A mutual fund is not an alternative investment option to stocks and bonds, rather it pools the money of millions of investors and invests in stocks, bonds, money market instruments and other types of securities. Buying a mutual fund is like buying a small slice of a big pizza.

Hence, this chapter traces the origin of mutual funds in India as well as in international; further an attempt has been made to know the Growth, Regulatory framework and Parameters to evaluate the performance of mutual funds in India. Accordingly, the researcher presents nitty-gritty of mutual funds in three (3) sections, as described below:

**Section-I:** Deals with Origin and Overview of Mutual Funds.

**Section-II:** Divulges the Regulatory Framework of Mutual Funds in India: A Bird’s eye view

**Section-III:** Description of models of performance evaluation of mutual funds.

- Treynor’s measure
- Sharpe’s measure
- Jenson’s measure
- Eugene Fama’s Decomposition of Total Returns
- M-squared measure
- Sortino measure
SECTION-I: ORIGIN AND OVERVIEW OF MUTUAL FUNDS

3.1 FOREIGN ANTECEDENTS:

The first mutual fund originated in the capital market of Amsterdam that was in many ways well developed and transparent. More than one hundred different securities were regularly traded on the Amsterdam exchange even during the 1770s. In 1774 the Dutch merchant and broker Abraham van Ketwich invited subscriptions from investors to form a trust named *Eendragt Maakt Magt* the maxim of the Dutch Republic, “Unity Creates Strength”. The founding of the trust followed the financial crisis of 1772-1773, and Van Ketwich’s aim was to provide small investors with limited means an opportunity to diversify. Risk spreading was achieved by investing in Austria, Denmark, Germany, Spain, Sweden, Russia, and a variety of colonial plantations in Central and South America.81

The bulk of trade took place in bonds issued by the Dutch central and provincial government and bonds issued by foreign governments that tapped the Dutch market. The governments of Austria, France, England, Russia, Sweden, and Spain all came to Amsterdam to take advantage of the relatively low interest rates. The other major category of securities consisted Mutual funds emerged gradually, as merchants and brokers learned how to expand the range of investment opportunities to the general public during the 18th century. This broadening of the Dutch capital market eventually led to the introduction of the forerunners of today’s closed-end mutual funds and depository receipts.82

Mutual funds originated in Belgium, where, in 1822, a company was started to finance investments in national industries associated with high risks under the name of ‘Societe Generale de Beigie‘. In the 1860s, this

movement spreads to England. In 1868, the Foreign and Colonial Government Trust was formed to spread risks for investors over a large number of securities. The history of mutual funds started in the USA from the beginning of the 20th century. Massachusetts Investors Trust, State Street Investment Corporation and U.S. and Foreign Securities Corporations were the three investment companies which were organized. Mutual funds emerged during the 1920s in Canada, when many close-ended investment companies were organized. The Canadian Investment Fund was the first mutual fund set up in Canada in 1932. Subsequently, hundreds of mutual funds emerged and expanded their wings in many countries in Europe, the Far East and Latin America.

In recent years, mutual funds in Japan and the Far East have been showing good performance, probably as a result of growth and performance of the economies of these countries and their capital markets. Similarly, countries in the Pacific area like Hong Kong, Thailand, Singapore and Korea have also entered this field in a big way. Mauritius and the Netherlands are emerging as tax havens for offshore mutual funds. Mutual Funds are thus a global financial culture now.

The word “mutual” signifies a vehicle wherein the benefits of investment accrue pro-rata to all the investors in proportion to their investment. A trust that pools the savings of investor who share a common financial goal is known as a ‘Mutual Fund’. The money thus collected is then invested in financial market instruments as shares, debentures and other securities like government paper. The income earned through these investments, and the capital appreciation realized, are shared by its unit holders in proportion to the number of units owned by them. Investments in securities are spread over a wide cross-section of industries and sectors, thus allowing risk reduction to take place. Diversification reduces the risk because all stocks and debt instruments may not move in the same direction and in the same proportion at the same time. A Mutual Fund is a collective investment vehicle formed with
the specific objective of raising money from a large number of individuals and investing it according to a pre-specified objective, with the benefits accrued to be shared among the investors on a pro-rata basis in proportion to their investment. A special type of institution that acts as an investment conduit is called a ‘Mutual Fund’. It is essentially a mechanism of pooling together the savings of a large number of investors for collecting investments with the objective of attractive yields and appreciation in their value. Mutual Funds are an important segment of the financial system. It is a non-depository financial intermediary.

A non-depository or non-banking financial intermediary which acts as an important vehicle for bringing wealth holders and deficit units together, indirectly, is known as ‘Mutual Fund’. Mutual funds are corporations that accept money from savers and then use this money to buy stocks, long-term bonds, and short-term debt instruments issued by business or Government units. These corporations pool funds and thus reduce risk by diversification.

According to the Mutual Fund Fact Book (Published by the Investment Company Institute of the U.S.) “A Mutual Fund is a Financial Service Organization that receives money from shareholders, invests it, earns returns on it, attempts to make it grow and agrees to pay the shareholder cash on demand for the current value of his investment”. According to Encyclopedia Americana, “Mutual funds are open end investment companies that invest shareholders’ money in portfolio or securities. They are open ended in that they normally offer new shares to the public on a continuing basis and promise to redeem outstanding shares on any business day.”

According to Securities and Exchange Board of India Regulations, (SEBI) 1996 a mutual fund means “a fund established in the form of trust to raise money through the sale of units to the public or a section of the public under one or more schemes for investing in securities, including money market instruments”.

46
3.2 INDIA’S PLACE WITH RESPECT TO GLOBAL ECONOMIES:

In the light of evolving regulatory frameworks, it is worthwhile to adjudge India’s place with respect to other global economies. A few specific criteria have been considered as points of discussion, throwing light on the key developments which have taken place across the world. They are, Entry Load, Management Fees to the Asset Management Company, Regulation of Distributors, and Taxation of the Mutual Fund.

<table>
<thead>
<tr>
<th>ENTRY LOAD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>India</strong></td>
</tr>
<tr>
<td>Recently in India, the industry regulator, SEBI has instructed that no entry load be charged for all MF schemes launched on or after August 1, 2009. Distributors receive commission from the investors based on investor’s assessment of various factors including service rendered. Exit loads may or may not be charged to the investors and it varies depending on the period they stay invested in the scheme.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>United Kingdom (UK)</th>
<th>United States (US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In UK, there exists a concept of front end charge of about 5% of the net assets and distributors are paid commission (typically 3%) out of this by the MFs. They are further entitled to receive trial commission of around 0.5% of the net assets annually over the period the investor stays invested in the scheme. Exit fees are also being charged by few fund houses to investors on redemption on Mutual Fund units.</td>
<td>Similarly, in the case of US, both entry and exit loads are charged to investors of open-ended mutual fund schemes. No such loads are charged in the case of close-ended schemes. For close-ended schemes, the investor pays commission directly to the distributor of the mutual fund scheme.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>China</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>In China, fund houses charge both entry and exit loads from mutual fund investors. Thus, commission to distributors is ultimately borne by the investors as the mutual funds pay distributors from the loads charged to the investors in the scheme.</td>
<td>Australia does not have a concept of entry and exit load that is charged by the mutual fund to the investors. Here the distributors are paid commission by the mutual funds. Further, they may also receive fees from the investor for the advice rendered to them.</td>
</tr>
</tbody>
</table>

## MANAGEMENT FEES TO THE ASSET MANAGEMENT COMPANY

### India

In India, there exist statutory limits defined by SEBI for payment of management or advisory fees to the AMC. The advisory fees payable are capped at 1.25% where the net assets outstanding do not exceed ₹.100 crores and at 1% over the net assets above the threshold of ₹.100 crores. However, in case of index fund, the advisory fees payable to AMCs are capped 0.75% of the net assets in the scheme.

### United Kingdom (UK)

In the UK, there exists no cap on the management fees to the AMC other than those stipulated in each fund’s scheme prospectus. Typically fees vary on the type of fund and are usually about 1.5% of the net assets or an actively management equity fund. Recently, new entrants in the UK market are charging lower annual management in an attempt to gain a higher market share.

### United States (US)

Similar to the UK, no statutory limits are prescribed by regulatory authority in the US but it is ensured that the AMC does not earn an unfair profit from the advisory contract. AMC fees typically range between 0.50% to 1.75% of the net assets depending on the type of the fund.

### China

In China, statutory caps are fixed for advisory fees payable to the AMCs depending on the type of fund. For equity-based funds, the AMC fees are capped at 1.5% of the net assets while for index funds, debt-based funds and money market funds, fees are capped at 0.5-0.7%, 0.6-1.2% and 0.33% respectively.

### Australia

There are no pre-defined statutory caps on the fees payable to AMCs. The fees payable vary, inter alia, depending on the type of the fund.

---

## REGULATION OF DISTRIBUTORS

### India

In India, the distributors of the mutual fund units are not separately regulated by SEBI or any other regulatory authority. Currently, distributors are required to take a simple test. However, there have been instances of distributors rendering professional advice to investors without the requisite qualifications and information about the mutual fund schemes. SEBI is in discussions to introduce a more stringent certification programme for all distributors of mutual fund schemes.
Unlike in India, distributors in UK are regulated by the Financial Service Authority. In the UK there is a regulation being proposed that will require distributors of mutual fund units to undertake certain examinations.

Distributors in the US are regulated by the Securities Industry and Financial Markets Association and are required to pass the securities broker-dealer exams in order to sell units of mutual funds.

In the hands of the mutual fund, capital gains are tax exempt. Non-UK dividend income is taxed to the extent that it is not covered by chargeable expenses. Interest income received in case of bond funds are not liable to tax in the hands of the mutual fund if the income is distributed to the investors in the scheme as an interest distribution.

Funds are pass-through entities and only the investor pays tax upon receipt of income or capital gain distributions by the fund. Mutual funds only pay foreign source taxes or US taxes if they fail to distribute the majority of income earned in the tax year. (i.e., > 90%).

In order to promote mutual fund industry, the tax authority in China gives nearly full tax exemptions to mutual fund and investors. Currently, both mutual fund and investors are not subject to any turnover or income taxes except for the institutional investors who redeem/sell the fund units. Also, dividends declared by the MF are tax free.

In Australia, mutual funds are treated as a pass-through entity and hence are not liable to tax.
3.3 MUTUAL FUNDS IN INDIA:

The mutual fund industry in India made its debut with the setting up of the largest public sector mutual fund in the world, namely the Unit Trust of India (UTI). It was set up in the year 1964 by a special Act of Parliament. The first unit scheme offered was the “US-64”. A host of other fund schemes were subsequently introduced by the UTI. The basic objective behind the setting up of the Trust was to mobilize small savings and to allow channeling of those savings into productive sectors of the economy, so as to accelerate the industrial and economic development of the country.

The monopoly of the UTI ended in the year 1987, when the Government of India permitted commercial banks in the public sector to set up subsidiaries operating as trusts to perform the functions of mutual funds by amending the Banking Regulation Act. State Bank of India (SBI) set up the first mutual fund, which was followed by Canara Bank. Later, many large financial institutions under government control also came out with mutual funds subsidiaries.

Recently with the beginning of the economic reforms and liberalization of the economy, based on the recommendations of the Abid Hussain Committee, foreign companies were also permitted to start mutual funds in India. The government introduced a number of regulatory measures, through various agencies such as the Securities Exchange Board of India (SEBI), for the purpose of allowing the growth of the mutual funds industry in an orderly fashion for the benefit of the investors, especially the small investors.
A Mutual Fund is a trust registered with the Securities and Exchange Board of India (SEBI) which pools up the money from individual/corporate investors and invests the same on behalf of the investors/units holders, in equity shares, government securities, bonds, call money market etc. The income earned through these investments and the capital appreciations realized are shared by its unit holders in proportion to the number of units owned by them. This pooled income is professionally managed on behalf the unit-holders, and each investor holds a proportion of the portfolio.

Operational flow of Mutual Fund:

The following diagram depicts the operational flow of Mutual Fund

![Operational flow of Mutual Fund diagram]

**Source:** Internet

**Figure 3.1: Operational flow of Mutual Fund**

3.5  HISTORY OF MUTUAL FUNDS IN INDIA:

The origin of mutual fund industry in India is with the introduction of the concept of mutual fund by UTI in the year 1963. Though the growth was slow, but it accelerated from the year 1987 when non-UTI players entered the industry.

In the past decade, Indian mutual fund industry had seen a dramatic improvement, both quality-wise as well as quantity-wise. Before, the monopoly of the market had seen an ending phase; the Asset Under Management (AUM) was ₹.67 billion. The private sector entry to the fund family raised the AUM to ₹.470 billion in March 1993. As on 31st March 2013, there were 45 mutual fund asset management companies with 1648 schemes and the average asset under management (AUM) is ₹.8,52,656 crores with a wide variety of options.
The Evolution

The formation of Unit Trust of India marked the evolution of the Indian mutual fund industry in the year 1963. The primary objective at that time was to attract the small investors and it was made possible through the collective efforts of the Government of India and the Reserve Bank of India. The history of mutual fund industry in India can be better understood divided into following phases:

### History of Mutual Funds

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Establishment and Growth</td>
<td>1964-1987</td>
</tr>
<tr>
<td>II</td>
<td>Entry of Public Sector Funds</td>
<td>1987-1993</td>
</tr>
<tr>
<td>III</td>
<td>Emergence of Private Sector Funds</td>
<td>1993-1996</td>
</tr>
<tr>
<td>IV</td>
<td>Growth and SEBI Regulations</td>
<td>1996-2004</td>
</tr>
<tr>
<td>V</td>
<td>Growth and Consolidation</td>
<td>2004 Onwards</td>
</tr>
</tbody>
</table>

Source: Compiled

**FIRST PHASE – 1964 to 1987 (Establishment and Growth):**

Unit Trust of India enjoyed complete monopoly when it was established in the year 1963 by an act of Parliament. UTI was set up by the Reserve Bank of India and it continued to operate under the regulatory control of the RBI until the two were de-linked in 1978 and the entire control was transferred in the hands of Industrial Development Bank of India (IDBI). UTI launched its first scheme in 1964, named as Unit Scheme 1964 (US-64), which attracted the largest number of investors in any single investment scheme over the years. US-64 helped to fulfill the twin objectives of mobilizing retail savings and investing those savings in the capital market and passing on the benefits so accrued to the small investors.
UTI launched more innovative schemes in 1970s and 80s to suit the needs of different investors. It launched ULIP in 1971, six more schemes between 1981-84, Children's Gift Growth Fund and India Fund (India's first offshore fund) in 1986, Mastershare (India’s first equity diversified scheme) in 1987 and Monthly Income Schemes (offering assured returns) during 1990s. At the end of 1988, UTI's assets under management grew ten times to ₹.6,700 crores. Following table provides the Net assets of Indian Mutual Fund Industry (UTI) from 1964-1987.

**Table No. 3.1: Net Assets of the Indian Mutual Fund Industry (UTI) from 1964-1987**

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Assets</th>
<th>Year on Year Growth Rate (%)</th>
<th>Net Accretion of Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964-65</td>
<td>24.67</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1965-66</td>
<td>25.94</td>
<td>5.15</td>
<td>1.27</td>
</tr>
<tr>
<td>1966-67</td>
<td>33.86</td>
<td>30.53</td>
<td>7.92</td>
</tr>
<tr>
<td>1967-68</td>
<td>48.70</td>
<td>43.83</td>
<td>14.84</td>
</tr>
<tr>
<td>1968-69</td>
<td>65.40</td>
<td>34.29</td>
<td>16.70</td>
</tr>
<tr>
<td>1969-70</td>
<td>88.30</td>
<td>35.02</td>
<td>22.90</td>
</tr>
<tr>
<td>1970-71</td>
<td>105.14</td>
<td>19.07</td>
<td>16.84</td>
</tr>
<tr>
<td>1972-73</td>
<td>141.96</td>
<td>19.03</td>
<td>22.70</td>
</tr>
<tr>
<td>1973-74</td>
<td>172.09</td>
<td>21.22</td>
<td>30.13</td>
</tr>
<tr>
<td>1974-75</td>
<td>169.95</td>
<td>-1.24</td>
<td>-2.14</td>
</tr>
<tr>
<td>1975-76</td>
<td>176.66</td>
<td>3.95</td>
<td>6.71</td>
</tr>
<tr>
<td>1976-77</td>
<td>206.84</td>
<td>17.08</td>
<td>30.18</td>
</tr>
<tr>
<td>1977-78</td>
<td>279.91</td>
<td>35.33</td>
<td>73.07</td>
</tr>
<tr>
<td>1978-79</td>
<td>393.70</td>
<td>40.65</td>
<td>113.79</td>
</tr>
<tr>
<td>1979-80</td>
<td>455.30</td>
<td>15.65</td>
<td>61.60</td>
</tr>
<tr>
<td>1980-81</td>
<td>513.97</td>
<td>12.89</td>
<td>58.67</td>
</tr>
<tr>
<td>1981-82</td>
<td>679.24</td>
<td>32.16</td>
<td>165.27</td>
</tr>
<tr>
<td>1982-83</td>
<td>870.24</td>
<td>28.12</td>
<td>191.00</td>
</tr>
<tr>
<td>1983-84</td>
<td>126.33</td>
<td>44.94</td>
<td>391.09</td>
</tr>
<tr>
<td>1984-85</td>
<td>2209.61</td>
<td>75.18</td>
<td>948.28</td>
</tr>
<tr>
<td>1985-86</td>
<td>3218.34</td>
<td>45.65</td>
<td>1008.73</td>
</tr>
<tr>
<td>1986-87</td>
<td>4563.68</td>
<td>41.80</td>
<td>1345.34</td>
</tr>
</tbody>
</table>

**Source:** UTI Factbook.

The net investible funds of UTI increased from ₹.24.67 Crores to ₹.4563.88 Crores from 1964-1987.
SECOND PHASE – 1987 to 1993 (Entry of Public Sector Funds):

The 1980s witnessed the beginning of the process of liberalization of the industrial sector by the Government of India, in pursuit of faster industrial and economic development. This not only brought in changes in the environment for Indian industries, corporate sector and the capital market, but also led to the emergence of demand for newer financial services such as issue management, corporate counseling etc. Once it became apparent that its development objectives could not be met solely by using financial institutions and commercial banks, the Government removed the monopoly in the mutual fund industry in 1987 by permitting large number of companies to raise funds through equity market and encouraging equity ownership through tax incentives. The following table provides the data pertaining to resource mobilization by the UTI and other public sector mutual funds during the period from 1987-1993 and the chart presents the data pictorially.

Table No. 3.2: Cumulative Resources Mobilized by UTI and Other Public Sector Mutual Funds from 1987-88 to 1992-93

<table>
<thead>
<tr>
<th>Year</th>
<th>UTI</th>
<th>Other Mutual Funds</th>
<th>Total</th>
<th>Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986-87</td>
<td>4563.88</td>
<td>-</td>
<td>4563.88</td>
<td>-</td>
</tr>
<tr>
<td>1987-88</td>
<td>6738.81</td>
<td>132</td>
<td>6870.81</td>
<td>50.55</td>
</tr>
<tr>
<td>1988-89</td>
<td>11834.65</td>
<td>1621</td>
<td>13455.65</td>
<td>95.84</td>
</tr>
<tr>
<td>1989-90</td>
<td>17650.92</td>
<td>1480</td>
<td>19130.92</td>
<td>42.18</td>
</tr>
<tr>
<td>1990-91</td>
<td>21376.48</td>
<td>1784.99</td>
<td>23161.47</td>
<td>21.07</td>
</tr>
<tr>
<td>1991-92</td>
<td>31805.69</td>
<td>6167.78</td>
<td>37973.47</td>
<td>63.95</td>
</tr>
<tr>
<td>1992-93</td>
<td>38976.81</td>
<td>8756.69</td>
<td>47733.50</td>
<td>25.70</td>
</tr>
</tbody>
</table>

Thus, after two decades of UTI monopoly, the mutual fund industry began to include some more players, though all of them from the public sector. State Bank of India Mutual Fund was the first followed by the Canara Bank Mutual Fund (December 1987), Punjab National Bank Mutual Fund (August 1989), Indian Bank Mutual Fund (November 1989), Bank of India (June 1990), Bank of Baroda Mutual Fund (October 1992), Life Insurance Corporation of India in 1989 and General Insurance Company in 1990. The end of 1993 marked ₹47,000 crore as asset under management of the mutual fund industry. However, UTI remained to be the leader with about 80% market share.

**Table-3.3: Mobilization as % of gross domestic savings of Phase-II of Mutual Fund Industry**

<table>
<thead>
<tr>
<th>1992-93</th>
<th>Amount mobilized</th>
<th>Asset Under Management</th>
<th>Mobilization as % of Gross Domestic Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTI</td>
<td>11,057</td>
<td>38,247</td>
<td>5.2%</td>
</tr>
<tr>
<td>Public Sector</td>
<td>1,964</td>
<td>8,757</td>
<td>0.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13,021</strong></td>
<td><strong>47,004</strong></td>
<td><strong>6.1%</strong></td>
</tr>
</tbody>
</table>

Source: AMFI website.
THIRD PHASE – 1993 to 1996 (Emergence of Private Sector Funds):

In the history of mutual funds a new era was started with the entry of Private Sectors in the mutual funds industry during 1993-1996. During this period private domestic and foreign players were allowed in the mutual fund industry. Finally, in the year 1992-93, the Government allowed Private sector player to setup the Mutual Fund.

As a result, a number of private sector mutual funds came up. With the entry of private sector funds in 1993, a new era started in the Indian mutual fund industry, giving the Indian investors a wider choice of fund family, some of them are Kothari Pioneer Mutual Fund, ICICI Mutual Fund, Birla Mutual Fund, Morgan Stanly Mutual Fund etc.

Also, 1993 was the year in which the first Mutual Fund Regulations came into being, under which all mutual funds, except UTI were to be registered and governed. The erstwhile Kothari Pioneer which is now merged with Franklin Templeton, was the first Private Sector mutual fund registered in July 1993. The rising number of mutual fund schemes and increasing competition in the industry offers investors a wide choice as a result they began to give investors improved services.

The Private sector funds provided an added benefit to the investor as these were generally setup as partnership or the joint venture with foreign mutual funds. The latter provided the technology and experience in managing the funds.

Thus, it was the phase of Private Sector funds entering in Mutual Fund Market thereby motivating investors by providing sufficient choice of fund.
Table-3.4: Net Resources Mobilized by Private Sector Mutual Funds from 1993-94 to 1995-96

(₹. in Billion)

<table>
<thead>
<tr>
<th>Year</th>
<th>UTI</th>
<th>Bank-sponsored mutual fund</th>
<th>FII-sponsored mutual fund</th>
<th>Private Sector Mutual Funds</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993-94</td>
<td>92.97</td>
<td>1.48</td>
<td>2.38</td>
<td>15.60</td>
<td>112.43</td>
</tr>
<tr>
<td>1994-95</td>
<td>86.11</td>
<td>7.66</td>
<td>5.76</td>
<td>13.22</td>
<td>112.75</td>
</tr>
<tr>
<td>1995-96</td>
<td>-63.14</td>
<td>1.13</td>
<td>2.35</td>
<td>1.33</td>
<td>-58.33</td>
</tr>
</tbody>
</table>


FOURTH PHASE –1996 to 2004 (Growth and SEBI Regulations):

The mutual fund industry witnessed robust growth and stricter regulation from the SEBI after the year 1996. The mobilization of funds and the number of players operating in the industry reached new heights as investors started showing more interest in mutual funds. Investors' interests were safeguarded by SEBI and the Government offered tax benefits to the investors in order to encourage them. SEBI (Mutual Funds) Regulations, 1996 was introduced by SEBI that set uniform standards for all mutual funds in India. The Union Budget in 1999 exempted all dividend incomes in the hands of investors free from income tax. Various Investor Awareness Programmes were launched during this phase, both by SEBI and AMFI, with an objective to educate investors and make them informed about the mutual fund industry. In February 2003, the UTI Act was repealed and UTI was stripped of its Special legal status as a trust formed by an Act of Parliament.

The primary objective behind this was to bring all mutual fund players on the same level. UTI was re-organized into two parts: 1) The Specified Undertaking, 2) The UTI Mutual Fund.
Presently Unit Trust of India operates under the name of UTI Mutual Fund and its past schemes (like US-64, Assured Return Schemes) are being gradually wound up. However, UTI Mutual Fund is still the largest player in the industry. In 1999, there was a significant growth in mobilization of funds from investors and assets under management which is supported by the following data:

**Table-3.5: Net Resources Mobilized by Mutual Funds from 1996-97 to 2003-04**

(₹. in Billion)

<table>
<thead>
<tr>
<th>Year</th>
<th>UTI</th>
<th>Bank sponsored mutual fund</th>
<th>FII-sponsored mutual fund</th>
<th>Private Sector Mutual Funds</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996-97</td>
<td>-30.43</td>
<td>0.07</td>
<td>1.37</td>
<td>8.64</td>
<td>-20.35</td>
</tr>
<tr>
<td>1997-98</td>
<td>28.75</td>
<td>2.37</td>
<td>2.04</td>
<td>7.49</td>
<td>40.65</td>
</tr>
<tr>
<td>1998-99</td>
<td>1.70</td>
<td>-0.89</td>
<td>5.47</td>
<td>20.67</td>
<td>26.95</td>
</tr>
<tr>
<td>1999-00</td>
<td>45.48</td>
<td>3.36</td>
<td>2.96</td>
<td>169.38</td>
<td>221.18</td>
</tr>
<tr>
<td>Year</td>
<td>UTI</td>
<td>Bank sponsored mutual fund</td>
<td>FII-sponsored mutual fund</td>
<td>Private Sector Mutual Funds</td>
<td>Total</td>
</tr>
<tr>
<td>------</td>
<td>-----</td>
<td>----------------------------</td>
<td>--------------------------</td>
<td>---------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>2000-01</td>
<td>3.22</td>
<td>2.49</td>
<td>12.73</td>
<td>92.92</td>
<td>111.36</td>
</tr>
<tr>
<td>2001-02</td>
<td>-72.84</td>
<td>8.63</td>
<td>4.06</td>
<td>161.34</td>
<td>101.19</td>
</tr>
<tr>
<td>2002-03</td>
<td>-94.34</td>
<td>10.33</td>
<td>8.61</td>
<td>121.22</td>
<td>45.82</td>
</tr>
<tr>
<td>2003-04</td>
<td>10.50</td>
<td>45.26</td>
<td>7.87</td>
<td>415.10</td>
<td>478.73</td>
</tr>
</tbody>
</table>


FIFTH PHASE - 2004 Onwards (Growth and Consolidation)

After the year 2003, during this phase, the flow of funds into the mutual funds industry considerably increased. This was due to tax benefits and improvement in quality of investor service which has resulted into a positive growth in the mutual fund industry in India. However, in the year 2003, due to the revocation of the Unit Trust of India Act, 1963, UTI was bifurcated into two separate entities. This Phase is known for division of UTI into separate entities. The phase had harsh experience for UTI. It was divided into two separate entities. One is the Specified Undertaking of the Unit Trust of India; running under the supervision and the rules framed by Government of India and does not come under the purview of the Mutual Fund Regulations. The Second is the UTI Mutual Fund Ltd, sponsored by SBI State Bank of India, PNB- Punjab National Bank, BOB-Bank of Baroda, and LIC Life Insurance Corporation of India. It is registered with SEBI and function under the Mutual Fund Regulations. With the division of the former UTI which had in March 2000 more than ₹76,000 crores of AUM (Asset Under Management) and with the setting up of a UTI Mutual Fund, conforming to the SEBI Mutual Fund Regulations, and with recent mergers taking place among different private sector funds, the mutual fund industry has entered its current phase of consolidation and growth.
As at the end of September, 2004, there were 29 funds, which manage (AUM) assets of ₹1,53,108 crores under 421 schemes which increased to ₹3,26,388 crore at the end of financial year 2006-2007, further there were 45 mutual fund companies with 1648 schemes and the average asset under management (AUM) is ₹8,52,656 crores with a wide variety of options as on 31st March 2013. These occupies major portion of the Indian economy. Thus, mutual funds industry as a whole, it provides many advantages due to its nature and size of the business.

Table-3.6: Net Resources Mobilized by Mutual Funds from 2003-04 to 2012-13

<table>
<thead>
<tr>
<th>Year</th>
<th>UTI</th>
<th>Bank sponsored mutual fund</th>
<th>FII-sponsored mutual fund</th>
<th>Private Sector Mutual Funds</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-04</td>
<td>10.50</td>
<td>45.26</td>
<td>7.87</td>
<td>415.10</td>
<td>478.73</td>
</tr>
<tr>
<td>2004-05</td>
<td>-24.67</td>
<td>7.06</td>
<td>-33.84</td>
<td>79.33</td>
<td>27.88</td>
</tr>
<tr>
<td>2005-06</td>
<td>34.24</td>
<td>53.65</td>
<td>21.12</td>
<td>415.81</td>
<td>524.82</td>
</tr>
<tr>
<td>2006-07</td>
<td>73.26</td>
<td>30.33</td>
<td>42.26</td>
<td>794.77</td>
<td>940.62</td>
</tr>
<tr>
<td>2007-08</td>
<td>106.78</td>
<td>75.97</td>
<td>21.78</td>
<td>1382.24</td>
<td>1586.77</td>
</tr>
<tr>
<td>2008-09</td>
<td>-41.12</td>
<td>44.89</td>
<td>59.54</td>
<td>-305.38</td>
<td>-242.07</td>
</tr>
<tr>
<td>2009-10</td>
<td>156.53</td>
<td>98.55</td>
<td>48.71</td>
<td>479.68</td>
<td>783.47</td>
</tr>
<tr>
<td>2010-11</td>
<td>-166.36</td>
<td>13.04</td>
<td>-169.88</td>
<td>-162.81</td>
<td>-486.01</td>
</tr>
<tr>
<td>2012-13</td>
<td>46.29</td>
<td>58.30</td>
<td>13.12</td>
<td>707.53</td>
<td>825.24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Mutual Fund</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>07-08</td>
</tr>
<tr>
<td>1.</td>
<td>AIG Global Invest.</td>
<td>31.65</td>
</tr>
<tr>
<td>2.</td>
<td>AXIS</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Benchmark</td>
<td>30.56</td>
</tr>
<tr>
<td>4.</td>
<td>BOI AXA</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>Birla Sun Life</td>
<td>138.31</td>
</tr>
<tr>
<td>6.</td>
<td>BNP Paribus</td>
<td>-</td>
</tr>
<tr>
<td>7.</td>
<td>Baroda Pioneer</td>
<td>-0.38</td>
</tr>
<tr>
<td>8.</td>
<td>CRB Mutual Fund</td>
<td>2.95</td>
</tr>
<tr>
<td>9.</td>
<td>Deutsche</td>
<td>35.75</td>
</tr>
<tr>
<td>10.</td>
<td>DSP BlackRock</td>
<td>46.55</td>
</tr>
<tr>
<td>11.</td>
<td>Edelweiss MF</td>
<td>-15.77</td>
</tr>
<tr>
<td>12.</td>
<td>Escorts Mutual Fund</td>
<td>0.61</td>
</tr>
<tr>
<td>13.</td>
<td>Fidelity Mutual Fund</td>
<td>20.50</td>
</tr>
<tr>
<td>14.</td>
<td>Fortis Mutual Fund</td>
<td>17.81</td>
</tr>
<tr>
<td>15.</td>
<td>Franklin Templeton</td>
<td>17.53</td>
</tr>
<tr>
<td>16.</td>
<td>Goldman Sachs</td>
<td>-</td>
</tr>
<tr>
<td>17.</td>
<td>HDFC Mutual Fund</td>
<td>157.89</td>
</tr>
<tr>
<td>18.</td>
<td>HSBC Mutual Fund</td>
<td>17.03</td>
</tr>
<tr>
<td>19.</td>
<td>ICICI Mutual Fund</td>
<td>121.38</td>
</tr>
<tr>
<td>20.</td>
<td>IDFC Mutual Fund</td>
<td>-15.77</td>
</tr>
<tr>
<td>21.</td>
<td>ING Mutual Fund</td>
<td>41.66</td>
</tr>
<tr>
<td>22.</td>
<td>JM Mutual Fund</td>
<td>86.19</td>
</tr>
<tr>
<td>23.</td>
<td>JP Morgan</td>
<td>22.13</td>
</tr>
<tr>
<td>25.</td>
<td>L&amp;T Mutual Fund</td>
<td>-</td>
</tr>
<tr>
<td>26.</td>
<td>Lotus Mutual Fund</td>
<td>56.46</td>
</tr>
<tr>
<td>28.</td>
<td>Mirae Asset</td>
<td>11.89</td>
</tr>
<tr>
<td>29.</td>
<td>Morgan Stanley</td>
<td>-</td>
</tr>
<tr>
<td>31.</td>
<td>Quantum Mutual F.</td>
<td>-0.03</td>
</tr>
<tr>
<td>32.</td>
<td>Reliance Capital</td>
<td>401.87</td>
</tr>
<tr>
<td>33.</td>
<td>Sahara Mutual Fund</td>
<td>-0.14</td>
</tr>
<tr>
<td>34.</td>
<td>SBI Mutual Fund</td>
<td>73.39</td>
</tr>
<tr>
<td>35.</td>
<td>Sundaram Mutual F.</td>
<td>40.13</td>
</tr>
<tr>
<td>37.</td>
<td>Taurus Mutual Fund</td>
<td>-0.37</td>
</tr>
<tr>
<td>38.</td>
<td>UTI Mutual Fund</td>
<td>106.78</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1586.74</strong></td>
</tr>
</tbody>
</table>

3.6 FEATURES OF MUTUAL FUND:

It is advisable for the investors to understand the unique features of mutual fund before they take investment decisions into mutual fund. So that, the investors can take prudent investment decision. Such major features of mutual funds are as below;

- **Mobilizing Small Savings:** It mobilizes funds by selling their own shares, known as units. To any investor, a unit in mutual funds means ownership of a proportional share of securities in the portfolio of a mutual fund. This gives the benefit of convenience and the satisfaction of owning shares in many industries which otherwise not possible for them. Thus, mutual funds are primarily investment intermediaries to acquire individual investments and pass on the returns to small fund investors.

- **Investment Avenue:** One of the basic characteristics of a mutual fund is that, it provides an ideal avenue for investment for persons of small means, and enables them to earn a reasonable return with the advantages of relatively better liquidity. It offers investors a proportionate claim on the portfolio of assets that fluctuate in value in comparison to the value of the assets that comprise the portfolio.

- **Professional Management:** It provide the services of experienced and skilled professionals, backed-up by a dedicated investment research team that analyses the performance and prospects of companies and selects suitable investments to achieve the objectives of the scheme.

- **Diversified Investment:** Diversified investment of funds in various industry segments spread across the country. This is beneficial to small investors who cannot afford having the shares of highly established companies due to high market price. Hence, mutual funds allow millions of investors to have investment in a variety of securities of many different companies.
- **Better Liquidity:** Investment in mutual funds provides the investors the benefit of better liquidity of investment. In the case of open-ended mutual fund units, it is possible for the investor to divest holdings any time during the year at the Net Asset Value (NAV). In the case of close-ended mutual funds, it is obligator that units are listed and traded, thus offering a secondary market for the units. Further, a high level of liquidity is possible for the fund holders because of more liquid securities in the mutual fund portfolio. These securities could be converted into cash at any time. Moreover, mutual fund schemes provide the advantage of an active secondary market by allowing the units to be listed and traded in the stock exchange.

- **Reduced risks in investment:** There is only a minimum risk attached to the principal amount and return for the investments made in mutual fund schemes. This is usually made possible by expert supervision, diversification and liquidity of units. It provides small investors the access to a reduced investment risk resulting from diversification, economies of scale in transaction cost and professional finance management.

- **Protect investors’ interest:** Mutual funds in India are largely regulated by guidelines and legislative provisions put in place by regulatory agencies such as the SEBI which predominant objective of protecting investors interest.

- **Flexible investment vehicle:** It provides investors with flexible investment opportunities, whereby it is possible to switch from one scheme to another. This flexibility enables investors to shift from income scheme to growth scheme, or vice-versa or from a close-ended scheme to an open-ended scheme, all at will.

- **Offers tax benefits:** An attractive benefit of mutual fund is that the various schemes offered by them provide tax shelter to the investor. This benefit is available under the provisions of the Income Tax Act.
**Low transaction costs:** The cost of purchase and sale of mutual fund units is relatively lower. This is due to the large volume of money being handled by mutual funds in the capital market. The fees payable, as brokerage fee and trading commissions are lower. This obviously enhances the quantum of distributable income available for investors.

**Aid to economic development:** It makes contribution to the development of a country’s economy. The efficient functioning of mutual funds contributes to an efficient financial system. This in turn paves the way for efficient allocation of the financial resources of the country, thus contributing to the economic development. This is made possible through the mobilization of more savings and channelizing them to the more productive sectors of the economy.

### 3.7 DARKSIDE OF MUTUAL FUND:

Though mutual fund offers bundle of benefits to the investors is also surrounded by the clouds of problems. This means that, investment into mutual fund is not free from loopholes. They are as follows;

- **No Guarantees:** No investment is risk free and investment in mutual fund is not an exception to it. It implies that, anyone who invests through a mutual fund runs the risk of losing money also.

- **Adverse effect on Return on Investment:** Investment and disinvestment decisions of fund managers of AMC requires deep and clear understanding of various avenues of investment in the universe and ever changing risk and return characteristics associated with each avenue of investment. This makes fund managers to get frequently involved in churning of portfolios. This process of frequent updating the portfolio may adversely affect the return on investment to investors.

- **Returns are associated with market risk:** Investment into mutual fund is not free from the impact of market risk. Mutual funds experience price fluctuations along with the stocks that make up the fund.
Returns too affected by over/under diversification: Although diversification is one of the keys to successful investing, many mutual fund investors tend to over / under diversify. The idea of diversification is to reduce the risks associated with holding a single security; over / under diversification occurs when investors acquire many funds that are highly related and, as a result, reduce benefits of diversification. At the same time, owning few securities may result to under diversification forcing investors to lose the benefits of optimum diversification.

It involves High Costs alongwith Risks: Mutual funds provide investors with professional management, but it comes at a cost. Funds will typically have a range of different fees that reduce the overall payout.

3.8 SCHEMES OF MUTUAL FUNDS:

Subject to SEBI regulations, a mutual fund is free to design its schemes / products to suit the needs of the various types of investors. Mutual funds in India presently offer more than 400 products / services / options plans across various categories. They consist of open-ended and closed-ended schemes. The difference between these two types of schemes is structural.85

Open-ended scheme:

An investor can buy / sell units on a daily basis; the scheme has a perpetual existence and a flexible, ever changing corpus. The investors are free to buy and sell any number of units at any point of time, at prices that are linked to their NAV. Investors can invest / disinvest any amount any time after a short initial lock-in period.86

86 Ibid.
Close-ended scheme:

It is one in which the subscription period remains open only for the specified period. At the end of this period, the entire corpus is disinvested and the proceeds distributed to the unit holders. Thus, after the final payment, the scheme ceases to exist. However, such schemes can be rolled over with the approval of the unit holders. The units are listed on a stock exchange for dealing in the secondary markets.87

The main points of distinction between the open-ended and close-ended schemes are as follows;

<table>
<thead>
<tr>
<th>Features</th>
<th>Open-ended</th>
<th>Close-ended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscription</td>
<td>Open for public subscription throughout the currency of the scheme</td>
<td>Open for subscription only for a limited period</td>
</tr>
<tr>
<td>Corpus</td>
<td>The fund raised from public keeps varying</td>
<td>The corpus of the scheme is fixed for all time to come</td>
</tr>
<tr>
<td>Exit</td>
<td>Easy and convenient exit, any time</td>
<td>No exit possible till the closure of the scheme</td>
</tr>
<tr>
<td>Liquidation</td>
<td>Units can be liquidated any time</td>
<td>Units can be liquidated only at the end of specified period</td>
</tr>
<tr>
<td>Maturity</td>
<td>No maturity period</td>
<td>Fixed maturity period</td>
</tr>
<tr>
<td>Listing</td>
<td>No listing and hence not traded in stock exchange</td>
<td>Listed in stock exchange and traded</td>
</tr>
<tr>
<td>Liquidity</td>
<td>Through re-purchase by mutual fund at NAV or at any other price as may be determined</td>
<td>Through trading in a stock exchange at the current market price.</td>
</tr>
</tbody>
</table>

Source: 88

Interval scheme:

It is a kind of close-ended scheme with a peculiar feature that it remains open during a particular part of the year for the benefit of investors, either to off-load their holdings or to undertake purchase of units at the NAV. Under SEBI (Mutual Funds) Regulations, every mutual fund is free to launch any or both types of schemes, including interval scheme. In the USA, UK and Canada, close-ended funds are popularly known as investment companies / trust, whereas open-ended funds are known as mutual funds.89

87 Ibid.
89 Ibid.
Variety of Mutual Fund Products:

A brief account of the variety of products/services offered by mutual funds is given in this section, with reference to *product variety* and *variety in terms of options and plans/services*. They are depicted as under;

Source: 90

---

PRODUCT VARIETY:91

The funds, from the viewpoint of product variety, can be categorized into (a) Equity funds, (b) Bond funds, (c) Hybrid funds and (d) Money market funds.

a) Equity funds:

Equity funds invest in equity shares. Classified by objectives, such funds can be grouped into 8 broad categories, namely, Growth funds, Mid-cap funds, Value funds, Equity-income funds, Index funds, Exchange traded funds (ETFs), Sector funds and Equity-linked savings schemes (ELSSs).

Growth Funds: The investment of growth funds is mainly in equity shares of companies which are expected to fare better than the market. The shares typically provide little or no dividends as earnings are re-invested for growth. Included in this category are companies of different sizes, ages and growth rates. The primary objective of such fund is capital appreciation. Growth funds involve moderate to high risk for the investors and reflect aggressive investing by them.

Mid-Cap funds: Similar to growth funds in the investment strategy, such funds invest in equity shares of mid-sized companies which grow faster than large companies as their expansion takes place on a smaller base of assets. Such companies usually have a narrower business focus than the large companies. Mid-cap funds have a growth orientation and invest in shares which generally have above average P/E ratios. Some such funds also follow ‘value orientation’.

Value funds: Investment of these funds is mainly in shares whose current valuation does not reflect the underlying value proposition. The portfolio focuses primarily on dividend yield and seeks yield significantly higher on an overall market yardstick, such as the BSE 30 or Nifty.

Index funds: Index funds are specifically designed to represent the characteristics of a chosen target index. They can be constructed in several ways. An Index fund consisting of all shares comprised in the index in the same proportion is known as a *Fully Replicated Index Fund*.

Exchange traded funds (ETFs): The ETFs usually passively managed funds, wherein the subscription/redemption of units work on the concept of exchange with the underlying securities. In other words, large investors can purchase units by depositing the underlying securities with the fund and can redeem by receiving the underlying shares in exchange of units. Units can also be bought and sold directly on the stock exchange. The ETFs are highly flexible and can be used as a tool for gaining instant exposure to equity markets, equalizing cash or for arbitrating between the cash and future market.

Sector/Segment Specific Funds: Such funds invest mainly in shares of a specific sector. They concentrate on a particular industry, such as that of technology, telecommunications, FMCG, petroleum and so on. Another variety of specific funds is making investing within a particular segment of the market, for example, large-caps, mid-caps or small-caps funds. A large-cap fund invests only in bluechip companies; a mid-cap fund invests in companies with capitalization in medium ranges, and small-cap fund invests in shares of companies with low market capitalization. Gold funds & Real estate funds are also example of such funds.

Equity Linked Savings Scheme (ELSSs): Such schemes / funds invest in equity / equity related instruments for long-term capital application, with a minimum 3-year lock-in-period and tax benefit U/s 88 of the Income-Tax Act.

b) Bond/Income/Debt funds:

Debt funds concentrate their investments in debt securities. The principal source of their income return is the interest earned on the fixed
income securities in the portfolio. The NAV of such funds is directly influenced by changes in interest rates. As interest rates decline, the prices of bonds go up, causing an upward movement in the NAV of the fund and vice versa. The income/bond/debt funds can be categorized into (a) Corporate bond funds, (b) Gilt schemes, (c) Floating rate scheme and (d) Bond index funds.

**Corporate bond funds:** Such funds invest in bonds issued by companies, so as to earn high incomes and these can be categorized into *High Grade Bond Funds* and *High Yield Bond Funds*. Also known as AAA (Triple-A) *Bond Funds*, the former type of funds invest mostly in AAA rated bonds, while the latter invest in instruments with high yield, consistent with risk tolerance.

**Gilt Schemes/Funds:** They invest only in securities issued by the Government (G-Sec). A portfolio of G-Sec is free of credit risk but it is exposed to interest rate risk. Income for such funds may be generated through the (i) receipt of coupon payment, (ii) amortization of the discount on the instrument and (iii) purchase/sale of securities in the underlying portfolio. The schemes also offer some capital appreciation.

**Floating Rate Scheme/Funds (FRFs):** The FRFs provide a hedge to the investors against volatile interest rates. They invest primarily in floating rate debt instruments, that is, *Floaters*, whose interest rates are reset at periodic intervals. They enable investors to avoid potential capital losses arising out of volatility in interest rates in case of fixed interest rate securities.

**Bond Index Funds:** Like an equity index fund, a bond index fund invests in instruments comprising of the underlying bond index in the same proportion, to replicate the return on the same.

c) **Hybrid Funds:**

Funds in this category have a dual composition of share/bond funds. Included in this category are (a) Balanced funds and (b) Asset application funds.
**Balanced Funds:** Such funds invest in a portfolio of securities consisting of shares and bonds, to offer to the investors’ current income, and moderate growth, with low levels of risk. The NAVs of balanced funds generally move in a narrow range and are not as volatile as those of equity funds. They are likely to outperform an equity fund in a bearish phase but do less well in a bullish market.

**Asset Allocation Fund (AAF):** An asset allocation fund invests in a variety of securities in different asset classes, to provide to the investors truly diversified holdings and consistent returns. A *Stable Allocation Portfolio* follows a specific breakdown of assets, which they try to maintain over time. The composition of the assets is varied as opportunities and circumstances change in a *Flexible Asset Allocation*. The AAFs may range from very conservative to very aggressive funds.

d) **Money Market Mutual/Liquid Funds (MMM/LFs)**

The MMM/LFs invest mainly in short-term liquid instruments, to offer to the investors stability of principal, higher liquidity and shorter investment horizon. The eligible instruments are CPs, commercial bills, T-bills, CDs, permitted securities under a repo/reverse repo agreement and other instruments permitted from time to time by the RBI/SEBI.

**OPTIONS / PLANS:**

The various schemes / products of the mutual funds in India, detailed above, offer several options/ plans / services. These are; (a) Growth/Dividend / Reinvestment; (b) Switching; and (c) Gift.

a) **Growth / Dividend / Reinvestment Option:** Under the *growth option*, the scheme does not declare dividend and the investors would not receive any income from the scheme, which would be reflected in the NAV. While the number of units held by an investor remains constant, their value varies with the value of the portfolio of the scheme. Under
the dividend option, the scheme declares and the investors receive dividends. Unit holders have the option to reinvest the dividend in additional units of the scheme at the prevailing NAV, without any load charges, under the reinvestment option. The number of units held by the investors’ increases with every additional purchase of (reinvestment in) units.

b) Switching Facility: Unit holders under a scheme can opt to switch units between dividend plan, growth plan and any other plan and also options within a plan under a scheme, at the applicable NAV-based prices. In addition, they may exchange their units under a scheme for units of other scheme(s).

c) Gift Facility: Gift facility to the extent provided in the Mutual Fund Regulations is available to the unit holders.

The principle of time diversification has given rise to the concepts of;
(a) Systematic investment plan (SIP), (b) Systematic withdrawal plan (SWP),
(c) Systematic transfer plan (STP).

a) Systematic investment plan (SIP): It refers to the practice of investing a constant amount regularly, generally every month. When the market goes up, then the money invested in that period gets translated into a fewer number of units for the investor. If the market goes down, then the same money invested gets translated into more units.\(^\text{92}\) It helps the investors to average out the cost of investment over the period and, thus, overcome the short-term fluctuations in the market. There are two strategies to accomplish it; Dollar cost of averaging and Value averaging.

i) **Dollar Cost of Averaging**: It eliminates the market timing decision, namely get-in at the bottom and got-out at the top for a fat profit.

ii) **Value Averaging**: It is an aggressive form of dollar cost of averaging. It is suitable for investors who can tolerate greater price volatility. Instead of investing a fixed amount regularly, the investor has to specific the investment value increase by a specified amount over a period of time. In other words, the investor would be investing more in some months when the investment has declined and less when the investment has increased beyond his expectations.

b) **Systematic withdrawal plan (SWP)**: SWP is a mirror image of SIP. Under SWP, the investor would withdraw constant amounts periodically. The benefits are the same, namely that through SWP the investor can temper gains and losses, though it does not prevent losses. SWP also has income tax implications.93

c) **Systematic transfer plan (STP)**: Investor’s exposure to different types of securities, whether debt or equity should flow from their risk profile or risk appetite which, as seen earlier, is a function of their financial position and personal disposition. A investor’s exposure to securities changes in two situations; (i) On investment or disinvestment (this is where SIP/SWP are useful); (ii) On change in the value of the securities in the market place. In such situation, it would be prudent to sell some equity and re-invest the redeemed amount in debt to re-balance the mix of debt and equity.94

93 Ibid p:44.
94 Ibid p:44.
3.9 ENTITIES INVOLVED IN MUTUAL FUNDS:

The following figure illustrates the various entities that are involved in organizational structure of mutual funds in India.

Source: Compiled

THE SPONSOR:

Any corporate body, which initiates the launching of mutual fund, is referred to as ‘the sponsor’. The agency, which is expected to have a sound track record and experience in the relevant field of financial services for a minimum period of 5 years, ensures complying with the various formalities required in establishing a mutual fund. According to SEBI norms, the sponsor should have professional competence, financial soundness and a general reputation for fairness and integrity in business transactions. There must be a minimum contribution by the sponsor to the tune of 40 percent of the net worth of the Asset Management Company. The sponsor appoints trustees, an asset management company and custodians in compliance with the regulations.

95 www.amfiindia.com
ASSET MANAGEMENT COMPANY (AMC):

The investment manager of a mutual fund is technically known as the ‘Asset Management Company’, and is appointed by the sponsor or the trustees. The AMC manages the affairs of the mutual fund. It is responsible for operating all the schemes of the fund, and can act as the AME of only one mutual fund. Only activities which are in the nature of management and advisory services to offshore funds; pension funds, provident funds, venture capital funds, management of insurance funds, financial consultancy and exchange of research on commercial basis can be undertaken by the AMC. With the permission of SEBI, it can also operate as an underwriter.

SEBI’s requirements of AMC:

The SEBI requires the AMC to possess the following attributes in order to ensure its efficient management:

1) **Track record:** An AMC should have a sound track record, with a net worth of at least ₹100 crores.

2) **Reputation:** An AMC shall have a general reputation of fairness in transaction.

3) **Expertise:** The directors of an AMC should have an expert knowledge of the relevant fields like portfolio management, investment analysis and financial administration.

4) **Operational autonomy:** It shall be provided to the directors of whom at least 50 percent should have no association with the sponsor or trustees, its Chairman being an independent person.

5) **Contribution:** Minimum contribution by the sponsor should be 40 percent of its networth so as to ensure the stake of the sponsors in the AMC.
Functions of AMC:

Many a time, an AMC carries out its functions through outside agencies that are appointed for this purpose. However, the functions remain the same as outlined below:

1. **Registrars and Transfer Agents:**

   The registrars and transfer agents who are appointed by the AMC carry out receiving and processing the application forms of investors, issuing unit certificates, sending refund orders, giving approval for all transfers of units and maintaining all such records, repurchasing the units and redemption of fund and; issuing dividend or income warrants. These intermediaries are paid compensation for their services by the AMCs. In India almost all AMCs engage such agents.

2. **Fund Accountants:**

   Fund accountants are appointed by the AMC. They are in charge of maintaining proper books of accounts relating to fund transactions and management. The functions performed by these agencies are computing the net asset value per unit of the scheme on a weekly basis; maintaining its books and records; monitoring compliance with the schemes, investment limitations as well as the regulations of SEBI and others.

3. **Lead Managers:**

   Lead managers carry out; selecting and coordinating the activities of intermediaries such as advertising agency, printers, collection centres and marketing the services; carrying out extensive campaigns about the scheme, and acting as marketing associates to attract investors; assisting the AMC to approach potential investors through meetings, exhibitions, contacts advertising, publicity and sales promotion.
4. **Investment Advisors:**

Investment advisors carrying out the market and security analysis, advising the AMC to design its investment strategies on a continuous basis. They are paid for their professional advice regarding funds investment on the average weekly value of the fund’s net assets. The majority of Indian mutual funds have their own market analysts who design their investment strategies.

5. **Legal Advisors:**

Legal advisors are appointed to offer legal guidance about planning and execution of different schemes. A group of advocates and solicitors may be appointed as legal advisors. Their fee is in no way associated with the net assets of the fund, but is paid to them as decided.

6. **Auditors:**

An auditor is required to be appointed by the AMC, and must undertake independent inspection and verification of its accounting activities.

7. **Underwriters:**

In recent times, mutual funds also undertake the activities of underwriting issues. Such activities generate an additional source of income for mutual funds. Prior approval from SEBI is necessary for undertaking this activity.

**Working Mechanism of AMC:**

The working of an AMC revolves around the investment functions. The AMC carries out the specialized investment function by designing strategies. The working mechanism of the AMC is described below:

1. **Creating Fund Manager:**

A fund manager is responsible for managing the funds of an AMC. The fund manager should desirably be an independent agency, as is the practice in the USA. But, according to the practices in India, a single fund manager
handles many schemes simultaneously. The basic function of a fund manager is to decide the rate, time, kind and quantum of securities to be bought or sold. It is the fund manager who ensures the success of the fund schemes.

2. **Research and Planning:**

The research and planning cell of the AMC undertakes research activities relating to securities as well as prospective investors. The results of the study are analyzed to draft future policy governing investment management. It is also possible that the research work is assigned to an independent outside agency.

3. **Creating Dealers:**

Dealers having a deep understanding of stock market operations may be created by the AMC in order to execute the sale and purchase transactions in the capital or money market. It is possible that this job is assigned to a separate marketing division of AMC. Dealers should comply with all the formalities of sale and purchase through brokers, the brokers being appointed by the Board of Directors of AMC. The Board lays down the guidelines for allocation of business to different brokers.

**TRUSTEES:**

Persons who hold the property of the mutual fund in trust for the benefit of the unit holders are called ‘trustees’. Trustees look after the mutual fund, which is constituted as a trust under the provisions of the Indian Trust Act. For this purpose, a company is appointed as a trustee to manage the mutual fund with prior approval from SEBI. A minimum of 75 percent of the trustees must be independent of the sponsors so as to ensure fair dealings.

**DISTRIBUTORS:**

Distributors earn a commission for bringing investors into the schemes of a mutual fund. This commission is an expense for the scheme, depending on the financial and physical resources at their disposal, the distributors could be:
a) **Tier-1** distributors who have their own or franchised network reaching out to investors all across the country;

   OR

b) **Tier-2** distributors who are generally regional players with some reach within their region;

   OR

c) **Tier-3** distributors who are small and marginal players with limited reach.

   The distributors earn a commission from the AMCs.

**REGISTRARS:**

An investor’s holding in mutual fund schemes is typically tracked by the schemes’ Registrar and Transfer Agent (R&T). Some AMCs prefer to handle this role on their own instead of appointing Registrar and Transfer Agent. The Registrar or the AMC as the case may be maintains an account of the investors’ investments and disinvestments from the schemes. Requests to invest more money into a scheme or to redeem money against existing investments in a scheme are processed by the Registrar and Transfer Agent.

**CUSTODIAN / DEPOSITORY:**

The custodian maintains custody of the securities in which the scheme invests. This ensures an ongoing independent record of the investments of the scheme. The custodian also follows up on various corporate actions, such as rights, bonus and dividends declared by investee companies. At present, when the securities are being dematerialized, the role of the depository for such independent record of investments is growing. No custodian in which the sponsor or its associates hold 50 percent or more of the voting rights of the share capital of the custodian or where 50 per cent or more of the directors of the custodian represent the interest of the sponsor or its associates shall act as custodian for a mutual fund constituted by the same sponsor or any of its associates or subsidiary company.
3.10 PORTFOLIO MANAGEMENT PROCESS IN MUTUAL FUNDS:

The portfolio management process of a mutual fund involves the following four basic steps:

Figure 3.2: Portfolio management process

a) **Setting investment goal**: The first and foremost task of managing the portfolio of a mutual fund is to identify and set the goal for the proposed scheme. The goal is set keeping in mind considerations such as the protection of investors, nature of the scheme, risk and return, market conditions, regulatory norms and size of issue.

b) **Identifying specific securities**: When once the goal to be accomplished by the proposed scheme has been identified, efforts are made to analyze and identify the right security where funds are required to be invested. For each security, risk and return characteristics are evaluated in a broader perspective. For the purpose of analysis, the fund manager considers the strengths and weaknesses of some of the sample securities.

c) **Portfolio Designing**: It involves making an ideal mix of debt and equity securities of corporate, government, etc. It is considered with decisions regarding the type of securities to be bought, the quantum and the timing of issue. Portfolio designing is carried out on the basis of research and analysis of stock markets. Based on their results, the long-term and short-term investment strategies are worked out.

d) **Portfolio Revision**: The build-up of portfolio needs to be periodically reviewed keeping in mind the risk-return characteristics of all securities under the changing circumstances. The revision of the portfolio has to be undertaken in the context of the dynamic investment world. Further, the exercise is to be taken up to cash on the renewed market opportunities in order to maximize the portfolio returns.
3.11 ASSOCIATION OF MUTUAL FUNDS IN INDIA (AMFI)  

AMFI, the apex body of all the registered asset management companies (AMC) was incorporated on August 22, 1995 as a nonprofit organization. All the asset management companies that have launched mutual fund schemes are its members. It functions under the supervision and guidelines of its Board of Directors. One of the objectives of AMFI is to promote investors’ interest by defining and maintaining high ethical and professional standards in the mutual fund industry. The AMFI code of ethics sets out the standards of good practices to be followed by the asset management companies in their operations and in their dealings with investors, intermediaries and public. AMFI code has been drawn up to encourage adherence to standards higher than those prescribed by the regulations for the benefits of investors in the mutual fund industry.

The Objectives of AMFI:

The Association of Mutual Funds of India works with 30 registered AMCs of the country. It has certain defined objectives which juxtaposes the guidelines of its Board of Directors. The objectives are as follows:

- This mutual fund association of India maintains high professional and ethical standards in all areas of operation of the industry.
- It also recommends and promotes the top class business practices and code of conduct which is followed by members and related people engaged in the activities of mutual fund and asset management. The agencies who are by any means connected or involved in the field of capital markets and financial services also involved in this code of conduct of the association.
- AMFI interacts with SEBI and works according to SEBIs guidelines in the mutual fund industry.

---

96 www.amfiindia.com
• Association of Mutual Fund in India do represent the Government of India, the Reserve Bank of India and other related bodies on matters relating to the Mutual Fund Industry.

• It develops a team of well qualified and trained Agent distributors. It implements a programme of training and certification for all intermediaries and other engaged in the mutual fund industry.

• AMFI undertakes all India awareness programme for investors in order to promote proper understanding of the concept and working of mutual funds.

• At last but not the least Association of Mutual Fund of India also disseminate information on Mutual Fund Industry and undertakes studies and research either directly or in association with other bodies.

3.12 BUSINESS ETHICS FOR MUTUAL FUNDS: 97

Business Ethics means rules of acceptable and good conduct. All those persons who are engaged in any business must comply with a set of rules of good conduct. The rules may be set by those who own and manage the business, or by those agencies that have the right to regulate the business. Rules may also be set and adopted voluntarily by those involved in the business. In many countries, laws such as Consumer or Investor Protection Act exist. However, laws cannot anticipate and take care of all potential malpractices in businesses. That is why, in addition to laws, rules of ethics are required to be designed and adopted by the business practitioners themselves. Business ethics goes beyond the laws. While law is enforced by a regulator, ethical codes are self-enforced.

Need for Business Ethics:

In a civilized activity, businesses must be conducted in a disciplined, organized and fair manner. In the absence of good and ethical business practices and a set of rules of good conduct, the sellers of goods and services might indulge in dishonest acts and make false promises to potential buyers.

From the social perspective, the need for business ethics arises from the need to protect the consumer, particularly when the seller is strong and the buyer is weak. Ethical practices mean practices in the interest of the consumer of a product, or the user of a service, who needs to be protected from unscrupulous business actions. While regulatory agencies could force businesses to follow ethical practices, a better situation is when businesses voluntarily place checks upon themselves.

From the perspective of the business or the profession itself, good ethics is good business. A consumer who feels cheated once will not return to buy the product again. The business will eventually lose the customer and turn unprofitable. Ethical business practices ensure that the customer remains a long term buyer. Business profits or salesperson’s commissions will be assured for the long term only through good business practices. That is why it is in the best long-term interest of the business and the sales person to stick to honest, ethical and good business practices. A business person should treat the potential and existing clients fairly, honestly and transparently, because “Honesty is the Best Policy”.

The need for an organized set of well-defined ethical business practices applies to all businesses without exception. Business ethics or rules apply to all the participants in the business and are not meant just for the sales staff. Mutual funds or investment management is also a business, where investors buy investment products. Mutual Fund distributor solicits potential clients from among the people who have disposable savings. Hence, Mutual Funds and their salespersons are required to adopt ethical, fair and good business practices, and apply them to all those involved in the selling / servicing activities. The rules of good conduct have to be observed at all times throughout the client contact or interface.
Business Ethics in Practice:

Mutual funds are in the business of providing investment management services to investors. All those engaged in this business—distributors, advisors, fund managers, operating employees of Asset Management Companies—need to abide by rules of good conduct in the interest of the investor.

The conduct rules for distributors and employees (including fund managers of each fund) are set by the Fund Trustees and Directors of AMCs. As the industry association, AMFI has set ethical standards and practices for the industry. AMFI’s code sets a common set of rules for all the funds. This code includes specific rules of good conduct for AMCs and its employees and the fund distributors. As the regulator for the industry, SEBI also requires the development of ethical standards and practices by all fund houses, and has asked that each fund or AMFI set up detailed Codes of Conduct for different groups—distributors, fund managers and other employees. As a fund distributor, you have to abide by all rules of good conduct, whether given by the AMC, AMFI or SEBI. In fact, you should set your own ethical standards even higher than minimum requirements of these agencies.

Objectives of the Business Ethics:

The major objectives of Business Ethics are simply being honest, open and transparent with the potential clients. Rules are needed to ensure that all those who are involved in the sales process possess adequate product knowledge and deal with the clients fairly and transparently. Such rules related to selling activity will be set by the manufacturers themselves, and by the managers of the manufacturing and distribution companies involved in the process. For example, in the mutual fund industry the product - investment scheme - is described in detail in the offer document.
Some key terms of Business Ethics:

It can now generalize and review the basic constituents of Business Ethics.

- **Fair business practices** ensure that the business is conducted not only in the interest of the seller but in the interest of the consumer or investor as well.

- **Ethical standards** are benchmarks set for acceptable level of performance. These standards are like targets to be achieved by participants.

- When the Rules of Business Ethics are explicitly stated and made known to participants they become ethical norms or guidelines. The norms may be voluntary or compulsory.

- **A Code of Conduct** is normally a voluntarily adopted set of rules of good conduct, acceptable to the business participants themselves, their employers, the regulators and the Self Regulating Organizations.

- **Ethical business practices** refer to the procedures and policies applied in the practice of the business, to ensure compliance with the rules and codes of good conduct.

- **Conflict of Interest in a mutual fund business** refers to situations where the interest of the investor runs counter to the interest of the intermediary.
SECTION-II:
REGULATORY FRAMEWORK OF MUTUAL FUNDS IN
INDIA: A BIRD’S EYE VIEW

This section divulges the Regulatory Framework of Mutual Funds in India. A significant outcome of the government’s policy of liberalization in industrial and financial sectors has been the development of new financial instruments. These new instruments are expected to impart greater competitiveness, flexibility and efficiency to the financial sector. The development of various mutual funds is part of a response to this new favourable environment. Among various instruments, mutual funds have proved to be the single-most catalytic instrument in generating momentous growth in the capital markets. In the past couple of years, banks were allowed to undertake this activity; mutual funds have come up in a big way. To curb the undesirable growth of mutual funds and regulate their growth in an orderly manner, the Reserve Bank of India (RBI) on July 5, 1989 had framed broad guidelines to be followed for all commercial banks. This section outlines the guidelines of Securities Exchange Board of India (SEBI) for regulation of mutual funds in India have been discussed in ensuing pages.

3.13 REGULATORY MECHANISM: The SEBI Mutual Fund Regulations

The Reserve Bank of India (RBI) had issued a set of guidelines in 1987 for bank sponsored mutual funds. This was followed in 1990, by stipulations for mutual funds from the Ministry of Finance, Government of India. In 1991, the Government of India initiated the process of creating a common regulation for all mutual funds and to permit the entry of private mutual funds. The Dave Panel submitted its recommendations regarding the Regulation of mutual funds in 1991. In October 1991, the Securities and Exchange Board of India (SEBI) issued guidelines for the formation of Asset Management Companies (AMCs) for mutual funds. A comprehensive set of guidelines was issued by the Ministry of Finance in February 1992. In 1993, the SEBI issued comprehensive
mutual funds regulations. These were replaced by a more rigorous SEBI framework in 1996, which have been amended from time to time. The regulations governing the functioning of the mutual funds in India were introduced by SEBI in December 9, 1996. This repeals the regulations that were issued in 1993. The objective of these regulations was to ordain the regulatory norms for the formation, operation and management of mutual funds in India. The regulations also lay down the broad guidelines on; “Registration of Mutual funds with the SEBI, Constitution and management of mutual funds, and operation of trusts, Constitution and management of asset management company and custodian, scheme of mutual funds, investment objectives and valuation policies, fees and expenses, inspection and audit; and procedure for action in case of default, advertisement code, code of conduct for mutual funds and asset management companies”. The core features of these regulations are discussed below.98

REGISTRATION OF MUTUAL FUNDS:

- Every mutual fund shall be registered with SEBI through an application to be made by the sponsor in the prescribed proforma, accompanied by a non-refundable application fee of ₹25,000.
- Every mutual fund shall pay ₹2.5 lakhs towards registration fee and ₹2,50,000 p.a. as service fee.
- Registration will be granted by the Board on fulfillment of conditions such as the sponsor having a sound track-record of five years and a general reputation of integrity in all business transactions, the net worth of the immediately preceding year being more than the capital contribution of the sponsor in AMC and the sponsor showing profits after providing for depreciation, interest and tax for three out of the immediately preceding five years.

---

CONSTITUTION AND MANAGEMENT OF MUTUAL FUND:

1. Regulations as to the Trust:

- **Constitution:** A mutual fund shall be constituted in the form of a trust under the provision of Indian Regulation Act, (U/s 16 of 1908) and the trust deed containing the provisions laid down by SEBI.

- **Code of conduct:** A trustee should be a person of liability, integrity and standing, and should not have been found guilty of moral turpitude, or been convicted of any economic offense or violation of any securities law.

- **Independence:** At least 50 percent of the trustees shall be independent trustees (who are not associated with an associate, subsidiary or sponsor in any manner).

- **Agreement:** The trustees and the AMC, with SEBI's prior approval, shall enter into an investment management agreement.

- **Requirement:** The trustees shall ensure, before the launch of a scheme that the AMC has its back-office, dealing and accounting system in place, and that key personnel, auditors and registrars are appointed. They also have to ensure that the compliance manual has been prepared, an internal control mechanism has been designed and norms have been specified for the empanelment of brokers and marketing agents.

- **Monitoring:** The trustees shall ensure that the AMC has been diligent in monitoring securities transactions with brokers, and in avoiding undue concentration of business with any single broker.

- **Managing:** The trustees shall ensure that the AMC has been managing the schemes independently of other activities. They should also take remedial steps by informing SEBI if the conduct of business of a mutual fund is not in accordance with SEBI regulations.

- **Consent:** In the interest of unit holders, the trustees shall obtain the consent of the unit holders whenever SEBI requires, or upon requisition...
made by three-fourths of the unit holders, or if a majority of trustees decide to wind up or prematurely redeem the units, or in the event of any change in the fundamental attributes of any scheme, trustee, fees, expenses payable or any other change which would modify the scheme or affect the interest of unit holders.

- **Details:** The trustee shall call for the details of transactions in securities by the key personnel of the AMC.

2. **Regulations as to AMC:**

   For grant of approval of the AMC, it should have a sound track record, general reputation, and fairness in transaction. The sponsor or trustees (if authorized by the trust deed) shall appoint an AMC with SEBI’s approval. The appointment of AMC can be terminated by a majority of the trustees, or by 75 percent of the unit holders of the scheme. The directors of the AMC shall have adequate professional experience in finance and related services. At least 50 percent of the directors of the Board of Management of the AMC should not be associated with the sponsor or its subsidiaries or the trustees. The Chairman of the AMC should not be a trustee of any other mutual fund. The AMC shall have a minimum net work of ₹.10 crore. No AMC shall act as an AMC for any other mutual fund.

3. **Regulations for the Custodian:**

   - **Appointment:** The mutual fund shall appoint a custodian to carry out the custodial services for the schemes of the fund and send intimation of the same to the Board. A custodian shall not be appointed, in case the sponsor or its associates hold 50 percent or more of the voting rights of the share capital of the custodian or where 50 percent or more of the directors of the custodian represent the interest of the sponsor or its associates.

   - **Agreement:** The agreement with the custodian shall be entered into with the prior approval of the trustees.
SCHEMES OF MUTUAL FUNDS:

- **Approval:** All the schemes to be launched by the AMC need to be approved by the trustees, and copies of offer documents of such schemes are to be filed with SEBI.

- **Disclosure:** The offer documents shall contain adequate disclosures so as to enable the investors to make informed decisions.

- **Advertisements:** Advertisement of schemes should be in conformity with the SEBI prescribed advertisement code.

- **Listing:** The ‘listing of close-ended schemes is mandatory, and every close-ended scheme should be listed in a recognized stock exchange within 6 months from the closure of subscription’. Listing, however, is not mandatory in case the scheme provides for periodic repurchase facilities to all unit holders, and if the scheme provides for monthly income or caters to special classes of person like senior citizens.

- **Redemption:** Units of a close-ended scheme can be opened for sale or redemption at a predetermined fixed interval.

- **Subscription open:** No scheme other than unit-linked scheme can be opened for subscription for more than 45 days. The AMC shall specify in the offer documents, the minimum subscription amount it seeks to raise under the scheme, and in case of over-subscription, the extent of subscription it may retain. In such a case, all applicants applying for upto 5000 units shall be given full allotment.

- **Repurchase of close-end schemes:** The AMC may, at its option, repurchase or re-issue the repurchased units of a close-ended scheme. The units of close ended schemes mentioned above may be open for sale or redemption at fixed predetermined intervals without listing, if the maximum and minimum amount of sale or redemption of the units and the periodicity of such sale / redemption has been disclosed in the offer document.

- **Conversion into open-ended schemes:** The units of close-ended
schemes may be converted into open-ended scheme, if the offer document of such a scheme discloses the option and the period of conversion. Upto January 12, 1998, approval by the majority of the unit-holders for such a conversion was required. But now, those unit-holders who do not express written consent to the above shall be allowed to redeem their holdings in full at NAV based prices.

- **Roll over**: A close-ended scheme shall be fully redeemed at the end of the maturity period, unless a majority of the unit holders decide for its roll-over by passing a resolution. But the unit holders who do not opt for the roll-over shall be allowed to redeem their holdings in the scheme at NAV based prices.

- **Offering period**: Any scheme of mutual fund shall be open for subscription for not more than 45 days (except the equity linked savings scheme).

- **Refund**: The mutual fund and asset management company shall be liable to refund the application money to the applicants if the minimum subscription referred to above is not received, and in case of over-subscription, as stated above. The same shall be refunded within 6 weeks from the date of closure of subscription list, otherwise interest at 15% p.a. shall be payable.

- **Transfer of units**: Unless otherwise restricted or prohibited under the scheme, a unit certificate shall be freely transferable by act of parties or by operation of law. If the units are with the depository, such units will be transferable in accordance with the provisions of SEBI (Depositories and Participants) Regulations, 1996.

- **Guaranteed returns**: A Unit Scheme may provide for guaranteed return, only if such returns are fully guaranteed by the sponsor or the AMC, a statement indicating the name of the person who will guarantee the return, is made in the offer document, and the manner in which the guarantee is to be met has been stated in the offer document.
INVESTMENT OBJECTIVES AND VALUATION POLICIES:

Every AMC has to frame certain investment objects/policies, following are the major ingredients of AMC in respect of its objectives and valuations.

- **Debt Instruments:** Investments in debt instruments should be only in rated debt instruments, not below investment grade, rated by a credit rating agency. If the debt instrument is not rated, approval of the Board of AMC is required to investment.

- **Ownership:** A mutual fund cannot own more than 10 percent of any company’s paid up capital under its entire scheme. It means the maximum investment in the shares of a company by a mutual fund should not exceed 10 percent of the paid up capital of the company.

- **Investment:** The money collected under any scheme shall be invested in the transferable money market or capital market securities, or in privately placed debentures of securitized debt, subject to the investment restrictions specified in the 1996 regulations.

SEBI came out with new regulatory norms for mutual funds investment are;

- **Equity investments:** Individual schemes can invest up to 10 percent of their NAV in equity instruments of single firm. This limit will not apply to *Index and sector-specific funds*.

- **Debt instruments:** Individual schemes can invest up to 15 percent of their NAV in rated investment grade debt instruments of a single issuer. This limit may be extended to 20 percent of NAV with prior approval of the AMC and the Trustee company. In non-rated debt-instruments, or instruments rated below investment grade, the exposure to a single issuer shall not exceed 10 percent of the NAV.

- **Other instruments:** The restrictions of investment ceilings will not be applicable to government securities and money market instruments.
- **Unlisted Shares**: A scheme’s investment in unlisted shares has been restricted to a maximum of 10 percent of the NAV for close-ended schemes, and up to 5 percent of the NAV for open-ended schemes, where the need for liquidity is higher.

- **Listed securities**: A mutual fund shall not invest over 25 percent of the NAV of any of its schemes in listed securities of group companies of the sponsor.

- **Open-ended schemes**: If there is a change in control or the fundamental attributes of open-ended schemes, investors will have to be informed, and must be allowed to exit at the prevailing NAV without any exit load. No such change shall be allowed for one year from the date of allotment of units of a new scheme.

- **Disclosure**: Mutual funds are required to disclose in their results, any underwriting obligations undertaken by their schemes, for the issues of associate companies, devolvement in such issues, subscription in issues lead-managed by associate companies, subscription in equity or debt on private placement basis where sponsor or associate companies act as manager.

- **Advertisement**: Any advertisement on performance must be supported by relevant figures such as NAV yields or returns for at least the past 3 years.

- **No advance**: Mutual funds shall not advance loans for any purpose, and the funds shall not be used in option trading, in short selling or carry-forwarded transaction.

- **Underwriting**: Mutual funds can undertake underwriting activities after obtaining a certificate of registration from SEBI. For the purpose of underwriting, capital adequacy shall be the net asset of the scheme. However, the underwriting obligation of a mutual fund should not exceed the total NAV of the scheme. Mutual funds are permitted to enter into an
underwriting agreement after obtaining a Certificate of Registration from SEBI. The underwriting obligation of a mutual fund shall not, at any time, exceed the total NAV of the scheme.

- **Borrowings:** The mutual fund can borrow up to 20 percent of the net assets of a scheme for a duration up to 6 months to meet the temporary liquidity needs of repurchase, redemption of units, payment of interest or dividend to unit holders.

Mutual funds are permitted to borrow only to meet temporary liquidity needs. This may be for the purpose of repurchase, redemption of units, repayment of interest or dividend to unit holders. It shall not borrow more than 20 percent of the NAV of the scheme, and for a maximum period of 6 months.

- **Valuation:** Every mutual fund shall carry out a valuation of its investment and publish the same in accordance with the valuation norms specified by SEBI regulations.

- **Pricing of Units:** The sale and repurchase prices of units shall be published in the case of open-ended schemes by the Mutual Fund at least once a week. The mutual fund shall ensure that the repurchase price is not lower than 93 percent and the sale price is not higher than 107 percent the NAV. The repurchase price of the units of a close-ended scheme shall not be less than 95 percent of the NAV. The difference between repurchase and sale price of the units shall not exceed 7 percent as calculated on the sale price.

- **Publicity:** A mutual fund shall periodically publish the sale and repurchase price of units at least once a week in a daily newspaper with all-India circulation, and the difference between the repurchase and sale price shall not exceed 7 percent of the sale price.

- **Income Distribution:** All mutual funds must distribute a minimum of 90 percent of their profits in a given year.
FEES AND EXPENSES:

- Investment and advisory fees charged by the AMC are to be fully disclosed in the offer document.

- The AMC can charge 1.25 percent of the weekly average net assets outstanding in each accounting year for the scheme concerned, as long as net assets do not exceed ₹.100 crore. In respect of no-load schemes, the AMC can charge an additional 1 percent of weekly average net asset outstanding in each financial year.

- The AMC can charge initial expenses of launching a scheme, recurring expenses for marketing, agents’ commission, brokerage and registrar services, fees and expenses for auditors, custodian, trustees and other costs approved by the board. The initial issue expenses shall not exceed 6 percent of the initial resources raised under the scheme.

- The total expenses of the scheme, excluding issue or redemption expenses but including investment management and advisory fee, shall be subject to the following:

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the first ₹.100 crore of the average weekly net assets</td>
<td>2.50%</td>
</tr>
<tr>
<td>On the next ₹.300 crore of the average weekly net assets</td>
<td>2.25%</td>
</tr>
<tr>
<td>On the next ₹.300 crore of the average weekly net assets</td>
<td>2.00%</td>
</tr>
<tr>
<td>On the balance of the net assets</td>
<td>1.75%</td>
</tr>
</tbody>
</table>

- In the case of schemes investing in bonds, such recurring expenses will be reduced by at least 0.25 percent of the weekly average net assets.

- The mutual fund and AMC shall furnish periodic statements to SEBI.

As per the SEBI regulation, 1999, the investment management and advisory fees shall be charged by the AMC to its Mutual Fund in the manner as specified below:

a) For net assets upto ₹.100 crore - 1.25 percent of the weekly average of net assets outstanding in the current year for the scheme concerned.
b) For net assets in excess of ₹100 crore - 1 percent of the weekly average of net assets outstanding in the current year for the scheme concerned.

In addition, the following expense may also be charged to Mutual Fund:

a) Initial issue costs of sponsoring the fund and its schemes (not exceeding 6 percent of the funds raised under each scheme)

b) Recurring expenses, including marketing expenses and the agents’ commission, if any, brokerage and transaction costs, registrar services for transfer of shares sold/redeemed.

These expenses should not exceed 3 percent of the weekly average net assets outstanding during the current year.

INSPECTION AND AUDIT:

The regulations also incorporate inspection and audit procedures. SEBI can inspect the books of accounts, records, documents, infrastructure system and procedure, or investigate the affairs of the mutual fund, trustees and AMC.

Accounting Requirements:

Mutual funds are required to segregate their earnings as current income, short-term and long-term capital gains. In addition, Mutual Funds are required to calculate weekly NAV at the last available closing market prices for all quoted instruments. For unquoted instruments, the valuation may be done once weekly, either at cost or by any other method, authorized by SEBI.

PROCEDURE FOR ACTION IN CASE OF DEFAULT:

SEBI may suspend the certificate of a mutual fund in case it contravenes any provision of the regulations. The certificate of registration can also be cancelled if the mutual fund is guilty of fraud, repeated default, or if it finds any price-rigging, or price-manipulation.
3.14 SEBI SCHEDULES:

The SEBI (Mutual Funds) Regulation, 1996, contains 11 schedules, which have been further defined and elaborated for various important regulatory issues. An outlines of these schedules is shown below:

a) First schedule : Proforma of various forms to be used
b) Second schedule : Various fees payable by mutual funds
c) Third schedule : Contents of the trust deed
d) Fourth schedule : Contents of investment management agreement
e) Fifth schedule : Code of conduct
f) Sixth schedule : Advertisement code
g) Seventh schedule : Restrictions on investment
h) Eight schedule : Investment valuation norms
i) Ninth schedule : Accounting policies and standards
j) Tenth schedule : Initial issue expenses
k) Eleventh schedule : Annual report

The schedules of all the above are shown in Appendix-A at the end of all the chapters.
3.15 VARIOUS OTHER ACTS APPLICABLE TO MUTUAL FUNDS:

Indian Trust Act, 1956:

A legal technically is that a trust is not a distinct or separate legal entity. A mutual fund trust is therefore in the nature of a “national entity”, which it is not distinct from the unit holders themselves. Therefore, its unit holders cannot sue (prosecute) a mutual fund. However, since the trustees have a fiduciary responsibility to protect the interests of the unit holder, the unit holder can sue the trustees for breach of faith if there is strong ground to prove that the trustees were fraudulent or willfully negligent in their role. In case the trustee’s of faith is proved and they need to personally pay damages, the India Trust Act provides that the trust cannot ever compensate the trustees for such damage. The Mutual fund regulation provides that neither the sponsor nor the AMC can compensate the trustees for such damages.

Companies Act, 1956:

Investors in a fund are neither shareholder of AMC nor depositors in the AMC. Therefore, the normal protection available to company depositors through agencies such as department of company affairs and company law board is not available to unit holders of mutual fund. The company act provides the “piercing the corporate the veil” in specific cases, including fraud. If fraud can, therefore, be proved, unit holders may then be able to pierce the corporate veil and hold the directors and management of the AMC responsible for such fraud.

Consumer Protection Act, 1986:

Unit holder cannot approach consumer courts to redress their grievances against trustees because the nature of the relationship between unit holder and trustees is a fiduciary (paper money) one. Unit holder themselves are beneficiary owner of the trust property. Being owners, they do not quality as consumer under the Consumer Protection Act.
SECTION-III:
PARAMETERS AND MODELS

Since the inception of mutual fund several performance evaluation models have been evolved and implemented to judge the performance of mutual fund. This section aims to provide ringside view of various models of performance evaluation developed over a period of time. The following are the various models of evaluating efficiency, return, risk and growth;

3.16 VARIOUS MODELS FOR EVALUATION:

1) Treynor Reward-to-Volatility Ratio
2) Sharpe Reward-to-Variability Ratio
3) Jensen’s Performance Index
4) Decomposition of Excess Return: Fama’s Approach
5) Modigliani and Modigliani risk-adjusted Performance or M-Squared Index.
6) Sortino measure

1) TREYNOR REWARD-TO-VOLATILITY RATIO:

Developed by Jack Treynor (1965), this performance measure evaluates funds on the basis of Treynor Index. This portfolio performance measure is based on the concept of characteristics line. It is interpreted as stating the reward (return minus the risk-free rate) in relation to a portfolio’s beta risk.

The equation for the Treynor measure for the performance of portfolio \( p \), \( T_p \) equals\(^ {99} \).

\[
T_p = \frac{(R_p - R_f)}{\beta_p}
\]

Equation (1)

Where:

- \( T_p \) = Treynor’s portfolio index
- \( R_p \) = Portfolio average return

\( R_f \) = Risk free rate of interest, generally returns bank deposits.

\( \beta_p \) = Beta coefficient of portfolio p.

The equation (1) stems from the security market line (SML), which defines a portfolio p as;

\[
R_p - R_f = \beta_p (R_m - R_f)
\]  

Equation (2)

From the equation (2), the reward for taking risk equals \([R_p - R_f]\).

Solving for the reward in equation gives.

\[
R_p - R_f = \beta_p (R_m - R_f)
\]  

Equation (3)

Dividing both sides by beta gives,

\[
\frac{R_p - R_f}{\beta_p} = R_m - R_f
\]  

Equation (4)

The left-hand side of equation (4) is simply the Treynor measure for portfolio p, \( T_p \). Note that Equation (4) originated from the Security Market Line (SML), and \([R_m - R_f]\) is the slope of SML. Equation (4) implies that if portfolio p lies on SML, then the portfolio’s Treynor measure, \( T_p \), must equal the slope of the market portfolio’s SML, SML\(_m\). In fact, dividing \((R_m - R_f)\) by \( \beta_m \) gives.

\[
T_m = \frac{(R_m - R_f)}{\beta_m}
\]  

Equation (5)

Because the market portfolio’s beta is 1.0 by definition, equation (5) is equivalent to the right-hand side of equation 4 or \([R_m - R_f]\). \( T_p \) is the slope of the portfolio’s SML, SML\(_p\). Therefore, the Treynor measure says that, if the slope of SML\(_p\) equals the slope of SML\(_m\) (i.e., if \( T_p \) equals \( T_m \)), then the portfolio must lie on the market SML. Recall that according to SML the performance of any portfolio or security that lies on the line matches the expectations of the CAPM. (See Figure 3.3)
Figure 3.3: Security Market Line when \( T_p = T_m \)

Suppose that a different portfolio \( P_1 \) lies above the SML, as shown in Figure 3. Its slope, calculated by the Treynor measure, would be steeper than that of SMLm.

\[
T_{p1} = \frac{[R_{p1} - R_f]}{\beta_{p1}} > \frac{[R_m - R_f]}{\beta_r} = T_m \quad \text{Equation (6)}
\]

As in the SML analysis, this implies that portfolio \( P_1 \) is undervalued; it is outperforming the expectations of SMLm (as defined by the CAPM). Because the SML represents the market portfolio, most interpret this relationship to mean that \( P_1 \) is outperforming the market portfolio.

Another interpretation is that the Treynor measure normalizes the portfolio’s reward by the market’s beta of 1.0. Suppose that \( T_{p1} \) is 0.245 and \( T_m \) is 0.210. This means that at a beta of 1.0, the reward to p1 equals 0.245, whereas the market portfolio’s reward equals 0.210. Figure-3.4 shows this graphically. The Treynor measure compares the rewards of two portfolios, \( P_1 \) and M, adjusted to reflect the same risk level. If the reward for \( P_1 \) is greater than that for M at the same risk level, \( P_1 \) outperforms the market portfolio.
Finally, if a portfolio $P_2$ lies below the SML, as shown in figure 3.5, then its slope will be flatter than the slope of the $SML_m$.

$T_{p2} = \frac{[R_{p2} - R_f]}{\beta_{p2}} < \frac{[R_m - R_f]}{1} = T_m$ \hspace{1cm} \text{Equation (7)}

Portfolio $P_2$ is overvalued; it underperforms the expectations of the SML, or the market portfolio, because the slope of the market portfolio is the benchmark. Again, if the two portfolios, $P_2$ and $M$, and aligned by beta risk of 1.0, then a comparison shows that $P_2$ generates a smaller reward than $M$ at the same level of beta risk.
2) **SHARPE REWARD-TO-VARIABILITY RATIO:**

William F. Sharpe (1966) devised an index of portfolio performance measure. Sharpe’s logic for introducing total risk instead of beta lies with the assumption behind the beta risk. Beta risk assumes that a portfolio is well diversified, with no remaining diversifiable risk. Sharpe argues, however, that a portfolio manager who does not hold a well-diversified portfolio should be penalized for exposing returns to diversifiable risk. Hence, the Sharpe measure adjusts portfolio returns for total risk, $\sigma_p$, which includes both systematic (beta) risk and diversifiable risk. Generally, if mutual funds or other portfolios are well diversified, the Sharpe and Treynor measure will give them the same rankings. If the measures give different rankings, the portfolio ranked higher by Treynor but lower by Sharpe may not be well diversified. In this way, the Sharpe measure is considered to be more stringent than the Treynor measure.

The Sharpe measure, $S_p$, adjusts portfolio performance by total risk, $\sigma_p$, rather than beta risk.\(^{100}\) The formula is

$$\text{Sharpe Index (} S_p \text{) } = \frac{(R_p - R_f)}{\sigma_p}$$

Equation (8)

Where:

$S_p$ = Sharpe’s portfolio index

$R_p$ = Portfolio average return

$R_f$ = Risk free rate of interest, generally returns bank deposits.

$\sigma_p$ = Standard Deviation of portfolio $p$.

Although Treynor used the SML, the Sharpe measure relies on the Capital Market Line (CML), that is defined as:

$$R_p = R_f + \left(\frac{(R_m - R_f)}{\sigma_m}\right)\sigma_p$$

Equation (9)

Again, the reward for taking risk equals $[R_p - R_f]$, which comes from some manipulation of Equation 9.

$$[R_p - R_f] = \left(\frac{(R_m - R_f)}{\sigma_m}\right)\sigma_p$$

Equation (10)

Dividing both sides by $\sigma_p$ gives

\[
(R_p = R_t) / \sigma_p = (R_m-R_t) / \sigma_m \tag{Equation (11)}
\]

The left-hand side of Equation (11) is the Sharpe measure for portfolio $p$, $S_p$, and the right-hand side is the Sharpe measure for the market portfolio. More important, the right-hand side gives the slope of the CML$_m$. Again, the logic resembles that for the Treynor measure. If the slope ($S_p$) of a line, CML$_p$, equals the slope of the CML$_m$, then portfolio $p$ must lie on the CML$_m$ as Figure 3.6 illustrates.

![Figure 3.6: Capital Market Line and the Sharpe Measure](image)

If, however, a portfolio such as $p_1$ lies above the CML$_m$, the slope of CML$_{p1}$ ($S_{p1}$) will be steeper than the slope of the CML$_m$. This suggests that $p_1$ outperforms the market. The Sharpe measure adjusts portfolio risk to the equivalent of the market’s 1 percent standard deviation so the analyst can compare the rewards for $p_1$ and M. Suppose that $S_{p1}$ equals 0.55 and $S_m$ is 0.45; this relationship implies that the reward to $p_1$ is greater (by 0.10) than the market portfolio’s return at the same level of $SD_p$ risk. Figure 3.7 illustrate this situation.
Suppose that another portfolio, $p_2$ lies below the CML; its slope ($S_{p2}$) must be flatter than the slope of the CML$_m$. This implies that $p_2$ underperforms the market. Again the Sharpe measure shows that the reward to $p_2$ is less than the market portfolio’s reward at the same level of risk, as in Figure 3.8.

Figure 3.7: Capital Market Line and when $S_p > S_m$

Figure 3.8: Capital Market Line and when $S_p < S_m$
COMPARISON BETWEEN SHARPE RATIO AND TREYNOR RATIO:

Both these ratios measure the portfolio return per unit of risk. While Sharpe ratio uses the total risk (represented by standard deviation ($\sigma$) of the portfolio), Treynor ratio uses only the systematic risk (represented by beta ($\beta$) of the portfolio). When the performances of two portfolios are compared on the basis of either Sharpe Ratio or Treynor Ratio, the portfolio that shows a higher value ratio is considered to have performed better. While William Sharpe put forth that the appropriate measure of risk is only the total risk and not the systematic risk alone, Jack Treynor was of the view that it is the systematic risk that is relevant. Rather than going into the merits of these two versions, it would be better if it know where to use Sharpe Ratio and where to use Treynor Ratio.

When a portfolio is a fully diversified one, there won’t be any unsystematic risk and the total risk will be represented by systematic risk. In such a case, Treynor Ratio will be a better measure for comparison of portfolios.

When a portfolio is not a well diversified one, it will have both systematic risk as well as unsystematic risk. In such a case, Sharpe Ratio will be a better measure for comparison of portfolios. For sector specific funds, Sharpe’s ratio will be an appropriate measure since such funds will have the presence of unsystematic risk.

Let there are a few portfolios and that it want to ascertain if the portfolios are well diversified. It can make use of Sharpe’s ratio and Treynor’s ratio to find out if the portfolios are well diversified. When the portfolios are ranked on the basis of Sharpe’s ratio and also on the basis of Treynor’s ratio, both the ranking will be identical, if the portfolios are well diversified.
3) **JENSEN’S PERFORMANCE INDEX (DIFFERENTIAL RETURN):**

Another type of risk adjusted performance measure has been developed by Michael Jensen and is referred to as the Jensen measure or ratio. This ratio attempts to measure the differential between the actual return earned on a portfolio given its level of risk.

The CAPM model is used to calculate the expected return on a portfolio. It indicates the return that a portfolio should earn for its given level of risk. The difference between the return actually earned on a portfolio and the return expected from the portfolio is a measure of the excess return or differential return that has been earned over and above what is mandated for its level of systematic risk. The differential return gives an indication of the portfolio manager’s **predictive ability or managerial skills.**

Using the CAPM model, the expected return of the portfolio can be calculated as follows:

\[
E(R_p) = R_f + \beta_p (R_m - R_f)
\]

Equation (12)

Where;

- \( E(R_p) \) = Expected portfolio return.
- \( R_f \) = Risk free rate.
- \( R_m \) = Return on the market index.
- \( \beta_p \) = Systematic risk of the portfolio.

The differential return is calculated as follows:

\[
\alpha_p = R_p - E(R_p)
\]

Equation (13)

Where;

- \( \alpha_p \) = Differential return earned
- \( R_p \) = Actual return earned on the portfolio
- \( E(R_p) \) = Expected return

---

Thus, $\alpha_p$ represents the difference between actual return and expected return. If $\alpha_p$ has a positive value, it indicates that superior return has been earned due to superior management skills. When $\alpha_p = 0$, it indicates neutral performance. It means that the portfolio manager has done just as well as an unmanaged randomly selected portfolio with a buy and hold strategy. A negative value of $\alpha_p$ indicates that the portfolio’s performance has been worse than that of the market or a randomly selected portfolio of equivalent risk.

The alpha value in Jensen measure can be tested for its degree of significance from the value of zero by statistical methods. This means, an analyst can determine whether the differential return could have occurred by chance or whether it is significantly different from zero in a statistical sense.

4) Eugene Fama’s Decomposition of Total Return:¹⁰²

The performance measures discussed for far assess the overall performance of a portfolio or fund. Eugene Fama has provided an analytical framework that allows a detailed breakdown of a fund’s performance into the source or components of performance. This is known as the Fama Decomposition of total return. The total return on a portfolio can be firstly divided into two components, namely risk free return and the excess return. Thus,

\[ \text{Total return} = \text{Risk free return} + \text{Excess return} \]

The excess return arises from different factors or sources, such as risk bearing and stock selection. Hence, the excess return, in turn, may be decomposed into two components, namely risk premium or reward for bearing risk and return from stock selection known as return from stock selectivity. Thus,

\[ \text{Excess return} = \text{Risk premium} + \text{Return from stock selection}. \]

The risk of a security is of two types: Systematic risk and Unsystematic risk or diversifiable risk. When a portfolio of securities is created, most of the unsystematic risk or diversifiable risk would disappear. But, in practice, no portfolio would be fully diversified. Hence, a portfolio would have both systematic risk and a small amount of diversifiable risk. Hence, the risk premium can be decomposed into two components, namely return for bearing systematic risk (market risk) and the return for bearing diversifiable risk.

**Risk premium** = Return for bearing systematic risk + Return for bearing diversifiable risk

Thus, the total return on a portfolio can be decomposed into four components.

Return on portfolio = Riskless rate + Return from market risk + Return from diversifiable risk + Return from Pure selectivity

This may be represented as;

\[ R_p = R_f + R_1 + R_2 + R_3 \]  
Equation (14)

Each component can be calculated. The risk free rate of return \((R_f)\) in the return available on a riskless asset such as the government security, T-bill, bank rate etc.

The return from market risk \((R_1)\) is calculated as:

\[ R_1 = \beta_p (R_m - R_f) \]  
Equation (15)

Where;

- \(R_f\) = Risk free rate.
- \(R_m\) = Return on market index.
- \(\beta_p\) = Systematic risk of the portfolio.

The return from Diversifiable risk \((R_2)\) is calculated as:

\[ R_2 = [(\sigma_p / \sigma_m) - \beta_p] (R_m - R_f) \]  
Equation (16)

Where;

- \(\sigma_p\) = Standard deviation of portfolio return
- \(\sigma_m\) = Standard deviation of market index return.

The return from pure selectivity \((R_3)\) can be obtained as the difference between the actual return and the sum of the other three components.

\[ R_3 = R_p - (R_f + R_1 + R_2) \]  
Equation (17)
The return from pure selectivity is really the additional return obtained by a portfolio manager for his superior stock selection ability. It is the return earned over and above the return mandated by the total risk of the portfolio as measured by standard deviation. Mathematically, this can be calculated as the difference between the actual return on a portfolio and the return mandated by its total risk. This is also known as Fama’s net selectivity measure. The following formula may be used for calculating the measure.

**Fama’s net selectivity** = \( R_p - [R_f + (\sigma_p/\sigma_m) (R_m-R_f)] \)  

Equation (18)

Where;

- \( R_p \) = Actual return on portfolio.
- \( R_f \) = Risk free rate.
- \( R_m \) = Return on market index.
- \( \sigma_p \) = Standard deviation of portfolio return.
- \( \sigma_m \) = Standard deviation of market index return.

The return from net selectivity may be negative. This occurs when the actual return realized on a portfolio is less than that mandated by the total risk of the portfolio. This indicates that, due to poor stock selection, the portfolio has not earned the return expected from it commensurate with its total risk.

The decomposition of total return is useful in identifying the different skills involved in active portfolio management. A portfolio manager who attempts to earn a higher return than the market return assumes higher risk and depends on his superior stock selection ability to achieve the higher return. If he is successful, the return due to pure selectivity would be positive.

Portfolio evaluation completes the cycle of activities comprising portfolio management. It provides a mechanism for identifying weaknesses in the investment process and for improving the deficient areas. Thus, portfolio evaluation would serve as a feedback mechanism for improving the portfolio management process.
Most investors are intuitively comfortable interpreting the economic meaning conveyed by a rate of return. Some are comfortable interpreting the various measures of risk based on the idea of return deviations. Professional investors understand the information conveyed by the Sharpe ratio. But many investors of performance measurement statistics, not working day to day with these tools, find Sharpe ratios confusing because they do not know its inputs and meaning. If an investor does not know what goes into it, it is hard to know whether a fund is better because it has a higher or lower ratio, because the risk and return tradeoff is the focus of investment decision making, the development of an unambiguous measure of risk-adjusted performance that is understandable by a wide audience is of critical importance. Without such a measure, many investors may be making decisions based on absolute returns or with only a rough consideration of the risks taken to earn these returns. Regulators and industry are still searching for this measure. There is no standard risk-adjusted performance statistic that has the broad based support that the time weighted return has on the return side of the performance measurement coin, but one candidate is the Modigliani and Modigliani, or $M^2$ return.

Dr. Franco Modigliani, a Nobel economic laureate at MIT, and Leah Modigliani, analyst at Morgan Stanley, are credited with developing the $M^2$ return to help investors compare returns that have been adjusted for risk.

Franco Modigliani and his granddaughter proposed a new performance measurement technique in 1997 which they called $M^2$. The $M^2$ performance measure expresses the relative performance in risk-adjusted basis points. The key is to ensure that the portfolio being evaluated and the benchmark have the

---

same standard deviation. To do this, risk-adjusted portfolio return is calculated by using the following equation.

\[
R_{\text{rap}} = \frac{S_m}{S_p} R_{\text{ap}} + \left(1 - \frac{S_m}{S_p}\right) R_f
\]

Equation (19)

Where;

- \(R_{\text{rap}}\) = Risk adjusted portfolio
- \(R_{\text{ap}}\) = Actual portfolio
- \(\sigma_m\) = Benchmark standard deviation
- \(\sigma_p\) = Portfolio standard deviation
- \(R_f\) = Risk free rate

6) **SORTINO RATIO MODEL:**

The Sortino ratio was created by Brian M. Rom at the software development company Investment Technologies in 1983. The ratio is named for Dr. Frank A. Sortino, an early popularizer of downside risk optimization. It measures the risk-adjusted return of an investment asset, portfolio or strategy. It is a modification of the Sharpe ratio but penalizes only those returns falling below a user-specified target, or required rate of return, while the Sharpe ratio penalizes both upside and downside volatility equally. Though both ratios measure an investment's risk-adjusted returns, they do so in significantly different ways that will frequently lead to differing conclusions as to the true nature of the investment's return-generating efficiency.

The Sortino ratio is used as a way to compare the risk adjusted performance of programs with differing risk and return profiles. Any risk adjusted return is just trying to normalize the risk across programs, and then see which has the higher return unit per risk.

The ratio is calculated as:

\[
S = \frac{R - T}{DR}
\]

104 http://en.wikipedia.org/wiki/Sortino_ratio
Where;

**R** is the asset or portfolio average realized return;

**T** is the target or required rate of return for the investment strategy under consideration, (T was originally known as the minimum acceptable return, or MAR);

**DR** is the target semi-deviation (the square root of target semi-variance) and is termed downside deviation. It is expressed in percentages and therefore allows for rankings in the same way as standard deviation.

An intuitive way to view downside risk is the annualized standard deviation of returns below the target. Another is the square root of the probability-weighted squared below-target returns. The squaring of the below-target returns has the effect of penalizing failures at an exponential rate. This is consistent with observations made on the behavior of individual decision-making under uncertainty.

\[
DR = \sqrt{\int_{-\infty}^{t} (T - r)^2 f(r) \, dr}
\]

Where;

**DR** = downside deviation (commonly known in the financial community as 'downside risk'). Note: By extension, \( DR^2 = \) downside variance.

**T** = the annual target return, originally termed the minimum acceptable return, or MAR.

**r** = the random variable representing the return for the distribution of annual returns \( f(r) \).

**f(r)** = the distribution for the annual returns, e.g. the three-parameter lognormal distribution.

Using the observed points to create a distribution is a staple of conventional performance measurement. For example, monthly returns are used to calculate a fund’s mean and standard deviation. Using these values and the properties of the normal distribution, we can make statements such as the likelihood of losing money (even though no negative returns may actually have been observed), or the range within which two-thirds of all returns lies (even though the specific returns identifying this range have not necessarily occurred). Our ability to make these statements comes from the process of assuming the continuous form of the normal distribution and certain of its well-known properties.
3.17 BENCHMARK INDICES: A fund manager’s performance can be assessed with the help of certain benchmarks. Benchmarks are nothing but independent portfolios that are not managed by any fund manager. They are purely representative of the behavior in market returns of selected securities. For instance, the S&P CNX Nifty is a portfolio of 50 securities traded on the National Stock Exchange. Similarly, the BSE Sensitive Index is a portfolio of 30 securities traded on the Bombay Stock Exchange. These indices and their movement to a large extent represent the movement in prices as well as returns, of large, actively traded stocks in the equity market. These independent portfolios can be used to measure the performance of a fund manager.

Qualities of an ideal benchmark:

The have a meaningful performance evaluation of a fund manager, his fund performance should be compared with the benchmarks. For fruitful comparison, the benchmark should have the following qualities.

- The benchmark should be completely independent.
- The fund manager should not have any influence over it nor should he manage it.
- The benchmark should comprise of market securities and it should be representative of the risk and return of the underlying market.
- The benchmark value should be publicly available everyday for the purposes of computing returns and comparison.
- As far as possible, the benchmark should represent the investment objective of the fund with which a comparison has to be made. In other words, the benchmark portfolio should match the mutual fund portfolio in objectives.

---

**Benchmarks used in the mutual fund industry:**

The same benchmark cannot be used for all the schemes of a mutual fund. It differs from scheme-to-scheme and from fund-to-fund depending upon the objective of its portfolio. Generally, the following benchmarks are used in the mutual fund industry:

- For actively managed all equity portfolios, the BSE Sensex and the S&P CNX Nifty are used as benchmarks.
- For broad based equity portfolios, S&P CNX 500 is used as benchmark since this index tracks the returns on the equity shares of 500 companies.
- For sectoral funds, sectoral indices are used to evaluate the performance of those funds.
- For short-term liquid funds and money market funds, the Treasury bill rates and the NSE MIBOR are used as benchmarks.
- For bond funds, I-Bex, an index of government bonds is used as a benchmark.
- For a combination of both equity funds and debt funds, the benchmark should also be a combination of an equity index and a debt market index in the same proportion of the fund investments.

**Benchmarks as a tool for performance evaluation:**

Once the benchmark is decided, then one should know how to evaluate the performance of a mutual fund with the help of the chosen benchmark. One has to simply compare the behavior of the returns of the benchmark and the NAV of the mutual fund over the same period of time. It clearly indicates to what extent the mutual fund portfolio has tracked the underlying benchmark. If a fund performs better than the benchmark, it is said to have outperformed. On the other hand, if the performance is worse when compared to the benchmark, it is said to have underperformed. A common size graph can be used for an effective and fruitful comparison of NAV and the benchmark.
SEBI guidelines on Benchmark:

The SEBI has laid down the following conditions for the use of benchmark.

- Mutual funds should use only those benchmarks that reflect the asset allocation of the fund.
- The period of comparison of returns should be identical for the fund and the benchmark.
- If the scheme’s offer document indicates a benchmark for return comparisons, the same should be used by the scheme.
- Growth funds with more than 60 percent in equity should always use any of the standard indices like; Sensex, NSE Nifty, BSE 100 and CRISIL 500. These indices should be used consistently throughout. Changes can happen only when asset allocation of the fund has changed significantly, and trustees approve the change.
- Income funds with more than 60 percent in debt should use a bond market index on benchmark.
- Balanced funds can make use of tailored benchmarks that combine equity and bond index returns in the same proportion as in the asset allocation of the fund.
- Money market funds can make use of money market instrument or a combination of such instruments as benchmark.

By keeping in view of the SEBI’s guidelines on benchmark, the present study is based on growth fund schemes are floated in Large-cap, Large & Mid cap, Multi cap and Mid & Small cap categories. Therefore, the researcher has intends to select NSE index which is used as a standard index, it includes S&P CNX Nifty, S&P CNX Midcap Index and S&P CNX 500, which were used for the present study to compare respective portfolio returns with benchmark returns. The chosen benchmarks are used in relation to their different schemes. A brief detail of the chosen benchmark indices are shown below:
S&P CNX Nifty

The CNX Nifty is the flagship index on the National Stock Exchange of India Ltd. (NSE). The Index tracks the behavior of a portfolio of bluechip companies, the largest and most liquid Indian securities. The CNX Nifty is a well diversified 50 stock index accounting for 22 sectors of the economy. It is used for a variety of purposes such as benchmarking fund portfolios, index based derivatives and index funds. CNX Nifty is owned and managed by India Index Services and Products Ltd. (IISL). IISL is India's first specialised company focused upon the index as a core product. The CNX Nifty Index represents about 68.99% of the free float market capitalization of the stocks listed on NSE as on December 31, 2013. The total traded value for the last six months ending December 2013 of all index constituents is approximately 59.01% of the traded value of all stocks on the NSE. Impact cost of the CNX Nifty for a portfolio size of ₹.50 lakhs is 0.06% for the month December 2013. CNX Nifty is professionally maintained and is ideal for derivatives trading.

Graph 3.3: Trends of S&P CNX Nifty during the period from 2007-08 to 2012-13
**CNX 500 Index:**

The CNX 500 is India’s first broad-based benchmark of the Indian capital market for comparing portfolio returns vis-à-vis market returns. CNX 500 Index is computed using free float market capitalization method, wherein the level of the index reflects the total free float market value of all the stocks in the index relative to particular base period. CNX 500 can be used for a variety of purposes such as benchmarking fund portfolios, launching of index funds, ETF’s and structured products.

- The CNX 500 Index represents about 96.76% of the free float market capitalization of the stocks listed on NSE as on December 31, 2013.
- The total traded value for the last six months ending December 2013, of all Index constituents is approximately 97.01% of the traded value of all stocks on NSE.

The CNX 500 companies are disaggregated into 72 industry indices viz. CNX Industry Indices. Industry weightages in the index reflect the industry weightages in the market. For e.g. if the banking sector has a 5% weightage in the universe of stocks traded on NSE, banking stocks in the index would also have an approx. representation of 5% in the index.

**Graph 3.4: Trends of S&P CNX 500 during the period from 2007-08 to 2012-13**

![Graph showing trends of S&P CNX 500 from 2007-08 to 2012-13](image-url)
• **S&P CNX Midcap:**
  The medium capitalised segment of the stock market is being increasingly perceived as an attractive investment segment with high growth potential. The primary objective of the CNX Midcap Index is to capture the movement of the midcap segment of the market. The CNX Midcap Index comprises 100 tradable stocks listed on the National Stock Exchange (NSE). CNX Midcap Index is computed using free float market capitalization method, wherein the level of the index reflects the total free float market value of all the stocks in the index relative to particular base market capitalization value. CNX Midcap can be used for a variety of purposes such as benchmarking fund portfolios, launching of index funds, ETF’s and structured products.

**Market Representation**
- The CNX Midcap Index represents about 12.45% of the free float market capitalization of the stocks listed on NSE as on December 31, 2013.
- The total traded value for the last six months ending December 2013, of all index constituents is approximately 18.70% of the traded value of all stocks on NSE.

**Graph 3.5: Trends of S&P CNX Midcap during the period from 2007-08 to 2012-13**