CHAPTER II

RESEARCH DESIGN

2.1 RATIONALITY AND SIGNIFICANCE OF THE STUDY

After satisfying one’s consumption need, the remaining amount is kept as savings. Instead of keeping this saved money idle one should take an attempt to invest it. Making investment is very much necessary for securing the future. If the right investment alternative or portfolios are chosen, it will give great return to the investors. On the other hand if the portfolio selection is not good, it might lead the investor to suffer loss.

Gender is considered to be a factor which influences individual’s investment behavior. Women are generally found to avoid taking investment decisions and rely mainly on their male counterparts for investment decisions. Earlier women were mainly housewives and were not at all in to jobs and therefore they did not have money in their hands. If they found any profitable investment schemes, then they were to ask their husbands or were to wait for their permission before taking any investment decision as they were totally dependent on their husbands for money relating issues. But today’s women work outside their homes and therefore they are linked with a much better
environment than before. They have money of their own in their hands and therefore whenever they find any profitable investment scheme they take decisions of investing their money into it all by themselves.

Through this study an attempt is made to find out how working women in various Public sector organisations invest their saved money into various investment portfolios. The study also focuses on the awareness level of women as regard various investment alternatives. The identification of awareness level would help the investment companies to take initiative to popularise their product if they are not known to the mass.

The study would help in identifying the factors which influences women investment behavior and hence will help in understanding women preference in making investment decisions.

The study will also help the investment companies to know whether women who are working employees are interested or preferring to invest their saved money in their investment alternatives or not and therefore it will help them to take some important or improvement measures for attracting women investors in their schemes.

The knowledge of investment behaviour will provide good training especially to the new research worker and enable them to do better research. The research will help in understanding the behaviour of
women in investment and will help the researcher in carrying out further research in this area.

2.2 REVIEW OF LITERATURE

1. Sellappan R., Jamuna S and. Kavitha Tnr., (2013)\(^1\) tried to gain knowledge about the marital status and age factors influencing the investment behaviour of women towards financial instruments with special reference to Erode district. The study concluded that married women are more curious in making investment than the unmarried. As well as the younger are mostly like to invest in shares, mutual Funds, insurance and fixed deposit than the older one.

2. Kumar, V. (2014).\(^2\) found that mutual fund were not that much known to investors, still investor rely upon bank and post office deposits, most of the investor used to invest in mutual fund for not more than 3 years and they used to quit from the fund which were not giving desired results.

3. Thulasipriya, B. (2015).\(^3\) studied the investment preference of salaried government employees. The study found relationship between age and risk tolerance levels of employees. It was found that employees even if earn high income, well educated, salaried independent are conservative investors and prefers to invest in financial products which give risk free returns.
Bashir et al. (2013) analyzed the relationship of demographic variables with the investment preferences consisting of stock investment and gambling decisions of salaried individuals of finance teachers and bankers of Gujarat and Sialkot. Findings of the research indicated that females were more risk averse than men. Young and educated people were attracted more towards new risky investment opportunities and want to invest their money in it but are reluctant because of limited resources and lack of investment opportunities and absence of investment trends. In addition the emergence of frequent religious issues, non conducive economic environment and culture were found to be main factors having negative relationship with gambling while making investment decisions.

Mohanta, G., and Debasish, S. S. (2011) carried a study on Investment preferences among urban investors in Orissa. An attempt has been made to study the motivational factors that drive investors for selecting the investment avenue. The study indicates that there is significant role of income and occupation in investment avenue selection by the male and female investors. Male investors were more interested to invest in risky avenues than their female counterparts.
6 Geetha, N., and Ramesh, M. (2011). studied the Indian’s behavior about investment preferences. The study was on the effect of demographic variables on investment preferences. The study found that people were not aware about all the investment options available to them and they lack knowledge about securities.

7 Patil, S., and Nandawar, K. (2014). made a study on preferred Investment avenues among salaried people with reference to Pune. After the analysis and interpretation of data it was concluded that investors were aware about investment avenues available in India but still preferred to invest in bank deposit, real estate gold. Most of the investors preferred secured regular income on the investment in the study area.

8 Christiansen, C., Joensen, J.S., and Rangvid, J. (2011). in their paper ‘The effect of marriage and divorce on financial investment’ investigated how changes in marital status affect the decision to take on financial risk. The paper studied how the same investor changes behaviour after a change in marital status, compared to investors who do-not experience a change in marital status. The study found out that marriage causes men to reduce the fraction of wealth they hold in risky assets, they increase risk after divorce. For women, it is the other way around.
The study also found that marriage increases the likelihood of holding stocks for both men and women. This indicates that marriage frees up economic resources and therefore makes individuals more likely to pay the stock-market participation costs.

9 Sharma, M., and Vaskarla, V. (2013). had studied possible gender effects on risk aversion and overconfidence in investment decision making. The study revealed female investors to be more conservative than their counterparts in terms of risk aversion. In terms of overconfidence, no conclusion could be drawn as the research has shown mixed results.

10 Chaturvedi, M., and Khare, S. (2012). made an attempt to analyze the relation between awareness and socio economic factors relating to the investors; to study the preferences of investors for different investment products; and finally to identify the factors influencing investor awareness and preferences.

11 Mathivanam, R., and Mohnaranjani, K. (2013). made a study on the women employees working in public and private organizations of Coimbatore city. The study found respondents to be expressing high degree of awareness i.e. financial literacy towards traditional saving/ investment avenues, but they have actively shifted their saving/investment avenues from traditional
bank saving avenues to modern technically risky capital market operations like: investing in mutual funds, shares, debentures and bonds of public and Private Companies. They were also found focused to investment in real-estate, arts and passions which showed positive sign of growth and participation of women in household and national savings/investments.

12 Panda, B.N., and Panda, J.K. (2013). tried to analyze the influence of demographic factors of investors in investment decision making process. The result of the study showed that few demographic variables such as family size, annual income and annual savings have significant relationship with period of investment whereas rest of the variables such as gender, age, education and occupation do not have any such relationship. The study also brings out that there is significant relationship between the demographic factors such as gender, age, education, occupation, annual income and annual savings with the sources of awareness obtained by the investors.

13 Wang, A. (2011). carried a study having three main objectives. Firstly to examine four aspects of younger generations’ investing behaviors in mutual funds: frequency of information search, frequency of investing, years of investing, and performance of investments in mutual funds. The second objective of the study
was to test the effects of gender, age and income on younger generations investing behaviors in mutual funds. The third objective was to examine younger generations experiences and knowledge that may explain the differences in the investing behavior in mutual funds.

14 Hira, T., and Loibl, Cazilia. (2006). Presented a report to NASD Investor Education Foundation on key factors that influence investment behavior and ways these key factors impact investment decision-making processes among men and women. The study found more women than men to be involved in financial management task but most of them do it in partnership with a spouse or partner whereas men do it of their own. Willingness to take risk varied significantly between men and women. A majority of the women in the study preferred taking average or below-average risks, whereas about half of the men preferred taking above average or substantial investment risks.

15 Bhusan, P., and Medury, Y. (2013). Carried a study on the employees working in various Universities of Himachal Pradesh with twin objective. Firstly to examine gender difference in investment behavior and secondly, to study the gender differences in satisfaction level towards various investment instruments among employees. The study identified that significant gender
differences occur in investment preferences for health insurance, fixed deposits and market investments. Gender differences in satisfaction level found was significant for mutual funds.

16 Vyas, R. (2012).\textsuperscript{16} focused attention on number of factors that highlights investors’ perception about mutual funds. It was found that mutual funds were not that much known to investors and investors still rely upon bank and post office deposits, most of the investor used to invest in mutual fund for not more than three years. This reflects that investor prefers primarily a safe destination for investment or safe mode of investment and then the returns factor comes on second place for investors. It was also found that maximum number of investors did not analyze risk in their investment and they depend upon their broker and agent for this work.

17 Das, S. K. (2012).\textsuperscript{17} made an effort to study the investment habit and preferred investment avenues of the households. The study reveals that investors across all categories found them to be safer with taking up the insurance policies. It was also observed that most of the respondents show their keen interest towards the insurance products so as to get tax benefits, life protection and average profitable investment avenues. Further, it was
highlighted that the level of income also influences the investment decisions.

18 Ramanujam, V., and Devi, K.C (2012) examined the impact of Socio-economic profile on Investment pattern of salaried and business people in Coimbatore city. The study identified age, gender, income, education and occupation as the significant socio-economic variables which have influence on the attitude of investors towards investment.

19 Krishna, K.T., Amarnath, B., and Reddy S.R. (2011) made an attempt to study the pre and post-purchase Informational Requirements of the mutual Fund Investors, their knowledge of Fund evaluation and their satisfaction towards the reliability of information provided by the Fund Agent. The study found investors to be more concerned with the pre-purchase information pertaining to risks in investing, company profile, dividend information and services offered. They also give importance to post-purchase services like a convenient place to pay subscription, proper mode of payment and or receipt, timely distribution of dividend or bonus and a few other kinds of services. It was also revealed that the investors were moderately satisfied on the reliability of information provided by the Fund
Agents and a majority of them have little knowledge of Fund evaluation.

20 Brahmabhatt., Kumari, P.S.R., and Malekar., S. (2012).\textsuperscript{20} made a study in Mumbai and found the awareness of investment knowledge, investment opportunities to be quite high. The investors were helped by financial news channels, financial newspapers; various markets related T.V shows, Expert talks, magazines.

21 Das, S.K. (2012).\textsuperscript{21} conducted a study to examine the investment behavior of the middle class households of Barak valley in Assam. The study observed that all age groups marked highest preference towards bank deposits and insurance investment so as to get the benefit of safety and security of their life and investment. Tax benefit, security and safety, high returns, liquidity and so on are the common order of investment objectives among the respondents. Further, the researcher also suggested the need for increasing the financial literacy among the middle class households in Bark Valley.

22 Chavara, D.T. (2013).\textsuperscript{22} had a study to know the investment practices of senior college teachers in Western Maharastra. The findings revealed that the investors were having high level of knowledge about various investment avenues. Most of the
investors have taken the assistance of investment planners during the decision making of investment. The study has found relationship between annual income and investment whereas no relationship was found age of investors and amount of investment.

23 Bhardwaj B., Sharma N., and Sharma D., (2013) made an attempt to through light on the investment behaviour of employees of Bahra university, Solan district. It was inferred that as the income of the employees increases, awareness about securities also increases. The study concluded that most of the employees were aware of investments in securities but they are not investing in those securities as they consider it to be unsafe investment.

24 Umamaheswari, S., and Kumar, M. A. (2014). made an effort to outline the relationship between the dominant societal and demographic factors of the salaried middle class that affects the investment criteria namely, investment awareness, investment attitude and investment returns.

25 Barber, B.M., and Odean, T. (2001). discussed how technological developments associated with the Internet are likely to affect investors and financial markets. The study also shows that how with the help of internet connectivity i.e., adoption of
electronic shareholder voting, the investors can influence corporate governance

26 Goyal, M., and Sharma, A. (2014).26 carried a study on the Investment Behavior of Middle Income Group towards different kinds of Investment avenues in Kota, Rajasthan. The result of the study showed that the Middle Income class looks for safest or less risky investment avenues because of their small saving and prefers to make investments according to their risk bearing capacity. Real estate is desirable investment avenue but the investors could not invest in real estate because of its highly non-liquid form. The research also found that tax advantage in any investment take last place in investor’s mind which indicate that the tax concessions given by the government on any investment are less attractive to the investors.

27 Bharathan, V., and Ahamed, F. (2012).27 tried to study the investor attitude and examine the factors influencing the same. The study found no significant association between age of the investor and investor willingness to take risk. The study again did not found any significant association between investment goals and investor attitude towards portfolio. The investors were skeptical about investing under current market conditions and preferred to put their money in low risk assets like government
bonds, cash and gold as the favored investment vehicles. While planning medium to long term investments, investors were being more selective and they were carefully researching their options.

28 Viscusi, W.K., Phillips, O.R., and Kroll, S. (2011). investigated the effect of group versus individual decision-making in the context of risky investment decisions in which all subjects were fully informed of the probabilities and payoffs. The result showed that simply observing what others in the group do has a significant impact on behavior. Group investment decisions were driven by individual preferences that were not the same as when people make individual choice in isolation.

29 Velmurugan, G., Selvam, V., and Nazar, N.A. (2015). attempted to examine the investors perception towards various investment avenues in vellore city, Tamil Nadu. The findings of the study emphasized that the aged and high income investor prefer to invest only in post office and bank deposit for safety investment reason.

30 Kanthi, K.P; and Kumar, M.A (2013). investigated the investment awareness, preferences, experiences, satisfaction, objectives and purpose of the investors on post office saving schemes in Madukkarai Block, Coimbatire. The study concluded that majority of investors were aware of all the post office saving
schemes, preferred post office saving account over all other post saving schemes, the main objectives of the investors were regular income, and only a very few investors were dissatisfied with post office saving schemes.

31 JOO, S.H., and Grable. (2000).\textsuperscript{31} proposed a model that can be used to explain and examine the decision involved when establishing a retirement investment or savings program and its outcomes. Findings showed that people with higher education, higher income, lower number of financial dependents, favorable financial attitudes, and those who are exposed to workplace financial education, were more likely to have a retirement investment or savings program. It was also determined that having an investment or savings program for retirement can be a first step in increasing retirement confidence.

32 Shetty, B., Gopalkrishnan, M.M and Mane, P. (2013).\textsuperscript{32} have examined investor’s preference towards various tax saving schemes. Fixed deposit and pension plans were mostly preferred by investors for investment and tax planning. The study reveals the fact that awareness level about tax saving schemes is not much among investors. Poor awareness is reflected not only in the limited number of schemes they are aware of but also in insufficient knowledge about features and benefits of schemes
they are aware of. The study also revealed that majority of investors invest in the tax saving schemes as it yields tax benefits but apart from that they also think of risk minimization as the key benefit of investing in these schemes.

33 Ramanathan, K.V., and Meenakshisundaram K.S. (2015). conducted a research to analyze the significance of selected demographic factors such as age, gender, marital status of the respondents working in a bank towards their investment preference on products such as Real Estate, gold, bank deposit, mutual fund etc. The study found income and investment to be positively co-related. The study also revealed that the respondents were aware about the investment avenues and preferred those avenues where return on investment was safe and risk free. General perception of the investors towards various investment products in the study.

34 Jani, D.J., and Jain, R. (2014). examined the buying behavior of rural investors for financial assets specifically focusing on mutual fund. The study showed that each demographical factor had significant bearing on rural investors buying behavioral process. The study revealed that, decision making process of rural investors for investment in mutual fund is affected by several factors. Based on the ranking of the factors it has been found that
the investor had placed financial advisor/ agent on the first place, risk and return appetite was placed on second priority, past performance secured at third place, saving of the income tax was the fourth priority and brand of the financial product does not have much significance and hence stayed at fifth position.

35 Venkatachalam, G., and Prabakaran, G. (2015). made a study on investors behavior towards gold exchange traded funds (GETFs) in Indian stock market with special reference to Tamil Nadu. The study has taken thirty variables to identify the relationship between this socio economic profile and behavior of gold exchange traded funds investor. The study found that out of the thirty variables, eight variables namely place of residence, marital status, occupation, number of dependents, Preferred mode of investment in GETFs, bases for selection of GETFs, investment frequency and risk perception by the investors do not have significant association with investors behaviour.

36 Bhusan, P. (2014). examines the awareness level and investment behavior of salaried individuals of Himachal Pradesh towards financial products. Results of the study suggested that the respondents were quite aware about traditional and safe financial products whereas awareness level of new age financial products among the population was low. It was also found that majority of
the respondents park their money in traditional and safe investment avenues.

37 Agarwal, G., and Jain, M. (2013). In their paper made an attempt to study mainly the investment avenue preferred by the investors of Mathura and have also tried to analyze the investor’s preference towards investment in mutual funds in comparison to other investment avenues. Real Estate was found to be the most preferred investment avenue of the investors of Mathura.

38 Ganapathi, R. (2014). Examined the investment pattern of government employees in Madurai city. The study found safety and capital gain as the two most preferred investment objectives. The survey also concludes that demographic variable and investment objectives have a significant association among them. Insurance was found to be most preferred source of saving and investment whereas debenture was least preferred source of investment.

39 Kaustia, M., and Knupfer, S. (2007). Have investigated the link between individual investors’ tendency to subscribe to initial public offerings and the returns on past IPOs. The results found that an increase in the returns that an investor earns on past IPO investments has a positive impact on the investor’s propensity to participate in future IPOs. The study found personally
experienced returns to be important determinants of future IPO subscription. That is, the individual repeats behavior that has produced good outcomes in the past and avoids behavior that has produced poor outcomes. Importantly, the individual overweight personal experience.

40 Saranya, B., and Jisha, U. (2014). Studied the awareness level of the consumers towards e-gold and also tried to analyze preference of e-gold to physical gold. The awareness level of the target group was found to be moderate. The result also revealed preference of respondents towards e-gold as it assures safety to the investors.

41 Pandian, V.A., and Thangadurai, G. (2013). through their study tried to analyze the investor’s preference towards various investment avenues in Dehradun districts. The study concluded that most of the investors prefer bank deposits followed by gold investment in the study area.

42 Bhushan, P. (2014). examined the relationship between financial literacy of salaried individuals of Himachal Pradesh and their investment behavior. Respondents having low financial literacy primarily invest in traditional and safe financial products and do not invest much in those financial products which are comparatively more risky and can give high returns. The study
clearly implies that financial literacy level affects investment preferences of the investors towards financial products.

43 Vasagadekar, P. (2014). carries a study with the objective to know the investment avenues that the Indian working women usually prefer, to know their role in making investment decisions and to find out the risk bearing capacity of the Indian working women while making investment decisions. The study focuses on the relationship between socio-demographic characteristics like age, income, qualification, marital status and investment habits, investment avenues, risk bearing capacity.

44 Jain, R. (2014). conducted a research on working women across both Government and private sectors in the city of Ahmadabad. The study found that majority of working women preferred to their savings in fixed deposits with banks for the safety of a volatile future followed by investing in gold.

45 Garg, K., Kumar, D., and Garg, M.C. (2009). found that family protection, risk coverage, retirement benefits, child care and tax benefit are the key reasons for buying the life insurance policies by the investors.

46 Sathiyamoorthy, C., and Krishnamurthy, K. (2015). highlighted investment pattern and awareness of salaried class investors in Tiruvannamalai district of Tamil Nadu. The research showed that
majority of the respondents were saving money as Bank deposits for the safety of an unpredictable future. The main avenues of investment were bank deposits and the main purpose of investment found was child education, marriage and security after retirement.

47 Arekar, K., and Gadbole, S. (2014). made a study to identify factors influencing gold investment decisions of retail customers in India. The study was conducted in two stages. In stage one, the most important factors which affect individual investments decision was identified. In the second stage, the differences in the perception of investors in the decision of investing on the basis of age and gender were identified. The study concludes that there were six important factors which affects the investment buying behavior i.e. motives, risk and return, opinions, market information, benefits and security. The study also concludes that the age and gender primarily decides the risk taking capacity of the investors.

48 Gaur, A., Julee., and sukhija, S. (2011). in their paper studied the difference in the investment decision making process between female and male investors. The findings of the study shows higher level of awareness for males than females for different investment avenues and female investors tend to display less
confidence in their investment decisions and hence have lower satisfaction levels.

Kasilingam, R. (2012). In his study signifies that media source (newspaper and TV) is the most commonly used source by the investors for getting investment information. Risk Protection is the most important criteria used by investors to evaluate the investment instrument. In the study the investors were classified into three categories, designated as rational investors, normal investors and irrational investors. The analysis of the study illustrates that the irrational people are in ‘not invested category’. The normal investors restricts investment in few investment instruments. Rational people use information from all sources and invest whenever they get lump sum amount and they have knowledge on four or five schemes.

Kumari, I., and Barua, B.C. (2015). by consolidating the opinions of respondents states that whatever be the age, the women investors shows quite similar kind of behavior in choosing an investing alternative. The study found less awareness level among women investors as regard various investment alternative and found their dependence mainly on family and friends for having investment information in today’s modern world.
• **Research Gap:**

From the survey of literature it is revealed that a number of researchers have carried out extensive research in the field of investment behavior and have come up with many interesting findings. But the researcher has not come across so far any study on investment behavior of working women in public sector organizations in this part of the country; not to mention the dearth of comparative studies in this regard. Hence, the study covers more than one sector for analyzing the investment behavior of working women.

Hence, the present study has been carried out under the title, “A Study of the Investment Behaviour of Working Women in Select Public Sector Organizations in Tinsukia District”.

**2.3 OBJECTIVES OF THE STUDY**

The main objectives of the study are:

a) To identify the various investment alternatives in which the women employees of the petroleum, banking and railway sectors are interested to invest their saved money.

b) To identify the various factors which have influence over the investment behavior of women employees working in the petroleum, banking and railway sectors.
c) To make a comparative study on the investment behavior of women employees working in the petroleum, banking and railway sectors.

d) To suggest measures based on the findings of the study.

2.4 HYPOTHESES OF THE STUDY

The present study is designed to test the following hypotheses:

a) Women employees of the petroleum, banking and railway sectors are more interested to invest their saved money in fixed deposit than other investment alternatives.

b) The Investment behavior of women employees working in the petroleum, banking and railway sectors are not significantly influenced by any specific factors.

c) There is no significant difference between investment behavior of women employees working in the petroleum, banking and railway sectors.

2.5 SCOPE OF THE STUDY

The scope of the study is limited to studying the Investment behaviour of only working women in Public sector organization. Moreover it covers study of the women employees working in Indian Oil Corporation Limited (Assam Oil Division), Public Sector Banks of Tinsukia District and Northeast Frontier Railway (Tinsukia Division).
From the academic point of view, the scope is confined to relating investment behavior with their awareness level as regard various investment avenues, interest to invest in various investment avenues, purpose of investment, variables judged before investment, time period preferred for investment, percentage of income kept aside for investment, sources of information for investment, parties in investment decision, confidence over investment decision, attitude towards risk and Perception about investment decision to be taken.

2.6 THE JUSTIFICATION FOR THE SELECTION OF THE SECTORS ARE:

- Indian Oil Corporation Limited (Assam Oil Division) is one of the profit-making central public sectors in Assam. The earnings or the income of the employees working in this sector are comparatively high as against employees of many other sectors. They are one of the largest employment generator organization in the state, so population of women employees working in these organizations is comparatively high as against many other sectors.

- Public Sector banks of Tinsukia District is taken by keeping in mind the fact that the employees working in banks are very much linked with finance and therefore they must be having a better idea about finance than others.
Northeast Frontier Railway (Tinsukia Division) is chosen as it is one of the biggest sector in Tinsukia district with a large number of personnel in its various departments. It employees a very large number of employees and therefore the proportion of women employees working here is found satisfactory for carrying out the desired study.

2.7 PROFILES OF SAMPLED PUBLIC SECTOR ORGANISATIONS:

- **Indian Oil Corporation Limited (Assam Oil Division)** -

  Indian Oil Corporation (Indian Oil) is India's largest commercial enterprise, with a sales turnover of Rs. 4,50,756 crore (US$ 73.7 billion) and profits of Rs. 5,273 crore for the year 2014-15. Indian Oil is ranked 119th among the world's largest corporates (and first among Indian enterprises) in the prestigious *Fortune* 'Global 500' listing for the year 2015.

  This little town, Digboi, is the headquarters of the Assam Oil Division of the Indian Oil Corporation Ltd. and is regarded as the birthplace of the country’s petroleum industry. It was in this region that the pioneers struck oil in the midst of dense jungles at a time when there was hardly any industrial development in the country. The Digboi Refinery, commissioned in 1901, is today India’s oldest operating
refinery and one of the oldest operating refineries in the world. In fact, it was the only refinery in India till the mid 1950’s.

The historic Digboi Refinery has been termed as the "Gangotri of the Indian Hydrocarbon sector." Earlier owned and operated by the Assam Oil Company Limited/Burmah Oil Company, it came into the fold of the Indian Oil Corporation Limited by an Act of Parliament on 14th October 1981 and became the Assam Oil Division of Indian Oil Corporation Limited. The refinery is accredited with ISO 9002 and ISO-14001 certification, which implies that it uses all possible means to promote environment protection through adoption of proactive pollution control measures. Besides efforts within the refinery, Assam Oil actively promotes environment protection, tree plantation and conservation efforts in and around Digboi and in all other areas where it operates by interacting with local schools, colleges and various social and non-governmental organizations. Digboi refinery is also accredited with BS-8800, a standard testifying to its commitment to occupational health and safety of its employees in its operations.

- **Northeast Frontier Railway (Tinsukia Division):**

- **Indian Railways:** The Indian Railways network binds the social, cultural and economical fabric of the country and covers the whole of country ranging from north to south and east to west removing the distance barrier for its people. Indian Railways is
known to be the largest railway network in Asia. The Ministry of Railways under Government of India controls Indian Railways. The Ministry is headed by Union Minister who is generally supported by a Minister of State. The Railway Board consisting of six members and a chairman reports to this top hierarchy. The railway zones are headed by their respective General Managers who in turn report to the Railway Board\textsuperscript{54}. The following table depicts the Zonal Division of Indian Railways\textsuperscript{55}:

**Table 2.1 – Zonal Division of Indian Railways**

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Railway Zone</th>
<th>Headquarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Central Railway</td>
<td>Mumbai</td>
</tr>
<tr>
<td>2</td>
<td>Eastern Railway</td>
<td>Kolkata</td>
</tr>
<tr>
<td>3</td>
<td>Northern Railway</td>
<td>New Delhi</td>
</tr>
<tr>
<td>4</td>
<td>North Eastern Railway</td>
<td>Gorakhpur</td>
</tr>
<tr>
<td>5</td>
<td>Northeast Frontier Railway</td>
<td>Guwahati</td>
</tr>
<tr>
<td>6</td>
<td>Southern Railway</td>
<td>Chennai</td>
</tr>
<tr>
<td>7</td>
<td>South Central Railway</td>
<td>Secunderabad</td>
</tr>
<tr>
<td>8</td>
<td>South Eastern Railway</td>
<td>Kolkata</td>
</tr>
<tr>
<td>9</td>
<td>Western Railway</td>
<td>Mumbai</td>
</tr>
<tr>
<td>10</td>
<td>East Central Railway</td>
<td>Hajipur</td>
</tr>
<tr>
<td>11</td>
<td>East Coast Railway</td>
<td>Bhubaneswar</td>
</tr>
<tr>
<td>12</td>
<td>North Central Railway</td>
<td>Allahabad</td>
</tr>
<tr>
<td>13</td>
<td>North Western Railway</td>
<td>Jaipur</td>
</tr>
<tr>
<td>14</td>
<td>South East Central Railway</td>
<td>Bilaspur</td>
</tr>
<tr>
<td>15</td>
<td>South Western Railway</td>
<td>Hubli</td>
</tr>
<tr>
<td>16</td>
<td>West Central Railway</td>
<td>Jabalpur</td>
</tr>
</tbody>
</table>

The Northeast Frontier Railway abbreviated as N.F.Railway is one of the 16 railway zones in India. Headquartered in Maligaon, Guwahati in the state of Assam it is responsible for rail operations in the entire Northeast and parts of West Bengal and Bihar. It is divided into 5 divisions:

- Alipurdour Railway Division
- Katihar Railway Division
- Lumding Railway Division
- Rangia Railway Division
- Tinsukia Railway Division

Each of these divisions is headed by a Divisional Railway Manager, a Senior Administrative Grade officer of the rank of Joint Secretary to Government of India. The departmental setup at headquarters level and divisional setup in the field assists the General Manager in running the railways. Various departments namely engineering, mechanical, electrical, signal & telecom, operations, commercial, safety, accounts, security, personal and medical are headed by a Senior Administrative Grade / Higher Administrative Grade officer, provide technical and operational support to the divisions in train operations.

- **Public Sector Banks:**

  Public Sector Banks (PSBs) are banks where a majority stake (i.e. more than 50%) is held by a government. There are currently 22 public sector banks in India along with associates of SBI, they stand at 27.
Indian banking is the lifeline of the nation and its people. Banking has helped in developing the vital sectors of the economy and usher in a new dawn of progress on the Indian horizon. Banking in India originated in the last decades of the 18th century. The first banks were The General Bank of India, which started in 1786, and the Bank of Hindustan, which started in 1790; both are now defunct. The oldest bank in existence in India is the State Bank of India, which originated in the Bank of Calcutta in June 1806, which almost immediately became the Bank of Bengal. This was one of the three presidency banks, the other two being the Bank of Bombay and the Bank of Madras, all three of which were established under charters from the British East India Company. For many years the Presidency banks acted as quasi – central banks. The three banks merged in 1921 to form the Imperial Bank of India, which, upon India’s independence, became the State Bank of India in 1955.

Nationalization of banks in India was done in two phases. The first phase of nationalization started in 1955 when the erstwhile Imperial Bank of India became State Bank of India with an Act of parliament. During 1959, seven subsidiaries were nationalized and associated with State Bank of India one by one. The second phase of nationalization started in 1969 with the nationalization of 14 major commercial banks in India. In 1980, 6 more commercial banks were nationalized and became
public sector banks. The nationalized banks in India expanded their branches and spread their activities across the country. The nationalization of Banks in India helped the masses to avail banking services at affordable cost.\(^{62}\)

### 2.8 METHODOLOGY OF THE STUDY

In order to carry out the research, the following methodology was adopted -

- **Universe of the study**

  For the purpose of the study, the universe consists of women employees working in i) Indian Oil Corporation Limited (Assam Oil Division) ii) Public Sector Banks of Tinsukia District and iii) Northeast Frontier Railway (Tinsukia Division). The distribution is better shown in the following table –

<table>
<thead>
<tr>
<th>Public Sector Organizations</th>
<th>Population Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indian Oil Corporation Limited (AOD)</td>
<td>125 (as on 20-08 - 2014)</td>
</tr>
<tr>
<td>Banks of Tinsukia District</td>
<td>107 (for the period 2013 to 2014)</td>
</tr>
<tr>
<td>Northeast Frontier Railway (Tinsukia Division)</td>
<td>531 (as on 17-09-2014)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>763</strong></td>
</tr>
</tbody>
</table>

Source – Survey data.

- **Sampling Design**

  - **Sampling unit** –

    The working women (both executive and non-executive) of the selected public sector organizations i.e. i) Indian Oil Corporation
Limited (Assam Oil Division ii) Public Sector Banks of Tinsukia District and iii) Northeast Frontier Railway (Tinsukia Division) constituted the sampling units. Here each working women was the unit of the study.

✓ **Sample size and sampling method** -

The sample size of the respondents from the population has been calculated with the help of sample size calculator (software) by Raosoft Inc\(^6^3\). The researcher has taken 95% confidence level and 5% margin of error. These figure along with the population size i.e. 763 was put in the software and a sample size of 256 i.e. 33.56% was found, it was later rounded off to 34% and a sample size of 260 was determined to serve the purpose. This sample size of 260 was later proportionately distributed among the three sectors. Table no. 2.3 below shows the overall sample size of the women employees working in IOCL (AOD), Banks of Tinsukia district and N.F Railway (Tinsukia division)

**Table 2.3 - Total sample size**

<table>
<thead>
<tr>
<th>Public Sector Organizations</th>
<th>Population Size</th>
<th>Sample Size (34% of Population Size)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indian Oil Corporation Limited (AOD)</td>
<td>125</td>
<td>43</td>
</tr>
<tr>
<td>Banks of Tinsukia District</td>
<td>107</td>
<td>36</td>
</tr>
<tr>
<td>Northeast Frontier Railway (Tinsukia Division)</td>
<td>531</td>
<td>181</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>763</strong></td>
<td><strong>260</strong></td>
</tr>
</tbody>
</table>

Source – Survey data.
Sample Profile of the respondents:

Table 2.4 - Sample Profile of the respondents

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Parameters</th>
<th>Public Sector Organizations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Indian Oil Corporation Limited (AOD)(% )</td>
<td>Banks of Tinsukia District (%)</td>
</tr>
<tr>
<td>1.</td>
<td>Age</td>
<td>20-30 years</td>
<td>03(07)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30-40 years</td>
<td>12(28)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40-50 years</td>
<td>13(30)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50-60 years</td>
<td>15(35)</td>
</tr>
<tr>
<td>2.</td>
<td>Designation</td>
<td>Executive</td>
<td>07(16)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-Executive</td>
<td>36(84)</td>
</tr>
<tr>
<td>3.</td>
<td>Marital Status</td>
<td>Married</td>
<td>32(75)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unmarried</td>
<td>07(16)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Widow</td>
<td>04(09)</td>
</tr>
<tr>
<td>4.</td>
<td>Annual Income</td>
<td>Less than 2 lakh</td>
<td>06(14)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Between 2-5 lakh</td>
<td>13(30)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Between 5-8 lakh</td>
<td>14(33)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>More than 8 lakh</td>
<td>10(23)</td>
</tr>
</tbody>
</table>

Source: Survey data

- **Data Collection Design:**

The research is based on purposive sampling followed by convenience sampling method. Data has been collected through both Primary as well secondary sources. The secondary data has been collected through various books, journals and websites. The data was collected during the period from August 2012 to January 2015. The technique adopted in the present study for collecting primary data is the general administration of the questionnaire method. The questionnaire
framed for the purpose of study involved close ended questions with multiple choices.

- **Questionnaire Design:**

The questionnaire contained four parts. While designing the questionnaire, the objective of the study were kept in mind and sections were created with respect to each objective.

- **Part I** – This dealt with personal profile of the respondents viz: Age of the respondent, Designation of the respondent, Marital status of the respondent and Annual income of the respondents.

- **Part II** – This part contained those questions which could help in identifying various investment avenues in which the respondents have interest to invest as well as questions which could help in measuring the awareness level of the respondents as regard these avenues.

- **Part III** - This part contained questions on the purposes for which investments are made by the respondents and the variables which are judged or enquired by the respondents before making investment decision.

- **Part IV** - This dealt with questions such as the time period preferred for investment, Percentage of income kept aside for investment, sources of information for investment, parties in
investment decision, confidence over investment decision, attitude towards risk, perception on investment decision. The questions contained in this part were utilized for making a comparative study on the investment behavior of women employees working in the petroleum, banking and railway sectors.

- **Methods of data analysis and interpretation**

  Simple statistical tools of analysis like percentages and cross-tables have been used to interpret the data collected and to arrive at findings thereof. This has been done using the SPSS (version 13) software.

2.9 CHAPTERISATION:

**CHAPTER I – PROLOGUE:** It covers aspects like theoretical background of Investment, Investment behavior, public sector organizations, various Investment alternatives.

**CHAPTER II – RESEARCH DESIGN:** This chapter portrays the Reviews of Literature, Research Methodology, Objectives and rationality of the study, Hypothesis, profiles of IOCL (AOD), Banks of Tinsukia district and Northeast Frontier Railway.

**CHAPTER III – MOST PREFERRED INVESTMENT ALTERNATIVES:** This chapter identifies the various investment
alternatives in which the women employees of the IOCL (AOD), Banks of Tinsukia district and Northeast Frontier Railway are interested to invest their saved money.

**CHAPTER IV – FACTORS INFLUENCING INVESTMENT BEHAVIOUR:** This chapter identifies the various factors which have influence over the investment behavior of women employees working in IOCL (AOD), Banks of Tinsukia district and Northeast Frontier Railway.

**CHAPTER V – COMPARISION OF INVESTMENT BEHAVIOUR IN DIFFERENT SECTORS:** This chapter makes a comparative study on the investment behavior of women employees working in IOCL (AOD), Banks of Tinsukia district and Northeast Frontier Railway.

**CHAPTER VI – EPILOGUE:** Finally this chapter covers hypothesis testing, Suggestions and conclusions.
End Notes


52 http://assamoil.com/assamoil.html (accessed on 14-01-16)


54 http://www.nfirindia.org/downloads/Know_about_Indian_Railways.pdf (accessed on 14-01-16)


56 http://www.worldlibrary.org/articles/northeast_frontier_railway_zone (accessed on 14-01-16)

57 Ibid


59 http://www.iba.org.in/viewmembanks.asp?id=1 (accessed on 03-03-06)

60 List of Public sector banks and their respective website addresses” (Online at http://www.time4education.com/bankexams/List_of_PSUBanks.aspx, accessed on 10-3-16)

61 Adukia, R.s, “An Overview of Banking Sector in India” (Online at http://www.caaa.in/Image/An%20Overview%20of%20Banking%20Sector%20in%20India.pdf, accessed on 03-01-16)


63 “Raosoft Sample Size Calculator” (http://www.raosoft.com/samplesize.html, accessed on 16-12-15)