CHAPTER II

REVIEW OF LITERATURE & METHODOLOGY

This chapter makes an attempt to comprehend the earlier research studies on the performance evaluation of Factoring and Mutual Fund as well as on banking industry and calls out the major findings and further problems to be investigated in the present study. It also deals with the description of the study area, sampling procedure adopted, nature and source of data, analytical techniques employed, procedure adopted for ranking of the Factoring organisation, fund deployment of mutual fund organisation and the key terms and concepts used.
Banking industry is one of the important industries for the development of trade and commerce. Public sector banks play a vital role in the economic development of a country. The liberalisation and globalisation policy has compelled the public sector banks to diversify their services from traditional services and gave momentum to non-banking services. Factoring and mutual funds are the major non-banking services provided by public sector banks through floating subsidiaries. There is vast literature provided by eminent scholars and financial experts on different aspects of banking industry and financial services. The research work conducted in banking industry so far consists of by and large on productivity, growth performance, loans and advances, customer services etc., but less studies have been conducted on non-banking services. To examine the objectives of the present study, it was felt necessary to review the findings of the previous studies conducted and methodology used therein. The review of literature on the factoring and mutual fund in public sector banks will provide a framework for the present study and serve as a purpose for further investigation either to approve or disapprove the available findings. The findings of the existing literature are provided as under

2.1 REVIEW OF LITERATURE ON FINANCIAL SERVICES IN BANKING INDUSTRY

A.K. KANTHALE(1989) found that most of subsidiary and ancillary business in banks are closely related to the main functions of banks. It was observed in the study that any deliberate attempt to deviate from the so called traditional functions, for the reason of viability is the most unfortunate step. It not only deviates banks from main

1 A.K.Kanthale,Diversification of banking business to meet the challenges- problems and prospects of departures from traditional banking. The banker,1989
objectives but it is equally difficult to maintain viable working of these function for long, due to inherent weaknesses and forces operating in the market.

STEVE CROSS, NIGEL OGILIVE(1990) observed that the 1980s witnessed continuing trend towards banking consolidations. They found that the 1980s was an interesting decade for U.S commercial banks. Although many faced mounting problems and hundreds failed, the industry as a whole recorded profit.

A. WILLIAM SCHENCK(1990) noted that as globalisation widens the competition will come from foreign banks as well as other domestic banks and non–bank financial service companies. The winners in the banking industry will be those institutions who focus on customers, build depth and quality of management, provide consistent and reliable service and deliver high–quality, competitively priced products.

S.M. PADWAL(1991) perceived that international wave of liberalisation of economic system was likely to be witnessed in Indian banking and also the development of high degree of diversification in banking activity. The study concluded that increased competition would necessitate marketing approach to tap unexplored/under explored market segment in rural, semi-urban and metro politan market segment.

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3 A. William Schenck, New Business Opportunities in commercial banking, The banker, April, 1990
4 S.M. Padwal, Liberalisation and its impact on banking and finance, Prajan, vol XII No 2, 1991
PRASAD. B (1991) made an attempt to describe various innovations that have taken place in the banking industry in India. He commented that innovations in banking industry are either market induced, policy induced or socially induced. It was confirmed in the study that innovations that have been market induced has more impact rather than policy and socially induced innovations.

B.J. MADHYAM(1991) found that banking industry is service industry, its improved efficiency due to automation will lead to a faster rate of growth in output and help to expand employment all around. It was discerned by the work force in the banking industry which must look upon computerisation as a means to improve customer service and must welcome it in that spirit.

E.S. MOHAN(1991) stated that technology based products, information systems and networks provided in banks will have competitive edge, better service and control of operations. It was noticed that while retaining their individual identity it is possible and desirable for the nationalised banks to come together and pool their resources to face the challenges arising from technology upgradation and globalisation.

N. RAMCHANDRAN(1991) remarked that the need of the hour is a systematic effort on part of the banking industry to augment income, reduce or control expenditure and improve operational efficiency. It was observed that banking, a multi-service industry is currently passing through a very crucial phase with public expectations running high.

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5 B.M.Prasad, Innovative banking, IBA,Feb.1991
7 E.S.Mohan, Technology upgradation and globalisation in banking,IBA,VolXIII,No5,1991
8 N.Ramchandran, Profit planning as a management tool for profit maximization, Facts for you,1991
D. AJIT(1997) observed that need for a profit center, diversification of earnings, maximisation of economies of scale and have leading market position are the reasons for the bank entry in to para banking activities. He studied that para banking activities have the potential for higher profit but also the drawbacks of greater volatility.

SUMONKUMAR BHAUMIK(1997) found that banking system in an LDC or in an emerging economy is not merely about allocational efficiency but should also take in to consideration welfare and equity related issues. The study clearly makes a case in favour of privatisation and decentralisation.

U. R. PATEL(1997) spotted that competition is considered as an opportunity for banks to enter global financial services. It was found in the study that financial services are assuming increasing importance in banking industry.

I.C. JAIN(1997) ascertained that customer service has to be the top priority for banks. Banks will have to upgrade their technology and change the work attitude to offer various innovative products and services to match with those offered by foreign banks in India and abroad. It was further observed that the emerging competition will be among the banks which are financially strong, technologically superior and financially efficient, and have flexible work culture.

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9 D.Ajit, Parabanking in India, Economic and political weekly, 1997
10 S.Baumik, Financial liberalisation and regulation of banks: A bird's eye view, Management and change, volume, No2, 1997
11 U.R.Patel, Emerging reforms in Indian banking-International perspectives, economic and political weekly, 1997
12 I.C.Jain, Role of banks under liberalisation: A case for privatization and adopting liberallicencing policy, Vinimaya, VolXVII, No1 1997
S. O. JUNARE (1998)\textsuperscript{13} found that innovation is a continuous process and it will continue to flourish, as financial markets and the financial service industry become even more competitive.

GANTI SUBRAHMANYAM (1998)\textsuperscript{14} study established that the more and more non-banking organisation will provide the banking functions than banking organisation themselves in the coming century. It was further observed that banks need to regear their distribution system according to changing customer preference.

T. AMMAYA (1999)\textsuperscript{15} pointed that the Indian regulators and by extension the regulartees i.e the banks are certainly moving in the direction of universal banking. It was found that the SBI is renewing itself to become a world class universal bank- a bank which provides a benchmark to others.

A.R. CHANSARKAR (1999)\textsuperscript{16} authenticated that the public sector banks have witnessed substantial loss in the market share deposits. Aggressive marketing strategies, maintenance of quality of assets, single window service and regular employees motivation may help in increasing the market share of public sector banks.

SAVEETA BHATIA AND SATISH VERMA (1999)\textsuperscript{17} observed that the priority sector advances influenced negatively the profitability of public sector banks in India.

\textsuperscript{14} G.Subramanyam, Banking in the next Millenium, Vinimaya, VolXIX, No 2, 1998
\textsuperscript{15} T.Ammaya, Universal Banking ,SBI monthly review, 1999
\textsuperscript{16} A.R.Chansarkar, Market share of public sector banks in the post reforms period, The Indian journal of commerce, vol52, No 2, 1999
\textsuperscript{17} S.Bhatia and S.Verma, Factors determining profitability of public sector banks in India: An application of Multiple regression model, Prajnan, Vol XXVII, No 4, 1999
Further fixed/current deposit ratio and establishment expenses influenced inversely to their profitability of commercial banks. It was further observed that cash/deposit ratio was influencing positively their profitability.

**MULUL K. GUPTA (2000)** found that customer retention and value maximisation value are the two key aspect which will drive the banking business in the new millennium. It was further observed that in the new millennium there will be more existence of virtual banks having low operating costs which will enable them to provide products and services at a much a lower cost and thus provide tough competitors.

**SRIVASTAVA S. (1993)** disclosed that emerging financial services are used by corporate sectors includes leasing, mutual funds, merchant banking, venture capital, factoring etc. He concluded that by introducing several innovative schemes and services banks have fully geared up to meet the future financial requirements of the expanding corporate sector. He further observed that by diversifying their activities commercial banks and other financial institutions have not only accelerated the pace of the industrial development but have also improved their profitability. Since most of the services are in their infancy stage continuous monitoring and evaluation must be carried on by RBI, SEBI and other similar bodies.

**R.K MITTAL AND ASHOK KUMAR (2002)** conducted a study with an objective of analysing the key issues involved in investment management in banks. It was found in the study that banks are now putting more and more of their funds to in securities.

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18 M.K. Gupta, When a bank is a bank?, Business India, Jan, 2000
19 S. Srivastava, Banking and finance, April 1993
Effective management of a bank's investment portfolio has assumed critical importance in recent years because of increased business competition and interest rate volatility. They further observed that prevailing needs of investment such as trading of securities, strengthening of capital base, risk factors, liquidity and the profitability, strengthening of information system in banks may prove quite useful and effective in the investment management of banks.

2.1.1 Review of literature on mutual fund services

A. MICHAEL LIPPER (1991)\(^{21}\) studied that the banks need to find out customers and develop products specific to their needs. They should also imitate insurance agents and start spending time with their clients outside the bank. It was found that most bank customers are attracted to banks' image as cautious, middle-of-the-road investment manager—an image that may be unwarranted. As managers of fixed-income funds, banks are more likely to be driven by maturity and coupon than to rely on credit analysis. Equity funds generate higher management fees and sales commissions. They typically have higher yields than fixed-income funds, thus expenses have a smaller impact.

T.N. PANDEY (1991)\(^{22}\) substantiated that the growing interest in new investment schemes by mutual funds, including equity linked saving schemes, is welcome from the point of view of the common man who is shy of making direct investment in equities due to speculations. It was further observed that the managers of the funds have to

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\(^{21}\) A. Michael Lipper, High returns don't guarantee, Mutual fund success, ABA Banking Journal, December, 1991

\(^{22}\) T.N. Pandey, New investment culture—mutual funds, Magnum, ELSS, Indian Journal of Finance and Research, vol 1 no 2, 1991
proceed with caution and care so that good returns may come with least risk to the capital invested.

S. SATCHIDANAND(1991)\(^{23}\) attempted to the need of supervision in banks about mutual funds. The basic objective of allowing the banks to enter the mutual fund business was to channelise the household savings to in the capital market by providing the benefits of diversified portfolio to a small investors. He observed certain issues in supervision of bank funds and they are regulatory framework for mutual funds, imposition of a maximum limit on the amount raised under a mutual fund scheme and other issues relating to regulation such as portfolio concentration avoidance, the asset classification and valuation, the development of internal control system, the details of audit programmes, the details of periodic inspection of books of accounts, the nomination of the representative on the board of trustees, the implementation of uniform accounting disclosure standards and reporting requirements. In the light of these it may be useful to bring out a comprehensive legislation for mutual fund.

DEBRA MCGINTY- POTEET(1991)\(^{24}\) observed that banks and mutual funds have a bright future together, according to consultants and executives within the banking and financial service industries. A study commissioned by the investment company institute, the trade group of the mutual fund will probably increase more than that of any other distribution of channel over the next four years. It was found that mutual fund products in banks can be utilized to diversify revenue streams and increase fee income. The banking community is also interested in mutual funds because of the requirements, which call for a minimum amount of reserves for every dollar on

\(^{23}\) S Satchitanand, supervision of bank sponsored mutual fund, IBA bulletin,1991

\(^{24}\) DebraMeginity-poteet, Banks and mutual funds-partners in the 1990s,The banker magazine,1991
dollar on deposit, traditional deposit accounts are not as attractive as they once were. Mutual fund can and should be seen as complementing both bank and saving institution product lines. An institution's best advantage is that it can rely on the same distribution channels used for traditional depositary products to turn banking customers into bank-affiliated mutual investors.

HARVE RICE (1993) reviewed the performance of bank sponsored mutual funds. He observed that healthy market and investment experience helped the bank to boost record of performance.

NALINI PRAVA TRIPATHY (1994) found that there are multiple regulations to supervise mutual funds in India. Investors in India prefer to invest in mutual fund as a substitute of fixed deposits in banks. It was found that with the structural liberalisation policies of Indian economy is likely to return to a high growth path in few years. Hence mutual fund organisation are needed to upgrade their skills and technology. It was observed that the success of mutual fund however would bright in near future.

SATYAJIT DHAR (1994) observed that experience of advanced countries reveal a wide participation of public in mutual fund schemes associated with transparency of operation, better access to information and variety of choices. The study further reveals that in India with the entry of private sector mutual fund associated with constant accountability to SEBI armed with statutory power, there would be a substantial change in dimensions and investment texture of the funds. It was further

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25 Harve Rice, Banks mutual funds keep flying high, Bank Management, July 1993
26 Nalini Prava Tripathy, Mutual funds in India: Financial service in capital market, Finance India, vol X, No 1, March, 1996
27 Satyajit Dhar, Mutual funds in India—a close look, Finance India, Vol VIII, No 3, 1994
observed that the real test of mutual fund performance would be their abilities to protect NAVs and the returns in the cases of falling market by appropriate investment strategies.

M. JAYADEV(1995)\textsuperscript{28} found that there is need for a rational and accurate method in valuation of unquoted and untraded securities. Annual reports should be more transparent especially regarding unquoted, untraded securities and also on interscheme transactions with full transparency of portfolio composition.

JAY.W.GOLTER(1995)\textsuperscript{29} exhibited the growth of mutual funds in USA in first section and next section describes the major functionaries employed by a mutual fund and the extent to which a banks or bank affiliates have provided these services for mutual funds. Mutual funds in the United states can trace their origins to investment trusts established in England and Scotland in the early 19\textsuperscript{th} century. As of year1993, 93.6 per cent of the asset managed by nations fund were in money—market funds. Mutual funds in USA are governed by the Securities Act of 1933( the 1933 act), the Securities exchange Act of 1934(the 1934 Act), the Investment Advisers Act of 1940, relevant sections of the Internal Revenue Act and blue sky laws of each state in which a fund operates. As the mutual fund industry developed to in major vehicle for financial intermediation, bank involvement with the industry grew. Banks have become a significant component of the distribution channel. The banks plays an significant role in mutual fund industry through acting as transfer agents, custodians, investment advisors, distribution channel etc. The study concluded that with an

\textsuperscript{28} M. Jayadev, valuation of Mutual funds units, Chartered secretary, oct.1995
\textsuperscript{29} Jay.W.Golter, Banks and Mutual funds, FDIC banking review, vol8, no3, 1995
examination of the ways that banks have entered the distribution channel by selling mutual funds to their customers.

MOHINDER N. KAURA AND M. JAYADEV (1995) examined the performance of mutual fund by using Jensen, Treynor and Sharpe model. These measures are developed on the assumption of the capital asset pricing model (CAPM). According to:

a) Jensen measure (1968) equilibrium return on a portfolio would be a benchmark. It is computed by using \[ \text{EAR}_p = R_i + (R_m - R_f) \beta_p \]

b) Reward to volatility ratio

This ratio is introduced by Treynor (1965) and similar to the above discussed Jensen measure. An additional returns of the Portfolio over the risk free return is expressed in relation to Portfolio systematic risk.

\[ \text{RVOL}_p = \frac{R_p - R_f}{\beta_p} \]

\( \text{RVOL}_p \) is reward to volatility of the Portfolio

(c) Reward to Variability

This ratio was developed by Sharpe (1966) additional Portfolio return over risk free return is related with the total risk of the Portfolio.

\[ \text{RVAR}_p = \frac{R_p - R_f}{\sigma_p} \]

It was observed that only mastergain has earned superior returns with respect to systematic risk and UGS 5000 not up to mark. It was also that growth oriented mutual funds possibly out perform the market with respect to systematic risk and exceptionally demonstrate superior performance in terms of total risk.
ALLEN J GRIVE (1996) revealed that individual investor like mutual funds because of three factors which are key to analyzing the effectiveness of bank/mutual fund partnership and they are diversification, selection and flexibility. The study observes that there exists partnership between bank and mutual fund companies. Each partner brings particular strengths to the bank/mutual fund industry partnership. Commercial banks provide convenient customer access, related financial services and the ability to build customer relationship beyond a specific investment transaction. Mutual fund companies and advisory firms have proven to be effective in research investment strategy and the targeting of funds to different market segment.

NALINI PRAVA TRIPATHY AND PRAMOD K. SAHU (1998) assessed the performance evaluation of mutual funds schemes. The study was conducted with an objective to learn whether the Government oriented mutual funds are earning higher returns than the market Portfolio returns and they are offering the advantage of diversification. The study undertakes an evaluation of ten major growth oriented schemes. The data for the study include annual returns for the accounting year from October 1994 to September 1995 and the risk is calculated on the basis of month-end Net asset values and Bombay stock exchange sensitive index (sensex) assessed as market index or benchmark. The capital asset pricing model (CAPM) was used.

a) Jenson Measure:

\[ \text{EARp} = \text{Rf} + (\text{Rm} - \text{Rf}) \text{Bp} \]

b) Treynor Measure

\[ \text{RVOLp} = \frac{\text{Rp} - \text{Rf}}{\text{Bp}} \]

c) Sharpe Model

31 Allen Grive, Two, Bank Management, Jan, 1995
32 Nalini Prava tripathy and Pramod sahu, Performance of selected growth-oriented mutual funds in India, UTI Institute of Capital Market, 1998
It was observed that most of the mutual funds on an average have fared better than the direct stock market return. It was noted that even though the LIC Dhanvikas (I) is well diversified and the fund is not affected by non-market related risks, still it shows negative return because due to fund managers Professional acumen of selectivity.

**K.V.Rao and K.Venkateswarlu (1998)** evaluated performance of Unit Trust of India with reference to number of parameter. Performance of open ended schemes and close ended schemes of UTI was evaluated by using growth analysis, sales, unit capital, investible funds, reserves and surplus, gross income & gross expenses were selected as variables. The efficiency of open ended schemes and close ended schemes were also assessed through computing ratios. The ratios computed were turnover, earning percentage to sales, return on investment, expenditure to total income and expenditure to investible funds, Pattern of funds development of open ended and close ended schemes of UTI were covered. It was found in the study that taking into account volatility of the returns all the growth schemes are more volatile than the market. Considering the diversification only two schemes VIZ UGS-2000 and UGS-5000 have reasonable diversification. When Jensen's alpha is calculated taking NAV into account, all the growth schemes outperformed the market. It was further noted that there has been an excellent growth in the funds mobilised by UTI.

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33 K.V.Rao and K.Venkateswarlu , Market timing abilities of fund managers-A case study of Unit Trust of India, A paper presented at the second capital market conference organized by UTI institute of capital market, Mumbai
D. MUKHOPADHAY (1998)\textsuperscript{34} studied the factors responsible for ailment of mutual fund industry and suggested remedial measures so that mutual fund industry can play an analytic role in the capital market. He observed that liquidity crisis, scanty market makers, lack of products differentiation, insignificant diversification of risks, no accountability of low performance, lack of initiative to educate the common investors, no no-load schemes, no insurance against capital erosion, no room for rural sector investor base, no attempt to maintain parity between fund management expenses and NAV of the units and investment in unappraised projects are the factors responsible for ailment which hinders the growth of Indian mutual fund industry. It was found that investors need comprehensive and qualitative information in order to induce themselves to invest in the mutual funds. Investors basically judge the commercial performance of a scheme on the basis of return generated by the scheme.

AJAY SRINIVASAN (1999)\textsuperscript{35} focused on the failure of the mutual fund industry. The growth of mutual fund industry in India was hindered due to several factors and they were as under;

1) Limited competition

2) There was inadequate understanding of the products by the investors and the lack of an enlightened distribution of infrastructure.

3) There wasn't a large enough breed called professional fund manager

4) There were several other opportunities to make money viz the Indian public offer boom, high interest bearing fixed deposits, lending against shares etc.

\textsuperscript{34} D.Mukhopadhay , A treatise on ailment of Indian mutual funds, The management Accountant, 1998
\textsuperscript{35} A.Srinivasan, Mutual funds: the new era, Chartered secretary, September, 1992
He observed that the future of mutual fund industry in the country is bright mainly because it meets investors need perfectly. The open ended fund will revolutionise the way Indian invest and lead the growth of strong institutional framework.

GANESAN, KARAIKUDI AND J.RAJA (2000) studied the mutual fund industry by preparing SWOT analysis. Full benefits of diversification, expert investment management, tax benefits, greater liquidity, convenience, transparency and flexibility are the strengths. Weaknesses include lesser returns compared to equity, conservative approach of professional money managers, poor technology, lack of proper marketing. The government policies and tax concessions especially long term capital gain fixed @20% and exempted after one year are the opportunities whereas the arrival of more private and foreign players, evaluating mutual funds with gold as base for comparision and performance as mutual fund on the basis of consumer price index are some of the threats before mutual fund. The study concluded that growth of middle class investor population ,mutual fund as a low risk avenue of investment will grow in popularity and in the years to come mutual fund will become a vehicle of growth of capital market. As the growth of mutual funds increases, competition will increase and efficiency and expertise will play a major role in survival.

SURINDER PAL SINGH (2000) noticed that fund companies pass investment risk to shareholders, thereby insulating its portfolio from bankruptcy dangers. Other advantages include affordable diversification, a wide selection of investment and plentiful investment.

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37 Surinder pal singh, Mutual fund investing programmes survival and success, Chartered Secretary, 2000
A.S. CHAWLA AND G.S. BATRA (2000) found that investment in mutual fund is attracting investor for compulsory savings and the return and safety are not the important factors. It was further observed that lack of aggressive marketing, more time in redemption and no accountability for low performance are weaknesses of SBI mutual fund. It was observed that proper awareness for investors and agents and schemes should be designed considering nation wide investors base covering rural sector need to be strengthened.

AMIT JAIN (2000) perceived that mutual funds are the best and hassle free avenue for investment. The future of the mutual funds is bright as it has seen a great upward trend in its first phase of operation and is set to grow manifold in near future as the investors are looking at the trend and finding it the most beneficial looking at the trend and finding it the most beneficial avenue considering liquidity, safety and return aspects.

M. R. MAYYA (2000) found that in the larger interest of healthy growth and development of the mutual fund industry to have a separate comprehensive statute to govern uniformly all the mutual funds including Unit Trust of India is required. It was further observed that investments in equities can be elusive but mutual funds can make them seductive.

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37A.s.Chawla and G.S. Batra, Mutual fund evaluation: A study of SBI MF in relation to its competitors, volume4,Number 1,2000
39 Amit Jain, Mutual funds-Trends and features, Chartered Secretary,December,2000
40 M.R.Mayya, Few thoughts on the functioning of mutual funds, chartered secretary,Decm,2000
T.S.RAJESHWARI AND V.E.RAMAMOORTHY (2001) attempted to measure the mutual fund concept awareness level of a sample of 350 retail investors and their perception level of the future performances of the mutual fund industry. The attempt has also been made to identify the demographic and perception level. To assess the mutual fund awareness level among potential retail investors, a list of 12 questions was developed and administered on the respondents. On the basis of the scores obtained, the respondents were classified into four groups.

It was observed that the perception of the potential investors regarding the performance of the Mutual Fund industry is dependent on the annual income and annual saving and other variables like age, sex, etc are not a bar for the awareness/perception level.

GORDON J. ALEXANDER, JONATHAN D JONES AND PETER J NIGRO (2001) presents a general overview of the mutual fund industry and examines several regulatory concerns that are increasingly important in light of the continuing mutual fund boom and resulting focus by regulators on investor protection, investor knowledge and disclosure. The survey data compiled by the office of the comptroller of the currency and the securities and exchange commission are used to examine mutual fund investors’ general investment knowledge, their beliefs about risks and costs and their sources of information used in making fund investments. The study concludes that investor knowledge of the interrelationship between mutual fund

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expenses, risks and performance can be significantly improved. More knowledgeable investors seem more comfortable with the idea of purchasing from a fund company or a broker. The overall level of investors financial literacy is low.

**Y.P. SINGH AND VANITA** (2002) attempted to investigate in to mutual fund investors perceptions and preferences in the changed regime. It was found in the study that most of the investors evaluate the performance of their fund on the basis of absolute returns only and the name of the promoters is the basics criteria used for selecting a mutual fund scheme. Most of the investors are not satisfied with the performance of their mutual funds particularly the investors of public sector mutual funds. Most of the investors are not aware of the risk inherent in mutual fund investments. The most preferred financial assets are debentures and post office deposits. Investors prefer to invest in private mutual funds, open-end schemes and balanced funds.

**HELLARA SLAHEDDINE AND SNOUSSIMENT** (2002) analyse the implications of using multi-factoral model of Carhart(97) which is based on four arbitrage strategies. For the construction and evaluation of the model four zero investment mimicking portfolio have been taken: high book to market minus low book to market(HML), small size minus big size(SMB) high prior year return minus low prior year return(PVIYR) and CRSP values weighted index less-T-bills(RMRF). Carhart measure for fund J is calculated with the regression

\[ R_{it} - R_{ft} = \alpha + b_1 R_{MRFi} + b_2 S_{MBi} + h_j HML + p_j PVIYR \]

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It was found that 50 percent of the funds have a positive and significant coefficient of the book to market ratio and the balance show a non-significant coefficient which suggest that the winners return are either sensitive to stocks that have low book to market ratio or are not affected at all by this criterion.

LALIT KHANNA (2003) studied the organisational structure of mutual fund. He observed that mutual fund is constituted in the form of trust. It has three tier management system consisting of sponsor, trustee and asset management company (AMC). The AMC is responsible for maintaining proper books of accounts, records and documents for each scheme. Mutual fund categorises the securities into traded securities, thinly traded securities (equity related), thinly traded debt securities, government securities. Securities categorised to in thinly traded/non-traded securities on the basis of trading volumes in a particular period at the stock exchange. Non traded/thinly trade securities are valued in good faith by the AMC on the basis of valuation principles as laid down in regulations. He further noted that SEBI has issued guidelines for identification and provisioning of non-performing assets.

G. SETHU AND RACHANA BAID (2003) evaluated the trends in the Indian mutual fund industry. They found that the benefit of an enhanced activity level in the Indian mutual fund industry is evident in the industry structure. They observed that Indian mutual fund showed poor diversification till the second half of 1990s. Marketing strategies are thought by the AMC in consultation with the marketing/media adviser. Mutual fund have also taken the lead to use the vast postal department.

45 Lalit Khanna, Accounting for Mutual funds, Decision, Vol 30, No 1, Jan-June, 2003
RENU JATANA, JOSEPH KEROS AND BOSIRE (2003)\textsuperscript{47} conducted study with an objective to review the development in investment patterns of mutual funds industry in terms of various innovative products and investment patterns and also assess the investors attitudes with regard to their preference for mutual fund schemes. The study is based on primary and secondary data. The statistical tools used are averages and mean standard deviation and percentages. It was observed that there is drastic shift of interest to private sector mutual funds. Most of the investors preferred open ended schemes. It was further noted that most investors influenced by number of factors, the schemes proposed objectives attract most of them while past performance and the nature of products offered hold same influencing effect upon respondents.

GURUCHARAN SINGH(2003)\textsuperscript{48} evaluated the performance of Indian mutual fund by applying Sharpe and treynor indexes. The study is based upon secondary data. NAV and returns on security have been taken for the two years and the sensex has been noted from the economic times of different dates. Ten open ended schemes were covered under the study. Alpha, beta, co-efficient of correlation, systematic risk and unsystematic were calculated for the equity funds.

JASPAL SINGH AND SUBHASH CHANDER (2003)\textsuperscript{49} conducted study with an objective to study the factors influencing the choice of a mutual fund by an investors. The data was collected through primary data. Weightaged Average Scores (WAS) and

\textsuperscript{47}Renu jatana Joseph Keros and Bosire,Mutual funds and Development- Pricking the bubbles with mutual fund priorities, The Indian journal of commerce, Vol 56 NO4, Oct.-Decm,2003


technique of ANOVA have been applied for the purpose of data analysis. The study was classified into three parts.

Part-I was considered of factors influencing choice of a mutual fund which includes past records of the organisation, growth prospects, credit rating, market speculations, disclosures of adequate information and early bird incentives. Part-II includes options expected from a mutual fund. Repurchase facilities, Easy transferability, prompt service, and information adequacy, Lock-in-period, grievances redressal investor right adherence and cost-effective management. Part-III determines appraisal criteria of mutual funds. It includes portfolio selection, Net Asset value and return (divided received). It was revealed that majority of the investors belonging to salaried and retired categories and those in the age group of more than 60 years gave maximum weightage to past record of the organisation, before deciding about investment in mutual funds. ANOVA showed that the occupation and the age of the respondents do influence their rating of different options expected from a mutual fund for their investment decision.

2.1.2 Review of literature on factoring services

G. Kendall Hubbard (1987) found that factoring works best for firms that have long delays between the making and selling of goods and cash collection. Service industries such as advertising and publishing are prime targets for factoring. The newly start-up companies and emerging businesses are ideal areas for factors to target.

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G. Kendall Hubbard, Factors image under exposed, ABA Banking Journal, 1987
M.J. SUBRAMANYAM(1991) attempted to summarise the findings of the Kalyansundaram committee. The committee recommended the introduction of the factoring services in India to complement the services provided by banks. There is good scope for international factoring. The committee recommended that the government may enact a suitable legislation for the levy of the penal interest for delays beyond a specific period.

NAVINCHANDRA JOSHI(1993) found that factoring services have become a big helping hand in the USA, U.K and western countries. It was further observed that economy of the country also gets geared to meet new challenges of paucity of funds or liquidity for industrial investment. It was found that no credit rating machinery is available in factoring services and it is needed to be developed within banks.

G.H. DEOLALKAR(1994) presented a case for international factoring in India. The Kalyansundaram committee recommended introduction of the factoring services in the country that factoring is to be deemed as a specialised financial activity concomitant to working capital finance provided by banks or even independent of that. It was observed that factoring is a supportive financial service and it should be available to importers and exporters to improve their terms of trade and competitiveness in respect of dealings in suitable products and markets as well as credit worthy of buyers. In India international factoring business will not get recognition particularly export factoring business unless factoring companies gain a suitable recognition.

51 M.J.Subramanyam, Factoring services,IBABulletin,july,1991
52 Navinchandra Joshi, Imperative need for Galvanising factoring services, Banking Fiance,1993
53 G.H.Deolalkar, Case for starting international factoring in India, Indian Banking today and tomorrow
A.K. SENGUPTA (1995) conducted a study on international factoring in India and observed that there is substantial scope for the introduction of international factoring in the country. It was observed that the introduction of international factoring services would open up an alternate window for the exporters. He further pointed that there is a need to scrutinize the some issues before launching of schemes. These issues are classified into legal, policy, strategies dimensions, organizational, and structural. In the legal issues, absence of comprehensive legal framework for international factoring was noticed. Policy and strategies dimension includes type of services, pricing policies, need for development of credit rating system, marketing of factoring services etc. and the organizational and structural issues contain the organizational framework to launch the services in India.

K. NIRMALA (1997) presented an overview of the factoring industry in India. In India, factoring services are provided by the subsidiaries of two leading public sector banks. The study proposes two alternatives for the growth of factoring services and they are:

1) Opening of CanBank factors and SBI factors Ltd. branches all over the country
2) All types of banks can become members of CanBank factors and SBI factors which will help to eliminate the expenses and removal of a few functions i.e., issue of letter of disclaimer by banks.

M.K. MITTAL (1997) found that factoring services are yet to be fully ingrained in the Indian financial systems. The study further reveals that there is a need to extend the

service on non-recourse basis. The study indicates that lot of promotional effort are needed to popularise the services.

S. VENUGOPALAN (2000)\(^{57}\) spotted that factors in India are undertaking "with recourse" factoring only. The growth of factoring market is not on expected lines due to poor awareness of the concept. It was found in the study that CanBank factors and SBI factors are the two major players in the market. It was found that the first private sector factoring company, namely foremost factors limited has commended operations.

D. HIMACHALAM, J. JANARDHANAM, M. SHANKARA AND M. MADHUSUDHANA (2000)\(^{58}\) studied the problems faced in factoring services. It includes absence of professional management, ascertainment of reliable information, collection of dues from clients, inadequate legal provisions for recovery. It was further observed that spread of information about the usefulness of the factoring services among the industrial community so as to make themselves to use this facility on a wider scale.

P. BANNERJEE (2003)\(^{59}\) studied the trends and performance of global factoring business. It was observed in the study that Factoring is expanding in all parts of the world. The compound growth rate of world total factoring volume is 13.54 per cent during the span of 19 years. However, domestic factoring dominates the market share in the total factoring business. The share of domestic factoring is between 92.97 per cent to 95.01 per cent of total factoring business during the study period. The upward

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\(^{57}\) S. Venugopalan, Factoring and Receivables Management, Chartered secretary, 2000
\(^{58}\) D. Himachalam, K. Janardhanam, etc., Marketing of Factoring Services in India- Some Issues, Banking Finance, April, 2000
growth rate of factoring business in some major countries viz Finland, France, Germany, Italy, Japan, Japan, Netherland and Spain has been particularly noticeable. However, concentration ratio, Hirschman-Herfindal index and Entropy index imply that factoring business is still highly concentrated in a few countries although it is expanding slowly in other countries.

2.1.3 Critical Appraisal of review of literature

The review of literature on Factoring, Mutual funds and public sector banks in general presented above reveals the following broad conclusions:

1) Majority of the studies on public sector banks were found more or less descriptive in nature. The studies were more based on innovative services, technology, productivity, performance evaluation etc. There have been very less attempt made to analyse the study in detail about performance of financial services provided by public sector banks.

2) The methodology adopted in presenting the studies was not systematically used to test observations and derive exact conclusion.

3) The reviewed literature on the financial services of public sector banks focussed on general aspects and less studies has been carried out in factoring and mutual funds in public sector banks.

4) The growth analysis of the factoring organisation was not carried on the at macro level. The performance indicators broadly include reserve fund, working capital, investments, income, expense were not used to find growth of factoring. Attempt has been made as a case for international factoring in India.

5) The reviewed literature under the heading of mutual fund were based on growth and performance of mutual fund, role of public sector banks in mutual funds, SWOT
analysis and overview of mutual fund industry in India etc. The valuation of mutual fund and performance evaluation of mutual funds were found by using-risk return analysis. However less studies have been reviewed on the analysing the performance evaluation of mutual funds in public sector banks.

6) Though there were studies on the growth of factoring in India and performance evaluation of mutual funds but hardly an attempt was made to compare the growth analysis of factoring and mutual fund with respect to two leading public sector banks.

7) There has been very few studies conducted with regards to awareness and problems of customers in mutual fund industry. No study has been conducted so far in understanding the awareness and problems of customers in availing factoring services in India.

Keeping in view the shortcomings of the earlier studies, the aspects which were not covered have been given more emphasis in the present investigation.

2.2 DATA AND METHODOLOGY

This section covers the description of the study area, the sampling procedure adopted, the nature and sources of data, the various tools and techniques employed in analysing the data and evaluation of results, procedure adopted for ranking of companies and certain terms and concepts explained to ensure a clear understanding about the present study.
2.2.1 Description of the study area

The two major financial services viz factoring and Mutual fund provided in public sector banks were selected for the study. These services are rendered through promoting separate subsidiaries by public sector banks.

2.2.2 Profile of SBI and CANBANK Factoring and Mutual Fund Organisation

Factoring services are provided by SBI Factors and Commercial services Ltd., CanBank Factor Ltd. and Mutual funds services are rendered by SBI Mutual fund, CanBank Mutual fund promoted by the State Bank of India and Canara Bank the leading public sector banks in India were considered for the study.

Profile of SBI Factors and Commercial services Ltd.

SBI Factors and Commercial services Ltd is the factoring company set up in India in Feb 1991 and commenced business operation in April 1991. The company was promoted by SBI jointly with SIDBI, Union bank of India, State Bank of Indore and State Bank of Saurastra. SBI Factors undertakes the responsibility of debt collection on all invoice factored, maintenance of sales ledger, informing monthly customer payment reports. The company is at present handling domestic factoring on recourse basis. It has corporate office in Mumbai, and five branches located at Mumbai, Pune, Baroda, New Delhi and Coimbatore.

Profile of CanBank Factors Ltd.

CanBank Factors Ltd. is the factoring subsidiary of the Canara bank set up in 1991 in association with Andhra Bank and Small Industries Development Bank of India(SIDBI). The company was formally launched on 31 Aug,1991. CanBank Factors
is one of the leading company in factoring industry in India. The company follows decentralised organisational set up having head office at Bangalore and branch offices at Chennai, Coimbatore, Hosur, Hyderabad, Mumbai, New Delhi and Pune. The company has been providing factoring services to large number of clients, having wide diversified base.

Profile of SBI Mutual Fund

State bank of India was the first commercial Bank to set up a mutual fund in July 1987 as SBI Mutual Fund. SBI Mutual fund was originally managed by SBI Capital markets Ltd. as a manager and trustees till 1993. This system was later modified and State Bank of India was retained as principal trustee of the fund. The Board has appointed the SBI management ltd. a fully owned subsidiary of the State Bank of India as manager of the funds and delegated authority on 14th May 1993. This subsidiary has floated nearly 20 schemes from the date of inception. These schemes include regular income schemes, monthly income schemes, tax saving schemes, cumulative and growth schemes.

Profile of CanBank Mutual fund

CanBank Mutual fund is the mutual fund subsidiary promoted by Canara bank. CanBank investment Management service limited (CIMS) is the investment manager for all the schemes of CanBank Mutual fund. The company also acts as sub-investment manager to the prestigious offshore mutual fund. The combined net assets under management of CanBank mutual fund was Rs991.47 crore, including the net assets of Rs 354.41 crore under offshore fund, involving nearly 4.5 lakhs investors. CIMS opened seven new investor relation centres across country to provide investor
related services and information to its existing as well as potential clients, especially in the urban /semi urban locations. The company posted a profit after tax of Rs 2.25 crore after tax and declared dividend of 16.5 percent.

2.2.3 Objectives of the Study

1) To study the growth trend of factoring and mutual fund services in SBI and CanBank.

2) To evaluate the performance of factoring and mutual fund services of SBI and CanBank.

3) To study a comparative performance analysis of factoring and mutual fund services of SBI and CanBank.

4) To understand the profile, awareness and problems of customer in availing factoring and mutual fund services of SBI and CanBank.

2.2.4 Nature and Sources of Data

The present study is related to the working of the two firms for a 10 years period (1991-92 to 2000-01) based on primary and secondary data.

A) Primary data

Primary data is collected through structured questionnaire prepared with an objective to study the profile, awareness and problems of customers in factoring and mutual fund organisation. The sample size have been selected as 30 respondents each of SBI Factors and CanBank Factors and 60 investors each of SBI and CanBank Mutual fund.
B) Secondary Data

The present study is related to 10 years period (1991-92 to 2000-01) based on secondary data. The required data were collected from the Annual report of SBI and CanBank Factors and Mutual Fund organisations.

2.2.5 Identified performance indicators of both SBI and CanBank Factors and Mutual funds

2.2.5.1 Performance Indicators of SBI and CanBank Factors

The 7 variables having close association with the performance of factoring companies were identified for computing compound growth rates. These variables are reserves and surplus, loan funds, total assets, working capital, total income, total expenses, sales or factored debts.

2.2.5.2 Performance Indicators of SBI and CanBank Mutual Funds

The 5 variables having close association with the performance of Mutual funds were identified for computing compound growth rates. These variables are unit capital, reserves and surplus, total income, total expenses and investable fund.

2.2.6 Analytical techniques employed

The data were collected and analysed by using the following analytical techniques

1) Tabular Analysis

2) Growth rate analysis

3) Ratio Analysis
4) Regression Analysis  
5) Spearman Rank correlation.  
6) Rank scoring technique  
7) Factor Analysis  

2.2.6.1 Tabular Analysis  

The tabular analysis technique was used to represent the data relating to the performance indicators of the factoring and Mutual fund company in easy way. Simple averages and percentages were worked out for the purpose of comparison  

2.2.6.2 Growth Rate Analysis  

Growth rate analysis was employed to study the changes over a period in the selected performance related to factoring and Mutual Fund company. The growth rate of different indicators were computed by employing the following exponential function  

\[ Y = AB^X \]  

Where  

\[ Y = \text{Dependent variable (performance indicators)} \]  

\[ A = \text{constant} \]  

\[ X = \text{Time(No. of years)} \]  

Growth rate analysis was employed to study the changes over a period in the selected performance related to factoring company.  

In order to obtain the discrete or an effective growth of different variables, the computed continuous growth rates were further compounded over the
appropriate period. The compound growth rates were worked out by using the
following equations

\[ r = e^b - 1 \]

where \( r \) = compound rates of growth

\( e \) = natural log

\( B_i \) = Slope parameter

### 2.2.6.3 Ratio Analysis

Ratio analysis is a widely used and important tool of financial analysis. The
interrelationship that exists among different items in the financial statements is
revealed by accounting ratios.

**Variables used for calculation of ratios**

The variables used for calculating the different ratios were: current assets, current
liabilities, liquid assets, total assets, total income, total expenses, factoring income,
other income, administrative expenses, finance expenses and volume of business

#### 2.2.6.3.1 Profitability Ratios

The main objectives of the business firm is to earn maximum profit. The firm's
ability to earn maximum profit by the best utilisation of its resources is called
profitability. The profitability of a firm can easily be measured by its profitability
ratios. These ratios indicate overall managerial efficiency.

1) *Net Profit ratio(%)*

\[
\frac{\text{Net Profit}}{\text{Sales}} \times 100
\]
Components: Net profit is taken as Profit after interest and tax and Sales is considered as Factored debts

2) **Operating Profit (%)**

\[
\text{Operating profit} \times 100
\]

\[
\text{Sales}
\]

Components: Operating profit is considered profit before interest and tax and Sales is considered as factored debts.

3) **Expenses Ratio**

\[
\text{Expenses} \times 100
\]

\[
\text{Sales}
\]

Components: Expenses are considered as total expenses and sales is considered as factored debts.

4) **Return on shareholders Fund**

\[
\text{Operating profit} \times \frac{100}{\text{Shareholders fund}}
\]

Components: operating profit is considered as profit before interest and tax and shareholder fund is considered as capital and reserves and surplus.
5) **Net profit to total asset(%)**

\[
\text{Net profit} = \frac{\text{Net profit}}{\text{Total Assets}} \times 100
\]

Components: Net profit is taken as Profit after interest and tax and total assets includes fixed and current assets.

6) **Return on working capital(%)**

\[
\text{Operating profit} = \frac{\text{Operating profit}}{\text{Working capital}} \times 100
\]

Components: Operating profit is taken as profit before interest and tax and working capital considered as net working capital i.e current assets less current liabilities.

2.2.6.3.2 **Liquidity Ratios**

Liquidity ratios measures the ability of the firm to meet its current obligations. It indicates the short term financial position as well as short term and long term solvency position of the organisation. These ratios are used to measure the ability of a firm to posses adequate cash to meet immediate obligations.

The following liquidity ratios were employed:

**Current ratio**

\[
\text{Current ratio} = \frac{\text{Current Assets}}{\text{Current liabilities}}
\]
Components: Current assets include sundry debtors, cash and bank balance and loans and advances. Current liabilities includes sundry creditors, amount due to clients on factored debts and provision.

*Acid Test Ratio*

\[
\text{Liquid Assets} = \frac{\text{Cash and Bank Balance, Cash in Hand and Sundry Debtors}}{\text{Current Liabilities}}
\]

Components: Liquid assets includes cash and bank balance, cash in hand and sundry debtors and current liabilities includes sundry creditors, amount due to clients on factored debts and provision.

*Cash to Total assets (%)*

\[
\text{Cash} = \frac{\text{Cash} \times 100}{\text{Total Assets}}
\]

Components: Cash includes cash and bank balance and cash in hand. Total assets includes total of fixed and current assets.

*Cash to Current Assets*

\[
\text{Cash} = \frac{\text{Cash} \times 100}{\text{Current Assets}}
\]

Components: Cash includes cash and bank balance and cash in hand. Current assets include sundry debtors, cash and bank balance and loans and advances.
**Cash to Current Liabilities**

\[
\text{Cash} = \frac{\text{X} \times 100}{\text{Current liabilities}}
\]

Components: Cash includes cash and bank balance and cash in hand. Current liabilities includes sundry creditors, amount due to clients on factored debts and provision.

**Cash to Working Capital**

\[
\text{Cash} = \frac{\text{X} \times 100}{\text{Working capital}}
\]

Components: Cash includes cash and bank balance and cash in hand. working capital includes net working capital i.e current assets less current liabilities.

2.2.6.3.3 *Activity ratios*

Activity ratios are employed to evaluate the efficiency with which the firm manage and utilise its assets. It indicates the speed with which assets are being converted or turned over in to sales. It involves a relationship between sales and assets. The following activity ratios were employed

**Fixed Assets to Net worth (%)**

\[
\frac{\text{Fixed Asset}}{\text{Net worth}} = \frac{\times 100}{\text{X}}
\]

Components: Fixed assets considered as net fixed asset i.e after deducting depreciation. Net worth includes paid up capital plus reserves.
Current assets to Total assets (\%)

\[
\frac{\text{Current Assets}}{\text{Total Assets}} \times 100
\]

Components: Current assets include sundry debtors, cash and bank balance and loans and advances. Total assets includes total of fixed and current assets.

Working capital to sales (\%)

\[
\frac{\text{Working capital}}{\text{Sales}} \times 100
\]

Components: working capital includes net working capital i.e current assets less current liabilities. Sales is considered as factored debts.

Total asset turnover (No. of times)

\[
\frac{\text{Turnover}}{\text{Total Assets}}
\]

Components: Turnover is considered as factored debts. Total assets includes total of fixed and current assets.

Fixed Asset Turnover (no. of times)

\[
\frac{\text{Turnover}}{\text{Fixed Assets}}
\]

Components: Turnover is considered as factored debts and fixed asset is considered as net fixed asset i.e after deducting depreciation.
Current Asset turnover

\[ \text{Turnover} = \frac{\text{Turnover}}{\text{Current Asset}} \]

Components: Turnover is considered as factored debts and Current assets include sundry debtors, cash and bank balance and loans and advances.

Net Fixed asset to Total asset(%)\[ \text{Net fixed Asset} = \frac{\text{Net fixed Asset}}{\text{Total assets}} \times 100 \]

Components: Net fixed Assets is considered as Fixed asset less Depreciation. Total assets includes total of fixed and current assets.

Depreciation to Gross fixed assets(%)\[ \text{Depreciation} = \frac{\text{Depreciation}}{\text{Gross fixed assets}} \times 100 \]

Fixed Asset to Current assets\[ \text{Fixed assets} = \frac{\text{Fixed assets}}{\text{Current assets}} \times 100 \]

Components: Fixed Assets is considered as Fixed assets less Depreciation. Current assets include sundry debtors, cash and bank balance and loans and advances.
**Fixed assets to Long term fund**

\[
\text{Fixed assets} = \frac{\text{Fixed assets}}{\text{Long term funds}} \times 100
\]

Components: fixed Assets is considered as Fixed asset less Depreciation. Long term fund includes

**Sundry debtors to current assets(%)**

\[
\text{Sundry debtors} = \frac{\text{Sundry debtors}}{\text{Current Assets}} \times 100
\]

Components Sundry debtors includes debt considered good, debt outstanding for more than six months and non-performing assets. Current assets include sundry debtors, cash and bank balance and loans and advances

**Sundry capital to working capital**

\[
\text{sundry debtors} = \frac{\text{sundry debtors}}{\text{Working capital}} \times 100
\]

Components: Sundry Debtors includes debt considered good, debt outstanding for more than six months and non-performing assets. working capital includes net working capital i.e Current assets less Current liabilities.

**Debtors Turnover Ratio(No of times)**

\[
\text{Turnover} = \frac{\text{Average Receivables}}{\text{Turnover}}
\]

Components: Turnover is considered as factored debts. Average receivables includes opening receivables and closing receivables.
**Average collection period**

Average Receivables

\[
\text{Average Receivables} = \frac{\text{Average Receivables}}{\text{Sales per day}}
\]

Components: Average receivables includes opening receivables and closing receivables. Sales per day is calculated by considering factored debts for the year by dividing 365.

2.2.6.3.3  *Productivity Ratios*

These ratios are used to measure the efficiency in asset management, operating efficiency and ability to ensure adequate return to shareholders. The following ratios were employed to assess the productivity of the factoring organisation.

**Factoring income to Total income(%)**

\[
\text{Factoring Income} \times 100
\]

\[
\text{Total Income}
\]

Components: Income from factoring includes the income generated from factoring transactions. Total income includes the income earned from all sources.

**Investment Income to Total Income(%)**

\[
\text{Investment income} \times 100
\]

\[
\text{Total Income}
\]

Components: Investment income is received from the investments made by factor and total income includes the income earned from all sources.
Administrative Expenses to Total Expenses(\%)

\[
\frac{\text{Administrative Expenses}}{\text{Total Expenses}} \times 100
\]

Components: Administrative Expenses includes the expenses incurred on administration by factor. Total Expenses includes all the expenses.

Interest charges to Expense ratio(\%)

\[
\frac{\text{Interest charges}}{\text{Total expenses}} \times 100
\]

Components: Interest is considered as the expense incurred on the finance used for the factoring.

Depreciation to Total Expenses Ratio(\%)

\[
\frac{\text{Depreciation}}{\text{Total expenses}} \times 100
\]

Total Expenses to Total Income ratio (\%)

\[
\frac{\text{Total Expenses}}{\text{Total Income}} \times 100
\]

Some of the relevant ratios were employed to examine the efficiency and performance of mutual fund organisation.
Return on investment (%)

Net income
\[ \frac{\text{Net income}}{\text{Total assets}} \times 100 \]

Components: Net income is taken after deducting total expenses and total assets is considered as combination of Current assets, Deposits and Investments.

Expenses to Gross income ratio

Gross expenses
\[ \frac{\text{Gross expenses}}{\text{Gross Income}} \times 100 \]

Components: Gross expenses includes the total expenses and Gross income includes income before deducting expenses.

Expenses to Total Assets

Gross Expenses
\[ \frac{\text{Gross Expenses}}{\text{Total Assets}} \times 100 \]

Components: Gross expenses includes the total assets and total assets is combination Current assets, Deposits and Investments

2.2.6.4 Regression Analysis

The log linear model has been employed to analyse the influence of independent variables \(X_1, X_2\) and \(X_3\) viz Income, Expenses and Sales or factored debts on the dependent variable \(Y\) profit. The model employed is as under

\[ \ln Y = B_0 + B_1 \ln X_1 + B_2 \ln X_2 + U_t \]
Where  \( X_1 = \) Income  \\
\( X_2 = \) Expenses  \\
\( X_3 = \) Factored Debts  \\
\( Y = \) Profit

2.2.6.5 **Spearman's Co-efficient of Correlation or Rank Correlation**

This technique is used to determine the degree of correlation between liquidity and profitability of SBI factors and CanBank Factors. The main objectives of this coefficient of correlation is to determine the extent to which the two set i.e liquidity and profitability ranking are similar or dissimilar. The formula determine the spearman's coefficient is

\[
R = 1 - \frac{6 \sum d^2}{n(n^2 - 1)}
\]

Where  \( d = \) Absolute difference between ranks  \\
\( n = \) Number of pairs observation

Liquidity is determined by current asset to total asset ratio in percentage and profitability is considered as return on investment. T test is used to test the significance of Spearman's \( r \) value

2.2.6.6 **Performance Analysis Through Risk Adjusted Return**

For each mutual fund scheme in the sample, the returns have been calculated taking weekly -end Net Asset Value since from 1998 to 2001. To conduct statistical tests as adequate observations are required hence weekly NAVs are taken. The returns are computed as follows

\[
R_{pt} = \ln \left( \frac{NAV_t}{NAV_{t-1}} \right)
\]
Where \( \text{Rpt} = \) is return of the Mutual fund scheme (portfolio) on the basis of NAV for \( t \) period.

\[ t \text{ and } t-1 \text{ indicate weekly end and weekly beginning respectively.} \]

\[ t= 1,2,3,\ldots,n \]

\( \text{LN} \) is the Natural logarithm to the base \( e \)

The Average return on the portfolio is determined as follows

\[ \text{Arp} = \frac{\sum_{t=1}^{n} \text{Rpt}}{n} \]

Where

\( \text{Arp} \) is average return on the mutual fund schemes

BSE sensitive index is assumed as benchmark. The value of market index on the respective date of NAV is taken and market return are calculated.

The returns on market portfolio is computed as follows

\[ \text{Rmt} = \text{is the return on the market index and } H_s \text{ the index value} \]

\[ \text{LN} = \text{is the natural logarithm to the base } e \]

Return on market index are averaged as follows

\[ \text{Arm} = \sum_{i=1}^{n} \frac{\text{Rmt}}{n} \]

Where, \( \text{Arm} \) is average return on the market

Thus, the performance evaluation is mainly concentrated to comparison of the scheme return, with benchmark portfolio and risk free return. Risk

Standard deviation of week returns is to be taken as risk

\[ \sigma_{p} = \left[ \frac{1}{n} \sum_{i=1}^{n} (\text{Rpt} - \text{Arp})^2 \right]^{1/2} \]

Where,

\( \sigma_{p} \) is total risk of the scheme portfolio
The total risk on the market portfolio is computed as follows:

\[
\sigma_m = \sqrt{\frac{1}{n} \sum_{t=1}^{n} \left( R_{mt} - AR_m \right)^2}
\]

Where \( \sigma_m \) is the total risk of the market portfolio.

In order to obtain the systematic risk (beta) of the portfolio, CAPM version of market model is applied.

The estimable form of CAPM is:

\[
R_{Pt} = a + \beta p R_{mt} + e_p
\]

Where,

- \( R_{Pt} \) is the return on the mutual fund schemes.
- \( R_{mt} \) is the return on market index.
- \( e_p \) is the error term.
- \( a \) is the constant.
- \( \beta \) is the systematic risk.

Risk free rate

The study considers interest rates on bank deposits as risk free asset. Since interest rates of the public sector banks are not uniform, hence State Bank of Indias fixed deposit rate for the three years period is considered as risk free rate.

The equivalent monthly return are obtained as follows:

\[
R_{ft} = (1 + \text{Annualrate})^{-1}
\]

Schemes selected are:

Corpus size is less than 50crs

1) SBI Global Fund
2) SBI Magnum sector (infotech)
3) Magnum sector pharma
4) Canexpro
5) Canpepe95

Corpus size is above 50crs

1) SBI growth fund
2) Magnum multiplier plus
3) Magnum sector umbrella
4) Canbonus

Performance evaluation of mutual fund through

1) Sharpe ratio

It is a ratio indicating the relationship between the portfolios additional return over risk-free return and total risk of the portfolio measured in terms of standard deviations. It is expressed as

$$RVAR_p = \frac{AR_p - AR}{\sigma_p}$$

2) Treynor Ratio

This ratio measures the relationship between funds additional return over risk-free return(Rp-Rf) and funds volatility (market risk) measured by beta(β). This is called as reward to volatility ratio and it is expressed as

$$RVOL_p = \frac{AR_p - AR_f}{\beta}$$

ARp= is the average return on the portfolio(fund)
Arf= is the average risk free return

is systematic risk of the portfolio

3) **Jensen measure**

The Jensen measure suggest explicit account of the effects of the risk on returns of the portfolio.

The following Jensen equation is used

\[ R_{pt} - R_{ft} = \alpha + (R_{mt} - R_{ft}) + U_{pt} \]

Where

\( \alpha \) is the differential return earned by the scheme

\( \beta \) is the systematic risk of the scheme portfolio.

### 2.2.6.7 Procedure adopted for ranking of factoring organisation

Based on the achievements made by each factor in the different areas viz. the financial parameters, liquidity status, profitability parameters, activity performance and productivity an attempt is made to rank the factor. For this purpose there are 19 parameters with which the performance of each factor was already evaluated were considered and conveniently grouped them in to five segments. Each of the parameters was assigned an equitable weightage on the basis of its significance in the factors total performance. The parameters that have been considered and the weightage assigned to each parameter were provided as under:-

<table>
<thead>
<tr>
<th>Segment</th>
<th>Name of the parameter</th>
<th>Assigned weightages</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td><strong>Financial parameters (Amounts in crs)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1) Average net profit</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>2) Average operating profit</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>3) Turnover or Factored debts</td>
<td>10</td>
</tr>
<tr>
<td>II</td>
<td><strong>Liquidity parameters (Ratio%)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1) Cash to current asset</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>2) Cash to working capital</td>
<td>5</td>
</tr>
</tbody>
</table>
3) Cash to current liabilities \hspace{1cm} 5
4) Cash to total assets \hspace{1cm} 6

### III Profitability parameters (Ratio%)
1) Expenses ratio \hspace{1cm} 8
2) Return on shareholders fund \hspace{1cm} 8
3) Net profit to total asset \hspace{1cm} 8
4) Return on working capital \hspace{1cm} 6

### IV Activity performance (Ratio%)
1) Current asset to total asset \hspace{1cm} 6
2) Debtors turnover ratio \hspace{1cm} 8
3) Working capital to sales \hspace{1cm} 6
4) Net fixed asset to total asset \hspace{1cm} 6

### V Productivity performance (Ratio%)
1) Factoring income to total income \hspace{1cm} 6
2) Administrative expenses to total expenses \hspace{1cm} 6
3) Interest expenses to total expenses \hspace{1cm} 6
4) Total expenses to total income \hspace{1cm} 8

**Justification of weightages assigned**

The different weightages assigned to the different parameters is explained with the help of a few parameters. For instance, the financial parameter like net profit, operating profit and factored debts or sales are considered to be more important in enabling the factor stronger and financially more viable. Thus the weightages assigned are 10 to each parameters and other parameters such as liquidity, profitability, activity and productivity are assigned score according to their importance in building the factor financially stronger.

**Computation of the total score and the final ranking**

A multi staged techniques was employed to arrive the total score of each factor on which a final ranking was made. At the first stage, each of the 19 parameters was allotted a rank viz. first and second. After that each of the rank (parameter) was assigned a score in the descending manner. First rank was allotted a score of 2 and second rank was allotted a score of one. After that, the allotted score of each parameter was multiplied by the weightage assigned to that parameter. Thereafter the
total score of each segment of factor was arrived and the final ranking of factor was made on the basis of the total score of all the five segments.

2.2.6.8 Factor Analysis

Factor Analysis is used to summarise the information contained in a large number of variables into smaller number of subsets or factors. The satisfaction level of customers about the services provided by the SBI and CanBank Factors are measured by using factor analysis.

2.2.7 Significance of the study

Public sector banks in India have been facing a tremendous competition from private and foreign banks. Diversification of financial services has taken a momentum in banking industry. Modern services of banks are increasing and the importance of traditional services is declining. Modern services like factoring, mutual fund, housing finance, gilt securities, merchant banking, venture capital etc are provided by public sector banks through promoting separate subsidiaries. Factoring and mutual funds are an important financial services in terms of industrial growth. Factoring has emerged as a major financial service in banking industry.

Similarly mutual fund is a vital source for small investors for instrumenting their savings through various securities in capital market. The government has allowed banks to set up mutual fund business in 1987. State Bank of India and Canara Bank were the first to establish their mutual fund subsidiaries. The present study will help to understand the importance of these two services in a competitive economic environment.
The researcher has evaluated the working of these two banks subsidiaries in factoring business viz SBI Factors and CanBank Factors in respect of their total assets, total income, total expenses, reserves and surpluses, profit and sales or factored debts. The researcher has also evaluated the growth and performance of mutual fund subsidiaries of two banks viz SBI Mutual Fund and CanBank Mutual Fund in respect of number of schemes, fund mobilized, investors problems and performance evaluation through Net Assets Values. The management of these two mutual fund organization and investors at large will come to know their practice and problems in respect of different parameters. The present study will definitely help to know the importance of modern financial services in banking industry in general and with specific reference to SBI and Canara Bank, leading public sector banks in India.

2.2.8 Scope of the study

The present study intends to examine the working, growth and performance of SBI and CanBank Factors, in respect of both physical and financial indicators. It also intends to understand the problems faced by customers in availing factoring services, awareness of factoring services offered by SBI and CanBank Factors. The present study intends to examine the growth and performance of mutual fund in banking industry with respect to SBI and CanBank Mutual Fund. The study also intends to evaluate problems of investors and their awareness level. The study confines to SBI and CanBank, the subsidiaries of State Bank of India and Canara Bank promoted to render factoring and mutual fund services. The main focus of the investigation is to evaluate the performance of SBI and CanBank Factors with respect to mutual fund and factoring. The finding of the study would help to the policy makers, administrators,
investors, customers and other officials in formulating better policies and their implementation.

2.2.9 Presentation of the Study

The present study is presented in five chapters.

Chapter I provides the background to the research proposition and describing the statement of the problem.

Chapter II makes an attempt to comprehend the earlier research studies on the performance evaluation of factoring and mutual fund as well as on banking industry and calls out the major findings and further research problem to be investigated in the present study. The chapter also deals with methodology, objectives, significance, scope and limitation of the study.

Chapter III is focussed on the performance evaluation of the factoring organisation viz SBI factors and CanBank factors in terms of selected physical as well as financial parameters by using the growth rate analysis, regression analysis and also ratio analysis.

Chapter IV is focussed on the performance evaluation of mutual fund with respect to SBI Mutual Fund and CanBank Mutual Fund in terms of size, growth and efficiency.

Chapter V narrates the comparative study of SBI and CanBank Factoring and Mutual fund

Chapter VI include profile, awareness and problems of customers of SBI and CanBank Factoring and Mutual Fund.
Chapter VII summarises the important findings of the research work and finally makes certain policy suggestions to improve the performance of the factoring and mutual fund organisation viz SBI and CanBank.

2.2.10 Limitations of the study

1) The study was restricted to factoring and mutual fund services of SBI and CanBank. As regards to primary survey the sample size of 30 respondents each of SBI and Can Bank Factors and 60 respondents each of SBI and CanBank Mutual Fund were selected for the study. The sample size was restricted to the above size due to difficulty in identifying the customers of SBI and CanBank.

2) In spite of frequent visits by the researcher to SBI and CanBank Factors, the information regarding the number of clients, branch wise transaction were not available for the purpose of the study.

3) Lack of time and other resources prevented the researcher from carrying out an in depth study relating to survey of customers in SBI and CanBank.

2.2.11 Definitions of the key terms and concepts used

1) Reserves and surplus

The components included in reserves and surpluses were general reserves, statutory reserve and reserve for contingencies.

2) Factoring Income

This represented the total income received through discount charges, services charges and processing charges.

3) Investment Income

This included income received through investments in other securities
4) **Other Income**

   This is represented by the income received through other sources such as lease rentals, lease Management fees etc.

5) **Total Income**

   Total Income included factoring income, investment income and other income.

6) **Factored debts**

   This is represented by the debts purchased during the particular year.

7) **Total Expenses**

   The components included expenses incurred in Administration, Interest and finance charges, Depreciation and provision for non-performing assets.

8) **Interest and Finance charges**

   This components included interest paid on deposits and borrowings.

9) **Investable Fund**

   This is represented by the amount in investments, deposits and current assets.