-linked personal insurance products might find greater acceptability with rising customer awareness about customized, personalized and flexible products. Flexible products and new technology will play a crucial role in reducing the cost, and, therefore, the price of insurance products. Finding the niche markets, having the right product mix through add-on benefits and riders, effective branding of products and services and product differentiation from competitors' offering will be the few challenges faced by new companies.

In today's highly competitive financial services environment, effective organizations will employ technology in a strategic role to achieve competitive edge. Technology will play an increasing role in aiding design and administering of products, as well in efforts to build life-long customer relationships.

At the same time, technology investment will only help as long as firms find the right people: people with the right attitude, values and ethics, commitment to excellence and focus on customer service. The critical success factor is a top-down emphasis on exceeding customer expectations with quality people, excellent products and legendary service. As has been seen in other financial services, the

entry of private players ensures that customer will be the beneficiary in the long run. It will also result in growing the market and extending the reach of insurance across the country.

Thus, apart from the normal issues facing any new company, many new Indian private insurance players will need to cope with the challenges of working with a joint venture partner. They will be competing with large and well-entrenched government-owned players. They have to overcome regulatory hurdles, change the attitude of new recruits and satisfy some very high customer expectations. Also, the players will have to consider the Indian market as a long-term investment and maintain clear-cut objectives and constant monitoring at all levels.

Rural-Urban Mix

It must be borne in mind that India is a predominantly rural country and will continue to be so in the near future. New players may tend to favor the "creamy" layer of the urban population. But, in doing so, they may well miss a large chunk of the insurable population. A strong case in point is the current business composition of predominant market leader – the Life Insurance Corporation of India. The lion's share of its new business comes from the rural and semi-rural markets. In a country of 1 billion people, mass marketing is always a profitable and cost-effective option for gaining market share. The rural sector is a perfect case for mass marketing.

Competition in rural areas tends to be "kinder and gentler" than that in urban areas, which can easily be termed cut-throat and the generally smaller policy amounts in rural areas would be more than offset by the higher volume potential in these areas in contrast with urban areas. Identifying the right agents to harness the full potential of the vibrant and dynamic rural markets will be imperative.

Rural insurance should be looked upon as an opportunity and not an obligation. A smaller bundle of innovative products in synergy with rural needs and perception and an efficient delivery system are the two aspects that have to be developed in order to penetrate the rural markets.

MARKETING MIX OF INSURANCE INDUSTRY

Product

Before the liberalization of the insurance sector, the Indian insurance industry is segmented into two distinct markets: the life insurance market and the non-life, or general insurance market.

Life Insurance

Life insurance plans are generally grouped into:



Motor Insurance: Motor insurance is mandatory for all vehicles in India. Motor insurance is classified into:

Third Party Motor Insurance: Only insures the party other than the owner in an incident.

Comprehensive Motor Insurance: Both the owner and the third party are involved. The premium for motor vehicle is decided on the value of the vehicle and location where it is to be registered. The premium for Heavy Commercial Vehicle is decided on the value of the Vehicle and Gross Laden Weight.

Property Insurance: Property insurance covers land, building and the contents of the building.

Burglary: Burglary insurance covers all losses arising out of burglary committed in one's premises.

Fire Insurance: Fire insurance is a comprehensive policy. The policy besides covering loss on account of fire, also includes loss due to Earthquake, Riots, Strikes, Malicious intent and Floods.

Marine Insurance:

- Cargo in transit.
- Cargo declaration policy.
- Marine hull insurance.

Travel Policy: Travel policies are designed to take care of all the problems that generally occur while travelling.

Business Policy: This policy mainly covers the risks of loss of business, goods, plants, machinery, etc.

Product Benefits

Superior to any other Savings Plan

Unlike any other savings plan, a life insurance policy affords full protection against risk of death. In the event of death of a policyholder, the insurance company makes available the full sum assured to the policyholders' near and dear ones. In comparison, any other savings plan would amount to only the total savings accumulated till date. If the death occurs prematurely, such savings can be much less than the sum assured, which means that the potential financial loss to the family is sizable.

Encourages and Forces Thrift

A savings deposit can easily be withdrawn. The payment of life insurance premiums, however, is considered sacrosanct and is viewed with the same seriousness as the payment of interest on a mortgage. Thus, a life insurance policy in effect brings about compulsory savings.

Easy Settlement and Protection against Creditors

A life insurance policy is the only financial instrument, the proceeds of which can be protected against the claims of a creditor of the assured by effecting a valid assignment of the policy.

Ready Marketability and Suitability for Quick Borrowing

A life insurance policy can after a certain time period (generally three years), be surrendered for a cash value. The policy is also acceptable as a security for a commercial loan, for example, a student loan. It is particularly advisable for housing loans when an acceptable LIC policy may also cause the lending institution to give loan at lower interest rates.

Disability Benefits

Death is not the only hazard that is insured; many policies offer disability benefits. Typically, these provide for waiver of future premiums and payment of monthly installments spread over a certain time period.

Accidental Death Benefits

Many policies can also provide for an extra sum to be paid (typically equal to the sum assured) if death occurs as a result of accident.

Price plays a vital role in marketing of insurance services. India is a very price sensitive market. However, 65% of the business is in tariff, where pricing is still determined by the Government, which decides the rates, terms and conditions for various businesses like Fire, Motor, Engineering, Workmen compensation insurance, etc. It is going to change over the next few years. In non-tariff products like personal accident, burglary, cash-in-transit, marine transit, etc., there is a lot of pressure on pricing. Although the insurers are free to quote the rates, companies will have to be reasonable while determining a pricing structure because, across the globe, there are instances of companies going bust while playing the game of undercutting state-run companies.

LIC made several downward revisions in its premium rating in order to benefit the 'substandard' lives, and also substantially reduced the number of vocations that were classified as hazardous. The additional premium being charged for granting accident benefit was reduced from Rs.2 to Re.1 per thousand sum assured. The charging of extra premium in respect of policies on female lives was also discontinued.

The three main factors used for determining the premium rates under a life insurance plan are – mortality, expense and interest. Significant changes in any of these factors normally entail revision of premium rates.

Mortality

The average rate of mortality is one of the main considerations when deciding upon the pricing strategy. In a country like South Africa, which is unfortunately plagued by a host of diseases like AIDS, the threat to life is very important. The price of the installments, its frequency and its premium charges are all decided accordingly.

Expenses

The cost of processing, the kind of infrastructure costs involved and the payment made to the agents, reinsurance companies as well as the registration, etc. are all incorporated into the costs of the installments and premium sum, and forms the integral part of the pricing strategy.

Interest

The interest rate is one of the major factors, which determines people's willingness to invest in insurance issues. If the interest rate provided by the banks is much greater than the perceived returns from the insurance premiums, the people would not be willing to put their funds in this sector.

Place

Place in terms of channels for distribution is very important in marketing insurance products. Insurance companies need to offer personalized services. To reduce the risks involved, they need large number of able agents. LIC is one of the best examples of a successful network resulting in good business. Even after decentralization in the insurance sector, LIC continues to be the market leader in the Life Insurance sector in terms of market share and the number of policies sold.

The core product of insurance is best sold through personal selling. The other distribution channels like internet, advertising, telemarketing, etc., can be used to provide the supplementary services to the customers. For example, the internet and the call center service can provide information to the customer as and when required.

Price

Promotion

There has been an increased emphasis on promotion in the insurance industry in the recent times. Advertising in insurance explains the need of insurance and its benefits. There is a very little difference in the service of one sector to that of the other. Under sales promotion of insurance products, the widely used techniques are Reduced Premiums, Discounts, Gift Coupons, and Future Price Discounts. Tie-ups with the automobile companies are one of the important ways to promote the products. For example, Maruti has tied up with Bajaj Allianz to provide insurance services to their customers.

Process

The processes involved in the insurance industry should be customer-friendly. The speed and accuracy of payment is of vital importance. The processing methodology should be such that it provides total ease and convenience to the customers. Installment schemes should also be streamlined to cater to growing demands of the customers and keep pace with the competition in the market. For instance, one of the LIC's steps in this direction is to accept deaths certified by its insurance agents in the absence of their records. In this way, the agents can accelerate the settlement of an insurance claim.

People

While agents continue to be the predominant distribution channel, today a number of innovative alternative channels are being offered to consumers. Some of them are brokers, the internet and direct marketing. Though it is too early to predict, the widespread branch network in India could lead to banks emerging as a significant distribution mechanism. Initially, insurance was seen as a complex product with a high advice and service component. Buyers prefer a face-to-face interaction and place a high premium on brand names for reliability. As products become simpler and awareness increases, they become off-the-shelf commodity products. Sellers move to indirect channels such as the telephone or direct mail. Insurance is sold by various intermediaries, not necessarily insurance companies. Some of them are brokers, the internet and direct marketing.

Physical Evidence

In insurance marketing, providing physical evidence to the customers is little bit difficult. In most of the cases, the customers might not ever visit the premises because in many cases they buy the policy through the agent at their residence or office. Therefore the infrastructure, building, equipment, etc., plays very little role as physical evidence. However, a good ambience, well-dressed and well-behaved employees, certificates and achievements of the company are some of the techniques used by insurance companies to provide the physical evidence.

The Indian insurance sector will register a high growth rate in the future years. This will be due to the innovative products, better distribution network, better services coupled with other never before changes that have taken place in the insurance sector. Stress on branding, customer service and tailor-made products will assume importance besides information technology that will become vital to bring down costs in the future. Also data warehousing, ensuring effective cross selling will grow in importance to exploit the largely unexploited market.

SUMMARY

• The bank is a Financial Institution which accepts deposits and lends money to its customers. As banks deal with their customers finances, banking is a high involvement service. Therefore, banks need to win the trust of their customers. Based on the customer profile, banks segment their market into retail banking, corporate banking, personal banking, etc. Depending on customer needs for finance, the market can also be segmented into trade finance, consumer finance, etc.

- The products offered by a bank may be in the core or augmented form. The best example for the core products are savings accounts and the loans offered by the banks. The augment products include internet banking, ATMs, 24-hrs customer services, etc. These augmented services help the service provider to differentiate their services from that of the competitor.
- In the pricing of banking services, determining the interest rates plays an important role, as these rates in turn determine the revenues and the profits of the bank. The place element of the marketing mix refers to making the services available and accessible to customers. Improvements in the availability and accessibility of services have changed the process of banking. The promotion mix in banking refers to varied strategies like personal selling, advertising, discounting, discounts and publicity, etc. used by banks to promote their offerings.
- People play an important role, even though their role has been eclipsed by technology. Process determines the efficiency of banking operation and the service quality. Physical evidence includes the infrastructure and buildings, ATM, etc. Even the quality of cheque books and mailers to customers forms physical evidence.
- A number of concerns are being expressed regarding the opening up of the insurance sector. But most of them seem to be unfounded. National interest lies in increasing the penetration of insurance products, increasing the retention of premium in India and mobilizing resources for infrastructure needs.
- It will be vital for new entrants to choose their product and service offerings carefully. In doing so, they must consider two possible pitfalls. First, when estimating the potential of the Indian insurance market, it is tempting to look at macroeconomic variables such as the ratio of premium to GDP, which is indeed comparatively low in India. The second trap is the tendency to target the business of existing companies rather than expanding the market. New players find it easier to try to capture-existing customer by offering better service or other advantages. Yet, the benefits of this strategy are likely to be limited. A better approach may be to examine specific niches where demand can be met or stimulated.
- Competition means that players aggressively target potential customers. This will increase the penetration of insurance and help build local professionals with world class expertise by introducing the best global practices. Competition will also develop a better understanding of consumer requirements leading to more customized products apt for the market place. Besides, it would also improve the tertiary sector tremendously. Development of the tertiary sector would imply new avenues for actuaries, accountants, stockbrokers and others.

Chapter X

Marketing of Mutual Fund and Portfolio Management Services

After reading this chapter, you will be conversant with:

- Structure of the Indian Mutual Funds
- Marketing Mix for Mutual Funds
- Benefits of Mutual Fund Investments
- Recent Trends in Mutual Funds
- Portfolio Management Services
- Market Segmentation and Marketing Mix
- Recent Trends in Portfolio Management Services

Introduction

The Indian Mutual Fund (MF) industry came into existence in 1964 with the formation of the Unit Trust of India, at the initiative of Government of India and Reserve Bank of India (RBI). In recent years, mutual funds have become the most important among the new capital institutions. Several public sector banks and financial institutions have set up mutual funds on a tax-exempt basis. Their main function is to mobilize the savings from the general public and invest them in stock market securities. Accordingly, mutual fund is a mechanism for pooling the resources by issuing units to investors and investing the funds in securities in line with the objectives. Like all investments, they also carry certain risks. The fund manager invests this money in different securities like shares, bonds and money market instruments depending on the objective of the scheme. Mutual fund provides an alternative to investing directly. Mutual fund is a good investment option for individuals who lack investment acumen or time and inclination to take charge of one's personal finances.

STRUCTURE OF THE INDIAN MUTUAL FUNDS

The Indian mutual fund system has many funds/schemes in all categories i.e., equity, balanced, income, etc., with some being open-ended and some being closed-ended. The Unit Scheme 1964 is commonly called as US 64. This is a balanced fund, which is the biggest scheme with a corpus of about Rs.200 billion. UTI was floated by Financial Institutions and is governed by a Special Act of Parliament. Most of its investors believe that the UTI is government-owned and controlled, which while legally incorrect, is true for all practical purposes.

The second largest category of mutual funds is floated by nationalized banks. Canara Bank Asset Management floated by Canara Bank and SBI Funds Management floated by the State Bank of India are some examples. GIC Asset Management Co. Ltd (GICAMC) floated by General Insurance Corporation and Jeevan Bima Sahayog AMC floated by the LIC are some of the other prominent ones. The aggregate corpus of funds managed by this category of AMCs is about Rs.150 billion.

The third largest category of mutual funds is floated by the private sector and foreign asset management companies. The largest of these are Prudential ICICI AMC and Birla Sun Life AMC. The aggregate corpus of assets managed by this category is in excess of Rs.250 billion. Some of the AMCs currently operating are:

Name of the AMC	Nature of Ownership
Alliance Capital Asset Management (I) Private Limited	Private foreign
Birla Sun Life Asset Management Company Limited	Private Indian
Bank of Baroda Asset Management Company Limited	Banks
Bank of India Asset Management Company Limited	Banks
Canara Bank Investment Management Services Limited	Banks
Cholamandalam Cazenove Asset Management Company Limited	Private foreign
Dundee Asset Management Company Limited	Private foreign
DSP Merrill Lynch Asset Management Company Limited	Private foreign
Escorts Asset Management Company Limited	Private Indian
First India Asset Management Company Limited	Private Indian
GIC Asset Management Company Limited	Institutions
IDBI Investment Management Company Limited	Institutions
Indfund Management Limited	Banks

Table 1: Asset Management Companies (AMCs)

Wealth Management

Name of the AMC	Nature of Ownership
ING Investment Asset Management Company Private Limited	Private foreign
J M Capital Management Company Limited	Private Indian
Jardine Fleming (I) Asset Management Company Limited	Private foreign
Kotak Mahindra Asset Management Company Limited	Private Indian
Kothari Pioneer Asset Management Company Limited	Private Indian
Jeevan Bima Sahayog Asset Management Company Limited	Institutions
Morgan Stanley Asset Management Company Private Limited	Private foreign
Punjab National Bank Asset Management Company Limited	Banks
Reliance Capital Asset Management Company Limited	Private Indian
State Bank of India Funds Management Company Limited	Banks
Shriram Asset Management Company Limited	Private Indian
Sun F and C Asset Management (I) Private Limited	Private foreign
Sundaram Newton Asset Management Company Limited	Private foreign
Tata Asset Management Company Limited	Private Indian
Credit Capital Asset Management Company Limited	Private Indian
Templeton Asset Management (India) Private Limited	Private foreign
Unit Trust of India	Institutions
Zurich Asset Management Company (I) Limited	Private foreign

Source: Lttp://www.indianmba.com/Faculty-Column/FC589/fc589.html

Strategic Marketing Plan

Consequent to the changes in the Indian economy, the financial market particularly the mutual fund market, is going to be more competitive. Hence, marketing of mutual funds will become more complex in a heterogeneous market environment. At present, public sector mutual funds are operating in a near protective environment and enjoying a sort of oligopoly. But in the emerging situation, private mutual funds are likely to enter the market hotting up competition. Besides, more and more new products are likely to emerge and offer further alternatives to investors. In the savings market, growing awareness due to easy accessibility of information and presence of competing alternative savings instruments will make the customers' decision more selective. Consumers, in future, are thus going to be sovereign and more powerful in dictating the market. Therefore, future market for mutual funds is going to be different from the present. In order to grow and service in that market, managers of mutual funds should have the ability to identify and prepare themselves to manage the changes. This calls for drawing a strategic market plan (strategic plan) which is defined as 'a process of deciding the objectives and the policy which are to govern the acquisition, use and disposition of resources'. Traditional strategic plan aims at achieving product/market efficiency by achieving external and internal efficiency. In the savings market, growing awareness among the customers and presence of competing alternative savings instruments will make their decision more selective.

MARKETING MIX FOR MUTUAL FUNDS

Product

The list of products is given in Chapter 7 under the heading 'Types of Mutual Funds.'

Price

Generally, the mutual funds are priced on the basis of Net Asset Value (NAV). The Net Asset Value of the fund is the cumulative market value of the assets net of its liabilities. It is calculated simply by dividing the Net Asset Value of the fund by the number of units. However, most people refer loosely to the NAV per unit as NAV, ignoring the "per unit". We also abide by the same convention.

Calculation of NAV

The most important part of the calculation is the valuation of the assets owned by the fund. Once it is calculated, the NAV is simply the net value of assets divided by the number of units outstanding. The detailed methodology for the calculation of the asset value is given below:

Asset Value = Sum of market value of shares/debentures + liquid assets/cash held, if any + dividends/interest accrued – (Amount due on unpaid assets, expenses accrued but not paid).

Promotion

With more and more private and global players entering the mutual fund market, the market has become quite competitive in the recent past. Mutual funds, as an investment option, are now competing with commercial banks and other financial institutions for the investor's savings. Mutual fund companies need to differentiate themselves from the other investment avenues in the market and position their services exclusively in the customer's mind. To do this and to increase their individual market share within the industry, they need to adopt innovative promotional strategies. Apart from the traditional promotional strategies like personal selling and advertising, market players are adopting new methods like strategic tie-ups.

UTI Mutual Fund has tied up with the world's top institutional asset manager, State Street Global Advisors. The institutional asset manager would offer advice to UTI on its international investments. This is expected to result in better investment decisions by UTI and thus better returns to its investors.

Process

The process of investment by one mutual fund company can be quite different from that of another. In some companies, the fund manager is given a free hand and he decides where to invest and how much to invest. On the other hand, the investment decision in some companies is strictly governed by the company itself. Any fund manager can operate within the defined parameters of the company. This difference in investment processes defines the style of functioning of the fund and determines its success.

People and Physical Evidence

The process of investment decision-making in a mutual fund company determines the importance of the individuals in the company. As discussed in the earlier example, if the fund manager has a free hand to decide the investment of savings of thousands of unit holders, he needs to be very competent and judicious in his decision-making. In such companies, people become the most important element of the marketing mix. In fact, companies publicize the success of their fund managers who have delivered consistent results, to promote their services. A mutual fund is relatively new investment option compared to the other investment avenues like bank deposits and bonds. Therefore, the knowledge of this option is limited not only among the customers, but even among the intermediaries like the agents and third party distribution companies. So, mutual fund companies invest in training not only their own employees but also those of the distribution companies and the agents. It is quite common for mutual funds like Reliance and SBI to conduct seminars and workshops to give the required impetus to the distributors.

Providing physical evidence to the customer is one of the most difficult aspects of the mutual fund business. As there are very few instances of the customer entering the company premises, buildings and infrastructure can rarely be used as physical evidence. Therefore, companies use their channels of distribution like banks and post offices to add an element of credibility to their services. They also try to use their service personnel to reduce the perceived risk of customers. One of the most important ways is to promote the earlier successes of the company in a big way.

BENEFITS OF MUTUAL FUND INVESTMENTS

Professional Management

Mutual funds provide the services of experienced and skilled professionals, backed by a dedicated investment research team that analyzes the performance and prospects of companies, and selects suitable investments to achieve the objectives of the scheme.

Diversification

Mutual funds invest in a number of companies across a broad cross-section of industries and sectors. This diversification reduces the risk because seldom do all stocks decline at the same time and in the same proportion. You achieve this diversification through a mutual fund with far less money than you can do on your own.

Convenient Administration

Investing in a mutual fund reduces paperwork and helps you avoid many problems such as bad deliveries, delayed payments and follow up with brokers and companies. Mutual funds save your time and make investing easy and convenient.

Return Potential

Over a medium to long-term, mutual funds have the potential to provide a higher return as they invest in a diversified basket of selected securities.

Low Costs

Mutual funds are relatively less expensive than direct investments in the capital markets because the benefits of scale in brokerage, custodial and other fees translate into lower costs for investors.

Liquidity

In open-ended schemes, the investor gets the money back promptly at the net asset value-related prices. In closed-ended schemes, the units can be sold on a stock exchange at the prevailing market price or the investor can avail of the facility of direct repurchase at NAV-related prices.

Transparency

The investor gets regular information on the value of his investment in addition to disclosure on the specific investments made.

Flexibility

The investor can systematically invest or withdraw the funds according to his needs and convenience through regular investment plans, regular withdrawal plans and dividend reinvestment plans.

Affordability

Investors individually may lack sufficient funds to invest in high-grade stocks. A mutual fund allows even a small investor to take the benefit of its investment strategy.

Well-Regulated

All mutual funds are registered with SEBI which regularly monitors the operations of mutual funds to protect the interests of investors.

Table 2 presents the comparative advantages of mutual funds over banks as investment vehicles.

	Banks	Mutual funds
Returns	Low	Better
Administrative expenses	High	Low
Risk	Low	Moderate
Investment options	Less	More
Network	High penetration	Low but improving
Liquidity	At a cost	Better
Quality of assets	Not transparent	Transparent
Interest calculation	Minimum balance between 10th and 30th of every month.	Everyday
Guarantee	Maximum Rs.1 lakh on deposits	None

Table 2: Banks v/s Mutual Funds

RECENT TRENDS IN MUTUAL FUNDS

In February 2003, the Unit Trust of India Act 1963 was repealed and UTI was bifurcated into two separate entities. One is the specified undertaking of the Unit Trust of India with assets under management of Rs.29,835 crore as at the end of January 2003, representing broadly, the assets of US 64 Scheme. The second is the UTI Mutual Fund Ltd, sponsored by SBI, PNB, BOB and LIC. Now, it is managing nearly Rs.37,790 crore worth of assets. In spite of the stiff competition and dwindling market share, UTI still remains a formidable force to reckon with.

Last six years have been the most turbulent as well as exciting for the industry. New players have come in, while others have decided to close shop by either selling off or merging with others. Product innovation is now passé with the game shifting to performance delivery in fund management as well as service. Those directly associated with the fund management industry like distributors, registrars and transfer agents and even the regulators have become more mature and responsible.

The industry is also having a profound impact on financial markets. While UTI has always been a dominant player on the bourses as well as the debt markets, the new generation of private funds which have gained substantial mass are now seen flexing their muscles. Fund managers, by their selection criteria for stocks have forced corporate governance on the industry. By rewarding honest and transparent management with higher valuations, a system of risk-reward has been created where the corporate sector is more transparent than before.

The most important trend in the mutual fund industry is the aggressive expansion of the foreign-owned mutual fund companies and the decline of the companies floated by nationalized banks and smaller private sector players.

Wealth Management

Many nationalized banks got into the mutual fund business in the early nineties and got off to a good start due to the stock market boom prevailing then. These banks did not really understand the mutual fund business and they just viewed it as another kind of banking activity. Few hired specialized staff and most generally chose to transfer staff from the parent organizations. The performance of most of the schemes floated by these funds was not good. Some schemes had offered guaranteed returns and their parent organizations had to bail out these AMCs by paying large amounts of money as the difference between the guaranteed and actual returns. The service levels were also very bad. Most of these AMCs have not been able to retain staff, float new schemes, etc. and it is doubtful whether, barring a few exceptions, they have serious plans of continuing the activity in a major way.

The experience of some of the AMCs floated by private sector Indian companies was also very similar. They quickly realized that the AMC business could make money in the long-term, but requires deep pocketed support in the intermediate years. Some have sold out to foreign-owned companies, some have merged with others and there is general restructuring going on.

The foreign-owned companies have deep pockets and have come in here with the expectation of a long haul. They can be credited with introducing many new practices such as new product innovation, sharp improvement in service standards and disclosure, usage of technology, broker education and support, etc. In fact, they have forced the industry to upgrade itself and service levels of organizations like UTI have improved dramatically in the last few years in response to the competition provided by these.

PORTFOLIO MANAGEMENT SERVICES

Portfolio Management Services are offered to investors with a general responsibility to maximize returns.

Definition of Portfolio Management Services

Portfolio management services refer to managing the funds of individuals or institutional customers, taking into consideration their short-term and long-term needs. This involves maximizing the returns for the customers while mitigating the risk. Portfolio management services need the professional expertise of the portfolio managers, who technically analyze each investment option and choose the ones that best suit the customer needs. It also involves distributing the available funds among the investment options for the best results.

Scope of Portfolio Management Services

Portfolio management services refer to the services provided to the investors wherein the agency takes the responsibility of maintaining the fund effectively for maximum results. The agency converts the funds into compatible portfolios on the basis of the objectives and constraints of the investor. It continuously evaluates and makes necessary adjustments for better results. The financial services in India are expanding and experiencing a boom because of the attraction of a good return in a short period is very tempting to the investors. Naturally, more and more firms are entering into this field. Although there is no regulation, the Securities and Exchange Board of India (SEBI) has stated that only registered merchant bankers should be allowed to render portfolio management services. Nevertheless, several traditional brokers and financial companies are venturing into it and catering to chosen high worth NRIs and Indian clients on an informal basis. Merchant banking subsidiaries of banks and finance companies are also providing these services to corporate clients. The investment in these cases, however, is restricted to fixed income securities, unit and money market instruments, especially the call money and the bill markets. Given the boom in the market, the volume has increased manifold inviting severe competition. The complexity is compounded due to the Reserve Bank of India (RBI) regulations and some other restrictions. This will mean that the companies will have to offer good service to their clients as the

Marketing of Mutual Fund and Portfolio Management Services

differentiation in the offer will slowly be erased. Finally, the performance of the portfolio is measured and revisions are carried out whenever necessary. The objective of the exercise is to build a portfolio that shows continuous appreciation in its value by optimizing the results and minimizing the risks. The clients are classified on the basis of the risk-taking ability. Periodically, portfolios are generated to suit the different risk-averse investors.

MARKET SEGMENTATION AND MARKETING MIX

Portfolio Management Services are used by High Net Worth Individuals (HNIs) and corporates. However, the market is evolving and the service is being extended to individual investors on a large scale, who have healthy investment opportunities. Therefore, based on the customer profile, the market can be segmented into three categories namely, average individual investor, high net worth individual and corporate investor.

Marketers can target a specific segment and cater to its needs rather than try to serve the whole market. This is because the needs of each of these segments are very different from others.

Based on the service offered and the requirements of the customer, the market can be divided into discretionary services and non-discretionary services. While discretionary portfolio management services allow the portfolio manager to take independent investment decisions within the broad framework of asset allocation, non-discretionary portfolio management services require that every decision taken by the manager be vetted by the investor.

Product

As discussed under segmentation, portfolio managers would do better to identify their target segments to serve them better. For example, a portfolio manager catering to the portfolio of Institutional Investors understands their requirements and their risk-taking abilities better. However, when he needs to advise an individual investor with a portfolio of Rs.10 lakh, he might not be able to do a good job. Therefore, the product needs to be designed based on the unique requirements of each investor. Each product should take into consideration the following aspects:

- Catering to investment needs.
- Adherence to predetermined goals.
- Conformity to market guidelines and constraints.
- Ensuring investment returns.

Different players cater to different segments. For instance, the Portfolio Management Services (PMS) section of the State Bank of India was set-up to handle the investment and regulatory-related concerns of Institutional Investors and has the knowledge and expertise to manage large portfolios.

Price

Pricing is very important in the PMS sector as high fees can turn away potential customers who would then be lured by mutual fund schemes. Therefore, pricing services competitively is almost a necessity for the survival of the PMS companies. However, reputed companies with strategic tie-up with international banks can afford to charge a premium price.

Pricing methods and the prices of these services vary from one service provider to the other. However, some of the most commonly used methods are percentage of value of portfolio assets or a percentage of returns.

• **Management Fees:** Minimum fees charged based on weighted average closing NAV for the quarter.

Wealth Management

- **Custody Fees:** Custody fees will be 0.25% p.a. (payable quarterly) of assets under management, subject to a maximum of Rs.50,000 p.a. payable quarterly.
- **Performance based Management Fee:** Performance-based management fee will be charged based on performance in terms of positive returns on portfolio. The fee increases proportionately with the percentage increase in profits.

People

Once customers specify their requirements, they leave investment decisions to the fund managers in the case of discretionary PMS. Discretionary portfolio management services allow the portfolio manager to take investment decisions on behalf of his clients within the broad parameters of asset allocation. This emphasizes the importance of people. Even in the case of non-discretionary PMS, portfolio managers give suggestions to their clients to enable them to take judicious decisions. Therefore, the role of people is very significant in the case of portfolio management services. Portfolio managers are the most important assets of a PMS company. In fact, these companies draw attention to their expert managers in their advertisements and promotional campaigns.

Place

One of the major contributors to the growth of PMS in India has been the lack of time or expertise of the individual and institutional investors. The internet as a distribution channel offers greater convenience and time-saving to the investors. However, the role of people, i.e., the employees who sell the PMS to the customers cannot be ignored. It is not an easy job to convince investors to place all their assets and trust in the hands of a portfolio manager. This needs excellent convincing skills to impress the customer and get him to trust a stranger, though a professional, with his investments.

Promotion

As PMS is a specialized service targeted at a select few customers, companies would do well to employ promotional strategies like personal selling and price discounting, instead of going in for advertising and publicity. Some companies offer price discount schemes wherein only the performance fee is charged, i.e., the customers need to pay only if their portfolio performs well. Such schemes definitely attract customers in the initial stages. PMS companies can tie-up with reputed banks to add credibility to their services. For example, Deutsche Bank offers investment tips to its clients from Prudential ICICI Mutual, while Standard Charted Bank offers customized portfolio management services to customers of Templeton.

Process

The process of portfolio management services involves understanding the requirements of the customer and his profile. This includes understanding his investment objectives, liquidity constraints, time horizon, tax status and risk profile. The next step is the allocation of assets to different segments of the portfolio like mutual funds, insurance, bonds, bank deposits, real estate, etc. Then comes the execution of the plan after the security selection decision is taken. Finally, the performance of the portfolio is tracked and necessary action taken from time to time to improve the returns for the customer. The portfolio needs to be changed depending on changing customer needs as he proceeds from one stage to another stage in his life cycle. The different steps involved in the process of portfolio management determine the effectiveness of the services and so need to be managed carefully.

The communication channel between the customer and the manager should always be open and there should be transparency. At the same time, the customer should not face any hassels and the processes should be simplified.

Physical Evidence

Like financial services, providing physical evidence is not easy for the service providers of PMS. However, it is a high involvement service and customer's investment is also quite high. There is a greater chance of the customers visiting the office of the service provider. As part of physical evidence, the service provider's achievement, clearances from regulatory bodies, quality compliance certificate like ISO 9001:2000, past performance and certificates from reputed clients can be displayed in the office of the PMS provider. In communicating to the clients, these achievements and certifications can be conveyed using innovative and attractive brochures. The infrastructure and the ambience should convey the message of trustworthiness of the service provider and the quality of service.

RECENT TRENDS IN PORTFOLIO MANAGEMENT SERVICES

The portfolio management services in India were almost non-existent till the late 20th Century. However, it has emerged as a strong player in the financial service sector. Whatever developments have taken place in PMS are recent and have contributed to the growth of PMS.

- Special service provider is offering services to institutional investors.
- Both high net worth and common investors are targeted.
- Special portfolio management services are being offered to NRIs.
- Indian investors are forcing their portfolio managers to come up with new ideas.
- SEBI is working on fresh guidelines for portfolio managers so as to reduce regulations.

SUMMARY

- A mutual fund pools the savings from numerous investors and invests them in diversified securities in the capital market in order to optimize the returns, safety and liquidity and offer the maximum benefits to investors.
- In purchasing mutual funds, investors look for capital appreciation, liquidity and safety. Therefore, marketers are required to design the products keeping these objectives in mind. Products are customized and designed to suit the risk profile of the customer and his investment objective. The price of a fund chiefly depends on the underlying stocks performance and the stock market trends. The company's performance allows it to charge a load on the purchase and redemption prices. Mutual fund companies use their own employees, distribution companies, agents, banks and post offices apart from the Internet. The role of people becomes quite important in the mutual fund industry for two reasons. The fund manager determines the success of a fund in the market. As there is limited knowledge of mutual funds among investors, they need to be convinced by the employees and agents to invest in mutual funds.
- The mutual fund industry has evolved as a competitive industry in the Financial Services sector with the introduction of reforms. The entry of global and private players and the introduction of technology like the Internet have transformed the business completely. The development of the equity market has made the mutual fund an attractive investment option for consumers. The option to invest in foreign equities is expected to change the mutual fund market in India further.
- The PMS industry today is about to take a gigantic leap. As the competition will grow, PMS will require higher value addition. This can come only through the attention and service provided to the customers as the restrictions on the industry will never allow its firms to be differentiated on the tangible benefits like return and safety. In order to achieve this, the PMS will have to develop a robust service system that will help implement the strategy and provide the necessary differentiations to create entry barriers.

Chapter XI

Financial Planning Process

After reading this chapter, you will be conversant with:

- Rewards of Financial Planning
- Personal Financial Planning Process
- Various Determinants of Personal Income

Introduction

Rohan, a software engineer, has two kids and a dependent wife. Rohan is thinking of securing his children's future. What should he do?

Riya, has just joined a marketing firm. She has to repay her education loan and support her family. How can she make it possible with her meager salary?

Siddharth received ten lakh rupees from his mother's estate, on his twenty sixth birthday. He has no idea what he should do with this money.

All these people are facing a common problem. They have uncertainty in their future financial plans.

Personal financial planning is a niche area meant for the affluent class. Personal financial planning is a systematic analysis of personal financial obligations, funds requirements, available funds, income generation, and allocation of funds on the basis of priority. It leads to better utilization of scarce financial resources and reduces the financial crises of individuals.

Personal Financial Planning can be defined "as taking conscientious and systematic steps towards fulfilling one's financial goals." It refers to the proper planning and implementation of well-coordinated plans to achieve financial objectives. Planning in financial areas is necessary for people whether they are rich or poor. If a person has huge cash reserves, he can plan to invest and spend it wisely. Similarly a person, who has low or inadequate funds, has to plan to get more satisfaction out of scarce funds. Financial planning can help a person to deploy the limited available resources in a wise manner. The savings and investments made today have to match the future goals. To make sure that this happens, proper projection of the future needs and the evaluation of the future course of actions become necessary.

An alternate definition of personal financial planning can be 'the process which begins with the collection and assessment of all relevant financial data, continues with the specification of personal and financial goals and objectives, is evaluated in terms of potential financial problems, and is completed in a written plan of action covering areas such as net worth, retirement, estate, and risk management.' (*www.mr-rrsp.com/inenglish.html*)

REWARDS OF FINANCIAL PLANNING

Financial planning is an ongoing process for an individual. A person may start it at an early age and carry it forward through his life with changes to suit his changing goals and needs. Financial planning provides the following long-term rewards for an individual:

Improved Standard of Living

Financial planning helps manage one's resources and controls undue expenses. Standard of living represents the quality of a person's life style. A person can maintain his/her standard of living or even improve it by planning efficiently his/her income and expenses and then provide for investments to meet future contingencies.

Of late, family income has been increasing steadily, with most families having two earning members. This has resulted in increased spending capacity, and also the aspirations for future requirements. As the income increases, the need for planning also increases, so that money is managed in a wise manner.

Spending Money Wisely

An individual always has two options with him/her with respect to his/her hard earned money – spend it or save it for the future. Sometimes, it is important for an individual to forgo his/her current needs to save for the future. Thus, if money

Wealth Management

needs to be spent, it should be spent wisely. Put differently, one should think of what manner of spending or what types of spending in what combination – gives the most satisfaction for each rupee spent.

CURRENT NEEDS

The current needs of a person are dependent on the level of expenses on the basic necessities of life such as food, clothing, shelter, etc., and his/her propensity to consume. Everybody spends money on these basic necessities of life, but the quantity and quality differs from person to person. People can easily get influenced by various attractive schemes for buying expensive consumer durables, clothes, large houses, etc., irrespective of their current income. Financial planning thus helps in making a person realize that he/she has to strike a balance between his/her current expenses and future requirements.

The average propensity to consume refers to the average inclination of an individual to spend a rupee of income on the current needs than to save for future needs. People with higher inclination to consume are said to have a higher average propensity to consume. Some people tend to spend almost equally on all the current needs, while some others overspend on some needs and are extra cautious about the others. As the income of the person increases, the propensity to consume decreases. The proportion spent on current needs as a proportion to the total income falls. It is not uncommon to find some people with a lower income range spending more on current needs, even in absolute terms, compared to another class of persons in a higher income range. This is dependent purely on the individual attitudes of people.

FUTURE NEEDS

Future needs can be taken care of by allocating a part of the current income for saving or investment. This allocation of a part of the income for the future depends on the current income of the individual. If a person earns less, it may not be possible for him/her to allocate a sizeable portion for future requirements. But as the income of the person increases, he/she can devote a bigger chunk of his/her earned income for saving or investment purposes.

At the same time, it should be said that irrespective of the level of income, it is imperative for a person to save for the future, for any financial plan to succeed. Individuals need some savings for the later years of life. There may also be other needs that call for a lump sum to be spent later, like for the college education of a child. It thus becomes necessary to plan ahead in order to meet these huge expenses. Saving for such needs may also require sacrificing some of the current needs in order to be able to meet these future needs comfortably.

Accumulating Wealth

There is a general tendency among people to accumulate wealth, which may be in the form of tangible or intangible assets. Financial planning can help a person to formulate a plan for investing in assets at the right time, without disturbing the current income. Assets can also be subdivided into earning assets and tangible assets. Buying a car is a long-term investment, but the asset does not earn any income. On the other hand, investment in fixed deposits, bonds, and stocks earns income. They are known as earning assets. Thus, an individual has to decide whether he/she should invest in earning or tangible assets. Again, within tangible assets, he/she has to select between those that generate income, like a commercial real estate, and those that result in only capital appreciation, like land. His/her decision will help chalk out his/her future strategy for investment planning.

Box 1: Financial Objectives

Every person has his or her own financial objectives in life with respect to career chosen, attitude, values and basic needs. But the objectives can be generally categorized as follows:

- i. Protection against personal risk resulting from:
 - Premature death
 - Disability losses
 - Unemployment
 - Property and liability losses.
- ii. Capital accumulation aimed at meeting:
 - Family needs
 - Educational needs
 - Emergency needs.
- iii. Provision for retirement income.
- iv. Reducing tax burden
 - During one's lifetime
 - At death when property passes on to others.
- v. Estate planning (investing for the heirs).
- vi. Investment and property management.

PERSONAL FINANCIAL PLANNING PROCESS

Financial planning is an ongoing process. It involves many steps broadly classified as – self-assessing the financial position, defining the financial goals, and developing financial plans based on the goals, redefining and revising the plans. The process can be better depicted in the following manner:

Step I : Self-assessing the financial position.

- Step II : Defining financial goals.
- Step III : Developing financial plans and strategies.
- Step IV : Implementation of financial plans and strategies.
- Step V : Evaluating the progress and the results of plans.
- Step VI : Redefining goals.

Self-assessing the Financial Position

To plan the financial future, first he/she has to assess the present financial position. He/she has to know the assets and obligations presently owed. Before fixing the targets, he/she has to assess whether or not the targets are possible to achieve. This can be seen in the light of present financial position of the individual. For example, before preparing the financial plans of an employee, who is drawing a salary of Rs.25,000 per month in the private sector, consider the present net worth, which is as follows:

Obligations	Present Value (Rs.)	Assets	Present Value (Rs.)
Housing Loan	2,50,000	House Property	8,00,000
Personal Loan	50,000	Motorcycle	40,000
		Investments	1,60,000
Total	3,00,000	Total	10,00,000
EMI on home loan	2,600	Net worth	7,00,000

After ensuring the current financial position, the next step is to define the financial goals.

Defining Financial Goals

For proper utilization of financial resources and forecast of future financial position of an individual, first set his financial goals in the light of present financial position. Like professional and personal goals, an individual also needs to identify his/her financial goals. He/she needs to list down his/her priorities with respect to his/her financial requirements in the future.

Financial goals are determined by financial desires. A person may have a desire to be financially secure after the age of 60, a housewife may have a desire to secure her 10-year-old daughter's future. A software engineer would like to start his/her own company after five years. These are all desires, originating from human needs and wants. The following points may help an individual set his/her goal:

GOALS SHOULD BE SPECIFIC

Financial goals should specify the end result of the whole process. The individual should specify what amount he or she is ready to part with to start an investment program, the time period and the purpose for such an objective.

GOALS SHOULD BE REALISTIC

The financial goals should be realistic in nature. In other words, they should be attainable. A person earning Rs.8,000 and having living expenses of Rs.6,000 cannot save 50% of his/her salary.

GOALS FOR THE WHOLE FAMILY

For achieving the financial objectives for the family, each member should involve himself/herself in the process. It not only reduces future conflicts, but also increases the probability of success of the investment plan for the whole family.

GOALS SHOULD HAVE TARGET DATES

Every goal should specify the target date, specifying when it is to be accomplished. The target date helps in reducing diversions from the objective and meeting the financial goal.

Types of Financial Goals

The next most important element in financial planning is to understand the various types of financial goals and how to use them in practice.

Long-term goals

Long-term financial goals represent the long-term requirements of an individual. They may extend beyond a period of six years. The time period should not be so long that the goals become unrealistic to achieve. It is possible that goals change over a period of time and thus need to be revised on a regular basis. The following table describes an individual's long-term goals:

Goal	Priority	Target Date	Cost Estimate
Take a home loan	High	2007	Rs.5,00,000
Investment in real estate	Medium	2009	Varies
Take a vacation in Venice	Medium	2008	Rs.50,000

Table 1: Long-term Goals

Short-term goals

Short-term goals are for a period of one year or less. They are immediate goals in the form of expenses in the current period, such as education expenses for a child newly admitted in nursery school. To attain long-term goals, it is essential to attain current short-term goals. The short-term goals also provide for the surplus required for savings, which are crucial for long-term goals.

The following table provides a description of a person's short-term goals:

Goal	Priority	Target Date	Estimate
Buy school uniform for children	High	Dec., 2006	Rs.1,500
Buy a new cooking gas range	High	Nov., 2006	Rs.2,000
Buy a new seat cover for the car	Medium	Jan., 2007	Rs.1,500
Buy a new crockery set	Low	Jan., 2007	Rs.1,500

Table 2: Short-term Goals

Intermediate goals

Intermediate goals fill up the gap between the short-term and long-term goals. They are generally spread over a period of two to five years. The following table describes an individual's intermediate goals:

Table 3: Intermediate Goals

Goal	Priority	Target Date	Cost Estimate
Repaying education loans	High	Dec., 2007	Rs.1,00,000
Take a week-long vacation	Medium	June., 2007	Rs. 8,000

It is always advisable to prioritize these goals on the basis of the urgency in fulfilling them. By doing so, an individual will be able to identify the goals that he/she has to concentrate on immediately and which of them can be deferred for sometime.

Developing Financial Plans and Strategies

After setting up financial goals, the next systematic step is to formulate financial plans. This is the very essential and main step in the financial planning. There are separate plans for each and every financial aspect of an individual as given below:

PLANNING FOR A LIFE TIME

Financial planning is a dynamic process. Financial goals and targets change with the changing environment and situations. They need to be updated and revised at the right time. A person may have to face contingencies such as unemployment, illness, disability, etc. Financial planning provides the requisite cushion for such contingencies.

An individual starts his/her life from being dependent on his/her parents, then begins his/her career and starts earning for himself/herself and his/her family. The income increases or stabilizes as the years pass on and he/she has responsibilities in the form of children and maintaining the requisite standard of living. After this stage, he/she has to take care of his /her retirement needs.

The financial plans give a picture of what plan can be adopted in various stages of life. The asset acquisition plan is taken in the initial years, followed by insurance planning when a person starts his/her family and finally, retirement planning as one approaches middle age.
The following figure gives a brief summary of how financial goals of an individual change over a period of time.



Figure 1: Personal Financial Planning Life Cycle

Source: Lawrence, J. G., and Michael D. J., Personal Financial Planning, 9th ed., Thomson Learning Publishers.

ASSET ACQUISITION PLANNING

Asset planning is the first form of financial planning. A person in his/her lifetime decides to acquire certain assets, which may vary from acquiring a car to a house or investments in the form of buying stocks, bonds, etc. The assets acquired may range from liquid assets to real estate property to personal assets. Cash held and balances in savings accounts are examples of liquid assets, while assets such as: automobiles, household furniture, appliances, and jewelry are personal assets. Land and structures fixed to it, like houses, etc., constitute real assets.

LIABILITY AND INSURANCE PLANNING

A person may have to manage his/her debt in the same way as managing his/her assets. Debt may be in the form of education loans or loan for an automobile or credit card payments. Apart from managing one's debt, one also has to provide for his or her insurance. There is a risk that a critical illness may wipe out the entire earnings of a person or that an accident wipes out the savings accumulated through years of hard work. Thus, it is essential to have an adequate insurance cushion for a smooth living. Too much of insurance, too, is not desirable.

SAVINGS AND INVESTMENT PLANNING

As a person's income increases, the importance of savings and investment will also increase. People generally start saving for meeting unexpected situations. At a later stage, it is essential to start investing in investment instruments such as bonds, saving schemes, and personal property to accumulate wealth. The final wealth accumulated depends substantially on the return earned from the investments made initially. The following graph shows how an amount of Rs.2,000 grows at the rate of 10% and 12% over a given period of time:



Figure 2: Savings Growth

EMPLOYEE BENEFIT PLANNING

Generally, large firms provide employee benefits in the form of life and health insurance, disability insurance, reimbursement plans for education or it may be in the form of pension or retirement plans. Apart from these traditional plans, firms now-a-days also give benefits in the form of stock options, health and child care expenses, vacation leave, sick leave, etc. An individual should try to integrate his/her own personal plans with the benefit plans provided by the organization to achieve a better financial planning. Plans such as deferred retirement plans offer tax benefits. Similarly, there are certain retirement plans, which allow one to borrow loans. Insurance policies provided by the organization should also be duly supplemented by personal policies.

Employee benefits like group insurance and stock options offered by the employer should not be depended on too much. In today's uncertain employment conditions, one should be prepared for eventualities like a loss of job – either through layoffs or dismissal – and having to run the family without a job for sometime.

TAX PLANNING

Tax planning assumes importance for an individual, once he or she falls in the tax bracket. Taxation becomes a headache, as it is difficult to understand the intricacies of changing taxation laws and benefits. There are various exemptions and deductions available under different sections of the Income Tax Act for different purposes and based on different criteria. Not considering the tax benefits available when planning the investments, can result in loss of a substantial portion of the return to taxes. Hence, tax planning and financial planning go hand in hand. A person should understand the implications of the taxation laws and make suitable arrangements for proper investment plans to minimize the costs of taxation.

RETIREMENT AND ESTATE PLANNING

One of the main long-term goals of financial planning is to make proper retirement plans. Apart from maintaining one's standard of living and meeting all necessities in life, one has to take care of his/her retirement days. Old age brings with itself increased medical expenses and other requirements. Thus, investment in a retirement plan is of utmost importance for a person who is approaching middle age. It is always advisable to start planning for retirement well in advance, rather than after one is into the late 40s or the 50s. This is because, investments made early in life multiply with accrual in interest and the final sum available will be much more. Apart from retirement plans, estate planning should also be done carefully for passing on the wealth to legal heirs. Estate planning is a complicated topic that calls for an understanding of wills, trusts, and their legal aspects.

Financial Planning Environment

Financial and economic environment need to be properly understood by an individual before starting his/her financial plan. The economic environment of a country influences the individual financial decisions made by a person. Economic variables such as inflation, interest rates, retirement plans available by the government agencies, etc., influence the planning decisions. A bull run in the stock market may result in high returns from investment in the stock market, which attract higher investments into stocks and low investment in saving schemes. Similarly, in case of a depressed scenario in the economy, the investment might be low in the stock markets and high in saving\schemes. The financial environment is influenced by various agencies, which are major players in the financial environment, integrating each other's goals. There are three main such groups discussed below:

GOVERNMENT

The government is an overpowering influence in any business environment. It not only regulates the economic activity, but also provides employment, and services in the form of public education, national defense, health care, etc. There are two main tools applied by the government, which impose restrictions – they are taxation policies and government regulations.

Taxation

The government levies direct taxes on the income of the individual, indirect taxes on commodities, goods and services, real estate and personal property. Taxes form one of the main sources of revenue for the government. By changing the taxation rates, the government can decide the amount of disposable income in the hands of the consumers and affect their financial planning.

Regulations

Governments impose various regulations to safeguard interests of the consumers, investors and general public as a whole. The government may impose restrictions on the undesirable activities of the sellers, producers, financial institutions, etc. It may also impose restrictions in the form of standards for food, medical assistance and other necessities and for prevention of pollution. The personal financial decisions of an individual are affected by the government laws, and regulations have to be made considering the legal requirements that are aimed at protecting the consumers and investors.

BUSINESS

Business enterprises produce goods and services by employing labor and utilizing land, capital and technology. Business firms need to pay wages, interest, and rent for the use of the factors of production and in turn earn profits. Thus, business enterprises facilitate the circular flow of income in the economy. Enterprises not only create healthy competition in the economy, but also facilitate greater array of goods and services available to the customers. Figure 3: Financial Planning Environment

The following figure shows the financial planning environment and interrelation between the government, consumers and the business enterprises:

Source: Lawrence, J. G., and Michael D. J. Personal Financial Planning. 9th ed. Thomson Learning Publishers.

CONSUMERS

The consumer is the 'king' in today's dynamic environment. His tastes and preferences determine the strategies of the business enterprises. In case, the economy is depressed with low economic activity, the general public may cut its expenditure. Similarly, if the economy is going through a boom period, there is increase in the disposable income of the consumers leading to increase in consumer expenditure. These factors have to be considered while planning investments.

ECONOMY

The economy is the result of interaction among various groups such as the government, business and the consumers. The government is the most important player in the economy, maintaining the economic stability and high employment levels. The government through its monetary and fiscal policy is able to determine the requisite level of economic activity by influencing the interest rates, inflation and money supply. The government, by reducing and increasing taxes and interest rates, is able to regulate the fundamentals of the economy. Taxes and interest rates are generally lowered when the economy needs a stimulus and they are increased when the economy is getting overheated, during a boom.

ECONOMIC CYCLES

The level of economic activity changes constantly giving rise to various economic cycles also known as business cycles. An economic cycle goes through the following stages:

Expansion

The economy expands when the economy goes through high levels of employment and production. These two are indicators of high growth in the economy. The stronger the economy, the higher will be the level of employment and production.

Wealth Management

Recession

Recession results, when the economic activity declines for a period of more than six months (often mentioned as two consecutive quarters).

Depression

Depression in the economy is said to occur, when the economic activity comes to a standstill.

Economic Recovery

The recovery stage in the economy occurs when the production and employment levels start rising indicating a revival in the economic activity. Percentage changes in the Gross Domestic Product (GDP) are commonly used to measure the growth of an economy. An increase in the GDP means that the economy is growing and a fall in the GDP indicates poor economic conditions. Obviously, a higher GDP growth rate is more desirable than a lower rate. Unemployment rate is also used frequently to measure the health of an economy. Higher unemployment rates indicate that the industrial and other activities are not up to the full potential and increase in the unemployment rate points towards a deterioration of the economic conditions.

The following graph shows the various stages through which the economy of the country goes through:



Source: Lawrence, J. G., and Michael D. J. Personal Financial Planning. 9th ed. Thomson Learning Publishers.

INFLATION, LEVEL OF PRICES AND INTEREST RATES

Every economy is based on the exchange of goods and services among businesses and their customers. This exchange is facilitated by 'money' and the price of the product or service. Inflation occurs when the general level of prices increases. In this situation, the economy is said to be going through inflation. Inflation can be measured through various measures, such as consumer price index or wholesale price index. These indices comprise various products and services, which help in measuring the change in the general level of prices.

The level of inflation influences financial planning, as the disposable income in the hands of the individual may reduce. Inflation also affects interest rates – high rates of inflation increase the cost of borrowing, as the lenders demand a higher compensation as a price for parting with their money. Inflation also affects stock and debt market. Apart from all this, high level of inflation affects the retirement plans drastically. Thus, the economic scenario should be completely understood by an individual before formulating any long-term financial plan.

Implementation of Financial Plans and Strategies

After preparing and analyzing financial plans and environment, the next important step is implementation of financial plans and strategies. This is the real and practical aspect in the personal financial planning process. Here, it is necessary to understand the volume of risks involved in the financial plans. A home loan may invite increased bank interest. To overcome this problem, an alternative course of action has to be developed at the preparation of financial plans. The plans also must be characterized by flexibility. Based on changes in the environment and time requirements, the plans have to be modified and implemented to reach the financial goals of the individuals.

Evaluating the Progress and the Results of Plans

To review and evaluate the financial progress of the individual, the life period must be subdivided into specific intervals. Generally, programs should be evaluated yearly to assess the progress and results. At the end of each year, review the financial plan to see whether the individual has stuck to it or not. While evaluating the results of financial plans, find any deviations between the expected results and actual results and also the reasons for the deviations. Draw a course of action to reduce the deviations.

Redefining Goals

Static is not a symbol for development. Lastly, goals set-up are not static. Update the financial goals especially medium and long-term goals with significant changes in the financial environment. Innovations and technological changes bring change in the lifestyle of an individual. The standard of living and income changes also determine necessary changes to redefine the financial goals of the individual. The financial goals must be changed from time to time to suit the present environment. At the time of redefining the financial goals, the financial position of the individual and his/her present income must be clearly analyzed as defined in the first step. Hence, the process of personal financial planning is defined as a cyclical process, which is never ending.

VARIOUS DETERMINANTS OF PERSONAL INCOME

Personal income of an individual depends on various factors such as age, marital status, level of education, place of residence and last but not the least, the choice of career. Earning money is not difficult, but it is influenced by the variables associated with the individual. A sixty year-old man cannot have the same energy as that of a thirty year-old. Similarly, a forty year old, executive director will earn more than a salesman in the same firm, at the same age. All these factors are discussed below:

Age

The age group in which an individual falls determines his/her earning capacity. The low level of income is generally for old people above 60 years or below the age group of 25. The highest earnings are in the age group of 35 and 55. In this age group, people develop their skills or are at the peak of their careers. Thus, one of the main determinants of the financial condition of a person is his/her age.

Marital Status

Family income also depends on the marital status of the individual. A single person will definitely earn less than a working couple. Where both the spouses are working, it is easier to plan financially for the future and also maintain the requisite lifestyle of the family.

Education

Education does make a difference, when it comes to personal income of an individual. A person having a PhD may earn more than a graduate. Although it is not necessary that the education of a person is the sole determinant of an individual's income, high education makes a difference in the long-run for the financial stability of a person.

Place of Residence

A person working in Kanpur will earn less than someone working in Delhi. This condition is again dependent on various factors such as the organization, designation, etc. But the number of opportunities available in a bigger city or town gives a better exposure for finding a better job or changing a job than a smaller city. In addition, higher price levels are also responsible for wages being higher in bigger cities. Moreover, people have to generally travel long distances to reach their workplace.

Choice of Career

Earning capacity of a person depends on the type of career he or she chooses. A film star will definitely earn more than a normal sales executive. The career chosen by a person is again dependent on the education, standard of living, skills, and interests of a person, his/her preferences and personal values.

Career Plan

There is a close relationship between career and financial planning. Decisions made in one area affect the other. Career planning is similar to financial planning, as short and intermediate goals determine long-term goals of an individual. Proper career planning helps in determining the financial goals of an individual. The following points will help in proper financial planning for an individual:

- Identify skills, interests, values, etc.
- Identify long-term and short-term career goals.
- Develop a career plan and implement it to achieve the targets set.
- Keep reviewing the plan to adjust to the changing situations.

SUMMARY

- Personal financial planning involves proper planning and implementation of well-coordinated plans to achieve financial objectives. There is generally a misconception among people that personal financial planning is a niche area that is meant only for the affluent class. But it is not the case. Irrespective of the amount of income of a person, it is always essential to plan in order to achieve the goals. Personal financial planning helps in proper projection of the future needs and evaluation of the future course of actions.
- Financial planning process involves self-assessing the financial position, defining financial goals, developing financial plans and strategies, implementing financial plans and strategies, evaluating the progress and the results of plans and redefining goals. It involves identifying both the long-term and short-term goals. Thus, the planning process goes on throughout the whole life process of an individual. An individual should analyze the whole financial environment before making any financial decision. The financial environment comprises the business enterprises, consumers and the government. Other factors, which also need to be taken into consideration for financial planning are age, marital status, choice of career, place of residence of the individual.

<u>Chapter XII</u> Fundamentals of Security Analysis

After reading this chapter, you will be conversant with:

- Objectives and Beliefs of Fundamental Analysis
- The Fundamental Analysis Framework
- Definition of Intrinsic Value
- Market Analysis

Introduction

Security analysis is the first step in the process of investment decisions. The task involves determining prospective benefits from investing in a security. It involves forecasting future conditions, the prospective benefits from holding a security given these conditions and arriving at 'what ought to be' the price of the security, given these benefits and adjusting the inherent time and risk. Valuation is the end objective of security analysis.

OBJECTIVES AND BELIEFS OF FUNDAMENTAL ANALYSIS

Fundamental analysis is an approach to determine 'what ought to be the price', which in other words is described as the 'intrinsic value'. The intrinsic value is the true economic worth of a financial asset. The objective of fundamental analysis is to identify the securities in the market so that the investment decisions like buying and selling can be made. (A security is said to be underpriced if its current market price is below 'what ought to be the price'. Conversely, it is overpriced if its current market price is above its intrinsic value.)

Fundamental analysts believe that due to temporary market disequilibrium, the current market price may be at variance with its intrinsic value. Graham and Dodd pointed out that the fundamental analysts do not attribute this value to permanence. Instead, they believe that the intrinsic value is likely to change from year-to-year as the factors determining it take on different values. So, an investor usually has an opportunity to profit from a wide discrepancy between the current market price and the intrinsic value. By buying an underpriced security and selling an overpriced security, an investor would be able to make profits.

Fundamental analysts may buy a security if the current market price matches its intrinsic value, that is, the fair price. By buying a fair-priced security, a person earns the normal rate of return on his investment. Buying an underpriced stock enables him to earn some abnormal return (relative to risk) on the investment. This is known as beating the market. The fundamental analysts in this sense are those participants in the market who believe that the stock market can be beaten.

THE FUNDAMENTAL ANALYSIS FRAMEWORK

Fundamental Analysis is based on the premise that a security has an intrinsic value at any given time. This value is a function of underlying economic values specifically, expected returns and risks. By assessing these fundamental determinants of intrinsic value of a security, it is possible to determine an estimation of its intrinsic value. This estimated intrinsic value can then be compared to the current market price of the security. A basic assumption of fundamental analysis is that market price and intrinsic value can differ from time to time, but eventually investors will recognize the discrepancy and act to bring the two values together. Those investors who can perform good fundamental analysis and spot discrepancies should be able to realize profits by taking a suitable decision before the disparity is eliminated by the market.





Fundamentals of Security Analysis

Fundamental analysts follow two approaches for arriving at investment decisions. These are referred to as EIC or CIE Framework. In case of EIC framework, the first step would be to analyze the overall economy and securities markets. Second, analyze the industry within which a particular company operates. The final step involves the analysis of the company. It includes making careful estimates of the expected stream of benefits and the required rate of return (this depends on the risk) for a common stock. The intrinsic value can then be obtained through the present value analysis – that is, the dividend discount model. An alternative method of valuation is the P/E ratio or earnings multiplier approach.

Under the CIE framework, the first step involves analysis of the company fundamentals, followed by the analysis of the industry in which the company operates. The third step is to analyze the macro economic fundamentals and growth parameters of the economy.

Professionals follow both the approaches for investment and disinvestment decisions, but the preferred order for fundamental analysis is (i) the economy and market, (ii) the industry and (iii) the company. It is very important to assess the state of the economy and the outlook for primary variables such as corporate profits. If a recession is likely, or underway, the stock prices will be heavily affected at certain times during the contraction. Conversely, if a strong economic expansion is underway, stock prices will be affected heavily, at particular times during the expansion. Thus, the status of economic activity has a major impact on overall stock prices. It is, therefore, very important for investors to assess the state of the economy and its implications for the stock market.

In turn, the stock market impacts each individual investor. Investors cannot very well go against market trends – if the market goes up (or down) strongly, the majority of stocks are carried along. Company analysis is likely to be of limited benefit in a period when there is a severe depression in stock market. Conversely, many investors would do well regardless of their specific company analysis because the market is up.

In a well-known study in the year 1966, Benjamin King analyzed the relationship between market returns and individual stock returns. King found that for the period 1927-1960, roughly the overall market explained half of the variance for an average stock. The impact was observed to be in the range 20-45% in a recent study conducted for Indian securities.

This impact is much higher for well-diversified portfolios. For instance, the percentage of variability in return of Mastershare NAV and Canshare NAV explained by the market (BSE National Index as proxy for the market) was observed to be as high as 84 and 72.6 respectively. Thus, the impact of the market factor on security returns is quite powerful. Another indication of the overall market impact is on earnings of a particular company. Available evidence for developed economies suggests that from one-fourth to one-half of the variability in a company's annual earnings is attributable to the overall economy. Thus, economy/market analysis is considered extremely important.

After a complete analysis of the economy and the overall market, an investor can decide if it is favorable to invest in common stocks. If so, the next step should be industry analysis. King also identified the industry factor as the second component (after overall market movements) affecting the variability in stock returns. In the Indian context, the industry factor is observed to be extremely powerful in influencing the fortunes of individual companies. In a partially controlled economy like India, changes in government policies generally affect all companies in a given industry.

After economy and industry analysis, the next step is to concentrate on specific companies. The bottomline in financial statements, i.e. earnings per share is considered to have a powerful impact on the price of the share. While a number of factors are important in analyzing a company, investors tend to focus on earnings and dividends paid.

Let us recapitulate the components of these three forms of analysis:

A. ECONOMIC ANALYSIS

- i. A study of economic trends as indicated by the rate of growth in gross national product, employment, aggregate corporate profits, personal disposable income, etc.
- ii. A study of economic policies of the government includes plan priorities, monetary policies, exim policy, fiscal policy, industrial policy, regulation, control of prices, wages and production.
- iii. An analysis of the relationship between economic trends, economic policies and the stability of such relationships.
- iv. A study of the world economic trends and their impact on Indian economy.

B. INDUSTRY ANALYSIS

- i. Implications of projected growth in GDP for various industries.
- ii. Implications of plan priorities and plan expenditures for various industries.
- iii. Vulnerability of an industry under government regulation, control of prices and production.
- iv. Implications of industrial and fiscal policies of the government.
- v. Input-output analysis of an industry's sales.
- vi. Degree of dependence on scarce raw materials and energy.
- vii. Vulnerability of industry to business cycle.
- viii. Linkage between the sectors vulnerable to business cycle and the industry.
- ix. Life cycle position of the industry.
- x. Price and income elasticity of the end-products of the industry.
- xi. An analysis of competitive conditions as reflected in any barriers to entry.

C. COMPANY ANALYSIS

- i. A trend analysis of the company's market share.
- ii. Cost structure and break even analysis.
- iii. An analysis of turnover of assets and operational parameters.
- iv. Leverage and coverage ratio analysis.
- v. Funds flow analysis.
- vi. Profitability analysis.
- vii. A trend analysis of book value per share.
- viii. An analysis of growth in dividend per share and retention policy.
- ix. Estimation of dividend yield.
- x. Estimation of price-to-earnings multiple.
- xi. An assessment of the quality of assets.
- xii. An assessment of the quality of management.

DEFINITION OF INTRINSIC VALUE

John Burr Williams defined a stock's intrinsic value as the present value of all future cash payments to be paid on the security. These cash payments may be in the form of dividends, interest, liquidation proceeds or repayment of the principal amount.

Graham and Dodd define the intrinsic value of a security as, 'that value which is justified by the facts, e.g. assets, earnings, dividends, definite prospects, including the factor of management (of the company)'. This rather aptly covers the work of a fundamental analyst. His primary focus is, however, on earning and dividends.

The intrinsic value of a stock is estimated by discounting the company's prospective earnings stream or the shareholder's prospective dividend stream. The prospective earnings of a company and the prospective dividends to its shareholders depend on the economic and industrial environment, relative importance of the company within its industry, its financial strength, policies, quality of assets and management. The fundamental analysts seek to establish quantitative relationships between economic, industrial and company indicators to forecast earnings and dividends. For this purpose, economic, industrial and company analyses are performed. The quality of assets (technology) and management is of course, the factor about which a qualitative assessment is made.

In practice, a fundamental analyst calculates a range of intrinsic values rather than a single value. A stock is said to be mispriced if its current price falls outside this range.

What does Intrinsic Value Imply?

The traditional rule in investments specifies a relationship between the intrinsic value of an asset and its current market price. Specifically, if intrinsic value exceeds current market price, the asset is undervalued and should be purchased or held if already owned. If intrinsic value is less than the current market price, the asset is overvalued and it should be sold if held or sold short.

A problem with intrinsic value is that it is derived from a present value process involving estimates of uncertain (future) benefits and use of (varying) discount rates by different investors. Therefore, the same asset may have many intrinsic values. This is why, for a particular asset on a particular day, while some investors are willing to buy, some others want to sell. The market price of an asset at any point of time is, its intrinsic value in the market.

In this buy and sell, scenario one person gains, another one loses. However, no money will enter or leave the system when the price changes as explained in the example given under:

Initial Positions

AL has no money (but owns 1 share), Mohan has Rs.200, Ravi has Rs.500 and Bhasker has Rs.1,000. Suppose the following events take place:

Share Sales

- i. AL has a tech share that it sells to Mohan for Rs.30.
- ii. A tech boom occurs and Mohan sells his shares to Ravi for Rs.80.
- iii. The tech bubble burst and Ravi sells his shares to Bhasker for Rs.15.

If we consider each transaction individually at a time, we can follow the movement of the money.

First, AL goes public and sells a share to Mohan for Rs.30.

Transaction 1: AL sells one share to Mohan for Rs.30.

AL has Rs.30 (down 1 share, up Rs.30 from initial).

Mohan has Rs.170 (up 1 share, down Rs.30 from initial), Ravi Rs.500 and Bhasker Rs.1,000.

A tech boom occurs and Mohan sells his shares to Ravi for Rs.80.

Transaction 2: Mohan sells his shares to Ravi for Rs.80.

AL has Rs.30 (down 1 share, up Rs.30 from initial).

Mohan has Rs.250 (up Rs.50 from initial).

Wealth Management

Ravi has Rs.420 (up 1 share, down Rs.80 from initial), Bhasker has Rs.1,000.

Mohan was right and the tech bubble burst. Ravi is worried that AL may go bankrupt, so he decides to sell his shares to Bhasker for Rs.15.

Final Transaction: Ravi sells his shares to Bhasker for Rs.15

AL has Rs.30 (down 1 share, up Rs.30 from initial).

Mohan has Rs.250 (up Rs.50 from initial), Ravi has Rs.435 (down Rs.65 from initial).

Bhasker has Rs.985 (up 1 share, down Rs.15 from initial).

The total money lost would be equal to the total money gained and the total number of stocks lost would be equal to the total number of stocks gained. Mohan (Rs.50) and AL (Rs.30) are collectively up Rs.80 and Ravi (Rs.65) and Bhasker (Rs.15) are collectively down Rs.80. So, no money has entered or left the system. Similarly AL's one stock loss is equal to Bhasker's one stock gain.

Suppose the true "value" of the share is Rs.15. We can figure out each entity's net value by adding Rs.15 per share to anyone who has a share and subtracting Rs.15 per share for anyone who is down a share.

Net Value of the Four Entities

AL has a net value of Rs.15 (up Rs.15 from initial).

Mohan has a net value of Rs.250 (up Rs.50 from initial).

Ravi has a net value of Rs.435 (down Rs.65 from initial).

Bhasker has a net value of Rs.1000 (even).

It is now clear where Ravi's loss (Rs.65) have gone. Mohan has Rs.50 while AL has Rs.15. If we change the value of the stock, the total net amount AL and Bhasker have will be equal to Rs.15. So, for every rupee the stock goes up, Bhasker will have a net gain of Re.1 and AL will have a net loss of Re.1. So, no money will enter or leave the system when the price changes.

In this situation, nobody has put more money in the bank from the down market. Mohan was the big winner, but he made all his money before the market crashed. After he sold the stock to Ravi, he would have the same amount of money whether the stock went up to Rs.15 or Rs.150.

AL's net value goes up when the stock price goes down, because when the price of the stock plunges, it becomes cheaper for AL to repurchase the shares sold to Mohan. If the stock price goes to Rs.10 and he repurchases the shares from Bhasker, he will be up Rs.20 as he initially sold the shares for Rs.30. However, if the stock price goes to Rs.70 and he repurchases the share, he will be down Rs.40. Unless, he actually makes this transaction, AL does not gain or lose any cash from changes in the share price. We can assume that he did not repurchase the shares, so AL has not gained money from the lower stock price.

Lastly, consider Ravi's situation. If Bhasker decides to sell his shares to AL, from Ravi's perspective it doesn't matter what price Bhasker charges AL as Ravi will still be down Rs.65 regardless of the price. But unless AL actually makes this transaction, they are up Rs.30 and down one share, no matter what the market price of that share is.

MARKET ANALYSIS

Investors must make intelligent judgments about the current state of the market and possible changes in the future. A logical starting point in assessing the market is to understand the economic factors that determine stock prices. Understanding the current and future state of the economy is the first step in understanding what is happening and what is likely to happen to the market. The state of the market is measured by the security market indicators.

Fundamentals of Security Analysis

What determines stock prices? As discussed earlier, the two determinants of stock prices are the expected stream of benefits (earnings or dividends) and the required rate of return (or its counterpart, the P/E ratio). Although these are the ultimate determinants, a more comprehensive model is desirable when attempting to understand the stock market.

The positive impact of a change in expected real corporate earnings on stock prices has been noticed in the Indian scenario. However, the variables that have led to a change in expected real corporate earnings have been more qualitative in nature, and caused gradual elimination of controls in the industrial, financial sector and the like.

SUMMARY

- The fundamental analyst believes in the intrinsic value of security.
- The fundamental analyst takes inputs from the analysis of economy, industry and company.
- Economic analysis includes the study of economic trends, economic policies, and the relationship between these two and the impact of the world economic trends on the Indian economy.
- The industry analysis includes the study of all issues that directly or indirectly influence a particular industry.
- The company analysis reveals how a company generates wealth.

<u>Chapter XIII</u> Technical Analysis

After reading this chapter, you will be conversant with:

- Meaning of Technical Analysis
- Technical Trading Rules and Indicators
- The Dow Theory
- Charting
- Price Patterns

Investors may adopt an active investment strategy, constantly evaluating their holdings and reshuffling the stocks they hold. This approach requires constant evaluation of the market. It is a well-established fact that stock markets also portray cyclical movements akin to business cycle. An active investor who is able to identify the turns in the market would be able to buy at bottoms (low prices) and sell at peaks (high prices) and make substantial gains out of cyclical investments. In practice, however, such gains can be registered only if an investor is able to consistently buy and sell at turning points and if the gains are substantial enough to cover transaction costs and taxes.

MEANING OF TECHNICAL ANALYSIS

Technical analysis is the study of technical characteristics which may be expected at major market turning points and their objective assessment. The term 'technical analysis' can be defined as the 'use of fairly wide range of techniques, all based on the concept that past information on prices and trading volume of stocks gives the enlightened investor a picture of what lies ahead'.

According to technical analysts, the cyclical trend visible in the movement of stock prices is due to the changes in the attitude of investors, reflected in changes in the demand and supply of securities. The previous turning points are studied with a view to develop some characteristics that would aid identification of major market tops and bottoms. It is assumed that human reaction to similar situations is by and large consistent and recurrence of a certain characteristic is expected to spur a similar, though not identical, reaction. Technical analysts have developed tools and techniques to study past patterns and predict future price. The basic assumptions underlying technical analysis are as follows:

- Market value is determined solely by the interaction of supply and demand.
- Supply and demand are governed by numerous factors, both rational and irrational.
- Ignoring minor fluctuations in the market, stock prices tend to move in trends which persist for an appreciable length of time.
- Changes in trend are caused by shifts in supply and demand.
- Shifts in supply and demand, no matter when they occur, can be detected sooner or later in charts of market value.
- Some chart patterns tend to repeat themselves.

Unlike fundamental analysis where factors like earnings of the company, its management, products, etc., are studied, technical analysis is based purely on study of the behavior of past prices. The supply and demand for a security is supposed to have incorporated not only the fundamental factors but also psychological and behavioral factors. Fundamental analysis is directed towards determining the intrinsic value of a security. Technical analysis is directed towards predicting the price of a security. The price at which a buyer and seller settle a deal is considered to be the 'one precise figure' which synthesizes, weighs and finally expresses all factors, rational and irrational, quantifiable and non-quantifiable and is the only figure that counts. The spirit of technical analysis can be summed up thus: "The going price as established by the market itself comprehends all the fundamental information which the statistical analyst can hope to learn (plus some which is perhaps secret to him, known only to a few insiders) and much else besides of equal or even greater importance".

Wealth Management

Technical analysis is not based on a strong conceptual framework but depends fully on use of historical trends to predict future prices. Though technical and fundamental analysis provide diagonally opposite approaches to valuation, in practice, a judicious blend of the two approaches is attempted to arrive at better results.

Box 1: The Case for Market Timing - Too Significant to Ignore

The principle objective of market timing is to provide investors with the opportunity to avoid major decline in market prices. If investors could avoid weak periods in the market and participate in the strong, they can gain superior returns over a buy-and-hold strategy.

The stock market has historically outperformed virtually all other investments but only after great volatility. From 1929 to 1992, there have been 13 bear markets when the S&P 500 has fallen by at least 20%. The bear market on an average slashed almost 39% from stock prices. During that 63 year period, new bear market emerged on the average after every 5.2 years, with an average duration of 17 months. After the bear market bottomed, it took an average of 3.5 years to return to a break even position. The average gain between bear markets since 1929 is 117% over 45 months.

Every time investors lose money in a down market, they lose valuable time. If a bear market reduces the value of a portfolio by 25%, a 33% return is required to break even. After eliminating overlapping bear markets, 41 years were spent either suffering through a bear market or returning to break even. In other words, investors spend 2/3 of their time trying to stay even. Only 1/3 of the times were they benefited from the stock market boom.

Consider the Dow Jones Industrial Average from 1966 through 1983. An investor who put in \$250 and sold at the market tops in 1966, 1968, 1973, 1979 and 1981 and reinvested at the bottoms in 1966, 1970, 1974, 1980 and 1982 would have had more than \$9,000 in profits. However, it is unlikely for anyone to be smart enough to identify the exact bottom and top of every cycle. However, one could still miss a few calls and still come out substantially ahead. For investors who are nearer to retirement age, a buyand-hold strategy is more dangerous. A hypothetical investor who sets aside \$5,000 a year at an annual growth rate of 11.3% (the average return of the S&P 500 index over the past 60 years with dividends reinvested), the investor's portfolio would be worth \$369,826 in 20 years. If that investor had encountered a severe bear market like the one of 1973-74 in the first year of his investment plan, the 48% loss from that bear would have little effect on his ending portfolio. However, if the bear market struck in the last year of his investment plan, it could wipe out half his portfolio and dramatically change his retirement plans.

Market timing reduces the risk or fluctuation in an investment, with superior risk returns compared to other investments with similar risk. According to a study published in the Journal of Portfolio Management in 1992, 92% of the timers tracked outperformed the market averages in the 1987 collapse and 96% during bear runs in January 1990 to August 1992.

Technical analysis is done from four important points of view, viz.,

- **Price:** Changes in price reflect changes in investor attitude and changes in demand/supply of securities.
- **Time:** The degree of movement in price is a function of time. The longer it takes for a reversal in trend, the greater the price change that would follow.

- Volume: The intensity of price changes is reflected in the volume of transactions that accompany the change. An increase in price accompanied by a low volume implies that the change is not strong enough.
- **Breadth:** The quality of price change is measured by studying whether a change in trend spreads across most sectors and industries or is concentrated in few scrips. Study of the breadth of the market indicates the extent to which price changes have taken place in the market in accordance with a certain overall trend.

We shall discuss in detail the tools and techniques of technical analysis in terms of the above dimensions.

TECHNICAL TRADING RULES AND INDICATORS

A model of stock price cycle is shown in Figure 1 which could serve as an overall picture of the stock market cycle or for an individual stock.



Figure 1: Stock Price Model

Source: Frank, K. R, and Keith, C. B. Investment Analysis and Portfolio Management.

A declining market or a bear market ends in a trough followed by an upward trend that passes through the declining trend channel. When the trend is reversed, it will confirm a buy signal. When the reversal of the trend occurs at this stage, technical analysts would buy stocks in general or an individual stock that displays such a pattern.

When the stock price is rising, the technical analyst would hold the stock(s) till the expected peak level is reached. He/she would normally sell at the peak which would be evident again only at the time of reversal of the trend. If the market starts trading in a flat pattern, it will come out of its rising trend channel. At this juncture of trend reversal, some technical analysts would sell, with most of them holding still to find out if the stock experiences a period of consolidation and then breaks rising again. If the stock breaks out on the downside, it will be construed as a sell signal and a declining trend channel is anticipated. The next buy signal would be after the trough when the declining channel is broken and a rising trend is established.

A number of technical trading rules exist and each one of them has to be interpreted differently. Though a majority of technical analysts keep track of alternative rules and decide on a buy or sell decision based on a consensus of the signals, a complete agreement of all the rules is not common.

THE DOW THEORY

The Dow Theory, originally propounded by Charles Dow in 1900, is one of the oldest methods of identifying trends in the stock market. The basic principles of technical analysis originate from this theory. In a nutshell, this theory seeks to study the major movements in the market with a view to establish trends. Until a reversal occurs, a trend is assumed to exist. It should be noted that the Dow Theory only describes the direction of market trends and does not attempt to forecast future movements or estimate either the duration or the size of such market trends. However, subsequent analysts like Robert Rheas who provided a formalized account of the theory ('The Dow Theory', 1932) attempted to measure size and duration of trends proposed by Dow. The theory uses the behavior of the stock market as a barometer of business conditions rather than as a basis for forecasting stock prices themselves. It is assumed that majority of the stocks follow the underlying market trend, most of the times. Therefore, the postulates of the theory were framed with reference to market indices, specifically constructed to measure market trends. (The Dow Jones Industrial Average, one of the popular market indicators in the United States, was one such index developed by Charles Dow).

The six basic tenets of the Dow Theory are as follows:

i. The Average Discounts Everything

The aggregate judgment of all stock market participants, regarding both the current and potential changes in the demand-supply relationships of stocks, is reflected in the share prices. In other words, the share prices that are determined in the market evolve out of a discounting process that takes all known and predictable factors into account.

ii. The Market has Three Movements

The Dow Theory classifies the movements in stock prices into,

- a. Primary movements.
- b. Secondary reactions.
- c. Minor movements.

Primary Movements: Primary movements, which last from about a year to several years, represent the major market trends. It can either be a rising (bull) trend or a falling (bear) trend. A primary bear market trend can be seen as a long decline, interrupted by some rallies. (A rally is an increase in price that occurs after a falling trend in prices.) It is important that, though few rallies have occurred, the long-term trend in prices is bearish. A primary bull market trend is a broad upward movement, interrupted by some reversals. (A reversal is a decrease in price that occurs after a rise in prices.) Primary trends are thus, long-term movements in prices, interrupted by swings in the opposite direction.

Secondary Reactions: A secondary or intermediate reaction is defined as '....an important decline in a bull market, or advance in a bear market lasting from three weeks to as many months, during which interval, the movement generally retraces from 33 to 66 percent of the primary price change since the termination of the last preceding secondary reaction' (Robert Rheas, Dow Theory, 1932). Sometimes, a secondary reaction almost wholly retraces the primary trend. Where the reaction is more than 50 percent of the preceding primary trend, technical analysts find it difficult to say whether the reaction is indeed secondary, or if it signals a new primary trend in the opposite direction.

Technical Analysis

Minor Movements: Movements in prices daily that form only intra daily are called minor movements. They have no implication for long-term forecasting, though short-term investors tend to manipulate them to some extent.

Figure 2 provides an illustration of these three trends in prices.

Figure 2: Trends



Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 32.

iii. Price Action Determines the Trend

A trend can be called primarily bullish, when successive rallies lead to peaks that are higher than the preceding ones, and when troughs reached by the intervening secondary reactions are above the preceding troughs. Similarly, a bearish trend is marked by a series of descending peaks and troughs. A reversal in primary trend is indicated when the above tenet does not hold. Figure 3a illustrates reversals implied by this tenet of the Dow Theory. Figure 3a shows a bull market interrupted by reactions. Similarly, figure 3b illustrates a change in a primarily bearish trend.



b: Start of Bull Market Interrupted by Reactions



Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 35-36.

iv. Lines Indicate Movement.

In certain cases, price movements which initially look like secondary reactions, persist within a narrow range, forming what is called in technical parlance as a 'line'. A line is formed by price movements within a range of 5 percent of its mean average (see figure 4). This is called an 'accumulation' (where a 'line' is formed in between a primary bear trend) or a 'distribution' (where a line is formed in between a primary bull trend). If prices advance above an accumulation, it marks a reversal in the bearish trend; if prices continue to fall after an accumulation line, it is only a consolidation of the bearish trend, and is only a horizontal secondary movement. The converse is true for a distribution.



Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 37.

Technical Analysis

v. Price/volume Relationships Provide Background

The relationship between share prices and volume of shares traded is very important in technical analysis. Volume is normally expected to complement the movement in prices. A reversal in trend is signaled if a dull volume accompanies a rally, or a high volume, a reversal. This principle is further elaborated in the section on volumes.

vi. The Averages must Confirm

An important tenet of the theory is that the averages must confirm each other. If the market is truly a barometer of future business conditions, the industry averages and market averages should by and large move together. This principle has been tested in the United States where averages that are industry specific (like the Transportation Average) exist. In the Indian context, all indices that are widely used, measure the overall market trend. This principle, therefore, is yet to be tested in India.

CHARTING

The basic tool in technical analysis is movement in prices, measured by charts. It is for this reason that the technical analyst is sometimes called the "Chartist". Three types of charts that are commonly used are:

- a. Line Charts.
- b. Bar Charts.
- c. Point and Figure Charts.

Line Charts

Line charts are simple graphs drawn by plotting the closing price of the stock on a given day and connecting the points thus plotted over a period of time. The charts are easily drawn and widely used in technical analysis. The price is marked on the Y-axis and the period of time on the X-axis. Line charts are helpful and easy to identify price patterns. (See Figure 5 for a typical chart.)



Figure 5: Chart

Wealth Management

Bar Charts

In order to draw a bar chart, the data on a day's high, low and closing prices is necessary. To plot a stock's price movement, the high and low reached on a said day is marked and connected by a vertical line. The closing price is indicated by a small horizontal tick on this line. (See figure 6 for a typical bar chart.)



Figure 6: Bar Chart

Point and Figure Chart

Though the Point and Figure Chart (which is also referred to as PFC) is not as commonly used as the other two charts, it differs from the others in concept and construction. We shall discuss the construction of the PFC in detail.

While the line and bar charts are plotted at specific time intervals, the PFC does not have a time dimension. A PFC concerns itself only with the measurement of prices. Further, a PFC does not measure every movement in price. Unlike a bar chart, PFC records changes in prices that are larger than a specific amount, called points. For example, a PFC can be constructed to measure changes in prices over and above 2 units. Such a chart is called a 2 point chart. It is a common practice to use 1 point charts for shares with face value of Rs.10, and 3-point charts for shares of Rs.100.

For plotting indices, a 10-point or a 20-point chart may be constructed. As the size of a point decreases, the details of even minor fluctuations in the graph drawn increases and vice versa. Some chartists chart graphs with varying point sizes for the same stock for better analysis. The decision about the size of a point is essentially based on price range and degree of volatility of the stock.

Construction of a PFC involves the use of 2 symbols i.e 'X' and 'O'; while 'X' indicates increase in prices, 'O' indicates downward movement.

PFCs are plotted on cross-section paper that has arithmetically ruled squares. Suppose a 2-point PFC is to be plotted, the graph may begin by recording the price at a chosen level. Across the price levels marked on the Y-axis, either 'X' or 'O' is marked for the beginning price. Subsequent change in price level is noted. If the price increases, for every increase equal to or over Rs.2, an 'X' is marked on the same column, if the chart began with an 'X' mark for the beginning price level. A decrease in price equal to or above Rs.2 is treated as a change in direction. The chartist shifts to the next column and marks a series of 'O's to indicate the magnitude of fall in prices. No marking is made if prices remain at the same level or if changes are less than Rs.2. Prices are marked in the same column irrespective of the time period, as long as the direction of change remains unaltered.

Technical Analysis



Figure 7: P & F Chart

PRICE PATTERNS

The cyclical trends in prices are of utmost interest to the technical analyst, who looks at them with a view to forecast trend reversals preferably in advance or at least before the reversal is complete. It can be observed that share prices do not always switch from a bullish phase to a bearish phase or vice versa almost overnight. The transitional period which lies in between the two trends, throws up indications as to the direction of price change. The concept of price patterns is based on the invariable occurrence of a transitional phase, which shows up as an intermediate trend, in between two major trends. In a rising market, prices increase as the buyers' optimism about the market outweighs the cautiousness of the sellers. The uptrend subsequently slows down either because buyers are booking gains or because the balance tends to get even with the sellers exerting more pressure. At the end of this exercise, the market either continues to surge ahead or turns down due to increased selling pressures. Sometimes, a highly emotional market changes without warning. These instances however are only exceptions to the rule.

According to the technical analysts, the transitional phase is marked by clearly discernable price patterns which signal (a) The end of a bull/bear market, (b) The reversal in trend, (c) The magnitude and direction of the new trend, and (d) Confirmation of the new trend.

In order to explain this concept of transition, Martin Pring compares the 'battle' between buyers and sellers to one fought between two armies engaged in trench warfare.

Wealth Management

Figure 8 illustrates the behavior of prices in the transitional period, in terms of this example.



Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 55.

In figure 8a, one finds armies A and B facing one another in position of attack. AA and BB are lines of defense of the armies A and B respectively. The arrows indicate attack on the opposite side's line of defense. If army B, for instance, manages to push through the line AA, army A is forced to retreat to line A_2A_2 . In the stock market, line AA represents selling resistance, which once overcome signifies a change in balance between buyers and sellers, in favor of the buyers. If the price line, after meeting resistance for a while, penetrates the line of defense, it is most likely to advance quickly until a new line of defense is met.

Army B may penetrate defense A_2A_2 also, but if it continues to advance without waiting to consolidate its position, the possibility of receiving a serious setback is high. In the stock market also, a rising trend arrested by reactions all along the way is more dependable than an unchecked rally.

The transitional period, as we already noted, may either end in reversal as explained above or mean a consolidation of the existing trend. In case the price moves in the same direction after the transition, it is difficult to say during the period of formation as to which direction the breakout would occur. The army B in our example may either advance after an attack on line A_2A_2 or may retreat when army A breaks through the line of defense of army B. It is, therefore, assumed that a prevailing trend continues to exist, until it is proved to be reversed.

The following are important principles to be borne in mind, while analyzing price patterns:

i. The significance of a pattern is a direct function of its size and depth. The longer a pattern takes to complete and greater the price fluctuations within the pattern, the more substantial the ensuing move is likely to be.

The fluctuations that occur indicate the combat between buyers and sellers. The longer it takes for prices to break through a pattern, the greater is the significance of the penetration. ii. The longer it takes for prices to move out of the pattern, the stronger is the base of the new trend. This is due to the presence of both uninformed investors and professionals in the market.

When the prices hit a new low, uninformed investors panic and start selling. Professionals would, however, accumulate stocks in anticipation of improved conditions in the future. The stocks therefore move from weak to strong hands. The reverse process occurs at the market tops. The professionals, who accumulated stocks at the bottom, sell to uninformed investors who are attracted by the rising prices and buy these stocks. Thus at market bottoms, the base from which prices rise is strong, as most stock has moved into the hands of professionals. At market tops, the reverse is true as most stock is in the hands of less sophisticated investors and triggers a sharp fall in prices.

- iii. Price patterns offer certain forecasting possibilities, because the duration of a trend can be measured, with a certain level of accuracy, on the price charts.
- iv. A valid breakout can be confirmed, in most cases, if the penetration of the boundaries of a pattern is marked by price change equal to or more than 3%.
- v. The validity of a breakout should be confirmed by volume statistics. Volume advances with rising prices and declines with falling prices. A divergence from this relationship gives off important signals.

We shall now discuss some of the widely used price patterns:

HEAD AND SHOULDERS

This pattern is by far the most reliable, and widely used, of all reversal patterns. This pattern occurs at the end of a bull market and is characterized by two smaller rallies flanking a higher rally just as the head lies in between two shoulders. A typical head and shoulder formation is shown in figure 9.



Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 64.

THE INVERSE HEAD AND SHOULDER PATTERN

Head and shoulders pattern occurring at market bottoms indicate a reversal and are called 'inverted head and shoulders'. Volume is high at the bottom of the left shoulder and significantly contracts during the formation of a right shoulder.

Wealth Management



Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 65.

DOUBLE TOPS AND BOTTOMS

When prices are found to react after rallying up to a certain level, technical analysts watch the rallies with caution. If subsequent rallies also fail to raise above the previous highs, a level of resistance is found to be developing. A classic pattern that indicates such a tendency is the Double Top formation.

Figure 11: A Typical Example of a Double Top and a Double Bottom



Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 70.

A DOUBLE TOP

A double top is formed when prices reach the previous high, and react immediately, the two highs reached being almost at the same level. Two peaks at comparable heights are seen, with a reaction forming a valley in between them. The prices breakout into a bearish phase, once they penetrate the neckline drawn across the bottom of the intervening reaction. The measuring implication is similar as for the head and shoulder formation. If the price line falls from the neckline by a distance equal to the distance between the peak and the trough the indication is to sell. Volume is found to be distinctly low at the second top.



Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 70.

TRIANGLES

Triangles are commonly used to identify reversals and consolidation but are not very reliable formations. There are two types of triangle formations – symmetrical and right-angled.

A **symmetrical triangle** is formed when, in a series of rallies, each succeeding one peaks at a lower level than the preceding peaks, and the bottoms of the intervening relations is progressively higher. The lines joining the peaks and bottoms of such a formation converge. When prices breakout of a symmetrical triangle, the reversal is generally sharp. Volumes reduce as the triangle narrows towards the apex. When the breakout occurs between the half and three-fourths of the distance between the widest peak and rally, and the apex, the formation is said to be a highly reliable indicator of a reversal (see Figure 13). It is, however, not known before the breakout as to whether the triangle is a continuation pattern or a reversal pattern.

Figure 13: Triangles



Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 74.

A **right-angled triangle** is also formed when a series of rallies converge, but with an important difference. One of the two boundaries of the series is horizontal to the x-axis. In a right angled triangle, since the resistance or support level is implied in its formation, the direction of breakout can be identified even before the actual breakout. However, sometimes a right-angled triangle develops into a rectangle, thus making such identification difficult. The validity of the breakout is measured by drawing a line parallel to the sloping side of triangle (hypotenuse) through the first rally or reaction.

RECTANGLES

A rectangle is an important consolidation pattern, which can be formed either during an uptrend or in the course of a downtrend in prices. A series of minor rallies and reactions, which have almost identical peaks and troughs signal the formation of a rectangle. (Note that rectangles are formations indicated as 'Lines' in the Dow Theory.) A rectangle indicates equal pressure being exercised by buyers and sellers, and the combat is indecisive until a breakout occurs. The price line may breakout on either side. A rectangle therefore may be a consolidation pattern or result in reversal. Just as in the case of the symmetrical triangle, one cannot predict the course of prices when a rectangle is being formed, but has to wait for the breakout.



Figure14: Rectangles

FLAGS

If a vertical rally or decline is interrupted by a consolidation pattern akin to a rectangle, such a formation is called a flag. After the flag formation, prices move in the same direction as before. Flags only represent a pause in a rally or reaction before prices continue in their course. Flags may be horizontal, though it has been found that flags in a rising market are formed with a slight downtrend, and flags in a falling market have a slight uptrend.

FLAG FORMATION

Since flags by definition are minor interruptions of a trend, a flag extending over more than 4 weeks should be treated with caution. The price trend in such a case may reverse. A flag takes 5 days to 2 weeks to form. If a flag formation is not accompanied by contraction in volume, a reversal might occur. It is estimated that flags occur somewhere near the mid-point of a trend. Therefore, the measuring implication is continuance of the trend by a length equal to that which prevailed before the flag was formed. Figure 15 illustrates a flag formation.

Technical Analysis



Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 82.

A TYPICAL PENNANT FORMATION

Figure 16: A Typical Pennant Formation



Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 83.

SAUCERS AND ROUNDING TOPS

A saucer generally occurs at market bottoms when investor interest in the share is at its lowest ebb. The lows reached at the end of the market are all formed by reactions that are small, and rallies are not marked enough due to lack of enthusiasm. However, these minor fluctuations while continuing for sometime, form a saucer-like pattern indicating that fluctuations have been occurring at higher price levels, after a bottom was reached. This triggers increase in price as well as volume, which explode at the end of the formation to a smart rally.

A saucer being formed during a period of near inaction in the market, volumes almost dry up at the bottom of the saucer, and pick up once the upward movement in prices begins. Saucers sometimes are formed when the rally in the beginning of a bull market is sluggish, and have the same characteristics as described above. In such cases, saucers confirm a reversal. Wealth Management





Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 84.

A ROUNDING TOP

A rounding top is exactly opposite to a saucer, but volume characteristics are same for both the patterns. A rounding top is formed to indicate a slow change in the demand-supply balance, and is an important reversal pattern.

The price volume relationship in a rounding top formation provides important tips. The volume behaves just opposite to the price pattern, resulting in low volume when the price is at the highest level, and expanding volumes when prices begin to fall. As we shall see in the section on volumes, both of these indicate a downtrend in prices.

It is difficult to obtain support or resistance levels, or breakout levels for both saucers and rounded tops. These patterns typically develop slowly and over a long span of time. Interestingly, these very characteristics are responsible for the substantial moves that invariably follow these two formations.

GAPS

A gap refers to the occurrence of an empty space in a bar chart between the prices of two consecutive trading periods. Typically, the lowest price of the period after the gap is higher than the highest price of the preceding period or vice versa.



Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 86.

Three types of gaps are generally analyzed by technicians – Runaway gaps, Breakaway gaps and Exhaustion gaps. **Runaway gaps** occur when prices are on a rapid uptrend or downtrend, they generally occur almost halfway through a trend, and are also called measuring gaps. **Breakaway gaps** are created when price breaks out of a price pattern. **Exhaustion gaps** represent gaps occurring before a trend ends, or gaps that precede the last leg of a bullish or bearish trend.

Figure 19: Runaway, Breakaway and Exhaustion Gaps



Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 86.

ISLANDS

Islands refer to the formation of an isolated price pattern, usually within a narrow range, at the end of a price trend. The island is separated from the previous trend by an exhaustion gap, and a breakaway gap (see Figure 20 for an illustration of an island). Islands signal price reversals which have to be confirmed by a noticeable drop in volume occurring as the pattern forms, and an increase in volume after the breakaway gap.



Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 89.

TREND LINES

A rising primary trend in prices, would be marked by a series of ascending rallies, while a falling trend would be characterized by a series of descending rallies. Trendlines are lines that are drawn to identify such trends and extend them into the future. These lines typically connect the peaks of rallies and bottoms of reversals. Sometimes, an intermediate trend, that extends horizontally, is seen. Trendlines can also be drawn to describe such patterns. The boundaries of a rectangle can be called a horizontal trendline.

TREND CHANNELS

Trendlines encompass rallies or reactions by joining successive tops or bottoms. Sometimes, it is useful to 'trap' trends by drawing trendlines on both the sides of an uptrend or downtrend. These parallel lines drawn to encompass trends from both the sides, are called, channels.





Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 105.

SUPPORT AND RESISTANCE

An important application of trendlines is in identification of support and resistance levels. Resistance is defined by Edward and Magee as 'Selling, actual or potential, sufficient in volume to satisfy all bids and hence stop prices from going higher for a time period'. Support is defined as 'Buying, actual or potential, sufficient in volume to halt a downtrend in prices for an appreciable period'.

A support zone is formed when the demand supply balance tilts in favor of buyers, resulting in a concentration of demand. A resistance zone similarly represents a concentration of supply. The concepts of support and resistance can be illustrated with the help of an example.

The behavior of prices during January-May does not throw up any price pattern, but the range within which the prices are found to be fluctuating warrants attention. On almost 6 occasions, prices have climbed to the level of Rs.122, and returned. Prices can be observed to face resistance at this level, as every time they reach there, they fail to climb further, but fall back. A trendline drawn to represent this level is called a resistance line (designated RL₁ in the figure).

Similarly, prices have not fallen beyond a level of Rs.110, most of the times they returned from the resistance line. It can be said that a support level exists, at which prices have shown a tendency to climb up again, rather than continue to fall. The maximum fall registered is at Rs.106, represents the level at which support has almost invariably occurred. Line SL₁ represents this line of support.

Support and resistance lines are, therefore, trendlines drawn to indicate the ranges a trend can be expected to take, using the past behavior as a reference point. These lines throw up further interesting inferences. When the prices pierce the resistance level RL_1 , it is an indication that buyers have succeeded in breaking the resistance, and prices can be expected to climb up. The new high reached prices would represent a new level of resistance (represented as RL_2). Prices now are found to fluctuate between the old RL_1 , and the new RL_2 . The point to be noted is that the old resistance line is the new support line, as prices receive support at a level almost equal to RL_1 . Similarly, prices can be observed to reach a new resistance level RL_3 , and find support at the previous RL_2 .

The support and resistance levels are important tools in confirming a reversal, in forecasting the course of prices, and in making appropriate price moves. The following principles are to be applied while using support and resistance lines for trend analysis:

- Support and resistance lines are only approximations of the levels prices may be expected to 'obey'. They should therefore be drawn using judgment, and clues from the past price behavior.
- ii. Penetration of a support or resistance line, also confirmed by an underlying price pattern, is a fairly sure indication of a strong ensuing move in the same direction. New highs are reached after a resistance line is penetrated and new lows follow penetration of a support line.
- iii. Prices are said to remain in a 'congestion zone' as long as they fluctuate in narrow ranges within a support and resistance level. The direction of breakout from a congestion zone cannot be predicted in advance.
- iv. The higher the volume accompanying the confirmation of a support or resistance level, the more its significance.
- v. The speed and extent of the previous move determines the significance of a support or resistance level. Prices penetrate support (resistance) level generally after slowing down from a previous low (high) and hovering around a level for sometime (see Figure 27).
- vi. Support and resistance levels repeat their effectiveness time and again, even if separated by many years.

RELATIVE STRENGTH INDEX (RSI) ANALYSIS

Relative strength is obtained by dividing the price of the stock by the market index.

The RSI is calculated by the formula given below:

$$RSI = 100 - \frac{100}{1 + RS}$$

Where, RS is the ratio of the average of X day's up closes to the average of X day's down closes.

When computed in this manner, a rising RS index indicates that the stock is doing better and vice versa. RS index also follows trends, reversal of which signifies changes in the relative strength of the stock. RS indexes are normally used in stock selection.

MOVING AVERAGES

There are three basic types of moving averages:

- a. **Simple Moving Average:** Simple moving average formed by computing the average (mean) price of a security ever a specified no. of periods.
- b. **Exponential moving average:** In order to reduce the lag in simple moving averages, technicians after use exponential moving averages. Exponential moving average reduces the lag by applying more weight to recent prices relative to order prices.

The Filter Rules

The filter rules define the mechanical trading schemes.

ENVELOPES



Source: Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International, p. 124.

BREADTH OF THE MARKET

Figure 31 plots the A-D line for the period.



OTHER METHODS FOR ANALYZING MARKET BREADTH

Breadth of the market is popularly studied using A-D lines. Other techniques also used along with the A-D lines by technical analysts are:

- i. Stocks in Positive Trends.
- ii. Percentage of Stock Over a Moving Average.
- iii. Diffusion Index.
- iv. High-Low Statistics.

VOLUME

Technical analysts confirm a price reaction by looking at the volume of shares traded.




RATE OF CHANGE INDEX (ROC INDEX)

Day	BSENI Values	BSENI 50 days ago	ROC Index value $\frac{(1)}{(2)} \times 100$
	(1)	(2)	(3)
1	382.60	377.19	101.43
2	385.19	373.69	103.07
3	385.79	373.66	103.25
4	381.27	380.79	100.13
5	378.79	383.00	98.90
6	378.45	383.28	98.74
7	379.62	383.27	99.05
8	384.19	389.83	98.55
9	383.16	393.81	97.30
10	385.24	375.28	102.65

Computation of ROC Index Values

MOVING AVERAGE CONVERGENCE AND DIVERGENCE (MACD)

MACD is the difference between short-term (EMAS) and long-term (EMAL) exponential moving averages, and is often used with a single line that is an exponential moving average by the MACD. As the MACD is a momentum indicator, it shows positive momentum when it is above zero line and negative momentum when it is below zero line.

MACD is constructed by taking the difference of the ratio of short-term and the long-term moving average.

Academic Perspective

Academics have consistently been sceptical about Technical Analysis, as all their attempts to unravel the golden rule that consistently provides extra-normal returns have failed. A large number of studies, both in the Indian as well as markets the world over, using a variety of statistical procedures and trading rules have invariably concluded that no single rule can earn consistently above average returns from the market over long periods of time. A rule may work very well for a short time, but would fail miserably in the next time span, in which some other rule would have yielded extra normal returns. No one has been able to predict with certainty as to which rule is to be applied when for consistently outperforming the market.

Academics also argue that even if knowledge for always earning superior returns exists, it would never be disclosed as the one who possesses the knowledge could use it profitably. The argument goes a step further: if the knowledge (to outperform the market) were to be made public, that very act would destroy its effectiveness because if everyone in the market were to act according to that, no one will be able to make extra profits. Therefore, it is impossible that a trading rule which yields extra normal profits with certainty would ever be known. Charting and Technical Analysis are, therefore, an attempt to build an edifice without foundation.

Technical Analysis

These arguments comprise what is known as 'market efficiency'. The thesis is that the presence of large number of experts in the stock market, who are constantly trying to outwit each other to make the extra buck, would ensure that the market is very efficient in pricing of securities. In the long run, therefore, an investor would earn the returns commensurate with the risks assumed, no more no less. The search for patterns in the prices on the assumption that there is future in the history of prices is meaningless. The view appears too fatalistic as it seems to do away with the need to manage our portfolios. Well, that is not entirely true, because the risk one assumes in the market, which depends on the composition of the portfolio, is still a decision that needs to be made and constantly reviewed by an investor. That would necessitate transactions and reshuffle of portfolios.

SUMMARY

- Technical analysis beliefs in the study of historical price trends to predict future prices.
- Dow Theory is one of the methods to identify price trends.
- The basic tool in technical analysis is movement in prices measured by charts.
- Moving averages can help determine the share price when they appear to move rather haphazardly and be very volatile.
- The cyclical trend in prices is discernable from the price patterns.

<u>Chapter XIV</u> Portfolio Analysis

After reading this chapter, you will be conversant with:

- Components of Risk and Return
- Systematic and Unsystematic Risk
- Beta of a Portfolio
- Portfolio Diversification
- Marginal Productivity of Incremental Assets
- Perils of Excessive Diversification

Introduction

We know that the risk and return of a portfolio is not a simple aggregation of the risk and return of the individual securities that form the portfolio in most of the cases. Portfolio analysis deals with the calculation of risk and return of different portfolios. We shall analyze the risk and return of different portfolios that can be constructed with the help of a given set of stocks. We will also try to understand the portfolio diversification process for risk reduction and will finally analyze the various portfolio management strategies.

COMPONENTS OF RISK AND RETURN

Portfolios are constructed to be held over some time period. We can calculate a portfolio's expected return using the historical data or using the probability of future returns on the constituent securities. Portfolio theory is primarily concerned with the *ex ante* events which indicate expected future events. All portfolio decisions are for future, and hence we should consider *ex ante* values. Conversely, if we want to evaluate portfolio performance, we should calculate the actual return and risk for past periods i.e., *ex post* values. It is important to understand that *ex ante* values will always be projected values, while *ex post* values.

'Ex ante' Return of a Portfolio

The expected return on any portfolio can be calculated as a weighted average of the individual security's expected returns. The weights used must be the proportions of total investible funds in each security. The total portfolio weight will, therefore, be 100%.

For a portfolio of two securities:

Expected portfolio return $(E_p) = W_1 E_1 + W_2 E_2$

Where,

 E_1 is the expected return on security 1;

W₁ is the proportion of money invested in security 1;

 E_2 is the expected return on security 2; and

 W_2 is the proportion of money invested in security 2.

Similarly, the expected return of a portfolio of n securities, E_n , is given as:

$$E_{p} = \sum_{i=1}^{n} W_{i} E(R_{i}) E(R_{i}) \qquad \dots Eq. (1)$$

Where,

 E_p is the portfolio return;

W_i is the proportion of investment in security i;

 $E(R_i)$ is the expected return on security i; and

n is the total number of securities in the portfolio.

The following illustration will clarify.

Illustration 1

Calculate the return on a portfolio, which has 40% of its fund in asset A and the rest in asset B. The probable returns in different conditions of the economy are as follows:

Condition of Economy	Probability of Occurrence (%)	A's Return (%)	B's Return (%)	
Growth	40	16	10	
Stable	50	9	8	
Recession	10	-4	-2	

Solution

A's Return	=	(0.40)(0.16) + (0.50)(0.09) + (0.10)(-0.04)
	=	0.105 or 10.5%
B's Return	=	(0.40)(0.10) + (0.50)(0.08) + (0.10)(-0.02)
	=	0.078 or 7.8
$W_{A} = 40\%, W_{B}$	=	60%

Expected Return on Portfolio = $0.40 \times 10.5\% + 0.6 \times 7.8\% = 8.88\%$

Regardless of the number of securities in a portfolio, or the proportions of total funds invested in each security, the expected return on the portfolio is always a weighted average of expected returns of individual securities in the portfolio.

'Ex post' Return of a Portfolio

Ex post return of a portfolio is nothing but the weighted average of the historical returns of the securities held in a portfolio. Historical return of any security can be calculated as the holding period yield of that security. In general, holding period yield for the ith asset in time t can be calculated using the following formula:

Holding period yield =
$$\frac{(P_{it} - P_{it-1}) + D_t}{P_{it-1}}$$
....Eq. (2)

Where,

P_{it} is the current price of the security;

 P_{it-1} is the price of the security at the beginning of period t; and

 D_t is the dividend received during period t.

While using the above formula, the dividend is assumed to have been received at the end of the holding period.

Illustration 2

An investor bought 100 shares of X Ltd. on April 30, 2005 for Rs.8,000 per share. The company paid a dividend of Rs.300 on April 30, 2006. If the price of the stock, on May 1, 2006, is Rs.8,500, calculate the holding period yield to the investor for one year time horizon.

Solution

HPY = $\frac{(8,500 + 300 - 8,000)}{8,000} \ge 10\%$

To calculate the *ex post* return of any portfolio, we must calculate the historical returns of individual securities in the portfolio. After getting the values of the historical returns, we can measure the portfolio returns by multiplying the proportions of the funds invested in each security with the historical returns on each security. To understand this concept consider the following illustration.

Illustration 3

Find the *ex post* return of the portfolio using the following data.

A portfolio consists of 30% of HDFC, 40% of Reliance and 30% of ACC.

Stock	Price as on 30.06.2005	Price as on 01.07.2006	Yearly Dividend	Rates of Return (%)
	(Rs.)	(Rs.)	(Rs.)	(Rs.)
HDFC Bank	634.10	740.00	4.50	17.41
Reliance Industries Ltd.	641.90	1071.00	14.00	69.03
Associated Cement Companies (ACC)	377.90	780.00	7.00	108.26

Solution

Rate of return is computed as:

HDFC =
$$\frac{740 - 634.1 + 4.5}{634}$$
 = 17.41%
Reliance = $\frac{(1071 - 641.9 + 14)}{641.9}$ = 69.03%

$$ACC = \frac{(780 - 377.90 + 7)}{377.9} = 108.26\%$$

Portfolio Return = 0.30 x 17.41% + 0.40 x 69.03% + 0.30(108.26%) = 65.31%

The concept of return on a security calls for the investor's change in wealth that results from his investments. This change in wealth can be either because of his cash inflows, such as interest and dividends received, or even may be due to the changes in prices of assets held by him. Let us say, one has invested Rs.400 and at the end of the year he gets back Rs.440. The return during this period can be termed Holding Period Return (HPR), which can be calculated as (Terminal value of investment/Initial value of investment)

i.e.,
$$\frac{\text{Rs.440}}{\text{Rs.400}} = 1.1$$

It is to be remembered that if this value is greater than one, it reflects an increase in wealth. Whereas, HPR is less than one denotes a reduction in the value of wealth, and HPR of zero signifies a total loss in the wealth. Generally, investors evaluate returns in percentage terms on annual basis. The HPR can be converted into an annual percentage rate by deriving a percentage return, referred to as Holding Period Yield (HPY).

Now, HPY = HPR - 1

i.e., HPY = (1.1 - 1) = 0.10

Annual HPR = HPR^{1/n} [n = number of years the investment is held]

i.e., $(1.10)^{1/2}$ (say, "n" = 2) = 1.04

: Annual HPY = (1.04 - 1) = 0.04 = 4%

Now, let us consider mean rates of return for a single investment and for a portfolio of investments. The return performance of a set of annual rates of return can be computed in two ways. The first may be represented as:

 $AM = \Sigma HPY/n$ (i)

Where,

AM	= Arithmetic mean of returns;
Σ HPY	= Sum of annual holding period; and
n	= Number of years the investment is held.

The other measure may be geometric mean, i.e.,

GM =
$$[\text{HPR}]^{1/n} - 1$$
; and
 π = Product of annual holding period
i.e., (HPR₁) x (HPR₂) x x (HPR₂).

Though the former measure provides a good indication of the expected rates of return, it is biased upward, if the investor is attempting to measure an asset's long-term performance.

Relationship between Risk and Return



The above graphical representation of risk vs. return reflects the relationship between risk and return. The line that reflects the risk-return relationship is referred to as security market line. It shows the combinations available for all risky assets in the capital market in the given time.

Risk of a Portfolio

Risk is the chance that actual returns will differ from their expected values. The expected value of return can be obtained from probability estimates for *ex ante* data. We must know the expected distribution of returns to estimate the risk. Portfolio risk is measured by the variance (or the standard deviation) of the portfolio's return. As explained earlier, the expected return of the portfolio is a weighted average of the expected returns of the individual securities in the portfolio. However, the risk (as measured by the variance or standard deviation) of a portfolio is not a weighted average of the risk of the individual securities in the portfolio, i.e.,

$$VaR(R_p) \neq \sum_{i=1}^{n} W_i VaR(R_i)$$

The portfolio risk depends not only on the risk of individual securities in the portfolio, but also on the correlation or covariance between the returns on the securities of the portfolio. Portfolio risk can be defined as the function of each individual security's risk and the covariances between the returns on the individual securities. If we represent the portfolio risk in terms of variance, it can be stated in the following way:

$$VaR(R_{p}) = \sum_{i=1}^{n} W_{i}^{2} VaR(R_{i}) + \sum_{j=1}^{n} \sum_{i=1, i \neq j}^{n} W_{i}W_{j}Cov(R_{i}R_{j}) \qquad ...Eq. (3)$$

Where,

 $VaR(R_{p})$ = the variance of the return on the portfolio;

 $VaR(R_i)$ = variance of return on security i;

 $Cov(R_iR_i)$ = the covariance between the returns of securities i and j; and

 W_{i}, W_{i} = the percentage of investible funds invested in securities i and j.

The double summation sign indicates that n(n - 1) numbers are to be added together (i.e., all possible pairs of value for i and j when $i \neq j$.)

Illustration 4

From the following data, calculate the return and risk of a portfolio containing 60% of stock A and 40% of stock B.

Market Condition	Probability	E(R _A) (%)	E(R _B) (%)	
Boom	0.25	40	40	
Growth	0.50	20	30	
Recession	0.25	10	20	

Solution

Expected return on stock A

= 0.25 x 40 + 0.50 x 20 + 0.25 x 10

= 10 + 10 + 2.5 = 22.5%

Expected return on stock $B = 0.25 \times 40 + 0.50 \times 30 + 0.25 \times 20 = 30\%$

Portfolio return = 0.60 x 22.5% + 0.40 x 30% = 25.5%

Variance of stock A's return

$$\sigma_{A}^{2} = 0.25(40 - 22.5)^{2} + 0.50(20 - 22.5)^{2} + 0.25(10 - 22.5)^{2} = 118.75\%^{2}$$

Variance of stock B's return

 $\sigma_{\rm B}^2 = 0.25(40 - 30)^2 + 0.5(30 - 30)^2 + 0.25(20 - 30)^2 = 50\%$

 $\operatorname{Cov}_{AB} = (40 - 22.5)(40 - 30) \ 0.25 + (20 - 22.5)(30 - 30)0.50$

 $+(10-22.5)(20-30)0.25 = 75\%^{2}$

$$\sigma_{p}^{2} = X_{A}^{2} \sigma_{A}^{2} + X_{B}^{2} \sigma_{B}^{2} + 2 X_{A} X_{B} \sigma_{B}$$

Portfolio risk = 0.60² x 118.75 + 0.40² x 50 + 2 x 0.60 x 0.40 x 75

$$\sigma_{\rm p}^2 = 86.75\%^2$$

 $\sigma_n = \sqrt{86.75} = 9.314\%.$

Covariance

The covariance on an absolute scale determines the degree of association between any two variables. In the present context, the two variables are the returns for a pair of securities. Covariance can be defined as the extent to which the two variables move together. These two variables can move either in the same direction or in the opposite direction. The covariance of returns between the two securities can be:

- i. Positive, indicating that the returns on the two securities will move in the same direction during a given time. If the return on one security is increasing (decreasing), the return on the other security will also increase (decrease). In other words, both securities should move together in the same direction. The value of the covariance will indicate the magnitude of change in a security return when there is a change in the return on the other security.
- ii. Negative, indicating that the return on the two securities will move in the opposite direction, i.e., the movement of their returns is inversely related. If the return on one security is increasing (decreasing), the return on the other security decreases (increases).

iii. Zero, indicating that the returns on two securities do not have any relation and they are independent.

To understand the role, covariance plays in determining the portfolio risk, consider a portfolio having two stocks A and B and the proportion of the portfolio devoted to each stock is X_A and X_B respectively. The total risk of this portfolio, as we have discussed earlier, can be written as follows.

$$\sigma_p^2 = X_A^2 \sigma_A^2 + X_B^2 \sigma_B^2 + 2X_A X_B \sigma_{AB}$$

Notice what the covariance (σ_{AB}) does. It is the expected value of the product of two deviations: the deviations of the returns on stock A from its mean return $(R_{Ai} - \overline{R}_A)$ and the deviations of stock B from its mean $(R_{Bi} - \overline{R}_B)$. In this sense, it is quite similar to variance. However, covariance is the product of deviations of two different stock returns.

The value of covariance will be large, when good or bad outcomes for the stocks A and B occur together.

In this situation, the covariance will be a large positive number for two good outcomes. When the bad outcomes for both A and B occur together, the covariance will be the product of two large negative numbers, which is positive. Therefore, occurrence of good and bad outcomes of the two stocks together will result in large value for the covariance and a higher variance for the portfolio than otherwise. However, if good outcomes for stock A are expected to be associated with bad outcomes of stock B and vice versa, the covariance will be negative. This negative covariance comes from the product of a positive deviation for the first stock and negative deviation for the second stock.

Clearly, covariance indicates how returns on stocks move together. If both stocks have positive and negative deviations at the same time, the covariance will be a large positive number. On the other hand, if positive and negative deviations occur at different times, the covariance will be negative. The next question that arises is when will covariance be zero? If the deviation of either security A or B is zero, the covariance will be zero.

Since covariance is an absolute value, it is useful to standardize the covariance between two assets by dividing it by the product of standard deviation of each asset. This standardization will produce a ratio with the same characteristic as the covariance but with a range of -1 to +1. We know that this ratio is known as the correlation coefficient. If ρ_{ij} indicates the correlation between securities i and j, the correlation coefficient is defined as:

$$\rho_{ij} = \frac{\sigma_{ij}}{\sigma_i \sigma_j} \qquad \dots Eq. (4)$$

Where,

 σ_{ii} = Covariance between securities i and j;

 σ_i = Standard deviation of security i; and

 σ_i = Standard deviation of security j.

The correlation coefficient can be used as a relative measure to decide co-movements of the stock returns.

If the correlation between two securities is +1, it indicates that there is a perfect direct linear relationship between two securities. However, if the correlation is -1, the relationship will be inverse linear. If the correlation is zero between two securities, there is no relation between the returns of the two securities, and knowledge of the return on one security will not give any clue about the return on the other security. Combining securities whose returns have perfect positive correlation will not reduce the risk of a portfolio, instead the portfolio risk will

Portfolio Analysis

only be the weighted average of the individual risk of the securities. As securities with perfect positive correlation are attached to a portfolio, portfolio risk remains the weighted average. There will be no risk reduction. Combining two securities with zero correlation can reduce the risk of a portfolio. If securities with zero correlation were added to a portfolio, some risk reduction can be achieved but total elimination of portfolio risk is not possible. Finally, if we make a portfolio with two securities with negative correlation, portfolio risk can be reduced. If a portfolio consists of only two securities with perfect negative correlation (-1), the risk of the portfolio can be reduced to zero. However, in the real world it is very difficult to find two securities with perfect negative correlation. Generally, securities will possess some positive correlation with each other and therefore, the risk can be reduced and cannot be eliminated completely. Ideal situation for any investor to reduce his/her portfolio risk is to find securities with negative correlation with securities with negative correlation with securities with negative correlation for any investor to reduce his/her portfolio risk is to find securities with negative correlation with negative correlation or low positive correlation but investors usually encounter securities with positive correlation.

Illustration 5

Consider a portfolio of two securities with 60% investment in stock A and 40% investment in stock B and the variance of their returns are $24(\%)^2$ and $36(\%)^2$ respectively. Calculate the portfolio risk if coefficient of correlation between stocks A and B is,

a.
$$\rho_{AB} = +1$$

b.
$$\rho_{AB} = -1$$

c.
$$\rho_{AB} = 0$$

Solution

$$\sigma_p^2 = X_A^2 \sigma_A^2 + X_B^2 \sigma_B^2 + 2 X_A X_a \rho_{AB} \sigma_A \sigma_a$$

Where,

$$\begin{split} \sigma_A^2 &= 24, \ \sigma_B^2 = 54, \ X_A = 0.60, \ X_B = 0.40 \\ a. & \sigma_p^2 &= (0.60)^2 \ x \ 24 + (0.40)^2 \ x \ 54 + 2 \ x \ 0.6 \ x \ 0.40 \ x \ 1 \ x \ \sqrt{24} \ x \ \sqrt{54} \\ &= 8.64 + 8.64 + 17.28 = 34.56(\%)^2 \\ b. & \sigma_p^2 &= (0.60)^2 \ x \ 24 + (0.40)^2 \ x \ 54 + 2 \ x \ 0.60 \ x \ 0.40 \ x \ (-1) \\ & x \ \sqrt{24} \ x \ \sqrt{54} \\ &= 8.64 + 8.64 - 17.28 = 0(\%)^2 \\ c. & \sigma_p^2 &= (0.6)^2 \ x \ 24 + (0.40)^2 \ x \ 54 + 2(0.6) \ (0.4) \ (0) \ x \ \sqrt{24} \ x \ \sqrt{54} \\ &= 8.64 + 8.64 = 17.28(\%)^2 \end{split}$$

After understanding the covariance and correlation between securities as the measure of association between securities, we are now in a better position to discuss the risk of a portfolio. As we said in the previous section, the portfolio risk can be calculated using the following two factors:

- i. Weighted individual security risks (the variance of each security multiplied by the percentage of investible funds placed in each security).
- ii. Weighted relationship between securities (the covariance between the securities returns, multiplied by the percentage of investible funds placed in each security).

As the number of securities in a portfolio increases, the importance of each individual security's risk (variance) decreases. Let us consider a portfolio with n securities, the number of the variance terms will be n while the total number of covariance terms will be n(n - 1)/2. Clearly, as n increases, the number of

covariance terms will increase and difference between variance and covariance terms will also rise. Let us take various values of n and calculate the number of variance and covariance terms.

n	Variance term (n)	Covariance term $\left[\frac{n(n-1)}{2}\right]$		
3	3	3		
10	10	45		
50	50	1,225		
100	100	4,950		
1,000	1,000	4,99,500		

We can see that when the number of securities in a portfolio is equal to 100, the number of covariance terms are 4,950 whereas the number of variance terms are only 100. This huge number of covariance term suggests that portfolio risk will be immensely attributable to covariance factor rather than variance factor.

We can rewrite equation (3) in the following format:

$$VaR(R_{p}) = \sum_{i=1}^{n} \sum_{j=1}^{n} W_{i}W_{j} \rho_{ij} SD(R_{i}) SD(R_{j}) ...Eq. (5)$$

The above equation represents both the variance and the covariances of the securities, because when i = j, the variances will be accounted whereas, if $i \neq j$ the covariances are taken into account. If we want to use the above equation, we need to calculate the variance and correlation coefficients or covariances for each security. We can calculate both covariance and the correlation coefficient using either *ex post* or *ex ante* data. If the historical data is a good estimate of the future value, it can be used for calculating the portfolio risk. However, it must be remembered that the variance and correlation coefficients can change over time. Our discussion on the portfolio risk can be concluded by highlighting the following:

- i. The measurement of portfolio risk requires information regarding the variance of individual securities and the covariance between the securities.
- ii. Three factors determine any portfolio risk: variances of the individual securities, the covariances between the pairs of the securities and the proportions of total fund invested in securities.
- iii. As the number of the securities increase in a portfolio, the impact of the covariance of the securities rather than their individual variance affects the portfolio risk.

SYSTEMATIC AND UNSYSTEMATIC RISK

In our earlier sections, we discussed that the variance of the portfolio is a measure of its risk. According to the portfolio theory, the total risk (variance) is not the relevant risk in the portfolio context. It is necessary to understand that the risk of security when held in isolation is not equal to the amount of risk it contributes to a portfolio, when it is included in the portfolio. We are aware that the risk of a security is the sum of systematic risk and unsystematic risk. Unsystematic risk is the extent of variability in the security's return due to the specific risk attached to the firm of that particular security. Unsystematic risk is diversifiable risk, and hence this risk can be removed from the total risk of portfolio by investing in large portfolio securities. This is possible, because the firm specific risk factors are mostly random. For example, if the financial position of one company is weak, the financial health of the other company in the portfolio can be strong enough to neutralize the risk attributed by the weak financial position of the firm. However, the systematic or non-diversifiable risk cannot be diversified away completely because it depends on the factors affecting the whole market in a particular direction. For example, a steep rise in inflation in India will affect the entire market adversely and therefore, no diversification can make a portfolio free from this risk. Since the systematic risk affects the entire market, it is also known as the market risk.

We know that total risk of security is measured in terms of the variance or standard deviation of its returns. We also know that total risk consists of systematic and unsystematic risks. We will now try to segregate these two risks.

Total risk of a security $i = \sigma_i^2$

Systematic risk of security $i = \beta_{im}^2 \sigma_m^2$

Where,

 β_{im} is the beta of the security i, and

 σ_m^2 is the variance of the market portfolio.

However,

Substituting the value for $\beta_i = \frac{\sigma_{im}}{\sigma_m^2} = \frac{Cov_{im}}{\sigma_m^2}$ in the above equation, we get

Systematic risk of security
$$i = \left(\frac{Cov_{im}^2}{\sigma_m^4}\right) x \sigma_m^2 = \frac{Cov_{im}^2}{\sigma_m^2}$$

As we know from the relation between covariance and correlation, the above equation can be written in the following form:

Since $Cov_{im} = \rho_{im}\sigma_i\sigma_m$

Systematic risk of security
$$i = \frac{\rho_{im}^2 \sigma_i^2 \sigma_m^2}{\sigma_m^2} = \rho_{im}^2 \sigma_i^2 = R_{im} \sigma_i^2$$
 Since,

$$R_{im} = \rho_{im}^2$$

Where,

 ρ_{im}^2 is the correlation coefficient, and

 R_{im} is the coefficient of determination between the return on security i and the market portfolio.

From the above equation, it is evident that coefficient of determination is (R_{im}) , the indicator of the systematic risk. The coefficient of determination indicates the percentage of the variance explained by the variation of return on the market index. To calculate the systematic risk of the portfolio, we should add the systematic risk of the individual securities.

Systematic Risk of the Portfolio =
$$\left(\sum_{i=1}^{n} X_i \beta_{im}\right)^2 \sigma_m^2$$

Unsystematic risk of the security is the difference between the total risk and the systematic risk of the security and can be represented in the following form:

Risk
$$\sigma_{e_i}^2$$
 = $\sigma_i^2 - \beta_{im}^2 \sigma_m^2$ or, $\sigma_{e_i}^2 = \sigma_i^2 - \rho_{im}^2 \sigma_i^2$
= $\sigma_i^2 (1 - \rho_{im}^2) = \sigma_i^2 (1 - R_{e_i})$

Unsystematic risk of the security is the percentage of the variance of the security's return not explained by the variance of return on the market index. This unexplained variance is also called the residual variance of the security.

Unsystematic risk of a portfolio can be calculated as the total unsystematic risk of the individual security forming that portfolio.

Unsystematic risk of portfolio =
$$\sum_{i=1}^{n} X_i^2 \sigma_{e_i}^2$$

Total portfolio variance can be represented as:

$$\sigma_p^2 = \left(\left(\sum_{i=1}^n X_i \ \beta_{im} \right)^2 \ \sigma_m^2 \right) + \left(\sum_{i=1}^n X_i^2 \ \sigma_{e_i}^2 \right) \qquad \dots \text{ Eq. (6)}$$

Where,

 σ_p^2 = Variance of portfolio return;

 σ_m^2 = Expected variance of index;

- σ_{e}^2 = Variance in security not caused by its relationship to the index;
- X_i = Proportion of the total portfolio invested in security i; and
- n = Total number of stocks.

BETA OF A PORTFOLIO

We can measure the volatility of a stock by using beta. Beta measures how much the share price of a security has fluctuated in the past in relation to fluctuations in the overall market (or appropriate market index). If properly analyzed, beta indicates the fact that both market and stock returns depend on common events. The beta tells about the relationship of market and security returns. Most of the risk and return in a portfolio is directly connected to the market. Therefore, it is essential to calculate the portfolio beta. Portfolio beta is nothing but the weighted average of beta of its component securities. According to William Sharpe, proper diversification and possession of sufficient number of securities can reduce the unsystematic risk of a portfolio to zero by neutralizing the unsystematic risk of the individual securities. The rest of the risk remaining in the portfolio is systematic risk, caused by the market factors and cannot be diversified away by portfolio balancing. Because of this reason, the Sharpe model emphasizes a lot on the importance of the beta, which measures the systematic risk. According to the Sharpe model, the amount of risk contributed to a portfolio by a stock can be calculated by the stock's beta coefficient. The market index will have a beta equal to 1. If beta of a stock is +1.5, it indicates that if the market return is 10%, the return on the stock will be 15%. On the other hand, if the market return is -10%, the return on the stock with beta 1.5 will be -15%. Securities with beta greater than 1 are called aggressive stocks, while stocks with beta less than 1 are viewed as defensive stocks. Negative beta stocks can help fund managers reduce the portfolio risk beyond the unsystematic level. Efficient portfolios do not contain unsystematic risk because of diversification. The risk of such portfolios is entirely based on their systematic risk, which is caused exclusively by the market movements. The total risk of an efficient portfolio can be calculated by portfolio beta. We will now illustrate the calculation of portfolio beta.

Illustration 6

A fund manager has apprehensions that in the short-term market is going to decline. His portfolio contains Infosys (35%), ICICI Ltd. (20%), Dr. Reddy's (20%), Tata Motors (10%) and GAIL (15%). The beta of the stocks is given below. You are required to calculate the portfolio beta and suggest him the suitable alteration in the portfolio to avoid possible loss.

Portfolio Analysis

Stock	Beta
Infosys	0.87
ICICI Ltd.	0.86
Dr. Reddy's Labs Ltd.	0.63
Tata Motors	1.15
GAIL	0.91

Solution

Company	Beta	Portfolio Proportions (%)	Weighted Beta	
Infosys	0.87	35	0.3045	
ICICI Ltd.	0.86	20	0.1720	
Dr. Reddy's Labs Ltd.	0.63	20	0.1260	
Tata Motors	1.15	10	0.1150	
GAIL	0.91	15	0.1365	
		100	0.8540	

The portfolio beta is 0.8540, which is lesser than 1. Therefore, if the fund manager wants to protect his fund from the forthcoming loss, he should try to increase the beta of the portfolio, which can be done by increasing the proportion of high beta stocks like Tata Motors and reducing the low beta stocks like Dr. Reddy's in the portfolio.

Alternative Measures of Risk

TRACKING ERROR

With small modifications in the risk measure, standard deviation, we will get an alternative measure of risk called tracking error. It is defined as the standard deviation of the difference in return between the investment and a specified benchmark or target position. The differential return is defined as follows:

$$\Delta R = R - B$$

Where,

R is the return on investment; and

B is the return on benchmark.

Tracking error is a relative measure of risk. It is particularly useful when the investor is interested in knowing how his/her portfolio is positioned with reference to a benchmark or a target. This helps in tracking the investment performance. It suffers from a severe drawback – it treats deviations above the benchmark and those below the benchmark alike.

Relation between Tracking Error and Beta

The tracking error of a security relative to the market index can also be derived from the following differential return equation:

$$R_i - R_m = (\beta_i - l) R_m + e_i$$
 Eq. (7)

Where,

 $R_i = Return on the security i$

 $R_m = Return on the market index$

 β_i = Beta of security i

 $e_i = Security$ i's residual return.

The above equation is derived from the basic equation to find the return on security i (viz),

(Note: In some places, you will find α_i in place of e_i .)

Tracking error for stock 'i' is given by,

Tracking error for stock
$$\mathbf{i} = \left[(\beta_i - l)^2 \sigma_m^2 + \sigma_{e_i}^2 \right]^{1/2}$$
 Eq. (9)

Illustration 7

Suppose a stock X has a beta of 1.2 with residual risk 15%. The variance of the market returns is 10%. Calculate the volatility of the stock and tracking error.

Solution

Variance of the return on stock X = $\beta_x^2 \sigma_m^2 + \sigma_{e_z}^2$

 $=(1.2)^2 (0.10)^2 + (0.15)^2 = 0.0369$

$$\sigma_{\rm x} = 19.21\%$$

Tracking error of the stock relative to the market is,

Tracking error =
$$\left[(1.2 - 1.0)^2 (0.10)^2 + (0.15)^2 \right]^{1/2} = 22.9\%$$

Since beta of the stock is a little close to that of the market, i.e., most of the tracking error of a stock relative to the market comes from the stock's residual volatility.

TRACKING ERROR OF FIXED INCOME SECURITY

Modified duration is a concept related to fixed income security. It is generally expressed in years and is less than or equal to the actual maturity of the fixed income security. The relationship between the short-term return on a fixed income security due to a small change in its yield-to-maturity and the modified duration can be expressed as follows:

$$\frac{\Delta P_i}{P_i} = -D_i^* \Delta y_i \qquad \dots \text{ Eq. (10)}$$

Where,

P_i is the price of the security;

 D_i^* is the modified duration; and

y, is the yield-to-maturity for security i.

If the change in the yield-to-maturity of a particular security i is related to the change in a key market interest rate, it can be expressed as follows:

Where,

 β_i = sensitivity of the security's yield to the market interest rate (yield beta);

r = market interest rate; and

 e_i = the residual change in yield unaccounted for by the market rate.

Replace Δy_i from equation (11) in equation (10).

$$\frac{\Delta P_i}{P_i} = -D_i^* \left(\beta_i \Delta r + e_i\right) \qquad \dots Eq. (12)$$

Taking the variance on both sides of the equation (12), we get the relation among the variance of return on the security to its duration, yield beta, market interest rate volatility and residual yield volatility as:

$$\sigma_{\rm R}^2 = D^{*2} \left(\beta_i^2 \, \sigma_{\Delta r}^2 + \sigma_e^2\right)$$

The security's yield beta and residual yield volatility are usually found by regressing the security's change in yield against the change in market interest rates giving a yield beta as,

$$\beta_{i} = \frac{\text{Covariance } (\Delta y_{i}, \Delta r)}{\sigma_{\Delta r}^{2}}$$
$$= \frac{\rho_{\Delta y, \Delta r} \sigma_{\Delta y}}{\sigma_{\Delta r}}$$

Where, $\rho_{\Delta y, \Delta r}$ represents the correlation coefficient between the change in the security's yield-to-maturity and the change in market interest rates.

Let D_i^* be the modified duration of the market index. The difference in return between the security and the market index can be approximated as,

$$\frac{\Delta P_i}{P_i} - \frac{\Delta P}{P_1} = -(D_i^* \Delta y_i - D_1^* \Delta r)$$
$$= -[D_i^* e_i + (D_i^* \beta_i - D_i^*) \Delta r]$$

Tracking error of a fixed income security i would then be expressed as follows:

$$[D_i^{*2}\sigma_{e_i} + (D_i^*\beta_i - D_1)^2 \sigma_{\Delta r}^2]^{1/2} \qquad \dots Eq. (13)$$

Thus, we can infer that a security with a duration similar to the market index and a yield beta equal to one will have tracking error equal to the duration adjusted residual yield volatility. Securities which have yield betas and market durations different from the market index will have tracking error greater than the duration adjusted residual yield volatility.

Illustration 8

Suppose a bond Y has a modified duration of 5 years, a yield beta of 0.8 and residual yield volatility of 1.2%. Yield volatility of the market is 2%. Duration of the market is 5.5 years. Calculate

- i. Volatility of the market and the bond y.
- ii. Tracking error for the bond relative to the market index.

Solution

i. Volatility of the market
$$\sigma_1^2 = D_i^{*^2} \sigma_{\Delta r}^2$$

= (5.5)² (0.02)² = 0.0121
 $\sigma_1 = 11\%$

Volatility of the individual bond:

$$\begin{split} \sigma_y^{\ 2} &= {D_y^*}^2 \ (\beta_y^2 \ \sigma_{\Delta r}^2 + \sigma_{e_i}^2) \\ &= (5)^2 \left((0.8)^2 \ (0.02)^2 + (0.012)^2 \right) = 0.01 \\ \sigma_y &= 10\% \end{split}$$

ii. Tracking error = $[(5)^2 (0.012)^2 + ((5) (0.8) - (5.5)^2 (0.02)^2]^{1/2} = 6.7\%$ The bond has a relatively high tracking error with respect to the market because it has a low yield beta.

Probability of Shortfall

This is another measure of risk proposed by Balzer (1994). It measures the chance that returns from the investment may fall below some reference point. The reference point is normally set at zero. However, it need not always be so.

Shortfall probability = Probability (R < B)

Where,

- R = return on investment; and
- B = benchmark or reference return.

The reader should be able to distinguish between tracking error which is an absolute measure and the probability of shortfall which is a probability. The benchmark return could be a risky asset or return on an index. This risk measure does not give any hint about the magnitude of risk. Consider two cases - (i) the investor has a 10% probability of losing 20%, (ii) the investor has a 10% chance of losing 100%. The probability of shortfall ranks these two as equivalent from a risk perspective. However, we can see that case (ii) leads to a huge loss if it occurs though the probability of losing is the same for both the cases. Thus, probability of shortfall is not a complete measure of risk.

Value at Risk (VaR) for the Asset Manager

It is a well-known fact that higher return can be obtained by assuming higher risk. However, for most cases, most of the investment decisions focus on the return side of the risk-return equation. The portfolio managers are judged on the basis of how much they outperform competition rather than by how much they have outperformed on risk-adjusted basis. Risk, in reality, is much more difficult to quantify than return. So, the focus of institutional investors is now more on their investment risk. The standard deviation of returns which describes the variability in the stocks' returns has been a traditional measure of risk.

ORIGIN

VaR explains the maximum possible loss (in currency terms) over a specified holding period and confidence level. It helps in estimating the amount of potential loss as well as probability of the loss occurring. In fact, it is a statistical approach. The origin of VaR can be dated back to 1993, when a Washington DC based company published a study and concluded that the market risk can be best measured as value at risk. Further in 1994, VaR gained popularity when J.P. Morgan introduced risk metrics, which is a variance/covariance method used for calculating VaR. Here, it is to be noted that VaR is not only used by derivatives dealers but also used in pension fund's risk management practices.

CALCULATION OF VaR

The measurement of VaR can be done by any of the following three methods – Variance/Covariance method, Historical Simulation method, and Monte Carlo Simulation method. There is no single method that can fit every situation. Among the three methods, the Variance/Covariance method finds more applicability.

Variance/Covariance Method

This method is also termed correlation method. This finds its place in J P Morgan's Risk Metrics and is based on Modern Portfolio Theory (MPT). Using MPT, the total expected risk of a portfolio or its standard deviation can be explained as a function of the volatility of return of each security in the portfolio and the correlation between each security's position.

Now, volatility of a portfolio, comprising two securities can be written as:

$$\sigma_{p} = \sqrt{w_{i}^{2} \sigma_{i}^{2} + w_{j}^{2} \sigma_{j}^{2} + 2w_{i}w_{j} \rho_{ij} \sigma_{i} \sigma_{j}} \qquad \dots Eq. (14)$$

Where,

 $w_i =$ Market value weight of the ith security;

 $w_i =$ Market value weight of the jth security;

 $\sigma_i^2 =$ Variance of ith security;

 σ_i^2 = Variance of jth security; and

 ρ_{ii} = Correlation between securities i and j.

In fact, VaR can be viewed as an extension of MPT. It assumes that the risk exposures are affected by only one risk factor.

Factors may be interest rates or exchange rates that drive the valuation of securities. VaR involves the mapping of security positions to a simple set of instruments or exposures. Once the mapping is done, it is necessary to compute the standard deviation of return on the portfolio. The calculation can be done using equation (13) with a difference. The weights of the securities are replaced by the weights of the exposures to a risk factor, and the variance of the security is replaced by the variance of the risk factors. The correlation coefficient here measures the correlation between the risk factors. The equation can be written as:

$$\sigma_{p} = \sqrt{w_{x}^{2}\sigma_{x}^{2} + w_{y}^{2}\sigma_{y}^{2} + 2w_{x}w_{y}\rho_{xy}\sigma_{x}\sigma_{y}}$$

Where,

 w_x = Market value weight of the exposures to risk factor x;

 $w_y =$ Market value weight of the exposures to risk factor y;

$$\sigma_x^2$$
 = Variance of risk factor x;

 σ_{y}^{2} = Variance of risk factor y; and

 ρ_{yy} = Correlation between risk factors x and y.

Once the standard deviation is calculated, the VaR is simply the number of standard deviations that equates to a given probability level.

Historic Simulation Method

This involves the use of historical market data, and calculating the market value of the portfolio for each day over a specified period of time. One of the major advantages of this method is that it is easy to understand. It does not make any assumptions about the distribution of returns and stability of the volatilities and correlations. Though this approach is a good one, it suffers from certain drawbacks. The use of the number of trading days for collecting data may not be a representative of future market movements. The VaR may be over or underestimated depending upon market history.

Monte Carlo Simulation

When compared to the earlier two methods, this is more flexible. This method is used to generate a large number of market movements which is consistent with expected volatility and correlations. Here, each scenario is different but the total simulations will aggregate to the overall statistical parameters. VaR is then calculated from the results of the simulations. The Monte Carlo method is flexible in nature, in the sense that the distributions may not be normal, but they may reflect the actual historical distributions of the risk factors. This method generates much more simulations than the historical method and is not constrained by the assumptions of the historical method. The only disadvantage is that it requires the use of a computer.

Stress Testing

Each method has its own advantages and disadvantages. Any method can be chosen provided that it is supplemented by stress testing. Stress testing involves comparison of the value of a portfolio of exposures or assets under various market assumptions. For instance, a portfolio's value is calculated based on some assumption such as yield curve shifts of \pm 100 basis points, 5% or 10% appreciation/depreciation of a foreign currency or a significant price increase/decrease of a particular commodity. These simulated situations would provide an estimate of the worst possible scenarios which a portfolio manager is likely to encounter. Thus, stress testing helps in providing additional risk information which an investment/portfolio manager needs to know.

APPLICATIONS OF VaR

Implications from the Portfolio Point of View

VaR provides a common framework for the aggregation of risk irrespective of the asset, portfolio or product that is under evaluation. It can be used to aggregate and estimate the risk consistently over a broad class of assets that may include equities, high-yield securities and the emerging markets. VaR provides managers information about the nature of risk facing the portfolio. The portfolio managers can use VaR in making investment decisions, and in the process of constructing more efficient portfolios. The VaR methodology helps the investor in quantifying the risk effect of adding or removing an asset class or security to/from a portfolio. It is also used for setting risk parameters or limits on a portfolio. The portfolio limits can be generally constructed using either the absolute VaR or total variation in the portfolio.

Whatever method be used for calculation, the VaR results can be predetermined based on the assumption that past market data serve as a representative of the future. This implies that VaR can only predict losses and does not provide an assurance against the possibility of a higher level of losses. Its accuracy also depends on the level of data and assumptions associated with it.

Performance Measurement Implications

As stated earlier that the origin of VaR has its roots in modern portfolio theory, as such its application for performance measurement finds immense use. Though traditionally, performance of portfolio managers was measured in terms of the total returns that were earned on the portfolio they managed, a need was felt to account for the risk they assumed to achieve that level of return. However, VaR should not be construed as a proxy for the standard deviation used to measure risk; rather it should be used with standard deviation.

Standard Deviation and VaR

Standard deviation has its own advantages; viz., (i) consistency of its calculation among the managers and hence the comparability of results (ii) common time-frame for both return and risk calculation. However, VaR suffers from the absence of these two advantages. Different models and different assumptions will yield different VaR results and hence comparison of two managers based on VaR becomes difficult. While VaR is an estimate of the risk of current portfolio, standard deviation is a measure of the actual return volatility of past portfolio compositions. Even if VaR is measured continuously, it may not be reliable as it is an estimated measure of risk whereas standard deviation is an *ex post* measure of actual volatility.

Performance Measurement vs. Peer Group

VaR could be best used as a measure of relative risk for competitive set of portfolios. However, it has a drawback that can be exemplified as follows. Let us say that the returns earned by two portfolio managers A and B on their portfolios are 20% and 10% respectively. A's VaR is 15% and B's is 10%. One may conclude that A's performance is inferior to that of B on a risk-adjusted basis.

However, it may not be true. VaR calculation should have been consistent with respect to both A and B to facilitate comparison. How do we assure consistency? Two options of assuring consistency are: (i) composition of the competitive portfolios must be known to facilitate calculation of VaR; (ii) a standard VaR measurement methodology must be adopted to facilitate reporting of VaR of the competitive portfolio.

It is found that both the options are infeasible in practice. Fund managers do not reveal information on the composition of their portfolio to a peer group of managers. Even if some information is available, it may not be reliable. It is not possible to arrive at a consensus on a unique approach to calculate VaR.

Performance Measurement vs. Index

VaR finds more application in measuring performance versus an index benchmark rather than a peer group. VaR measured using an index as a benchmark provides more meaningful and reliable information than the relative risk versus a competitive benchmark. VaR calculation for the actual portfolio and index portfolio is consistent because the investment manager will calculate the risk of both portfolios using an identical methodology. Moreover, data regarding the composition of the index is readily available and reliable too. The ratio of VaR of the manager's portfolio to that of the benchmark will then give the relative risk score. If the ratio is greater than one, it is perceived to be riskier than the benchmark. The effective way of making use of VaR is to understand that it is a tool used for evaluation of risk and not a solution in itself. A clear understanding of different methodologies, inputs and assumptions is also imperative to comprehend and interpret VaR figures and to make effective portfolio decisions.

PORTFOLIO DIVERSIFICATION

Diversification is the strategy of combining distinct asset classes in a portfolio in order to reduce overall portfolio risk. In other words, diversification is the process of selecting the asset mix so as to reduce the uncertainty in the return of a portfolio. Diversification helps to reduce risk because different investments may rise and fall independent of each other. The combinations of these assets will nullify the impact of fluctuation, thereby, reducing risk.

Most financial assets are not held in isolation, rather they are held as parts of portfolios. Banks, pension funds, insurance companies, mutual funds, and other financial institutions are required to hold diversified portfolios. Even individual investors – at least those whose security holdings constitute a significant part of their total wealth – generally hold stock portfolios, not the stock of a single firm. Why is it so? An important reason is the lowering of risk, which means risk of getting zero or negative return on some assets. If a person holds a single asset, he or she is highly dependent on the issuer firm, its success, and dividend policy, as well as on the overall current market situation. On the other hand, holding a well-diversified portfolio protects a person from both market fluctuations and internal problems of issuer. A diversified portfolio helps to keep investment returns stable.

As we have learnt in the earlier sections, the portfolio risk depends not only on the variance of the individual securities in the portfolio but also on the correlation coefficient between each pair of securities.

Diversification in a portfolio can be achieved in many different ways. Individuals can diversify across one type of asset classification – such as stocks. To do this, one might purchase shares in the leading companies across many different (and unrelated) industries. Many other diversification strategies are also possible. You can diversify your portfolio across different types of assets (for example, stocks, bonds, and real estate) or diversify by regional allocation (such as state, region, or country).

Thousands of options exist. Luckily, in almost every effective diversification strategy, the ultimate goal is to improve returns while reducing risks. The following possible ways can be applied by a fund manager while considering the mode of diversification.

Diversify within an Industry

Investing in a number of different stocks within the same industry does not generate a diversified portfolio since the returns of firms within an industry tend to be highly correlated. However, this is better than investing in a single stock.

Diversification Across Industries

Diversification across industries refers to the diversification by any portfolio holder with the help of appropriating the fund in various industries. The industries to be chosen by any fund manager should provide the minimum required return by canceling out the risk of the individual industries. For example, assume that a fund manager has invested only in the aluminium industry. It is possible that this industry may not perform well because of lack of proper power supply. The effect of power scarcity could lead the prices of all aluminium stocks to plummet. The entire holdings of fund manager would be left at deflated level. However, if fund manager also invests in other industries such as oil, consumer durables and electronics, it is unlikely that unsystematic risks in aluminium industry will adversely affect fund value. What is more, unfortunate circumstances in the aluminium industry may result in a boom in other industries which are not affected by power crisis. If a fund manager is holding stocks of those industries, he might even benefit from the troubles of aluminium industry. Unsystematic risks can be avoided by diversifying among different industries rather than just investing in one.

Diversify Across Geographical Regions

Companies whose operations are in the same geographical region are subject to the same risks in terms of natural disasters and state or local tax changes. Investing in companies whose operations are not in the same geographical region can diversify these risks.

International Diversification

If any portfolio manager tries to diversify his/her portfolio by investing across the countries, the diversification is known as international diversification. For an individual investor, it is quite difficult to adopt this kind of diversification because of the regulations of different countries as well as high transaction costs attached in dealing with foreign investments. Even for all fund managers, it is not possible to implement international diversification due to regulatory constraints attached to it.

ISSUES IN INTERNATIONAL DIVERSIFICATION

Given the enormous opportunities available around the world, international diversification can be a beneficial strategy for big investors. To analyze this kind of diversification, we have to consider the following factors:

- i. Returns available in different countries;
- ii. The risk attached to each foreign market; and
- iii. The correlation coefficients across international markets.

The return from a foreign investment depends on the return on the assets within its domestic market and the change in the exchange rates between the asset's own currency and the currency of the buyer's home country. Therefore, the return on the asset for a foreign buyer can differ according to the domicile of the buyer. For example, assume that the stock of Microsoft earns a return of 20 percent for a US

investor, but the real return for investors in India or Indonesia will depend on the corresponding exchange rate between the two countries. If the rupee is depreciating against the dollar, the investment in Microsoft stock will yield greater return, however, if the rupee is appreciating against dollar, the return from such investment will produce lower returns to the Indian investor. Thus, the exchange rate between the security's country and the country of purchaser plays an important role in deciding the actual return available to the international purchaser.

Basically, return from a foreign investment could be segregated into the return in the security's home market and return from the changes in the exchange rates.

There are two sources of risk attached to an investment in the foreign securities. First, the return on an investment in foreign securities fluctuates due to change in the securities prices within the securities domestic market, and second, source of risk is the variations in the exchange rates.

The risk of investing in foreign securities can be assessed using the standard deviation of securities and the correlation coefficients between two security markets. The correlation coefficients between the markets of countries, where investment has been made, play a significant role in deciding the risk of the international portfolio. If any fund manager in India invests in US and Japanese stock, the correlation between US and Japanese market should be taken into account while calculating the risk of the portfolio consisting Japanese and US stocks.

The total risk of any international portfolio can be split into domestic risk and the exchange risk. Domestic risk is indicated in the standard deviation of returns, when returns are calculated in the domestic currency. Exchange risk can be measured by assessing the variations in the exchange rates. If an Indian investor has invested his money in the US stock, the risk of investing can be represented by the standard deviation of the US stock price changes in dollars and the standard deviation of changes in the rupee-dollar exchange rate. It should be noted here that variability of exchange rates should be calculated by assessing the variability of each foreign currency with respect to domestic country. Use of hedging strategy by any international investor can protect his/her portfolio against the exchange risk. If an Indian investor enters into a forward contract, he can protect the value of the fund.

Exchange rate fluctuations generally increase the correlation among countries' returns. The risk of an international portfolio can be significantly reduced, if the portfolio risk is completely protected against the exchange risk.

Apart from the exchange risk, there are several issues attached with the investment in the foreign assets. For example, if the tax rate imposed on the foreign investment differs greatly from the domestic investment, the risk of foreign portfolio will increase. Differential tax structures are quite common for international investors. Several countries impose withholding tax on dividends received from international investments. In withholding tax arrangement, a taxable firm can get a domestic credit for the foreign tax paid, provided there is an agreement between the home country and the foreign country. However, for a nontaxable portion of any fund's portfolio like pension assets, withholding tax is a cost that may lower the return from the international investments. Higher transaction cost in international investments compared to the domestic investment can cause lower return from the foreign investments. Controls sometimes do not allow an international investor to drive the full benefit. For example, the RBI did not allow FIs to take a forward contract for their portfolio investment. Similarly, the RBI puts a cap on FII investment in a company. These restrictions either increase the risk or reduce the return.

One form of international diversification by any domestic investor is to invest in the multinational corporations based on his/her country, but research results state that this kind of diversification does not result in the international diversification because stock prices of MNCs behave much like the stocks of domestic firms and are least affected by the foreign factors.

Diversification Across Asset Classes

Investing across asset classes such as stocks, bonds, and real property also produces diversification benefits. The returns of two stocks tend to be more highly correlated, on average, than the returns of a stock and a bond or a stock and an investment in real estate.

Diversification across asset classes provides a cushion against market tremors because each asset class has different risks, rewards and tolerance to economic events. By selecting investments from different asset classes, any portfolio manager can minimize the overall portfolio risk. Securities whose price movements are opposite to each other are negatively correlated. When negatively correlated assets are combined within a portfolio, the portfolio volatility is reduced. For example, if the returns from stocks and bonds are negatively correlated, investing in both stock and bond can result in lowering the risk of the portfolio.

Diversification across asset classes works with the help of three over-arching asset classes – stocks, bonds (or stock and bond mutual funds), and so-called cash equivalent securities, such as money market mutual funds which are quite safe and allow easy access to your money, much like cash. Investing in any of these securities carries some risk, but at varying levels. If any portfolio is formed using these assets with required risk/return trade-off, the desirable benefits of the optimal diversification can be achieved.

MARGINAL PRODUCTIVITY OF INCREMENTAL ASSETS

Many traditional approaches to portfolio diversification suggest that the more securities one adds to his/her portfolio, the better return and less risk he/she gets. Markowitz-type of diversification emphasizes on selection of right kind of securities with least positive correlation and not the addition of more securities. Unfortunately, most of the securities available are positively correlated and a significant part of their risk is systematic risk which cannot be diversified. Only the unsystematic risk can be diversified using an appropriate diversification approach. Once you diversify all unsystematic risk, your portfolio will possess the systematic part of the total risk which nobody can avoid. Therefore, beyond a finite number of securities like twelve or fifteen, inclusion of more securities will be expensive in terms of time and money required to be spent to identify them and watch their performance, and this additional cost cannot be offset against any additional gains in the form of reduced portfolio risk. Researchers in the advance countries suggested that unsystematic risk can be reduced naively by holding not more than ten to fifteen stocks. In general, as the number of securities in a portfolio increases, say up to 15 or 20, the diversification process recedes dramatically. However, soon thereafter the marginal reduction to portfolio risk of any further diversification becomes very small (see Figure 2). Roughly speaking, a diversified portfolio of 25 securities selected from different industries more or less represents a market portfolio. For example, the BSE Sensex consists of 30 stocks from diverse industries that more or less represent the entire Indian stock market. Because of this reason, the BSE Sensex and BSE Natex with 100 stocks are highly correlated and often move together. Clearly increasing number of securities from 30 to 100 does not necessarily enhance the effect of diversification. Moreover, there is a fair chance that duplicating the stocks from the same industries can increase risk. With Markowitz-type of diversification, portfolio risk can be reduced below the systematic risk level by incorporating low or negatively correlated securities in the portfolio.



The extent of diversification possible in a portfolio is directly related to the proportion of systematic risk in the total risk of the portfolio. For example, if 40% of total risk in a portfolio is systematic risk, diversification can reduce the total risk to the extent of unsystematic risk in it. Hence, 60% (100% - 40%) of the total risk can be reduced by diversification in this portfolio. Proportion of systematic risk in a portfolio can be measured as follows:

$$\frac{\beta_p^2 \sigma_M^2}{\sigma_p^2} = \frac{\text{Systematic risk}}{\text{Total risk}}$$

PERILS OF EXCESSIVE DIVERSIFICATION

Over diversification means selecting too many securities in a portfolio. This can diminish the significance of an individual holding. Good performers can get lost in the crowd, minimizing their positive impact on the overall portfolio. In addition, over diversification can increase the costs of investing and can make it difficult to maintain and manage your portfolio. The question is, how many securities should an investor own? It depends on the risk and return requirements of an individual investor. Probably not more than ten to fifteen securities should be purchased for getting the benefits of diversification because, owning too many securities can easily result in a dangerous combination of over diversification and excessive cost.

Over diversification can theoretically create a perfect hedge and thus produce a flat or zero return. For example, if you purchase gold mutual funds as an inflation hedge and also have fixed income mutual funds, which are deflationary in their scope, depending on what the economy does, one fund can rise and one can fall, thus resulting in a neutral response. Therefore, it is important to have a portfolio that is diversified but not to such a great extent that it does not provide good returns.

SUMMARY

- The expected return from a portfolio is based on the characteristics of the individual stocks and the performance of such stocks in the past and the expected performance in times to come.
- Every portfolio bears certain risk, which is measured by the deviation of actual return of the portfolio from the expected returns. The portfolio risk also depends on the correlation or covariance of the securities among themselves.

- Covariance depicts the extent to which two securities move together. The covariance of returns between the two securities can be positive or negative or absent. All the stocks in the portfolio have risk, but the collective risks of all the stocks in the portfolio tend to be different when calculated as a cohesive unit due to the diversification effect.
- The returns are affected by the systematic and unsystematic risks associated. To reduce the variability of the stock, it is recommended that the portfolio be fully diversified across industries, geographical groups, asset classes, etc.
- However, there are drawbacks from over diversification also; hence, the portfolio manager should guard against such possibilities because overdiversification can neutralize the benefits from the combination of good stocks.

<u>Chapter XV</u> Portfolio Revision

After reading this chapter, you will be conversant with:

- Need and Importance of Portfolio Revision
- Pitfalls to be Avoided in Portfolio Revision
- Portfolio Revision Techniques
- Practical Problems in Portfolio Revision
- Selection and Revision of Equity Portfolios

NEED AND IMPORTANCE OF PORTFOLIO REVISION

Constructing a portfolio is similar to constructing a house – both require determination of the needs and the available resources and proper matching of the two. However, there are a few basic differences – while a building may require little changes as frequent changes are not feasible, a portfolio calls for frequent changes based on changes in various factors. For portfolios, change is inevitable. The responsibility of the investment managers is to modify the composition of the portfolio (rebalance the portfolio) in such a way that it achieves the objective laid down even in the changed conditions. This chapter focuses on how this task is achieved by portfolio managers. In other words, it focuses on the day-to-day activities of portfolio management.

Portfolio rebalancing or portfolio revision calls for making a risk-return trade-off. The cost of revising the portfolio is known as the transaction cost, which manifests in two forms – the commissions or brokerages and the bid-ask spread. There may be some non-financial transaction costs as well. For example, if the portfolio manager changes the portfolio composition very frequently, he may lose his credibility. Sometimes, the client may feel uncomfortable with the high turnover in the portfolio and look out for the services of another portfolio manager. Though the portfolio manager is fully justified in making the changes, frequent trading may impose subjective costs. And, these costs have to be borne by the portfolio manager in the form of lost fees. That explains why portfolio management focuses on maximizing the utility of the investor rather than the returns.

The feeling that it is sometimes advisable not to trade at all, is right but only to a certain extent. Staying away from trading will also entail its own costs, which may manifest as follows:

- Holding a portfolio or an asset that is overpriced and hence offers inferior returns.
- The composition of a portfolio may no longer reflect the investor's objectives.
- A poorly diversified portfolio, which is riskier than what an investor can bear.

Adopting a buy-and-hold strategy (not trading at all) very often imposes costs in the form of one or more of the above. Just a day after its formulation, the portfolio may cease to be optimal. However, trying to keep it optimal always entails transaction costs. Again, incurring transaction costs may not be sensible when the deviation from optimality is minimal.

PITFALLS TO BE AVOIDED IN PORTFOLIO REVISION

People have many misconceptions on how to go about revising or rebalancing portfolios. Some portfolio managers believe in churning their portfolios continuously. They do it as dictated by their emotions rather than as an analysis of the changes in asset values, capital market opportunities and utility of the investor. Even investors have their own idiosyncrasies. They change the portfolio manager and/or the portfolio composition just because the value of the portfolio has decreased and run to portfolio managers who have recently achieved higher returns, without thinking about the risk-return trade-off. The following are the common follies committed in portfolio revision, which should be carefully avoided.

Projecting the Past into Future without Analysis

People have a tendency to believe that anything that worked well in the past will continue to do so. This perhaps arises from the fact that we can take some things for granted – the sun rises in the east; the seasons have a rhythm, so on and so forth. However, it is unwise to extend the logic and state that an asset class that has

been providing good returns in the past will continue to do so. The converse is also true, that an asset class will not provide good returns in future because it did not do so in the past. The underlying tendency, it appears, is to take comfort from the feeling that there might not be much risk in an investment that provided good returns in the past. However, this only results in closing one's eyes to risk and thinking there is no risk.

Cultural Differences

The behavior and attitudes of successful investors are often remarkably different from what can be expected from a profit seeking organization. Commercial entities reward success and punish failure. However, successful investors do not hesitate to stay with the laggard till the profit potential is realized. They do not sell securities because the returns are poor in one period, if the promise for the future is bright. An organization, under similar circumstances, may force its managers to sell securities that offer a lot of potential due to poor performance, perhaps just before they start moving up. Another folly frequently committed is to go with the crowd. People derive a certain amount of comfort by investing in what others are investing in. Organizations are known to force their managers to invest in markets or asset classes in which competing organizations are investing, irrespective of the desirability of such investments. Sometimes, such investments are considered necessary from the marketing point of view - the clients may be put off, for example, if an investment management organization says that it has no dealings in the emerging market securities, when all other similar organizations are investing heavily in the emerging markets. For example, Templeton Mutual Fund believed in value investing and refrained from investing in IT stocks. Further, fund managers also find it easy to go with the market and lose money rather than go against the market and lose money.

Need for Rebalancing: How to Identify Factors Affecting the Client

There may be many reasons why the portfolio of a client may have to be changed. The portfolio manager should always remain alert and sensitive to the changes in the requirements of the client. The following are some of the important factors affecting the client, which make it necessary to change the portfolio composition:

CHANGE IN WEALTH

According to the utility theory, the risk taking ability of the investor increases with increase in wealth. It says that people can afford to take more risk as they grow rich and benefit from its rewards. However, in practice, while they can afford, they may not be willing. As people get rich, they become more concerned about losing the newly acquired riches than about getting richer. So, they may become conservative and more risk-averse. The fund manager should observe the changes in the attitude of the investor towards risk and try to understand them in a proper perspective. If the investor turns to be conservative after making huge gains, the portfolio manager should modify the portfolio accordingly.

CHANGE IN THE TIME HORIZON

As time passes, some events may take place that may have an impact on the time horizon of the investor. Births, deaths, marriages and divorces – all have their own impact on the investment horizon. There are, of course, many other important events in a person's life that may force a change in the investment horizon. The happening or non-happening of the events will naturally have effect. For example, a person may have planned for an early retirement, considering his delicate health. However, after turning 55 years of age, if his health improves, he may not take retirement. He may extend the investment horizon, as he does not need annuities until he retires.

CHANGES IN LIQUIDITY NEEDS

Investors very often ask the portfolio manager to keep enough scope in the portfolio to get some cash as and when they want. This forces the portfolio manager to increase the weight of liquid investments in the asset mix. Due to this, the amount available for investment in fixed income and/or growth securities that actually help in achieving the goal of the investor, gets reduced. That is, the money taken out today from the portfolio means that the amount and the return that would have been earned on it are no longer available to achieve the investor's goal.

CHANGES IN TAXES

It is said that there are only two things certain in this world – death and taxes. The only uncertainties regarding them relate to the date, time, place and mode. With taxes you have the additional aspect of the amount or rate. So, portfolio managers have to constantly look out for changes in the tax structure and make suitable changes in the portfolio composition. The rate of tax under long-term capital gains is usually lower than the rate applicable to income. If there is a change in the minimum holding period for long-term capital gains, it may lead to revision. The specifics of tax planning depend on the nature of income of the investor, and the nature of other investments.

BULL AND BEAR MARKETS

The fluctuations in the stock markets often provide opportunities for the investors in both positive as well as negative aspects. Say, when everything is going well, the markets also perform well, but during downtrends in the economies, the stock prices fall. Let us consider the period one, where stock return is more than the bond in contrast to the period two, where the bond has better return than the stock. This provides the opportunity to buy stock in period one and sell it in period two to shift to the bond market. The above facts also apply to individual securities. The investors protect themselves against disturbances that arise in the markets. This is possible only when the investors have proper knowledge and discipline in the investment process. The disciplined investment decisions provide value by providing the objective basis to confidently pursue uncomfortable investments.

THE CENTRAL BANK POLICY

The central bank and the other banks enjoy a greater power in influencing liquidity in the capital markets. The stock market's demand for funds arises basically out of the money supply growth and the underlying policy that determines it. The monetary and liquidity constraints finally take a toll on the stock markets. Further, the monetary policy also has an immediate effect on the money markets, though it has less effect on long-term bond yields.

INFLATION RATE CHANGES

Inflation has its unique way of affecting the stock markets. As per the studies of Fama, unexpected changes in the rate of inflation may affect pricing of stocks in either direction. When the inflation rate increases beyond expectations, the bond investors face a reduced real yield on the bonds. The nominal yield then rises so as to counteract the loss, and the bond prices fall. The unexpected changes in the inflation rate are also significant to the stock market returns. The simple measures of inflation, such as Consumer Price Index (CPI), are not reliable predictors of future returns on stocks and bonds. Alternatively, the rates of changes in producer prices, which actually result in CPI inflation provides a better measure and signal for future returns.

CHANGING RETURN PROSPECTS

It is assumed that other things being equal, the changes in prices accompany changes in the return prospects. With each negative fluctuation in the bond's price, its yield rises but its total return falls. For the equities, as price changes take place regularly, so do the return prospects. These changes eventually lead to the adjustments in the investor's portfolio. Bonds are both the most quantifiable as well as the least quantifiable of asset classes, for bonds which are downgraded by raters provide a better return prospect. A simple measure such as the slope of the bond market yield curve serves as an indicator of bond performance relative to cash equivalents.

The Transaction Cost Barrier

For all good reasons, transaction costs provide a jolt to the portfolio managers. These costs can never be recovered and their cumulative erosion value can at times be harmful. The very task of portfolio revision does not come free. Apart from the negative effect from the fees earned by brokers, the traders themselves can influence the security prices. The portfolio manager is expected to understand the trading costs and then to control or avoid them. Transaction costs consist of more than just commissions. Marked changes are observed, before and after the trade and even during the day. This may be another inadequate measure. The actual cost of transacting is the difference between the realized price and the price that must have existed in the absence of the order. Added to these, there can be trades that one seeks to carry-out, but fails to execute, which provides another tariff, an opportunity cost.

Several research studies have tried to find the true transaction cost. However, they could not realize their goals, because traders possess many skills and devise ways to win whatever game the portfolio managers try to play with them. Trading costs are like an iceberg. The commissions rise above the surface, visible to the man. The part below the water reflects market impact of trades and those costs of the traders that were never incurred.

TRANSACTION MANAGEMENT

The modern portfolio theory aided by affordable computing power and new investment vehicles provides encouraging facts on trading costs. It argues that trading costs are difficult to overcome. These innovations in finance made the program trade a credible alternative to traditional trade executions. If anyone trades without any basis, with the broker initiating a transaction without having seen the actual list of securities being traded, the broker's bid may be overstating the actual value of the trade cost. Thus, a broker would be able to make some profits also.

TRADING'S POSITIVE SIDE

The traders provide liquidity to the markets, which is one of the prominent features of capital markets. Further, the commissions indirectly help in funding investment research, which adds to the efficiency that makes investment management a rewarding occupation. Added to this, rebalancing is a necessary aspect of portfolio management, so it should be done on a cost effective basis.

Asset Mix Rebalancing Benefits

DRIFTING MIX

Normally, clients and other investment managers strive hard, so that their asset policy reflects an aversion towards risk as well as a good return prospect. However, normally this asset mix gets drifted because of the day-to-day changes in stocks. Two sensible views of asset allocation exist in the markets. One being the active shift that is assumed to add value, and the other being market efficiency which assumes to preclude a profitable switch among asset classes. However, investors behave in such a way as if neither of these applies in the real world. The simple rebalancing can provide the necessary measure of control over a drifting mix. It is very effective and is properly managed.

DISCIPLINED REBALANCING

Suppose an investor decides to maintain an investment mix consisting of 60 percent of stocks and 40 percent of bonds, so that he can rebalance the stock and bond position to the extent of 60/40 equilibrium on a monthly basis. Studies have revealed that simple rebalancing over a fifteen year period produces an average annual return of 9.82 percent higher than the results obtained from a drifting mix.

By rebalancing into more variable return assets when the markets decline, the loss on the portfolio is more than that of the drifting mix. However, at the same time, riskier assets usually provide superior long-term returns.

Coherent rebalancing increases the level of performance. Though it may not work every year or in every market cycle, it may work better over time. The disciplined rebalancing helps in eliminating the periodic deviations from the policy mix. Further, it can also produce real world benefits over and above those depicted normally. Rebalancing does not require the belief in market timing and is easy to sell to clients. Finally, we can say that rebalancing adds to the modest values that cumulate significantly over time.

DISCIPLINED REBALANCING VS. AD HOC CHANGES

The responsive shift benefits systematic rebalancing. Further, while a standard 60/40 portfolio generates a return of around 10 percent, simulated *ad hoc* shifts in response to the drifting return are expected to produce a higher return. Rebalancing may not be effective each year. For example, the returns on stocks were more than the bonds throughout 1980.

THE BURDEN OF EXCESS CASH

Cash reserves may not always be beneficial to the investors. Cash can, at times, be a highly risky investment. If the interest rates fall, the income on cash investment will also fall, and thus sacrifice the opportunity for long-term investors. Cash may be a good source for short-term investments. During the period 1926-88, the cash equivalents underperformed the stock and the bonds considerably. For long-term investments, cash produces low returns but associates itself with high returns. The endowment funds, despite their saving obligations, hoping that they would be perpetual, maintain an even higher position, to their detriment. The cash retained for benefits payments and cash reserves held by equity and bond managers can add up to a larger figure.

REBALANCING WITH STOCK SCREENS

Vendors often offer stock screening models that include rebalancing activities. Some of these models have added considerable value over time, but they are at the same time not free from certain drawbacks. In these models, the transaction costs are ignored. While the active managers deliver results after the transaction costs, screening models do not include such costs in their return equations. Further, the screens seem to favor the smaller stocks as compared to the larger ones mainly because there are more of smaller stocks than larger ones. Thus, the selection of smaller stocks would be more than warranted by their share of aggregate equity market value.

Availability of New Investment Avenues

In both developing and developed markets, generally, new investments are invented which gain popularity. In India, currently there are three types of new instruments in their initial stages of development. The latest of them are interest rate derivative instruments. Both BSE and NSE have already introduced trading in index futures and stock futures. Interest rate derivatives are expected to improve the market activity further. Index futures are highly efficient instruments to arrive at the optimal asset allocation mix. The second is the possibility of Indian investors investing in stocks abroad, which might be allowed by the government soon. The third is the increasing securitization of assets in the market. If the trend picks up well, securitized instruments may be available even to individual investors soon. The availability of new investment avenues and/or hedging instruments makes it necessary for the portfolio manager to reconsider the pattern of allocation of funds (or the asset mix) to make sure that the allocation is optimal, and to make change where desired.

Change in Asset-Risk Attributes

Asset allocation decision depends on the expectations regarding the risk-return attributes of the assets chosen for investment. If there are any changes in the risk and return projected for the investments, changes in the investment mix become necessary. For example, there may be an unexpected recession in the economy, bringing down the yields on investments. Or, there may be an unexpected increase in the volatility in the stock markets, which changes the risk of the chosen investments. The rate of inflation may go up, and the inflationary expectations in the economy may also rise. Or, there might be a change in the policy of the government relating to some of the industries in which investments have been made. While changing the investment mix to suit these changes, it must be borne in mind that the adjustment may result in reduction in the overall return or a higher risk may have to be borne for the same return, as the universe of available investment opportunities has undergone a change. A good portfolio manager should explain this to his client.

PORTFOLIO REVISION TECHNIQUES

While portfolio revision, according to changes in various factors as outlined above, involves determining the optimal asset mix again, there are certain techniques which are either based on a formula or a rule of thumb. These techniques are aimed at avoiding the elaborate exercise involved in identifying the changes in various factors and redefining the optimal asset mix. While they do not result in an optimal asset mix, they nevertheless help, at least sometimes, in making good use of changes in the stock market and the value of the portfolio. In other words, these techniques are aimed at making the portfolio revision decisions automatic.

Formula plans are based on predetermined rules. The rules specify the nature, timing and proportion of change. The rules result in the elimination of emotional responses by investors such as optimism and pessimism, as the actions to be taken are predetermined. As we may expect, the actions suggested in these plans are contrary to what investors normally do in situations of optimism or pessimism. The plans, therefore, relieve the investor from the pressures relating to forecasting of fluctuations in security prices. However, these plans do not envisage selection of individual securities. They provide for actions involving reallocation of funds from one asset class to another asset class. The individual securities have to be selected separately.

However, then, formula plans should not be looked at as a sure short way of maximizing returns. The plans have their own weaknesses:

- They offer no suggestions to select securities.
- The formula plans, by their very definition, are rigid and offer no flexibility. Due to this, it is necessary to know when to change the formula, to suit the changing circumstances, which is not an easy task.
- The plans are not suitable for too short a period or too long a period. Plans need adequate time to work optimally. The longer the time-frame, the greater is the possibility that the investment environment and the circumstances of the investor may change, making it necessary to change the formula itself, about which the investor is left clueless.
- Formula plans appear mechanical, but do not really eliminate the need for projections regarding the movement of asset prices, as discussed later in this chapter.

The Framework of Formula Plans

The basic structure of formula plans contains two portfolios – an aggressive portfolio and a conservative (or defensive) portfolio. The assets in the aggressive portfolio should be more volatile than the assets in the conservative portfolio. That is, they should rise more quickly and to a greater extent than the conservative portfolio.

portfolio. They will, of course, fall more quickly than the conservative portfolio. Therefore, the conservative portfolio most often consists of bonds because this portfolio is intended to provide stability to the total portfolio. In general, the higher the difference between the respective volatility of the two portfolios, the higher the returns. To attain the maximum difference between the two volatilities, it is generally advised to invest in highly rated bonds in the conservative portfolio. Bonds that carry a high credit rating are generally very safe and have little price volatility. It is true that the prices of these bonds are subject to changes in interest rates. Generally speaking, in times of economic boom, the interest rates may be high, and the bond prices may fall. At the same time, due to the economic boom, the value of the stock portfolio increases steeply. The converse is also true - in times of economic recession, the value of the stock portfolio falls steeply, and the value of the bond portfolio may increase due to a fall in the interest rates. It is this negative correlation between the values of the two portfolios that provides gains from formula plans. These plans also contain predetermined rules about when funds should be transferred from one portfolio to another, that is, from the conservative portfolio to the aggressive portfolio or vice versa. This will result in automatic sale of securities when their prices rise and purchases when the prices fall. This process will result, in higher profits when the prices of the assets in both the portfolios are moving in opposite directions, than when there are movements in only one of them, while the other remains constant.

Stock prices and bond prices do not always move in opposite directions. Even when they do, the timing of the reversal of the price trend of the two may not occur simultaneously. To the extent that they do not, their prices move in the same direction and if their prices move in the same direction, it is bad news for formula plans. To overcome this problem, some experts suggest that the conservative portfolio should be entirely cash or investment in savings accounts. Cash and savings accounts have no volatility at all and hence they provide the maximum difference between the volatility of the aggressive portfolio and the conservative portfolio.

Just as the conservative portfolio should have the lowest possible volatility, the aggressive portfolio should have the highest possible volatility. The assets that are most commonly included in this portfolio are stocks. As discussed already, the stocks to be included have to be selected by performing the usual EIC analysis. Once some stocks are selected, the stocks with higher volatilities may be preferred to others. This will, of course, have to be decided based on the risk appetite of the investor. Aggressive investors will choose stocks with high volatility and conservative investors prefer those with lower volatility. Formula plans are beneficial even to investors who choose stocks with lower volatility. It is not out of place to mention that along with price volatility, investors should also look for growth and quality of the stocks. While, it is true that these plans basically aim to benefit from price fluctuations, it is better for the investor if the general trend that can be expected about the stock's price is an increase than a decrease. Formula plans generally provide the highest gains if the stock prices move through a full cycle, that is, a peak and a trough. If stocks of doubtful quality are selected, one can never be sure if they will ever rebound from the trough. If this makes you feel that selection of stocks for formula plans is more difficult than ordinary stock selection, you are justified. For choosing stocks with higher volatility, one may depend on the past price changes in comparison with an index. While doing so, you should remember that past volatility might not be completely true in future, at least not to the fullest extent. This problem can be overcome to a great extent by dividing the aggressive portfolio among a number of stocks that have high volatilities.

There are three formula plans, each of them different from the others in the rules relating to transfer of funds from the aggressive portfolio to the conservative portfolio or vice versa. Some of them overcome the limitations of the others, but may in turn add complexity. The mechanical plan for portfolio revision, called dollar cost averaging is discussed below:

CONSTANT DOLLAR VALUE PLAN

The name constant dollar value plan, suggests that the dollar value of the aggressive portfolio should be held constant. In the Indian context, this can be modified to say that the rupee value of the portfolio should be constant, or simply that the value of the aggressive portfolio should be constant. If the value of the aggressive portfolio rises, the investor should sell a part of his holding to bring back the value of the portfolio. Similarly, if the value of the aggressive portfolio falls, the investor should buy more stocks. The funds required for buying stocks should be obtained by selling a suitable proportion of the conservative portfolio. The biggest advantage of this plan is its simplicity. The investor always clearly knows the amount he needs to keep invested in the aggressive portfolio, though the proportion of his investment in the aggressive portfolio in the total investment may change at different times during the horizon period.

The constant dollar value plan requires the investor to lay down, before hand, action points, which are also referred to as revaluation points. These are the points at which the investor makes changes in his portfolios based on changes in their values. This necessarily has to be done at intervals, as doing it on a continuous basis may neither be possible nor economically rewarding. The action points may be defined in terms of time, or preferably in terms of changes in some economic or market index or ideally in terms of a percentage change in the value of the aggressive portfolio. The action points have a strong influence on the profits the investor gets. If the action points are too close to each other, a significant portion of the gains made on the portfolios may be lost on transaction costs. If they are too distant, opportunities for booking profits may be lost. For example, an investor sets the action point as a 20 percent change in the value of the aggressive portfolio. He does not book any profits whatever the fluctuations may be in the prices of the stocks in the aggressive portfolio. If it is set at 3 percent, most of the gains will be lost in transaction costs. Therefore, the investor should make a trade-off between the profits and the transaction costs while setting the action points. This process is, as you may have expected it to be, subjective.

For the effective implementation of the constant dollar value plan, it is necessary to estimate the possibility and extent of the downward fluctuations in the value of the aggressive portfolio. This is because the value of the conservative portfolio should be sufficient to provide funds for investment, even if there are steep downward fluctuations in the value of the aggressive portfolio. The size of the conservative portfolio can be determined only after the estimation of how low the stock prices may fall.

We will now take the help of an illustration to explain the concept of constant dollar value plans better. In fact, we are going to use illustrations in all formula plans. In all these illustrations, we use only stock in the aggressive portfolio and work out the changes in the value of the portfolio through a complete price cycle. That is, we will work through a complete cycle of a price rise and a price fall and stop with the beginning price. The efficacy of the formula plans can be gauged only when we consider both a price rise and a price fall. Needless to add, ignoring transaction costs and considering only one stock, make the calculations simpler and easier to understand. Before we proceed with the illustration, it should be noted that there is no limitation on the number of stocks included in the plan. The investor may include as many as he likes and also make changes in them as and when he thinks a more suitable stock is available. It should, however, be kept in mind that while making the changes in the aggressive portfolio, the relative proportions of the conservative and aggressive portfolios should not be disturbed.

Illustration 1

An investor has Rs.20 lakh of surplus, which he wants to invest using the constant dollar value plan. He decides that the value of the aggressive portfolio should be Rs.10 lakh and that the remaining Rs.10 lakh should be invested in a conservative portfolio comprising bonds. He purchases 50,000 shares of a company currently trading at Rs.20 for the aggressive portfolio. He wants to rebalance the portfolio each time the value of the aggressive portfolio moves up or down by 20 percent. Rebalancing will be done in such a way that the amount invested in the aggressive portfolio becomes equal to Rs.10 lakh after each rebalancing. Table 1 shows how the mechanism operates for both upward and downward changes that call for rebalancing. The first column shows the stock price and its changes. The second column gives the value of a buy-and-hold portfolio and helps see how the value of the constant dollar value plan compares with it. The third column gives the value of the bond portfolio. To keep the calculations simple, interest earned on the bond portfolio is ignored while calculating the value of the bond portfolio. The fourth column contains the value of the aggressive portfolio, that is, the portfolio containing the stocks. The fifth column gives the total value of the constant dollar value portfolio. The sixth column indicates the action to be taken where necessary to bring back the value of the aggressive portfolio to the original level. The seventh or the last column shows the number of shares in the aggressive portfolio at any point of time.

Stock Price Portfolio (Rs.)	Value of the Buy- and-hold Portfolio (Rs. lakh)	Value of the Conservat ive Portfolio (Rs. lakh)	Value of the Aggressive Dollar Value Portfolio (Rs. lakh)	Total Value of the Constant Dollar Value Portfolio (Rs. lakh)	Buy/Sell Securities	Total Number of Shares Held (lakh)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
20.00	20.00	10.00	10.00	20.00	_	0.5000
22.00	22.00	10.00	11.00	21.00	_	0.5000
24.00	24.00	10.00	12.00	22.00	—	0.5000
24.00	24.00	12.00	10.00	22.00	Sell 0.0833 lakh	0.4167
					shares at Rs.24.00	
23.00	23.00	12.00	9.58	21.58	—	0.4167
20.00	20.00	12.00	8.33	20.33	—	
20.00	19.20	12.00	8.00	20.00	_	
19.20	19.20	10.00	10.00	20.00	Buy 0.1041 lakh share at Rs.19.20	0.5208

 Table 1: A Constant Dollar Value Plan

The plan was initiated when the stock price was at Rs.20 and increased to Rs.22. However, the increase is less than the 20 percent at which we want to rebalance the portfolio. It later increased to Rs.24, which is higher than the initial price by exactly 20 percent, at which the portfolio requires rebalancing. We rebalance the portfolio by selling enough shares from the aggressive portfolio to bring its value back to Rs.10 lakh. The cash thus realized is invested in the bond portfolio. At Rs.24, about 0.4167 lakh shares make the portfolio worth Rs.10 lakh. So, (0.5000 - 0.4167) lakh shares, that is, 0.0833 lakh shares can be sold to realize Rs.2 lakh. Then, the stock price started moving downwards. It first moved to Rs.23, but required no action at this point, as it is not lower than Rs.24 by 20 percent. Finally, the stock price moved to Rs.19.20, which is exactly 20 percent less than Rs.24. At this point, we once again bring back the value of the aggressive portfolio to Rs.10 lakh. This time, we have to buy some more stocks, about 0.1041 lakh to be precise. Now the value of the aggressive portfolio changes to Rs.10 lakh and the value of the bond portfolio is also Rs.10 lakh. The total value of the constant dollar value portfolio is once again Rs.20 lakh.

If we compare the changes in the value of the buy-and-hold portfolio with the changes in the value of the constant dollar value portfolio above, we find that the volatility of the constant dollar value portfolio is lower than that of the buy-andhold portfolio. This is as we may expect, because about half of the constant dollar value portfolio is in bonds, whose value did not change. In the real world, the volatility of the bond portfolio may not be zero. It will have its own volatility, with changes in interest rates, etc. If it is desired to have no changes at all, the bond portfolio can be substituted with cash or a savings bank deposit. We can also observe that, compared to the buy-and-hold portfolio, the constant dollar value portfolio provides higher returns for a full cycle of price changes. The stock price in the above illustration changed from Rs.20 to Rs.24 and then fell back to Rs.20 and further to Rs.19.20. In this process, the final value of the buy-and-hold portfolio declined to Rs.19.20 while that of the constant dollar value portfolio is higher at Rs.20 lakh. This is because some of the gains were realized in the constant dollar value portfolio while none were realized in the buy-and-hold portfolio.

Constant Ratio Plan

The constant ratio plan is similar to the constant dollar value plan to a significant extent. In this plan too, there is a conservative portfolio and an aggressive portfolio. The aggressive portfolio is maintained at a fixed ratio of the conservative portfolio. Just like in the constant dollar value plan, purchases or sales are effected to maintain the ratio at the predetermined level.

While this plan is a bit complicated compared to the constant dollar value plan, it has its own advantages. In this plan, there is never a possibility that the money available in the bond portfolio may not be sufficient to rebalance the portfolio as is the case with constant dollar value plan. This happens because the target here is to maintain a constant ratio between aggressive and conservative portfolios and not an absolute level of value for the aggressive portfolio.

This plan, of course, has its own drawbacks. It becomes less aggressive in sales when the stock prices rise and less aggressive in purchasing stocks when stock prices fall. This is because, as the stock prices fall, the value of the portfolio falls and a higher investment is required in stocks to maintain the target ratio. Similarly, when stock prices rise, the total value of the portfolio rises and a lesser amount of investment is sufficient to maintain the ratio. In this process, by the time the stock prices reach their lowest levels, a lot of purchases will have already been made and with no money left for further purchases. Similarly, by the time stocks reach their highest levels, the stocks available for sale are less, as sales have been made all along. This defect is overcome by the variable ratio plan, as we will see later in this chapter. The advantage of this plan is that we need to forecast neither the share prices in this plan nor the amount that is required in the conservative portfolio. Whatever amount is available can be divided among the two portfolios.

During a sustained rise or fall of stock prices, the constant ratio plan gives higher profits than the constant dollar value plan or even the variable ratio plan. However, for a complete cycle of rise and fall, the profits from this plan are less than the other two. The profits will be higher because the investment in stocks will be higher in a bullish market and lower in bearish market. Then, how come the profits will be lower for a full cycle? They are so because in this plan, a significant part of the transfer of funds into and out of the aggressive portfolio takes place at the median values rather than the turning points. The decision of trigger points for this plan can be the same as in the constant dollar value plan. We have to make a tradeoff between the transaction costs and profit booking. If we fix the trigger points too close, all the gains may be lost in transaction costs. If we make them too farther, profits may be lost due to change in market trends.
Illustration 2

Let us use the same data we used in Illustration 1, with some modifications, to illustrate how the constant ratio plan works. The amount invested in the aggressive portfolio and conservative portfolio is equal and hence the ratio is 1.00. If 25 percent is invested in aggressive portfolio and 75 percent in conservative portfolio, the ratio will be 0.33. We will revise the portfolio when the ratio changes upwards or downwards from the target value of 1.00 by 10 percent. That is, our first action point will be either at 1.10 or at 0.90 based on the direction in which the ratio moves.

	Table 2: A Constant Ratio Plan(Rs. in lakh)							
Stock Price	Value of Buy- and- hold Portfolio	Value of the Conservative Portfolio	Value of the Aggressive Portfolio	Total Value of the Portfolio	Ratio	Rebalancing Action	Total Number of Shares in the Aggressive Portfolio	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
20.00	20.00	10.00	10.00	20.00	1.00	—	0.5000	
21.00	21.00	10.00	10.50	20.50	1.05	—	0.5000	
22.00	22.00	10.00	11.00	21.00	1.10	—	0.5000	
22.00	22.00	10.50	10.50	21.00	1.00	Sell 0. 0227 lakh Shares at Rs.22.00	0.4773	
21.00	21.00	10.50	10.02	20.52	0.95	_	0.4773	
20.00	20.00	10.50	9.55	20.05	0.91	—	0.4773	
19.80	19.80	10.50	9.45	19.95	0.91	_	0.4773	
19.80	19.80	9.975	9.975	19.95	1.00	Buy 0.0265 lakh shares at Rs.19.80	0.5038	

Table 2, is similar to the earlier illustration on constant dollar value plan, except that there is an additional column (6) showing the ratio of the value of the aggressive portfolio to the value of the conservative portfolio. We formulated this portfolio when the stock price was Rs.20. Then the value of the buy-and-hold portfolio was Rs.20 lakh. As the investment was made equally, the ratio at the beginning is 1 and we have to maintain it. The price of the shares that constitute the buy-and-hold portfolio and the aggressive portion of the constant ratio plan changed to Rs.21 from Rs.20. The value of the buy-and-hold portfolio changed to Rs.21 lakh and the value of the aggressive portion of the constant ratio plan changed to Rs.10.50 lakh. As the value of the bonds remained the same, the total value of the constant ratio plan changed to Rs.20.50 lakh. The ratio of the aggressive portfolio to the conservative portfolio at this stage is 10.50/10.00 = 1.05, which is lower than the action point of 1.10. So no action is required at this stage. The next move of the share price is to Rs.22 from Rs.21. Now the value of the aggressive portfolio is Rs.11 lakh and the ratio changes to 11.00/10.00 = 1.10. At this point, we have to rebalance the portfolio as the ratio has reached the action point.

Rebalancing is aimed at restoring the ratio to 1.00. We can achieve this by selling 0.0227 lakh shares at Rs.22 and investing the amount realized in the conservative portfolio (that is, in bonds). At this point, the share price started moving downwards. First it fell from Rs.22 to Rs.21, bringing down the value of the aggressive portfolio to Rs.10.02 lakh and the ratio of the plan to 0.95. However, this is still above the action point of 0.90. The share price then fell to Rs.20 and further to Rs.19.80. At Rs.19.80, the value of the aggressive portfolio is Rs.9.45 lakh. The value of the conservative portfolio remained at Rs.10.50 lakh. The ratio

now becomes 9.45/10.50 = 0.90, which is lesser than the target ratio by 10 percent and calls for rebalancing. Once again, rebalancing is done to restore the ratio to 1.00. We buy shares this time round. We buy 0.0265 lakh shares at Rs.19.80 each using funds from the conservative portfolio. Thus, the value of the conservative portfolio and aggressive portfolio – both become equal to Rs.9.975 lakh and the ratio is 1.00.

Now, let us take a look at what we achieved in this plan in comparison with the buy-and-hold strategy and the constant dollar value plan. For a full cycle of share price changes, the value of the portfolio increased to Rs.20.33 lakh in the constant dollar value plan, but only to Rs.20.05 lakh in the constant ratio plan. The buy-and-hold strategy, once again, does not give any return. Like we already discussed, the return earned on the portfolio is higher for the constant dollar value plan than the constant ratio plan.

Variable Ratio Plan

In a variable ratio plan, as the name suggests, the ratio of the aggressive portfolio to the conservative portfolio changes with change in the value of the aggressive portfolio. As can be expected, the ratio will decrease when there is an increase in the value of the portfolio and will increase when there is a decrease in the value of the aggressive portfolio. This will result in the investment in the stocks (in terms of number of shares invested in) increasing when stock prices are low and decreasing when they are high. That is, shares will be bought when the prices fall and sold when prices rise. To put it in other words, the aggressive portfolio will become more aggressive when the stock prices fall and less aggressive when the stock prices rise. Like all formula plans, this takes place automatically.

To achieve the above successfully, one should start the plan when the stock prices are at a median value. The median value may be forecast based on the historical data. Forecasts will also have to be made on the magnitude of fluctuations on either side of the median.

The action points have to be decided based on the forecasts. The success of this plan critically depends on the accuracy of the forecasts. If the forecasts are wrong, the investor may find himself investing 100 percent in stocks when their prices fall and investing fully in bonds when stock prices rise (if he allows the proportions to be invested in stocks and bonds to go to 100 percent). As we can now see, this plan requires the highest level of forecasting among all the formula plans.

It is not unusual to find variations in this type of formula plans that require investment in stocks or bonds up to 100 percent. There are plans that require the proportion of investment in stocks to be changed right through a projected growth in share prices. The proportions may also be changed mid-course, but it will require further forecasting. Some other plans call for the ratio to vary according to some economic or market index. This implicitly means that we consider the index to be a more reliable indicator of the amount to be invested in the aggressive stocks, than the changes in the stock prices. The indicator based on which the ratio is changed may also be changed periodically. However, as more and more changes are made in the ratio plan, it becomes complicated and difficult to handle. The utility of the plan also becomes difficult to gauge. Above all, it will necessitate a lot of complex forecasting and analysis, which formula plans are designed to avoid.

Illustration 3

Let us once again use the same data as in Illustration 1 with some modifications. Let us say that the investor decided that the current stock price of Rs.20 is the median value for the stock price. So, he wants to invest Rs.10 lakh each equally in the aggressive and conservative portfolios. If the stock prices increase by 20 percent, he wants to reduce the proportion of aggressive portfolio to 30 percent of the total portfolio and to 70 percent of the total portfolio if the stock price falls by 20 percent. Let us see how the plan works out.

Stock Price	Value of Buy-and- hold Portfolio	Value of Conservative Portfolio	Value of Aggressive Portfolio	Total Value of the Variable Ratio Portfolio	Value of Stock as % of Total Fund	Rebalancing Action	Total Number of Shares in the Aggressive Portfolio
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
20.00	20.00	10.00	10.00	20.00	0.50		0.50000
22.00	22.00	10.00	11.00	21.00	0.52		0.50000
24.00	24.00	10.00	12.00	22.00	0.55		0.50000
24.00	24.00	15.40	6.60	22.00	0.30	Sell 0.2250 lakh at Rs.24 each	0.27500
22.00	22.00	15.40`	6.05	21.45	0.28		0.27500
20.00	20.00	15.40	5.50	20.90	0.26		0.27500
19.20	19.20	15.40	5.28	20.68	0.26		0.27500
19.20	19.20	6.20	14.48	20.68	0.70	Buy 0.47917 lakh Shares at Rs.19.2 each	0.75417

Table 3: A Variable Ratio Plan

(Rs. in lakh)

In the table given above, the columns are very similar to the earlier illustration on constant ratio plan. We started when the stock price was Rs.20, which is the median value. The total amount available for investment is Rs.20 lakh. So, we invested Rs.10 lakh in the aggressive portfolio and another Rs.10 lakh in the conservative portfolio. The stock price increased to Rs.22. However, the increase is only 10 percent, so there is no need for rebalancing. Then again, the stock price increased further to Rs.24. At this price, the action point is touched and rebalancing is required. We rebalance by selling 0.2250 lakh shares at Rs.24 and investing the resulting sum in the conservative portfolio. Now, the stock portfolio is only 30 percent of the value of the total plan portfolio, as we want. At this point, the stock price started falling. It fell first to Rs.29, at which no rebalancing is required, as it is still higher than the action point of Rs.19.20. At Rs.19.20, we once again rebalance by buying 0.4792 lakh shares at Rs.19.20. This results in the value of shares held moving up to Rs.14.48 lakh and the value of the bond portfolio coming down to Rs.6.20 lakh, due to drawing of money for buying shares.

Looking at the overall picture, what can we say about this plan? Compared to the buy-and-hold strategy, this plan is beneficial for a full cycle of share prices. A gain of Rs.0.90 lakh is derived for a full circle of prices, while there is no profit from the buy-and-hold portfolio. This plan is better compared to the constant dollar value plan and the variable ratio plan, which can be seen from the above figures. The benefit from this plan is the highest, compared to constant dollar value plan or constant ratio plan. We have booked profits by a higher proportion in this plan than in the other plans by bringing down the proportion invested in the aggressive portfolio to 30 percent, when there is an increase in the value of the stocks. So, a higher portion of the profit remained with us, even though there is a fall in the stock prices later.

Modifications in Formula Plans

The most common modification that is made in the formula plans is to delay the rebalancing action. This is generally due to the expectations of the investors that the stock prices may rise or fall further, after breaching the action point. This is, in one way, desirable. If it is obvious that a bull run may continue in the near future,

selling off after a 20 percent or 30 percent rise will result in a significant part of the possible gains being lost. Similarly, buying at the beginning of a sustained bear phase is unwise. It should be noted, however, that postponing the action points will, as already explained, result in taking more risk than envisaged. Adhering to the plan will result in the planned profits being realized. Postponing the action points may result in the very objective of the formula plan being lost sight of. Where such modifications are made, they should be based on a careful study of the market and the price movements.

Dollar Cost Averaging

This is one more mechanical investment technique, and the last of the mechanical plans we are going to study. This plan is technically not a formula plan, as it depends on the periodicity of the investment, rather than on a combination of different kinds of portfolios and changes in them. This plan forces the investors to take decisions that they may otherwise be unwilling to take. The decision is of making investments periodically. This technique is suitable to those who are building a fund and have periodical inflows. The plans discussed so far are most suitable to those who have already accumulated a fund.

If this technique is implemented over a complete cycle of stock prices, the investor will get the shares at a lower average cost per share than the average price of the cycle. This is because a fixed amount of money gets more shares when the stock prices are down, than when they are up. Dollar cost averaging plans or Rupee Cost Averaging (RCA) plan (in Indian context) generally give their best results when undertaken over a long period of time. This is because the opportunity to buy stocks will never be missed if buying is more frequent. However, small amounts of investment may result in higher transaction costs. So, a balance should be struck between the two.

The benefits of this plan, as already explained, will be high in the initial periods of starting the investment. As the time passes by, and the number of shares held increases, the gain from the newly bought shares is distributed over more and more shares and becomes less and less perceptible, as seen from table.

In table 4, observe that the average cost per share reduced from Rs.50.00 to Rs.47.39, that is, by Rs.2.61 initially, due to a fall in the price from Rs.50.00 to Rs.45.00. However, at the end, for the same fall in the share price, from the same range of Rs.50.00 to Rs.45.00, the fall in the average cost per share is only from Rs.45.87 to Rs.45.70, that is, only by Rs.0.17.

Date of Investment	Value of the Investment	Cumulative Value of the Investment	Price of the Stock	Number of Shares Purchase d	Total Shares Held	Average Cost per Share
	(Rs.)	(Rs.)	(Rs.)			
January '90	10,000	10,000	50	200	200	50.00
January '91	10,000	20,000	45	222	422	47.39
January '92	10,000	30,000	40	250	672	44.64
January '93	10,000	40,000	50	200	872	45.87
January '94	10,000	50,000	45	222	1094	45.70

Table 4: Profitable Dollar Cost Averaging

Dollar cost averaging only helps in buying shares at a relatively lower average cost. However, it does not help in stock selection. So, the investor should not

Wealth Management

lose sight of the quality of the stocks chosen while following the plan. The focus on the quality of the stocks is always more important than the focus on buying the stocks at a lower average rate. The early gains seemingly realized from dollar cost averaging may be lost in course of time, as the following table shows:

Year	Periodical Investment	Stock Price	Shares Purchased	Total Shares Owned	Total Amount Invested	Total Value of the Investment	Average Price per Share	Average Cost per Share
	(Rs.)	(Rs.)			(Rs.)	(Rs.)	(Rs.)	(Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	10,000	25	400	400	10,000	10,000	25.00	25.00
2	10,000	20	500	900	20,000	18,000	22.50	22. 22
3	10,000	20	500	1400	30,000	28,000	21.67	21.42
4	10,000	30	333	1733	40,000	51,990	23.75	22.93
5	10,000	25	400	2133	50,000	53,325	24.00	23.44
6	10,000	30	333	2466	60,000	73,980	25.00	24.33
7	10,000	30	333	2799	70,000	83,970	25.71	25.01

Table 5: Dollar Cost Averaging - Losing the Gains

In the given table, the average cost per share is Rs.25 at the beginning. It decreased later, but then started increasing to reach the original level ultimately. The difference between the average cost and the current stock price reached a maximum of Rs.6.25 and later on fell to Rs.5.00. What can be understood from this table is that averaging by itself may not be of much use, if the stock prices do not show much volatility. Ideally, the stock prices should start falling, fall for a significant time, and then rise. If the stocks are of a poor quality, their prices may fall continuously, and may not rise at all. The investor gets a profit only if the stock price is above the average cost at the end of the investment period. If the stock becomes worthless in the mean time, the shares may have to be liquidated for a loss or even the entire investment may be lost. The technique of this plan works only over a period of 10 to 15 years, as only in a similar period, the fluctuations in the stock prices will complete full cycles and enable the investor to make profits.

In India, most of the mutual funds come up with Systematic Investment Plans (SIP) that primarily base on the underlying concept of Rupee Cost Averaging, the Indian version of the Dollar Cost Averaging. It is the simplest way to invest in stock markets. It helps an investor to purchase units of a mutual fund scheme in installments that makes it a viable investment instrument even for the small investors. At present, Indian mutual funds offer monthly and quarterly plans that need to be specified at the time of starting the investment. There is no lock in period in SIP and the investors get regular dividends as and when the scheme announces the same. Investors can discontinue the scheme by simply informing the fund house and this does not attract any penalty. An example of systematic investment plan is as under:

Portfolio Revision

Month	Amount Invested	Rising Market		Falling Market		Volat	ile Market
	(Rs.)	NAV	Units Allotted	NAV	Units Allotted	NAV	Units Allotted
1	1,000	10	100.00	10	100.00	10	100.00
2	1,000	12	83.33	8	125.00	12	83.33
3	1,000	14	71.43	6	166.67	8	125.00
4	1,000	16	62.50	4	250.00	10	100.00
Total	4,000	52	317.26	28	641.67	40	408.33
Average Purchase NAV (Sum Total of NAV's/Number of times investments made)		13.00		7.00		10.00	
Average Costs Per Unit(Sum Total of Investment/Total Units Allotted)		12.61		6.23		9.80	

 Table 6: An Illustration of Systematic Investment Plan

Thus, one can see that the average unit cost under Systematic Investment Plan will always be less than the average purchase price per unit irrespective of the market rising, falling or fluctuating.

Source:www.indiainfoline.com

PRACTICAL PROBLEMS IN PORTFOLIO REVISION

Risk-bearing Ability

In practice, portfolio adjustments are very complex. The inclusion of the concept of risk in any statement of portfolio objectives raises certain practical issues. How to express risk-tolerance in practice? One approach is to express in terms of the portfolio's volatility relative to the market, known as the portfolio beta. The portfolio beta, it will be recalled, is computed by using the beta of the individual securities in the portfolio weighted by the market value of each security in the total portfolio. Once the risk-tolerance is quantitatively defined, then portfolios that are 'efficient' can be constructed to produce the maximum return at the given level of risk. However, investors may have difficulty in expressing their risk-tolerances in terms of portfolio volatility. Even if they do, subsequently they may find that their tolerance level established before the event does not anticipate their tolerance level when results turn adverse. The portfolio manager has to establish through continuous penetrative dialogues with his client the risk-tolerance level which keeps changing over the client's lifespan.

Another approach would be to state the desired level of return and then seek to determine the minimum risk to be borne to reach the desired return. Risk is expressed as the probability of not achieving the desired return. This simple approach has been adopted by some portfolio management firms in India.

Investment Planning Horizon

An investor has to specify clearly the time horizon over which he expects the results to be achieved. The shorter the time-frame, the lower the probabilities of achieving expected returns. An investor has to understand that the standard deviation of expected annual returns on a portfolio is greater for one year than for four to five years. A client who expects his portfolio manager to be a performing wizard, even in a very short time-frame may be disappointed with the results. This is more so when portfolio revisions take place. When portfolio revisions take place, enough time has to be provided for the revised strategy to work.

Changes in Objectives/Asset Composition

In a portfolio revision plan, the asset mix can change either due to (i) changes in the portfolio's objectives; (ii) changes in the economic environment which have an impact on risk and return characteristics of securities; and (iii) changes in the market prices of assets.

Changes in objectives are the most fundamental factors affecting changes in a portfolio. Economic scenarios can change due to a change in the level of interest rates, changes in licensing policy, a shift in regulatory policy of an industry, etc. Changes in market prices of assets would affect dividend yield and expected future price changes. While structuring a portfolio revision plan, a portfolio manager has to be sensitive to these changes.

SELECTION AND REVISION OF EQUITY PORTFOLIOS

Edmund A Mennis¹ suggested the following alternative approaches for selection and revision of equity portfolios:

- i. Securities are selected individually and little consideration is given to their interrelationships when they are combined in a portfolio. Selection may be made on the basis of their perceived undervaluation in the marketplace, or because of superior financial characteristics. In such a portfolio, changes are made in the portfolio, either because of price changes (when a security is no longer undervalued), or because the perceived undervaluation subsequently proved incorrect or because the fundamental characteristics change. Risk is rarely taken into account in this approach.
- ii. The second style embraces modern portfolio theory and concludes that the risk in individual securities (unsystematic risk) is not rewarded because the market is efficient and securities are rarely mispriced. Hence, unique risk should be diversified away by the use of an index fund in which securities are held in proportion to their market capitalization weights. In such an approach, changes in the composition of the index would require a readjustment for new stocks and new weights.
- iii. Under the third approach, estimates are made of the expected return and risk for individual securities. Then, portfolio optimization models are used in order to construct an equity portfolio to give a required return at the lowest risk level, or the highest return at a specified risk level. Portfolio revisions under this approach take place when prices change, altering the expected returns, or as the risk classification or the fundamental characteristics of the individual stocks change, thus altering their risk reward expectations. In contrast to an index fund which diversifies away specific risk, this approach attempts to control portfolio risk.
- iv. The fourth approach has been increasingly used in recent years. Portfolios are structured by classifying stocks into industries, with the weight of each

¹ Mennis, Edmund A, "Techniques of Portfolio Adjustment", *Investment Managers' Handbook,* Dow Jones Irwin, 1980.

industry in the market portfolio. The rationale for structuring/restructuring portfolios by industries or economic sectors is based on the concept that broad economic trends and movements in major sectors of the economy influence stock prices.

Portfolio management theories have undergone a lot of changes. Practices have moulded theories and theories have given shape to varying practices. Hence, portfolio revisions are highly challenging and call for a lot of systematic, meticulous and patient effort.

SUMMARY

- Portfolio revision is integral to any portfolio management process. Portfolio rebalancing calls for revision of the existing portfolio and making adjustments as per the preferences of the investors.
- Portfolio revision is vital to align the portfolio as per the goals of the investor. Absence of portfolio revision also involves a certain cost, albeit indirectly.
- Portfolio rebalancing is necessary because with the passage of time, there is a change in wealth, liquidity preference, taxation policies and other factors, which make the portfolio balancing an inevitable consequence.
- Portfolio revision techniques like: constant dollar value plan, constant ratio plan, variable ratio plan, etc., are performed as per the needs of the client.
- However, many practical problems are encountered during portfolio rebalancing like: understanding the risk-bearing capacity of the investor, identifying the investment horizons, changes in the asset mix, etc. While constructing a portfolio, a manager has to be vigilant of these factors and plan his actions accordingly.

<u>Chapter XVI</u> Managing Risks in Wealth Management

After reading this chapter, you will be conversant with:

- Options
- Futures
- Difference between Options and Futures

OPTIONS

Introduction

Options and Futures are the result of the unrelenting search for better financial instruments. They belong to a class of instruments referred to as 'Derivatives' because they derive their value from an underlying commodity or a financial asset. The underlying commodities and financial assets can range from mundane products like wheat and cotton to precious items like gold, silver, petroleum, and financial assets like stocks, bonds and currencies. It was only in 1973 that organized exchanges began trading options on equities. In 1982, futures on equity and options on bonds made their appearance on stock exchanges.

For the success of innovative financial products, it is essential that the underlying asset has a strong market presence. The features of equity stocks that have contributed to the success of stock options are:

- i. In case of equities, the unsystematic risk component forms a large proportion of the total risk of the security. On diversification, this can be nullified. Buying options on these equities is as good as buying equities themselves, if we do not take into consideration the premium (discussed later) paid. Therefore, once the investor exercises the options, he aims to achieve the same objective of nullifying the unsystematic risk.
- ii. Equities have high degree of liquidity, that is, they are traded in large volumes. Therefore, purchases and sales by individuals or groups do not cause wide fluctuations in the equity prices, assuring price continuity. This helps the option holder in deciding the worth of the contract.
- iii. Stocks are instruments that have no maturity date. They remain on the exchanges for long periods, which facilitate option contracts to be structured on them.
- iv. Contrary to the stock market, in a debt market a large proportion of the total risk is systematic in nature and cannot be eliminated by diversification, within the debt market. Also, the debt instruments have a finite life and limited marketability as compared to stocks. Therefore, options on individual debt instruments could not be successfully traded. However, options on debt indexes were introduced and traded.

Source: Harper's Weekly October 10, 1857.

Box 1: Alan Greenspan

What many critics of equity derivatives fail to realize is that the markets for these instruments have become so large not because of slick sales campaigns but because they are providing economic value to their users. By enabling pension funds and other institutional investors to hedge and adjust positions quickly and inexpensively, these instruments have come to play an important role in portfolio management.

> Alan Greenspan Congressional Testimony, May 19, 1988

Source: Alan Greenspan Congressional Testimony May 19,1988.

Options Traded in Stock Exchanges

Options are traded on stocks, stock indices, foreign currency and futures. The following table gives some of the option exchanges and the instruments on which options contract are traded.

Exchange Name	Assets on Which Options are Traded		
National Stock Exchange (NSE)	Individual stocks, Stocks indices		
Bombay Stock Exchange (BSE)	Individual stocks, Stocks indices		
Multi Commodity Exchange (MCX)	Futures on different commodities like bullion, oil, spices, metals, sugar, etc.		
National Commodity & Derivatives Exchange Ltd. (NCDEX)	Individual stocks, Stocks indices		

Table 1: Options Traded in Stock Exchanges

The volumes traded differ from exchange to exchange. While CBOE leads in equity and index options, the Philadelphia Stock Exchange leads in foreign currency options. In India, NSE leads in equity and index options.

Options Terminology

An option is a contract in which the seller of the option grants the buyer, the right to purchase from or sell to the seller a designated instrument or an asset at a specific price which is agreed upon at the time of entering into the contract. The option buyer has the right but not an obligation to buy or sell. However, if the buyer decides to exercise his right, the seller of the option has an obligation to deliver or take delivery of the underlying asset at the price agreed upon. The seller of the option is also called the writer of the option.

CALL OPTION

An option contract is called a 'call option', if the writer gives the buyer of the option the right to purchase from him the underlying asset on or before expiry date.

PUT OPTION

An option contract is said to be a 'put option', if the writer gives the buyer of the option the right to sell the underlying asset on or before the expiry date.

Exercise Price

The exercise price of the option is determined by the exchange based on the prices at which it is being traded. The underlying may be brought or sold at this price referred to as the exercise price or the striking price. At this price, the buyer of a call option can buy the asset from the seller and the buyer of a put option can sell the asset to the writer of the option. This is regardless of the market price of the asset at the time of exercising.

Expiration Period

At the time of introducing an option contract, the exchange specifies the period (not more than nine months from the date of introduction of the contract in the exchange) during which the option can be exercised or traded. This period is referred to as the Expiration Period. An option can be exercised even on the last day of the expiration period. Beyond this date, the option contract expires.

Such options, which can be exercised on any day during the expiration period, are called American options. There is another class of options called European options. European options can be exercised only on the last day of the expiration period. For these options, the expiration date is always the last day of the expiration period.

Depending on the expiration period, an option can be short-term or long-term in nature. Warrants and convertibles belong to the latter category and are often issued by companies to finance their activities. (Reliance Petroleum Ltd. has converted its warrants issued as a part of triple optional convertible debentures into fully paid shares).

OPTION PREMIUM OR OPTION PRICE

This is the amount which the buyer of the option (whether it be a call or put option) has to pay to the option writer to induce him to accept the risk associated with the contract. It can also be viewed as the price paid to buy the option. Consider the data given below regarding options traded at the National Stock Exchange (NSE).

1	2	3	4	5	6	7	8	9	10	11	12	13
Type	Date	Expiry	Strike Price (Rs.)	Open (Rs.)	High (Rs.)	Low (Rs.)	Close (Rs.)	LTP (Rs.)	No. of Contracts	Settle Price (Rs.)	Open Interest	NSE Close (Rs.)
CA	3-Jul-06	27-Jul-06	700	52	64	52	54	54	6	54	2500	742.60
CA	3-Jul-06	28-Sep-06	700	0	0	0	77.5	0	0	96.85	0	742.60
PA	3-Jul-06	27-Jul-06	660	0	0	0	8.5	8.5	0	7.1	500	742.60
PA	3-Jul-06	27-Jul-06	700	17.1	17.6	15.5	16.15	17.6	17	16.15	20500	742.60
CA	4-Jul-06	27-Jul-06	700	0	0	0	54	54	0	71.2	2500	755.75
CA	11-Jul-06	27-Jul-06	800	5.85	5.85	4.3	4.75	4.75	24	4.75	149500	728.55
PA	12-Jul-06	27-Jul-06	720	26	26	15	16	16	22	16	40000	736.10
CA	27-Jul-06	27-Jul-06	700	32.5	48.45	27	44.3	44.3	9	0	75500	763.65
CA	27-Jul-06	27-Jul-06	720	32.5	45	10	39.4	43	79	0	83000	763.65
PA	27-Jul-06	31-Aug-06	700	12	20	9.5	11.4	12	80	11.4	34500	763.65
PA	27-Jul-06	31-Aug-06	660	0	0	0	28.05	0	0	6.25	0	763.65
PA	3-Aug-06	31-Aug-06	840	32	37	30.5	37	37	20	37	6500	830.60
CA	4-Aug-06	31-Aug-06	900	2.9	3.25	2.5	3.25	3.25	4	3.25	22000	807.80
PA	30-Aug-06	31-Aug-06	940	14	14	11	11	11	9	11	14000	930.75
CA	31-Aug-06	31-Aug-06	880	55	60	50.1	50.1	50.1	13	0	84500	931.25
PA	31-Aug-06	28-Sep-06	640	0	0	0	0	0	0	0	0	931.25
CA	1-Sep-06	28-Sep-06	960	17.2	20.85	16	18.45	18.3	183	18.45	141500	931.25
PA	4-Sep-06	28-Sep-06	940	25	29	25	27.85	27.85	24	28	32500	935.45
PA	4-Sep-06	28-Sep-06	920	18.95	19.9	17.3	17.65	17.3	8	17.65	31500	935.45
PA	4-Sep-06	28-Sep-06	900	10.05	13.85	10	12.95	12	13	12.95	32000	935.45
PA	4-Sep-06	28-Sep-06	880	5.1	5.1	5.1	5.1	5.1	1	5.1	6500	935.45

(lot size is 500 shares)

Source: nseindia.com.

For explanation, we consider the first row of the table.

The first column gives the information about the type of option contract. 'CA' stands for Call American and (PA) stands for Put American. The second column gives the date of the particular day (3rd July, 2006). The third column gives expiry date of the contract (July 27, 2006). The figures of the fourth column give the exercise prices (Rs.700) of the option contract. The fifth, sixth, seventh, eighth, ninth and tenth columns give the opening price, intra day high, low, closing price, last traded price and settlement price of the option contract respectively. The eleventh column gives the number of contracts traded that day. Since each contract represents 500 shares of the bank, trading six (6) contracts on that day involved 3,000 shares of the SBI. The figure in the eleventh column (2,500) gives total number of options contracts outstanding in the market as on July 3rd 2006.

The last column gives the closing price of the underlying stock at the National Stock Exchange. This facilitates the comparison of the prices of the stocks and the options.

EXPIRATION CYCLE

The options listed on the stock exchanges and introduced in certain months expire in specific months of the year only. This is due to the fact that option contracts have to expire within nine months from the date of their introduction. Exchanges previously used to assign an issue to one of the three cycles. First is January, April, July and October; second is February, May, August and November; third is March, June, September and December. This has been modified now to include the current month and the following month, plus the next two months in the expiration cycle so that the investors are always able to trade in the options. Therefore, now the first cycle will be January, February, April and July; the second cycle will be February, March, April and July and the final cycle will be March, April, July and October.

Intrinsic Value

Intrinsic value of an option is the value of the profits likely to arise from the option. It consists of the profit that will accrue, if the option is exercised today (in the case of an American option) or the present value of the profit (in the case of a European option).

Time Value

The difference between the intrinsic value and the option price is paid in the expectation that in future the price of the stock may rise. This price is referred to as the Time Value.

Out-Of-Money Options

An option contract is said to be 'Out of Money' if the buyer incurs a loss if he exercises it now. An "Out of Money" call option will have an exercise price that exceeds the current market price of the stock.

In-the-Money Options

An option contract is said to be 'In the Money' if the buyer makes a profit if he exercises it now. An "In the Money" call option has an exercise price that is lower than the current market price of the stock.

At-the-Money Options

The contract does not result either in gain or loss if the buyer exercises it now. For 'At the Money' options, the exercise price of the option is equal to the current market price of the stock.

Note:

We have been defining the above concepts for 'Call Options'. For put options, exactly the opposite of these have to be considered explained below:

	Put Options
Out of Money	Stock Price > Exercise Price
In the Money	Stock Price < Exercise Price
At the Money	Stock Price = Exercise Price

Pay-off from an Option

In this part, we will look at profit/loss made by an investor when he decides to exercise the option.

CALL OPTIONS

In a call option if the investor decides to exercise his right, he buys the shares of the company at the exercise price. Should he do so irrespective of the current market price of the stock? No, he should not. The explanation is given below:

For a contract assume that the option premium was Rs.3, the exercise price Rs.25 and the current market price of the stock Rs.23. Each contract stands for 100 shares.

Case 1

After three months, assume that the market price of the stock has risen to Rs.30. At this point, should the investor exercise the option? Yes, he should. The pay-offs are shown below:

Premium	Exercise	Total	Worth of Stock	Profit/
	Price	Outgo	at Current Price	(Loss)
300	2500	2800	3000	200

In this case, the trader made a profit of Rs.200. By exercising the option he has received the stock worth Rs.3000 by paying only Rs.2500. That is, he made a profit of Rs.500. However, the real profit comes to Rs.200 only, as he has already paid Rs.300 as premium. Therefore, the trader will make a profit whenever the stock price exceeds the sum of option premium and the exercise price. It is beneficial for him to exercise the option as long as the stock price is greater than the exercise price.

PUT OPTIONS

In case of put options, a buyer will make a profit if he exercises his option when the stock's current price is lower than the exercise price. In this situation, the writer will take delivery of the stock whose worth is lower. The option price (Rs.3) and the exercise price (Rs.25) remain the same for this case.

Case 2

Assume that the current market price is Rs.21. Should the buyer of the option exercise it? Yes, he should. The pay-offs are shown in the table:

Premium	Exercise	Total Inflow	Worth of Stock at Current Price	Profit/
	11100	mnow	Thee	(Loss)
300	2500	2200	2100	100

The explanation is as follows: On buying the option, the trader pays Rs.300. On exercising the option, the trader could manage to make a profit of Rs.400 as the price of the stock in the market is Rs.21. Therefore, Rs.400 reduced by Rs.300, gives a total profit of Rs.100. Thus, when the current price of the stock is lower than the exercise price less the premium, the trader makes a profit.

Note: In these cases, we have ignored the transaction costs.

Trading In Options

The trading mechanism is the process through which trades take place on an options exchange.

TYPES OF TRADERS

As in stock exchanges, there are different kinds of traders on the floor of the options exchange. They are market makers, floor brokers and order book officials.

Market Makers

A trader who trades on his own account to make a profit is a market maker. He has an obligation towards the investors standing ready to buy and sell options. Market makers can follow different strategies by gauging the mood of the investing public.

Wealth Management

Floor Brokers

The floor broker's main job is to execute quickly the order which he receives from outside the exchange at the best possible price. He usually belongs to one of the brokerage firms and receives salary or commission. The brokerage firms also engage in proprietary trading, i.e., trading for their own account.

Order Book Officials

The order book official is an employee of the exchange and participates in trading. He cannot trade for his own account. His main task is to facilitate the flow of orders by disclosing the best possible limit orders awaiting execution.

Specialists

These officials function as both dealers and brokers. As dealers, they have to maintain inventory of the stocks they are assigned and deal in them by quoting the prices in both ways. As brokers, they have the responsibility of maintaining the limit order book and execute orders keeping in view the movement in the market prices.

Specialists are employed by the American Stock Exchange, but at the Chicago Board Options Exchange, the function of the specialists is divided between market makers and order book officials.

TYPES OF POSITIONS

Options trade fall into one of the four categories:

- i. Open a position with a purchase.
- ii. Open a position with a sale.
- iii. Close a position with a purchase.
- iv. Close a position with a sale.

Open a Position with a Purchase

An investor opens a position or establishes a position by buying an option. This action increases the existing long positions by a single contract. An investor is said to be long when he buys an options contract – it being either a call option or a put option.

Open a Position with a Sale

An investor, can also open or establish a position by writing an option. This increases the existing short positions by a single option. An investor is said to be short when he writes an option, whether it is a call or a put option.

Close a Position with a Purchase

An investor, who has a short position as a result of writing an option can cancel it by entering into a closing purchase transaction. This reduces the existing short positions by one contract.

Close a Position with a Sale

An investor, who has a long position as a result of buying an option can offset it by entering into a closing sale transaction. This reduces the existing long positions by one contract.

When a trader closes an existing position – either long or short, that order is called as an offsetting order. Thus, an investor who is long cancels his position by a sale of an option which belongs to the same series (this is a necessary condition) and an investor who is short can cancel his position by purchasing an option belonging to the same series.

Options trading includes market order, limit order and stop limit order (along with the specified periods). These are similar to what we have in case of stocks.

PROCESS OF TRADING

An investor, who wishes to deal in options, has to open an account with the broker. The broker may or may not be a member of a clearing house.

When the broker happens to be a member of a clearing house: After opening the account, the initial margin has to be deposited. One of the accounts executives notes down the contract specifications and transmits the same to the floor broker. The floor broker executes the order and intimates to the clearing house, the details of the contract. After confirming these with the clearing house, he passes back to the accounts executive the trade details which are then conveyed to the investor.

When the broker does not happen to be a member of the clearing house: In this case, the broker has to contact a member of the clearing house and route his client's trades through him. The remaining procedure is the same as above.

NATIONAL SECURITIES CLEARING CORPORATION LIMITED (NSCCL)

The buyer of the call option has every right to purchase the shares of the company at the exercise price. If the writer of the option does not honor his part of the option contract, the buyer loses the benefit of buying the contract. Therefore, he looks for a mechanism which would assure him that the contract will be honored under all the circumstances. To overcome problems like these and to facilitate smooth trading in options, "National Securities Clearing Corporation Limited (NSCCL)" was formed. It is the clearing and settlement agency for all deals executed on the derivatives (Futures & Options) segment. NSCCL acts as legal counter-party to all deals on futures and options segment and guarantees settlement.

The Role of NSCCL

After the deal for an option contract is struck on the trading floor of the exchange, the NSCCL steps in acting as a writer as far as the buyer is concerned and the buyer as far as the seller is concerned. Thus, at this juncture, the link between the buyer and the seller is severed. At the end of every trading day, the NSCCL examines the contract notes submitted to it by its members. The paperwork submitted by both the parties should match. If they do they are called 'matched trade', if not, 'out trade'. The process of matching trades and tracking payments is called clearing. In case of out trades, the exchange tries to reconcile the differences by contacting the related traders.

A Clearing Member (CM) of NSCCL has the responsibility to clear and settle all deals executed by Trading Members (TM) on NSE, who clear and settle such deals through them. Primarily, the CM performs the following functions:

- **Clearing** Computing obligations of all his TMs, i.e., determining positions to settle.
- Settlement Performing actual settlement. Only funds settlement is allowed at present in Index as well as Stock futures and options contracts.
- **Risk Management** Setting position limits based on upfront deposits/margins for each TM and monitoring positions on a continuous basis.

TYPES OF CLEARING MEMBERS

- Trading Member Clearing Member (TM-CM): A Clearing Member who is also a TM. Such CMs may clear and settle their own proprietary trades, their clients' trades as well as trades of other TMs.
- **Professional Clearing Member (PCM):** A CM who is not a TM. Typically, banks or custodians could become a PCM and clear and settle for TMs.
- Self Clearing Member (SCM): A Clearing Member who is also a TM. Such CMs may clear and settle only their own proprietary trades and their clients' trades but cannot clear and settle trades of other TMs.

CLEARING MEMBER ELIGIBILITY NORMS

- Net worth of atleast Rs.300 lakh. The net worth requirement for a CM who clears and settles only deals executed by him is Rs.100 lakh.
- Deposit of Rs.50 lakh to NSCCL which forms the Base Minimum Capital (BMC) of the CM.
- Additional incremental deposits of Rs.10 lakh to NSCCL for each additional TM in case the CM undertakes to clear and settle deals for other TMs.

CLEARING MECHANISM

A Clearing Member's open position calculation is arrived at by aggregating the open position of all the Trading Members (TM) and all custodial participants clearing through him. A TM's open position in turn includes his proprietary open position and clients' open positions.

- a. **Proprietary/Clients' Open Position:** While entering orders on the trading system, TMs are required to identify themselves as proprietary (if they are own trades) or client (if entered on behalf of clients) through 'Pro/Cli' indicator provided in the order entry screen. The proprietary positions are calculated on net basis (buy-sell) and client positions are calculated on gross of net positions of each client, i.e., a buy trade is off-set by a sell trade and a sell trade is off-set by a buy trade.
- b. **Open Position:** Open position for the proprietary position is calculated separately from client position.

SETTLEMENT

In an options deal, contracts are cash settled. The underlying basket of securities for options of the Nifty index cannot be delivered, hence the need for cash settlement. Though stock options can be physically settled, it is mandatory that they are also cash settled. The settlement schedule of different types of option deals are as follows:

Product	Settlement	Schedule
Options Contracts on	Premium	Pay-in: T + 1 working day at or
Index & Individual	Settlement	after 11.30 a.m.
Securities		
		Payout: T + 1 working day at or
		after 12.00 p.m.
		-
		(T is trade day)
Options Contracts on	Exercise &	Pay-in : T + 1 working day at or
Index	Final	after 11.30 a.m.
	Settlement	
		Payout: T + 1 working day at or
		after 12.00 p.m.
		(T is expiration day of contract)
Options Contract on		Pay-in: T + 2 working day at or
Individual Securities	Interim	after 11.30 a.m.
	Exercise	
	Settlement	Payout: T + 2 working day at or
		after 12.00 p.m.
		(T is exercise day)
Options Contract on	Exercise &	Pay-in: T + 2 working day at or
Individual Securities	Final	after 11.30 a.m.
	Settlement	
		Payout: T + 2 working day at or
		after 12.00 p.m.
		(T is expiration day)

 Table 3: Settlement Schedule of Different Types of Option

Source: www.nseindia.com

MARGINS FOR OPTIONS

Margin amount for options are fixed on-line, on an intra-day basis. Standard Portfolio Analysis of Risk (SPAN) system is used by NSCCL for the purpose of finding margin, which is a portfolio-based system. NSCCL collects initial margin up-front for all the open positions of a CM based on the margins computed by NSE-SPAN. A CM is in turn required to collect the initial margin from the TMs and his respective clients. Similarly, a TM should collect upfront margins from his clients. Initial margin requirements are based on 99 percent value at risk over a one-day time horizon. As per the recommendations of SEBI, the Value at Risk percentage is calculated. Initial margin requirement for a client shall be netted at the level of individual client and grossed across all clients, at the Trading/Clearing Member level, without any set-offs between clients. However, to find SPAN Margin, various parameters are specified by NSCCL from time to time.

If TM wishes to take additional trading positions, his CM is required to provide Additional Base Capital (ABC) to NSCCL. The TMs can provide ABC in the form of cash, bank guarantee, fixed deposit receipts and approved securities. The excess amount over Initial Margin is known as Premium Margin. It would be charged to members. The premium margin is the client wise margin amount payable for the day and will be required to be paid by the buyer till the premium settlement is complete.

Covered Call Writing

An option contract is said to be a Covered Call Option, when the option is covered or protected by the writer by depositing the shares of the company on which the option is written in an escrow account with the brokerage firm. Therefore, the writer of a call option does not have to deposit any cash as such and whenever an exercise notice is received from the NSCCL, the shares are delivered.

In case, the option expires or if the writer enters into an offsetting transaction, he can withdraw the stocks deposited.

Naked Call Writing

If a trader writes a call option without owning the underlying stock, it is called Naked Call Writing.

When the writer does not own the underlying stock, he has to deposit the necessary amount of margin with the brokerage firm who in turn deposits it with the exchange. Sometimes, the deposit required by the broker may be higher than the deposit required by the exchange.

Naked Put Writing

In this situation, the brokerage firm does not have either the cash or the stock of other companies as security deposited by the writer of the put option.

Calculation of the Initial Margin for Naked Options: The method of calculation of the margin differs from exchange to exchange.

We explain the method followed frequently with an example.

If the investor writes a naked call or put option which is 'Out of money', the margin is calculated in two ways and the higher of these two is deposited as the margin.

The First Method

- i. Calculate the option premium for 100 shares (each option contract is on 100 shares).
- ii. Then compute 0.20 (market value per share) (100).
- iii. Then compute the amount by which the contract is 'Out-of-money'.

The margin amount is given by (i) + (ii) - (iii).

The Second Method

In this case, we calculate the margin as follows:

Margin = $100 \times \text{Option premium per share} + 0.10 \text{ (stock's market price) (100).}$

Case 3

An option trader writes a single naked call option. The option premium is Rs.2. The stock price and the exercise price are Rs.52 and Rs.55 respectively. Calculate the margin required.

The option is Rs.3 out of money. We calculate the margin by both the methods.

First Method

Option premium for 100 shares is Rs.200. Substituting, in the formula: 100 x Option premium per share + 0.20 (stock's market price) (100) – the amount by which the contract is 'Out-of-money'.

We have

(2)(100) + 0.20(52) (100) - 100(55 - 52) = Rs.940.

Second Method

The formula is = 100 x Option premium + 0.10 (stock's market price) (100)

= 200 + 0.10(52)(100) = 720.00.

The initial margin required is, therefore, the higher of the two which is Rs.940.

Calculation of Margin for Naked Put Option which is 'In-the-money'.

For a naked put option, which is 'In the money', the margin is calculated as follows:

- i. Calculate the option premium for 100 shares, and
- ii. Calculate 0.20 (Stock's market price) (100).

Then, the margin = (i) + (ii).

Case 4

An option trader writes a single naked put option. The option premium is Rs.2. The stock price and the exercise price are Rs.36 and Rs.38 respectively. Calculate the margin required.

We calculate the option premium as $2 \times 100 = \text{Rs.}200$.

Then, we calculate 0.20(36)(100) = Rs.720

Margin to be deposited = 200 + 720 = Rs.920.

Calculation of Margin for Naked Call Option which is 'In-the-money'.

In this case, the margin is calculated as follows:

- i. Compute the premium for 100 shares.
- ii. Compute 0.20 (Stock's market price) (100).

Then, the Margin = (i) + (ii).

We observe that, this method is similar to the method employed in calculation of margin for naked put option which is 'In-the-money'.

Case 5

An investor writes a naked call option at a premium of Rs.3. The current market price of the stock is Rs.64 and the exercise price is Rs.60. Calculate the initial margin.

In case of call option, Margin = Option premium + 0.20 (Stock's market price) 100 = x 3 + 0.20(64) (100)

= 300 + 1280 = Rs.1580.

FUTURES

Futures on bonds started trading on stock exchanges in 1975 and futures on equity were introduced in 1982. Prior to this, organized futures market in commodities existed in the Chicago Board of Trade since 1848. Over the years, it experienced rapid growth in terms of volume and turnover. Today, it is the oldest and largest futures exchange in the world. It was established as a voluntary, non-profit association by its members. Another exchange to reckon with is the Chicago Mercantile Exchange. These two exchanges between them account for about 80% of the total volume traded in future contracts in the US.

Futures, like options, possess certain characteristics which make them quite popular. From farmers to financial institutions, all categories of people employ these instruments to hedge their risks. A farmer, who produces wheat, in order to realize a better price for his produce may go to an exchange and sell a futures contract. Similarly, a baker who is uncertain about the future price of the wheat may also go to an exchange and buy a futures contract. In these cases, neither the producer nor the buyer possesses exact information about the price of wheat in future and faces the risk of unfavorable movement of the price in the future. In order to reduce the magnitude of this risk, a futures contract proves to be invaluable. A futures contract also serves as an instrument, for some of the market participants to speculate on.

Futures contracts owe their origin to forward contracts. In other words, futures contracts are refined forward contracts.

Forward Contracts – Genesis

As with most other phenomena, ambiguity exists as to where exactly these contracts saw the light of the day in their long history. Some authors suggest that, it was India where these contracts took birth, while some others suggest that, Roman emperors employed forward contracts to procure food grains from Egypt. Irrespective of this fact, in the present age they are serving important social objectives. It is estimated that forward contracts worth \$500 billion are being entered into every year.

Before the industrial revolution, it was not an easy task to transport commodities from one country to another. The probability that the price could change drastically during the period the commodities were being transported was high. Under these conditions, the traders required a mechanism where they could protect their price and the profits. One of the viable methods to achieve this objective was to enter into a forward contract with the other trader. That is, the trader has to search for another trader who is willing to take position in the contract as a buyer.

Wealth Management

This brings into picture, the first real problem. In the real world, it is quite difficult to find another trader whose requirement coincides with our requirement.

In forwards, both the traders negotiate the details of the contract privately without intervention of a third party. No doubt, this facilitates the traders to draw the details of the contract according to their needs, but this also increases the probability that one of the traders might default on fulfilling his obligation. This characteristic of the forwards contract changes the very nature of risk, as the fulfillment of the contract depends on the worth of the counterparty. This is the second real problem that one has to putup with, if he wishes to deal in forwards.

In forward contracts, since the producers are not in direct contact with the purchasers, they have to route their contracts through middlemen. Middlemen play a crucial role in forward markets, as they purchase the products from the producer by entering into a contract and then enter into a second contract with the other purchaser regarding the supply of the same. They bear the risk and have to perform the other part of the contract even when one of the parties defaults. Therefore, they should not only be paid for their services, but also for the credit risks they bear.

Although this may not be a problem on the face of it, the presence of an institution will bring much more stability to the whole process. This is a prerequisite for the retail investors to participate in forward markets. The other positive effect of this arrangement will be that the transaction costs will be lowered to a great extent.

In the introduction part, we talked about a wheat farmer and a baker going to an exchange to buy future contracts to hedge against the price risk. If we assume that the same contract has been negotiated somewhere outside the exchange, without any of the exchange rules regulating them, it would have been a perfect example of a forward contract.

Although forward markets have been serving the society at large, they are not without their pitfalls as we have seen above. Now, we look at futures and how they were structured to overcome these problems.

Futures Contract

A futures contract is an agreement between two parties to exchange a commodity or a financial asset for certain consideration after a specified period. As stated before, a futures contract is a refined forwards contract. The main differences between forwards and futures contract are:

- i. A futures contract is standardized in terms of quantity, the quality and terms of delivery, etc., and
- ii. A futures contract is traded in an organized exchange, where a large part of the process is regulated.

STANDARDIZATION OF THE CONTRACTS

Standardization of contracts facilitates trading on the exchange. When a group of traders come together they will be able to trade only if all of them know for sure what a contract carries with it. The futures contracts traded in organized exchanges are standardized in terms of features like quantity, quality, expiration month, delivery terms, delivery dates, minimum, maximum price fluctuation and finally trading days and hours.

We explain these in case of commodities traded at different exchanges.

Quantity

We know that commodities are usually in the form of solids or liquids with different units of measurement as given in table 4:

Table 4. Contract Size of Different Commouties				
Contract Size				
1 kg				
30 kg				
100 barrels				
10 MT				
10 MT				
10 MT				
5 MT				
10 MT				

Table 4: Contract Size of Different Commodities

Source: www. ncdex.com

Quality

At the National Commodity and Derivatives Exchange (NCDEX), the quality of the commodity contracts traded should be one of the following types:

Commodities	Grades
Coffee	Arabica, Robusta
Sugar	M grade, S grade Kolkata
Cotton seed oil cake	Akola, Kadi
Rice	Pardoiled, Pusa Basmati, Raw Traditional Basmati
Electrolytic Copper Cathode	ASTM B115/95 and IS 191

Table 5: Grades of Different Commodities

Source: www.ncdex.com.

Expiration Month

The exchanges also specify the months in which the contracts should expire. These months are so selected, that if the traders insist on a physical delivery of say wheat, it would be ready for delivery.

Commodity	Contract Months	Start Period	Expiry
Gold	Feb, Apr, Jun,	16th date of contract	5th date of the contract
	Aug, Oct, Dec	m in Previous year	month
Silver	Mar, May, Jul,	16th date of contract	5th date of the contract
	Sep, Dec	m in Previous year	month
Crude oil	Every month of	Four month	One month before on
	year	before on 16th	15th
Guar seed	Every month of	Four month	On 20th of contract
	year	before on 21st	month
Wheat	Every month of	Four month	On 20th of contract
	year	before on 21st	month
Soya seed	Every month of	Four month	On 20th of contract
	year	before on 21st	month
Chana	Every month of	Four month	On 20th of contract
	year	before on 21st	month

Table 6: Contract Period of Different Commodities

Source: www.ncdex.com

Wealth Management

Delivery Terms

The exchange specifies the delivery details like the warehouse in which the trader should store the physicals. For NCDEX, the warehouses should be in Delhi.

Box 3: Price of Futures

Stock index futures are traded in terms of number of contracts. Each contract is to buy or sell a fixed value of the index. The value of the index is defined as the value of the index multiplied by the specified monetary amount. The fair value of the futures can be calculated as follows:

If an investor holds a portfolio identical to the composition of the stock index for a year, he would receive the dividends during the year and there might be some gain by way of appreciation in the value of the portfolio. Let the index value be denoted as I_o , the expiration day index value as I_t and the dividend received as D_r . The rupee return earned by the investor is given by the following equation:

$$(I_t - I_o) + Dr$$

If the investor wishes to invest in an index futures as an alternative to investing in the underlying portfolio, he would buy the index futures contract and invest his money in risk-free treasury bills or short-dated government securities. If we denote the current price of the index futures as F_o , the expiration day price as F_t and the interest earned as R_f , the rupee return earned by the investor is given by the following equation:

$$(F_t - F_o) + R_f$$

If the investor has to be indifferent between the two alternatives, then

$$(I_t - I_o) + D_t = (F_t - F_o) + R_t$$

We know that the final settlement price of the index futures contract is set equal to the spot index value. The above equation can be simplified as,

$$F_o = I_o + (R_f - D_t)$$

Here F_o is known as the theoretical price of the futures. The difference between R_t and D_t is referred to as the "cost of carry" and we can say that the futures contract must be priced to reflect the "cost of carry". It is also referred to as 'basis'. This is positive because the annualized risk-free interest rate is typically greater than the dividend yield. However, this need not be true always.

If the price of the index futures contracts is different from the theoretical calculated by the above equation, an arbitrageur can earn riskless profits by trading simultaneously in the spot market and futures markets.

Bull and Bear Spreads

On day zero, the trader buys near month (N_0) and sells mid month (M_0) . Later he reverses the trade by selling near (N_1) and buying mid (M_1) .

His return is $(M_0 - M_1) + (N_1 - N_0)$, or this can be written as, $(M_0 - N_0) - (M_1 - N_1)$, which is nothing other than the earlier spread versus later spread. So, the bull spread player gains if spreads narrow across time.

On settlement day, the future price will converge to the spot price. That is spread will be zero at expiry. So, it may be thought that the bull spread player will always be a gainer. However, due to market movements, bear spreads are often profitable strategies. For example, when the opening basis is negative, a bear spread is an almost mathematically certain trade.

Delivery Dates

The Chicago Board of Trade specifies that the contract can be delivered on any business day of the expiration month.

Minimum Price Fluctuation

This is called the tick size.

Commodity	Tick Size
Gold	Rs.1/gm
Silver	Rs.1/Kg
Crude oil	Rs.1/barrels
Guar seed	50 paisa
Wheat	10 paisa
Soya seed	Re.1
Castro Seed	50 paisa
Chana	Re.1

|--|

Source: www.ncdex.com

DAILY PRICE LIMIT

To restrict the price movement during the day, the exchange specifies a limit. That is, in case of wheat contracts, the NCDEX specifies that today's price should differ by the preceding day's price by not more than 4% for a contract price limits are expanded gradually till a stage where there is no limit.

TRADING DAYS AND HOURS

The exchange also controls the days and the hours during which trading should be carried out on business days. The wheat contracts at NCDEX should trade from 10.00 A.M. to 5.00 P.M. from Monday to Friday and on the Saturday, the trading should cease by 2.00 P.M. The last trading day in case of wheat contract is seven business days before the last business day of the delivery month. The last trading day differs from commodity to commodity and also from exchange to exchange.

The level of standardization is so high that all the participants know precisely what is being offered for sale and the terms that accompany that transaction. This has helped immensely to promote liquidity and stimulate trading.

DIFFERENCES BETWEEN FUTURES AND FORWARD CONTRACTS

The differences between a futures and forward contract are as follows:

Table 8: Difference between Futures and Forward Contracts

	Futures Contracts	Forward Contracts
1.	These are traded in organized location	No particular physical location as
	such as exchange.	such.
2.	The terms of the contract are highly standardized.	Terms are structured to suit both the contracting parties.
3.	Contracts are cleared by a separate clearing house.	No such facility exists.
4.	Clearing house guarantees the performance of the contract.	No organization guarantees the performance of the counterparty. Depends on the worth of the counterparty.
5.	Traders have to deposit initial margin irrespective of their trading position.	No compulsion to make such deposits.
6.	Traders have to pay daily settlement margin depending on movement in the price of the underlying stock.	No such provisions are in vogue.
7.	Future contracts can be easily closed.	Quite difficult to do so.
8.	Futures markets are monitored and	Regulation is not as tight as in
	regulated by special agencies.	futures markets.
9.	Marking to market is done at the end of every trading day.	No such adjustments are carried out.

Futures Price Quotations

Futures prices are usually published briefly in leading newspapers and journals and are available on the websites of the stock exchanges. A sample of stock futures contract price quotations is given in the table below:

Expiry Date	Previous Close Price (Rs.)	Open Price (Rs.)	High Price (Rs.)	Low Price (Rs.)	Close Price (Rs.)	Volume	Open Interest	Delivery Center
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
21-Sep-04	821.0	828.0	830.0	822.0	825.0	5570	3980	Delhi
22-Sep-04	825.0	824.0	827.0	821.0	824.0	3070	5950	Delhi
23-Sep-04	824.0	824.0	825.0	821.0	823.0	1150	6470	Delhi
4-Oct-04	808.0	808.0	811.0	804.0	810.0	4460	18270	Delhi
5-Oct-04	810.0	811.0	815.0	810.0	812.0	4430	19110	Delhi
6-Oct-04	812.0	813.0	825.0	813.0	820.0	7140	20590	Delhi
1-Nov-04	809.0	808.0	812.0	808.0	811.0	1600	23920	Delhi
2-Nov-04	811.0	811.0	813.0	810.0	812.0	2150	24910	Delhi
3-Nov-04	812.0	813.0	814.0	812.0	814.0	1780	25190	Delhi
22-Dec-04	765.4	764.0	764.6	760.8	763.4	4880	35060	Delhi
23-Dec-04	763.4	762.0	762.2	752.8	754.8	5870	35390	Delhi
24-Dec-04	754.8	754.0	761.2	753.2	761.0	3300	35820	Delhi
29-Dec-04	760.6	759.6	761.8	759.2	760.6	1840	34760	Delhi
30-Dec-04	760.6	761.8	763.2	761.8	762.8	1290	34380	Delhi
31-Dec-04	762.8	760.8	762.4	760.0	762.2	1350	34080	Delhi
1-Jan-05	762.2	761.2	762.0	759.0	761.6	1740	33020	Delhi
19-Jan-05	768.8	769.0	774.0	768.2	773.2	4170	6150	Delhi
20-Jan-05	773.2	773.2	780.0	771.0	772.6	6310	2110	Delhi

Table 9: Future Trading of Wheat at NCDEX

Source: www: ncdex.com

For explanation, we consider the first row of the table.

The first column gives expiry date of the contract (September 21, 2004). The second column gives the previous day closing price (Rs.821). The third, fourth, fifth, and sixth columns, give the opening price, intra day high, low, and closing price. The seventh column gives the number of the contracts (5570) that were traded on that day. The figure in the eighth column (3980) gives total number of futures outstanding in the market at September 21, 2004. The ninth column gives the delivery center (Delhi) of the commodity.

In the table, the contract which matures next (22nd September) is said to be a near-by contract, while the contract maturing after that (September, October) is known as Distant or Deferred contract.

One should clearly distinguish between the Volume traded and the Open interest. Volume traded is calculated by counting the number of contracts either bought or sold and it gives definite idea about the trading activity in a period. Open interest denotes the number of contracts that are "open" at the close of trading on the preceding day.

More explicitly, if a trader 'A' has bought two contracts from trader 'B' and sold one of them back to 'B' on the same day, the volume will be three contracts. This is because, 'A' bought two contracts and 'B' bought one contract, which adds up to three. For the same example, the open interest will be one contract. This is because, trader 'A' bought two contracts and sold one of them and 'B' sold two contracts and bought one of them. Therefore, traders 'A' and 'B' are left with one contract each, which gives us the open interest.

What would have been the open interest, if trader 'A' sold that one contract to some other trader say 'C'. In this case, as far as 'A' is concerned he did close his position in one of the contracts he bought, but that does not affect the open interest as trader 'C' has taken his position. Therefore, the open interest would still remain as '2'. Open interest is calculated from market point of view and not from an individual point of view.

Trading Mechanism

In this part, first we look at how a trade is initiated and then we elaborate on the different players we come across and the different process involved.

FLOW OF THE ORDER

Any person who wants to trade in futures has to contact a Futures Commission Merchant (FCM) or a broker. An FCM is necessarily a member of the clearing house. The next step is to open an account at his firm. You will be assigned to one of the Accounts Executives, who will look after your transactions. Whenever you place an order with the accounts executive, he will note down the order specifications and immediately transmit it to one of the floor brokers at the exchange. The floor broker will execute the order and report the transaction to the clearing house. Once he receives the confirmation from the clearing house, he calls back the accounts executive giving him all the details about the trade. The accounts executive, in turn, will pass these details to his client.

Other responsibilities of the FCM are maintaining all the records and reporting the trading activity of all his clients to the clearing house and sending the clients' monthly statements about their position and account balances.

OPENING AN ACCOUNT WITH A BROKER

The broker may or may not be a member of a clearing house. If he happens to be a member of a clearing house, he notes down the specifications and transmits the order to the floor broker who will execute it, confirm it from the clearing house and send back the details to the broker, who then conveys the same to his client. In case, he does not happen to be a member of the clearing house, he should necessarily route the order through a member. Once he does this, the remaining procedure will be the same as above.

The investor who wants to trade futures can be a hedger or a speculator. They can be defined as follows:

Hedgers

Hedgers deal in futures to offset a pre-existing risk. The commodity is usually that which they produce or use in the course of their business.

Speculators

Speculators take long or short positions only with the intention of making profits by getting out of the market when conditions favor them. As with the other markets, speculators play an important role in futures market also. In the process, they assume risk which is disproportionate to the returns they are expecting.

Futures Commission Merchant

The role of the FCM is similar to that of a brokerage house in stock market. Investors interested in dealing in futures may also put through their deals through the contacting agents of FCM. These agents do not accept money from the investors. The agents are also called 'introducing brokers'.

The bulk of the business is carried out by FCMs only.

Floor Brokers

These people have the responsibility of executing the trades forwarded from the FCMs on the floor of the exchange. They can also trade on their own account. They work as individuals or associate with an FCM as his agents.

Pit

Now, the next logical question would be where does the floor brokers trade in the exchange? The exchange floor is divided into several physical locations called Pits. According to the Federal Law and the rules of the exchange, trading in futures should take place only during official trading hours in a designated area (a physical location on the exchange floor) called a Pit.

Open Outcry

To realize the fair price of the commodity, floor traders are required to make an offer to all other traders present in the Pit by openly shouting the bid or asked prices. This method is referred to as Open Outcry System.

The Clearing House

In "Flow of the Order" we mentioned that the floor broker will report back to the account executive only after confirming the trade from the clearing house. Does the clearing house function on similar lines as seen in options? Yes. As in options, the futures contracts are also cleared by a clearing house. The clearing house can be constituted separately or as a part of the futures exchange. Nevertheless, each futures exchange is closely associated with the working of a particular clearing house. The functions of the futures clearing house are very much similar to those of the "Options Clearing Corporation". Therefore, as the clearing house is well capitalized and since it holds a net zero position (it exists to facilitate trading in futures for the participants and it does not trade on its own account) and finally it being an integral part of the futures market, the traders place immense faith in the institution.

MARGIN AND DAILY SETTLEMENT

Each clearing house prescribes its own limits on initial, maintenance and variation margins. Therefore, the margins we mention here cannot be applied universally.

One of the main differences between Options and Futures is that in futures both the contracting parties are required to pay variation margins depending on the price of the underlying asset in the market. However, in case of options, the buyer of the contract after paying the premium does not bother about any other payments irrespective of the underlying asset's price in the market.

In futures trading, both the parties to the contract are required to deposit an initial margin with the broker, which in turn will be deposited with the exchange.

This margin depends on the price volatility of the underlying asset. Exchanges generally set this margin equal to $\mu + 3\sigma$, where μ is the average daily absolute change in the value of the contract and ' σ ' is the standard deviation of these changes measured over a period of time.

Case 6

The average daily price change is Rs.15 per ounce and the standard deviation of the price changes is Rs.4. The initial margin would be,

 $(15 + 3 \times 4) (100) = 2,700.00.$

Managing Risks in Wealth Management

One can also deposit securities instead of cash with the brokerage firm and simultaneously earn the interest on these. The initial margin is reinforced by maintenance and variation margins.

Due to the fact that the price of the futures contract changes, gains or losses accrue to the holder of the contract. The gains or losses are credited or debited to the margin account. If the price movements are adverse, the balance in the account falls. Under these circumstances, the trader is required to replenish the margin, bringing it on par with the initial value whenever the level or value of funds on deposit with the broker, reaches a certain level. This level is referred to as the **Maintenance Margin**. The additional amount, which the trader deposits with the brokerage firm, is called the "**Variation Margin**".

The maintenance margin is generally about 75% of the amount of the initial margin.

In the US, most of the exchanges specify the initial and maintenance margins, for the top ten futures contract.

Case 7

An investor buys a contract of Crude Oil on 13th November. The settlement price on ten consecutive trading days is shown below. The initial margin is Rs.3,000, the maintenance margin is Rs.2,100.00. For the following prices (Rs.), prepare a table showing when the various margins were called. The contract is for 1,000 barrels.

November 13th Rs.26.25	November 18th Rs.23.00	November 24th Rs.26.50
November 14th Rs.27.00	November 19th Rs.23.55	November 25th Rs.27.00
November 15th Rs.25.79	November 20th Rs.25.00	
November 17th Rs.24.12	November 21th Rs.26.25	

This problem will consist of two tables. The first table will show the daily gains and losses along with cumulative trading profits and losses. The second table will show equity and margin account.

Day	Trade Price	Settlement	Marked to Market	Cumulative
		Price/Barrel	Cash Flows	Profit/Loss
	Rs.	Rs.	Rs.	Rs.
November 13	26.25	26.25	_	_
November 14		27.00	+750.00	+750.00
November 15		25.79	-1210.00	- 460.00
November 17		24.12	-1670.00	-2130.00
November 18		23.00	-1120.00	-3250.00
November 19		23.55	+550.00	-2700.00
November 20		25.00	+1450.00	-1250.00
November 21		26.25	+1250.00	0
November 24		26.50	+250.00	+250.00
November 25	27.00	27.00	+ 500.00	+750.00

Daily Gains and Losses along with Cumulative Trading Profit and Losses

Wealth Management

	Equity Account			Margin Account		
Transactions	Beginning	Cash Flow	Ending	Margin Call	Deficiency	Excess
	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
Deposits Rs.2000		2000.00	2000.00	_	_	2000.0
Nov.13 Buys a contract	2000.00	_	2000.00	1000.00 (I.M)	1000.00	
Nov.14 Deposits Rs.1000	3000.00	+750.00	3750.00			750.00
Nov. 15 Withdraws Rs.750	3000.00	-1210.00	1790.00	1210.00 (V.M)	1210.00	_
Nov.17 Deposits Rs.1210	3000.00	-1670.00	1330.00	1670.00 (V.M)	1670.00	—
Nov.18 Deposits Rs.1670	3000.00	-1120.00	1880.00	1120.00 (V.M)	1120.00	_
Nov.19 Deposits Rs.1120	3000.00	+ 550.00	3550.00			550.00
Nov.20 Withdraws Rs.550	3000.00	+ 1450.00	4450.00			1450.00
Nov.21 Withdraws Rs.1450	3000.00	+ 1250.00	4250.00			1250.00
Nov.24 Withdraws Rs.1250	3000.00	+ 250.00	3250.00			250.00
Nov.24 Withdraws Rs.250	3000.00	+ 500.00	3500.00			500.00

Equity and Margin Account

Alternatively, if the investor does not withdraw any excess amount, the equity and margin account looks as under:

	Ec	quity Account		Margin Account		
Transactions	Beginning	Cash Flow	Ending	Margin	Deficiency	Excess
Transactions	(Rs.)	(Rs.)	(Rs.)	Call (Rs.)	(Rs.)	(Rs.)
Deposits Rs.2000		2000.00	2000.00			2000.00
Nov 13 Buys a Contract	2000.00		2000.00	1000.00	1000.00	—
Nov.15 Duys a Colluaci				(I.M)		
Nov.14 Deposited	3000.00	+ 750	3750.00			750.00
Rs.1000						
Nov.15	3750.00	-1210.00	2540.00			
Nov.17	2540.00	-1670.00	870.00	2130.00	2130.00	
				(V.M)		
Nov 19 Deposite De 2120	3000.00	-1120.00	1880.00	1120.00	1120.00	
Nov.16 Deposits KS.2150				(V.M)		
Nov.19 Deposits Rs.1120	3000.00	+ 550	3550.00			550.00
Nov.20	3550.00	+1450.00	5000.00			2000.00
Nov.21	5000.00	+1250.00	6250.00			3250.00
Nov.21	6250.00	+250.00	6500.00			3500.00
Nov.25	6500.00	+500.00	7000.00			4000.00

From the equity and margin account table, we observe that on 17th, November there was only Rs.870 in equity account (Trader's account). This was lower than the maintenance account of Rs.2,100. Therefore, the trader received a margin call and has to deposit Rs.2,130 under the variation margin. On 18th November also, the trader receives a margin call for Rs.1,120 which he deposits on the next day.

It is obvious that the traders would not like to get the margin calls often. To avoid this, they can either deposit securities whose value is quite above that of the initial margin or deposit the cash in excess of the initial margin into an interest bearing account and use the proceeds towards margin amounts.

In case, the trader does not comply with the above discussed norms, the broker has every right to close the futures position of the trader and return the balance after deducting the loss and brokerage fees to the trader. This usually results in a loss for the trader.

So far, we have looked at various facets of buying futures. We now look at how futures position is closed.

CLOSING A FUTURES POSITION

A trader, who has entered into a futures contract, can close the contract in the following three ways:

- i. Either make delivery of the commodity or opt for a cash settlement,
- ii. Enter into an offsetting or reversing trade, or
- iii. Settle for exchange for physicals.

The first two are similar to the methods studied in options. While entering into an offsetting or a reversing trade, we have to remember that the contract should be identical in terms of the commodity traded, the number of contracts and the maturity should match the one which is currently held.

EXCHANGE FOR PHYSICALS

A trader can also complete the futures contract by engaging in an exchange for physicals. In this method, the parties agree for an exchange of cash and the commodity underlying the contract. A baker who genuinely requires wheat and a farmer who has wheat can mutually agree on a price for the wheat, so that the exchange can take place, in the process facilitating both the traders to cancel their complementary futures position against each other. The exchange notes their positions and cancels their futures obligations.

This method is similar to the offsetting method, but differs from it in the following manner:

- i. The traders' actually exchange physical goods,
- ii. The transaction or the mutual agreement does not take place on the floor of the exchange, and
- iii. There may be no intermediaries to negotiate the deal.

Keeping in view the above points, an exchange for physicals transaction is also called "Ex-pit" transaction or "Against actual" or "Versus cash" transaction and is recognized by the Federal Laws and Exchange rules.

In the discussion on margins, we looked at the manner in which the margins are calculated for a futures contract. However, this was only for a single contract. In the real world, traders seldom deal in single contracts. Since the objective of margins is to protect the trader, the broker and the clearing house against losses, will it not make sense to ask traders to pay margins depending on: (i) his cumulative position and (ii) the risk he is exposed to in different markets? Certainly, it will improve the liquidity position and also release the funds locked up in margins.

Before we look at these margins, let us learn a few more basics about futures.

Basis

We define basis as the difference between the current cash price of the commodity and the futures price. That is,

Basis = Current Cash Price – Futures Price.

The spot price for a physical commodity can differ from location to location, since for physical commodities transportation costs play an important role. Correspondingly, basis calculated also differs from location to location. We know that single goods cannot be sold at different prices at two different locations, as the traders will actively exploit any arbitrage possibilities. Therefore, to avoid arbitrage, the differences should be only to the extent of transportation costs.

Generally, basis is higher for contracts with longer maturity.

Futures markets can be either Normal or Inverted in nature. By normal markets, we mean that the prices for distant futures are higher than for nearby contracts or for which the basis gradually increases. The inverted futures market is quite opposite of this.

The basis for normal markets usually exhibits "Convergence". By "Convergence" we understand that the spot and futures prices converge to a point, where the basis would be zero towards the end of the life of the contract.

Basis is also a valuable indicator for predicting future spot prices of the commodities that underlie the futures contracts and it is much more stable than the futures price or the cash price considered separately. The relatively low variability of the basis aids in decision-making for traders interested in hedging and certain types of speculation.

Case 8

The spot price of gold, say, on November 7, 2005 was Rs.4,330. The price of the futures contract expiring in August 2006 was Rs.4,450. What is the basis for this contract?

We know that,

Basis = Current cash price – Futures price = 4,330 - 4,450 = -120

Spread

The difference between two prices of the futures contracts is called a 'Spread'. Spread trading involves buying one futures contract and selling another.

In spreads, we have two types – intracommodity spread and intercommodity spread. Intracommodity spread is a position with both futures contracts on the same commodity, but with different expiration dates.

In intercommodity spread, the two future prices that form a spread belong to two distinct but economically related commodities.

Spread relationships play an important role and their thorough understanding is a prerequisite for the speculators to earn profits. Also, one should have the ability to identify economically unjustified spread relationships.

INTRACOMMODITY SPREAD

The intracommodity and intercommodity spreads require lower margins vis-à-vis single contracts. The logic behind lower margins is that, the prices of futures contracts in a spread are usually related and the initial margin which is deposited for a spread covers both the contracts of the spread. As a result, the risk of a spread is quite low as compared to the risk of a single contract and hence eligible for a lower margin. Most of the exchanges recognize this and they collect lower margins on the spreads.

In case of intercommodity spread, the pair of commodities in the futures contract determines whether one can go for lower margin requirements on the spread or not. Only those pairs of commodities, which have close economic relationship between them, are eligible for this treatment. Also, the contracts on these commodities should be traded on the same exchange, since each exchange establishes its own margins independently.

Intermarket spread is a variant of the intercommodity spread. The margin required in this case is briefly discussed below:

INTER-MARKET CROSS MARGINING

A trader's initial margin requirement would be decided by considering his entire portfolio, even if the different constituents of the portfolio happen to be with different exchanges. For example, the T-bill futures are traded at the Chicago Mercantile Exchange and Treasury bond futures at the Chicago Board of Trade. If a trader who holds a spread between T-bills and T-bonds deposits the initial margin depending on the spread, it would be an example of Intermarket Cross Margining. It depends on a trader's total holding in different markets.

The reasoning behind this method is that the trader's portfolio risk is usually less than the risk of the individual constituents. The other **advantages** of this method are:

- i. The total amount of initial margin deposit would be lower for a given degree of risk protection, necessarily freeing capital for other purposes;
- ii. That a central clearing house, while serving various markets, reduces the transfers of funds between different accounts increasing the overall efficiency of the system; and
- iii. It increases liquidity, as lower margins attract large number of traders.

Hedging

We have seen in the introduction part, that in futures market all categories of people try to hedge their risks. As an example, we looked at a farmer and a baker, who in order to protect their price and the profits, went to a futures exchange to buy futures contracts. The futures markets, thereby, perform an important social function. While hedging, if the trader is thinking of acquiring any asset, he would buy a futures contract and therefore, become immune to any price rise in future. If he is thinking of disposing an asset, he will sell a futures contract also with the sole aim of gaining immunity against falling prices. In the first case, it is referred to as a long hedge and in the later part, it is a short hedge.

In this part, we look at a couple of illustrations to understand the hedging process.

Case 9

A farmer knows that the wheat crop will be ready for harvest in the month of January. He estimates that the crop would yield 50 Metric Tonnes (MT). The current price for January futures contract is Rs.1050 per quintal. He sells five contracts, as the size of each contract is 10 MT. However, in January, the market price of the wheat reaches Rs.1,100. Would the farmer gain or lose and by how much amount?

On sale of 10 contracts, the cash inflows are

 $= Rs.1,050 \ge 10 \ge 5 \ge 10 = Rs.525,000$

On selling the harvest at Rs.1,100, the cash inflows would have been

= 1,100 x 10 x 50 = Rs.550,000.

Subtracting these, we have Rs.550,000 – Rs.525,000 = Rs.25,000.

Thus, the farmer made a notional loss of Rs.25,000.

The point to be noted here is that the farmer is assured of a price of Rs.1,050 irrespective of the actual market price. Even if the price turned out to be Rs.1,000, the buyer of the contract would have paid him Rs.1,050 per quintal. Thus, the futures contract has removed the uncertainty about the price the farmer may realize.

Case 10

The manager of Everest Photo films requires 30,000 troy ounces of silver after four months. He buys six 5,000 troy ounce silver future contracts maturing in five months at Rs.11.10 per ounce. After four months, if the spot price is Rs.11.20 per ounce and the basis is Rs.0.05, does the manager gain or lose? In case he gains, what will be the amount?

On buying the contracts, the outflow is

= 5,000 x 11.10 x 6 = Rs.333,000.

When he buys the silver in the market, his outflow will be

= 5,000 x 11.20 x 6 = Rs.336,000.

On sale of the futures contracts, he will realize:

Rs.11.15 x 6 x 5,000 = Rs.334,500.

Profit on futures contracts: Rs.334,500 - Rs.333,000 = Rs.1,500

Loss on buying in the spot: Rs.336,000 - Rs.333,000 = Rs.3,000.

The net loss is Rs.1,500. In this illustration, you may note that the manager, instead of taking delivery of the silver under the contracts, has chosen to liquidate the contracts and buy in the cash market. Goods under futures contracts are delivered at specified places. Generally, deliveries are not accepted because the place of delivery may not be convenient for the holder of the contract. In such cases, the buyer of the contract sells the contract and buys the commodity in the spot market at his convenience. In this example, you should also observe that the amounts gained and lost are not offsetting each other. There is a net loss of Rs.1,500. Such a hedge, which does not completely protect the holder from price changes, is called an imperfect hedge. The hedge that offers complete protection is called a perfect hedge.

We observe that profit made by Everest Photo films is given by the difference of Rs.336,000 - Rs.333,000 = Rs.3,000.

DIFFERENCE BETWEEN OPTIONS AND FUTURES

Now, we look at some of the differences between options and futures:

- i. In options, the obligation to honor the contract is on the writer of the option, whereas in futures both the parties are equally responsible to honor their obligations.
- ii. In options, the buyer has to pay the premium to the writer of the option. In futures, both the parties have to deposit the initial margin with the clearing house and then have to pay variation margin depending on whether the price fluctuation is favorable to them or not.
- iii. American options can be exercised any time before the expiry day, while the European options should be exercised on the last day of expiration period. In futures, no such distinction exists and the parties are expected to honor the contract on the settlement date.
- iv. In options, the buyer limits the downside risk to the extent of premium paid. He, however, retains the upside potential. In futures, the buyer is exposed to the whole of the downside risk and has the potential for all the upside return.
- v. The expiration period for options is nine months, while for futures it is twelve months.
- vi. Options are employed by both hedgers and speculators, while trading in futures is by and large by speculators.

- The option buyer has the right but not an obligation to buy or sell.
- An option is called a call option if the writer gives the buyer of the option the right to purchase the underlying asset from him.
- An option contract is said to be a put option if the writer gives the buyer of the option the right to sell the underlying asset.
- An European option is exercised only on the due date while an American option can be exercised any day prior to the due date.
- The option premium is the amount which is paid by the buyer of the option to the seller to induce him to undertake the risk associated with such contract.
- Out-of-Money option is one in which the buyer incurs loss if the option is exercised now.
- In-the-Money option is one in which the buyer books profit if the option is exercised now.
- At-the-Money option does not result in loss or gain to the buyer if it is exercised now.
- **Covered Call Writing:** When the option is covered or protected by the writer of the option by depositing the share of the company on which the option is written in an escrow account with brokerage firm.
- Naked Call Writing: If a trader writes a call option without owning the underlying asset, it is called Naked Call Writing.
- Naked Put Writing: Here the brokerage firm does not have either the cash or the stock of other companies as security deposited by the writer of the put option.
- A futures contract is an agreement between two parties to exchange a commodity or a financial asset for certain consideration after a specified period. These are standardized in terms of quantity, the quality and terms of delivery, etc. And the futures contracts are traded in an organized exchange, where a large part of the prices is regulated.
- Futures are used by hedgers to offset the pre-existing risk. The commodity is usually that which they produce or use in the course of their business.
- In the case of futures, both the parties to the contract are required to deposit an initial margin with the broker who in turn deposits the same with the exchange. The margin to be deposited depends upon the price volatility of the underlying asset.
- Initial margin is the amount required to be deposited as margin initially, that is, at the time of taking a position.
- **Maintenance Margin:** The floor price below which the balance in the margin account is not allowed to fall.
- BASIS in futures is the difference between the current cash price of the commodity and the futures price.
- SPREAD is the difference between the two prices of the futures contracts. It involves buying one futures contract and selling another. There are intracommodity spreads and intercommodity spreads.

Arbitrage	:	Making use of the difference in the price of the same commodity (for instance, shares) traded in different markets to make profit, by buying from the lower market and selling it in the higher market. It is non-speculative because an arbitrager will only switch from one market to another if the prices in both the markets are known and if the profit to be gained outweighs the cost of the operation.
Asset Allocation	:	It is the process of apportioning the available finances of an individual to different asset classes.
Bank	:	A commercial institution licensed as a receiver of deposits, mainly concerned with making and receiving payments as well as supplying short-term loans to individuals.
Bar Charts	:	To plot a stock's price movement, the high and low reached on a said day are marked and connected by a vertical line giving it the shape of a bar. The closing price is indicated by a small horizontal tick on this line.
Beta	:	A measure of a security's performance in relation to the general movement of the market. A share with a beta of 1 rises and falls corresponding exactly to the rise and fall in the market. The rise or fall in a security with a beta higher than 1 is more than that of the market and the rise or fall in a security with a beta less than 1 is less than that of the market index.
Bonds	:	Instruments of loan raised by the government or a company, against a specified interest rate with a promised date of repayment. Debentures are bonds secured by mortgage against company assets as distinguished from fixed deposits which are unsecured.
Breadth of the Market	:	It is the percentage of shares involved in an upward or downward movement of the stock market. If two-thirds of the shares listed on a stock exchange participate during a trading session, the corresponding trend it shows is said to be representative, and is not influenced by the price of a few heavily traded shares.
BSE Sensex	:	It is the benchmark index of the Bombay Stock Exchange and consists of the 30 biggest and actively traded stocks representing various sectors in the Indian economy.
Call Option	:	An option that gives the holder the right (but not the obligation) in exchange for payment of a premium, to buy the underlying asset at a specific price, and obligates the seller to sell the underlying asset at a specific price, should the option be exercised.
Capital Flow	:	It can come in the form of foreign direct investment or portfolio investments. Foreign direct investment means direct investment in the business operations of a company in a foreign land and portfolio investment means investment in the foreign financial assets.
Capital Market	:	It is a market for medium and long-term financial instruments and consists of the stock market, the primary market and the bond market. It usually trades in equities, debentures and bonds.

Clearing House	:	It is the agency of the stock exchange for effecting delivery and settlement of contracts between members.
Coefficient of Variation	:	It represents the ratio of the standard deviation to the mean, and is a useful statistic for comparing the degree of variation from one data series to another, even if the means are drastically different from one another. It helps determine volatility (risk) in comparison to the amount of return expected from an investment. The lower the ratio of standard deviation to mean return, the better the risk-return tradeoff.
Commodities	:	These are tangible goods that can be used for various purposes. They include agricultural products such as grains, oil seeds, wheat etc., metals like sponge iron, aluminum ingot, etc., to name a few except financial assets. They are traded a mutual agreement between the buyer and the seller to exchange a commodity at a given price.
Consumer Finance	:	It is any kind of lending to consumers. It covers a wide-range of activities, including loans from banks and indirect finance such as hire purchase agreements, and loans by specialist retail finance companies.
Covariance	:	A measure of the degree to which returns on two risky assets move in tandem. A positive covariance means that asset returns move together. A negative covariance means returns move inversely.
Credit Card	:	Any card, plate, or coupon book that may be used repeatedly to borrow money or buy goods and services on credit.
Credit Rating	:	It is an assessment of the creditworthiness of individuals and corporations. It is based upon the history of borrowing and repayment, as well as the availability of assets and extent of liabilities.
Derivative	:	It is merely a contract between two or more parties. Its value is determined by fluctuations in the underlying asset. The most common underlying assets include stocks, bonds, commodities, currencies, interest rates and market indexes.
Disposable Income	:	The income left with an individual after meeting all the expenses.
Diversification	:	It involves spreading investments into many types of investments which have different risk/reward ratios.
Dividend Yield	:	A financial ratio that shows how much a company pays out in dividends each year relative to its share price. In the absence of any capital gains, the dividend yield is the return on investment for a stock.
Emerging Markets	:	These are the financial markets of the developing countries underdeveloped in comparison with those in the developed countries. Examples are: Markets in many Latin American, Eastern European and Asian countries.
Flexibility	:	The quality or state of being flexible.
Foreign Institutional Investor (FII)	:	It is an entity established or incorporated outside India to make investment in India. It includes pension funds, mutual funds, insurance companies and asset management companies.
Forward	:	A contract in which a seller agrees to deliver to a buyer sometime in the future. Forward contracts, in contrast to futures contracts, are privately negotiated and are not exchange traded or standardized.
-------------------------------	---	--
Futures	:	A term used to designate all contracts covering the purchase and sale of physical commodities or financial instruments for future delivery on a commodity exchange.
GDP		GDP or Gross Domestic Product is the total value of goods and services produced in a country in a year. It represents the economic health of a country and is the sum of total consumption in the country, government expenditure, investments and net exports. (Net exports = exports less imports).
Gilt-Edged Securities	:	These are usually government securities and bonds, very safe to hold, as the government is responsible for the payment of interest and refund.
High Net worth Individuals	:	People with more than \$1 million in financial assets.
Hire Purchase	:	It is a contractual arrangement under which the owner lets his goods on hire to the hirer and offers an option to the hirer to purchase the goods in accordance with the terms of contract.
Inflation	:	The rate at which the general level of prices of goods and services in a country rise and consequently fall as the purchasing power decreases.
Initial Public Offer (IPO)	:	The first sale of stock by a private company to the public. IPOs are often issued by smaller, younger companies seeking capital to expand, but can also be issued by large privately owned companies looking to trade publicly. The issuer obtains the assistance of an underwriting firm, which helps it determine what type of security to issue (common or preferred), the best offering price and time to bring it to the market. Also referred to as a "public offering".
Installment Credit	:	Loan repaid with interest owed, in equal periodic payments of principal and interest. It also includes fully amortizing loans, repayable over a fixed amortization schedule in monthly installments.
Insurance	:	A contract (policy) in which an individual or entity receives financial protection or reimbursement against losses from an insurance company. The company pools the clients' risks to make payments more affordable for the insured.
Leasing	:	It is the right to use or occupy personal property or real property given by a lessor to another person (usually called the lessee or tenant) for a fixed or indefinite period of time, whereby the lessee obtains exclusive possession of the property in return for paying the lessor a fixed or determinable consideration (payment).
Line Charts	:	Simple graphs are drawn by plotting the closing price of the stock on a given day and the points thus plotted over a period of time are connected. The closing price of the stock is taken on the Y-axis and the period of time on the X-axis.
Liquidity	:	The degree to which an asset or security can be bought or sold in the market without affecting the asset's price.
Maintenance Margin	:	The minimum amount of equity that must be maintained in a margin account. Also referred to as "minimum maintenance" or "maintenance requirement".

Margin	:	The amount required to be deposited as margin initially, that is, at the time of taking a position.
Market Capitalization	:	The total market value at the current prices of the total number of equity shares issued by a company.
Marketing mix	:	The marketing mix is generally accepted as the use and specification of the four P's describing the strategic position of a product in the market place – Product, Price, Place and Promotion.
Merchant Bank	:	Mainly concerned with import and export trade, although they have recently expanded their activities by raising finance, at home and abroad, for industry, including high-risk hire-purchase financing. They also float shares on behalf of companies or underwrite them. They are increasingly involved in takeover bids and mergers, offering specialized advice to the bidders.
Monte Carlo Simulation	:	A problem-solving technique used to approximate the probability of certain outcomes by running multiple trial runs, called simulations, using random variables.
Moving Average	:	Most often applied to stock returns, stock prices, or trading volumes but can also be calculated for any time series. They are used to smoothen out short-term fluctuations, thus highlighting longer-term trends or cycles.
Mutual Fund Custodian	:	A trust company, bank or similar financial institution responsible for holding and safeguarding the securities owned within a mutual fund. It may also act as the mutual fund's transfer agent, maintaining records of shareholder transactions and balances.
Mutual Funds	:	They belong to a group of financial intermediaries known as investment companies, which are in the business of collecting funds from investors and pooling them for the purpose of building a portfolio of securities according to stated objectives.
Net Asset Value (NAV)	:	Term used by mutual funds, master shares and other investment trusts to indicate the net tangible asset value of each share on a particular date. It can also mean the total market price of all the shares held by a mutual fund less any liabilities, divided by the total number of outstanding shares on a particular date. With every change in share prices, the NAV of mutual funds shares changes.
Network	:	A group of people who develop and maintain contact with each other to exchange information of common interest in an informal manner.
Option	:	A legally binding agreement that confers the right, but not the obligation, to the holder to buy (in the case of a call option) or sell (in the case of a put option) an underlying asset (which may be a financial instrument, commodity, or futures contract) at a price agreed now (the exercise or strike price) by a specified expiry date in the future (if it is an American-style option) or on a specified date in the future (if it is a European-style option).
Personal Financial Planning	:	It refers to proper planning and implementation of well-coordinated plans to achieve one's financial goals.
Portfolio Management	:	The art and science of making decisions about investment mix and policy, matching investments to objectives, asset allocation for individuals and institutions, and balancing risk vs. performance.

Portfolio Manager	:	A professional, who manages investment portfolios with the objectives of profitability, growth and risk minimization. He is expected to manage the investor's assets prudently and chooses particular investment avenues, with a view to maximize profits.
Portfolio	:	The group of assets, such as stocks, bonds and mutuals held by an investor. The object of forming a portfolio is to reduce risk by diversification and maximize gains.
Position	:	A market commitment. A buyer of a futures or options contract is said to have a long position, and conversely, a seller of futures or options contract is said to have a short position. A position is achieved by having an exposure in the market by either buying or selling derivatives or the cash market asset or commodity.
Purchasing Power Parity	:	It measures the power of different currencies for the same kind of goods or services. It is used to know how much a given currency can purchase in terms of an international currency which is usually a dollar.
Put Option	:	It is an option to sell and is bought in the expectation of a falling price or to protect a profit on an investment.
Risk	:	It refers to variability and is measured generally by standard deviation or by beta coefficient.
SEBI	:	The regulatory body for the investment market in India established in 1992 to maintain stable and efficient markets by creating and enforcing regulations in the marketplace.
Security	:	A document that gives its owner, specific claim of ownership of particular assets. The two main types of securities are bonds and shares. The bondholder gets an assured interest only for the period of holding, while the shareholder is part-owner of the company and has invested in its future with a corresponding share in its profits or losses.
Standard Deviation	:	In finance, standard deviation is applied to the annual rate of return of an investment to measure the investment's volatility (risk). A volatile stock would have a high standard deviation. In mutual funds, the standard deviation tells us how much the return on the fund is deviating from the expected normal returns. Standard deviation can also be calculated as the square root of the variance.
Stock Market	:	The market in which shares are issued and traded either through exchanges or over-the-counter markets. Also known as the equity market, it is one of the most vital areas of a market economy as it provides companies with access to capital and investors with a slice of ownership in the company and the potential of gains based on the company's future performance. Example: BSE, NSE, NASDAQ, Nikkei.
Stress Testing	:	A simulation technique used on asset and liability portfolios to determine their reactions to different financial situations. It is a useful method of determining how a portfolio will fare during a period of financial crisis. The Monte Carlo simulation is one of the most widely used methods of stress testing.
Swap	:	Basically, an exchange of payment streams between two counterparties based on the underlying asset or liability which could be a currency or interest to maximize revenues and minimize the finance costs.

Systematic Risk	:	Risk that cannot be diversified away. It is also referred to as market risk or non-diversifiable risk.
The Dow Theory	:	The basic principles of technical analysis originate from this theory. This theory seeks to study the major movements in the market with a view to establish trends.
Time Horizon	:	The length of time for which an investment is made, or held, before it is liquidated. Time horizons can range from seconds, in the case of a day trader, all the way up to decades for a buy-and-hold investor. There is no "right" time frame – it depends on the investor's individual objectives.
Tracking Error	:	This is referred to as a "standard deviation percentage" difference. It tells the difference between the return received and that of the benchmark you were trying to copy.
Ultra High Net Worth Individuals	:	Individuals with more than US\$30 million in financial assets
Unsystematic Risk	:	Risk that can be diversified away. It is also referred to as unique risk, specific risk, residual risk, or diversifiable risk.
Value at Risk (VaR)	:	It is commonly used by banks, security firms and companies that are involved in trading energy and other commodities. It is able to measure risk while it happens and is an important consideration when firms make trading or hedging decisions.
Variance	:	It measures the variability (volatility) from an average. Volatility is a measure of risk, so this statistic can help determine the risk an investor might take while purchasing a specific security.
Variation Margin	:	It is a payment that is made by clearing members to their respective clearing houses based upon adverse price movements of the futures contracts that these members hold.
Venture Capital	:	Money made available for investment in innovative enterprises or research, especially in high technology, in which both the risk of loss and the potential for profit may be considerable. Also called risk capital.
Wealth Management Process	:	It is a comprehensive process starting with establishing financial objectives, setting strategies to achieve the objectives, implementing the strategies or plans and finally reviewing once in a while the objectives, strategies and performance to see that they are in line with the changing needs of the individual.
Wealth Management	:	A professional service which is the combination of financial/investment advice, accounting/tax services, and legal/estate planning to optimize, protect and manage the financial well-being of an individual, family or corporation.
Weighted Moving Average	:	It is any average that has multiplying factors to give different weights to different data points.
World Wealth Report	:	It identifies and analyzes the investment needs of the world's high net worth individuals. It gives a view of Global HNWIs: their size, behaviors and implications for the financial services industry.

- 1. Alexander J. Gordon, William F. Sharpe, and Jeffray V. Bailey. *Fundamentals of Investments.* 3rd ed. New Delhi: Prentice Hall of India Pvt. Ltd., 2002.
- 2. Bhalla, V. K. Management of Financial Services. New Delhi: Anmol Publication, 2002.
- 3. Fischer E. Donald, and Ronald J. Jordon. *Security Analysis and Portfolio Management*. New Delhi: Pearson Education, 2003.
- 4. Frank, K. R, and Keith, C. B. Investment Analysis and Portfolio Management.
- 5. Lawrence, J. G., and Michael D. J. *Personal Financial Planning*. 9th ed. Thomson Learning Publishers.
- 6. Mennis Edmond, A. *Techniques of Portfolio Adjustment Investment Manager's Handbook.* DowJones Irwin, 1980.
- 7. Pring Martin, J. Technical Analysis Explained. 3rd ed. McGraw-Mill International.
- 8. Ramakrishna Rao, T. S. "Wealth Management The New Kid on the Block", *Portfolio Organiser*, October, 2005.
- 9. Roger, G. I., and Gary, P. B. Investment Markets. McGraw Hill Book Company.

Reports

RBI – Annual Report, 2006-2007. Capgemini/Merill Lynch Report, 2007.

Websites

- http://indiabudget.nic.in
- http://rbi.org.in
- http://nscindia.com
- http://www.ncdex.com