CHAPTER-2

RESEARCH METHODOLOGY

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2.1 <u>RATIONALE OF THE STUDY</u> :

The users of an enterprise's financial statements are interested in how the enterprise generates and uses cash and cash equivalents. This is the case regardless of the nature of the enterprise's activities and irrespective of whether cash can be viewed as the product of the enterprise, as may be the case with a financial enterprise. Enterprises need cash to conduct their operations, to pay their obligations and to provide returns to their investors.

When cash flow statements are used in conjunction with the other financial statements, it provides such information which enables the users to evaluate the changes in net assets of an enterprise, its financial structure, its liquidity and solvency position and its ability to affect the amounts and timing of cash flows in order to adapt to changing circumstances and opportunities. The ability of the enterprises to generate cash and cash equivalents can be accessed through studying the cash flow statements. It enables the users to develop models to assess and compare the present value of the future cash flows of different enterprises and enhances the comparability of the reporting of operating performance by different enterprises because it eliminates the effects of using different accounting treatments for the same transactions and events. Historical cash flow information is used as an indicator of the amount, timing and certainty of future cash flows. It is also useful in checking the accuracy of past assessments of future cash flows and in examining the relationship between profitability and net cash flow and the impact of changing prices.

In this study, the matters relating to the cash flow statements, which normally forms a part of the financial statements of various enterprises to which the Accounting standard (AS) 3, 'Cash Flow Statements', become mandatory, is discussed in the light of, and on the basis of, the said Accounting Standard.

2.2 <u>TITLE OF THE PROBLEM</u> :

The title of the selected problem is ***"AN ANALYSIS OF CASH FLOW STATEMENTS OF SELECTED INDIAN COMPANIES OF CHEMICAL INDUSTRY".***

2.3 <u>OBJECTIVES OF STUDY</u> :

This study is on the topic "An Analysis of Cash Flow Statements of Selected Indian Companies of Chemical Industry".

There are three important activities which are the significant parts of Cash Flow Statements. The analysis of all these activities is undertaken with the following objectives:

(1) To study the trend of various activities such as Operating, Investing and Financing of selected companies of chemical industry.

(2) To analyze the effect of three activities i.e. Operating, Investing and Financing on the Net Profit of the selected companies of chemical industry.

(3) To provide suggestions for improvement in Cash Management.

2.4 <u>SAMPLE SELECTION</u> :

For the purpose of the study Ten (10) manufacturing companies of Chemical Industry has been selected.

1. TATA Chemicals Ltd.
2. Pidilite Industries Ltd.
3. Hindustan Organics Chemicals Ltd.
4. Meghmani Organics Ltd.
5. Clariant Chemicals Ltd.
6. National Organic Chemical Industries Limited
7. BASF India Limited
8. Gujarat Alkalis and Chemicals Ltd.
9. Himadri Chemicals Ltd.
10. HIKAL Ltd.

2.5 <u>PERIOD OF STUDY</u> :

This study is conducted for the period of Eight (08) financial years i.e. from 2004–'05 to 2011–'12.

2.6 HYPOTHESIS :

Considering the objectives of the study the following hypothesis were formed under investigation.

- **Null Hypothesis :**

(1) The trend of Operating Activities is identical in selected companies during the period of study.

(2) The trend of Investing Activities is identical in selected companies during the period of study.

(3) The trend of Financing Activities is identical in selected companies during the period of study.

(4) There is no significant effect of Operating, Investing and Financing activities on the Net Profits of the selected companies.

- **Alternative Hypothesis :**

(1) The trend of Operating Activities is flexible during the period of study of selected companies.

(2) The trend of Investing Activities is flexible during the period of study of selected companies.

(3) The trend of Financing Activities is flexible during the period of study of selected companies.

(4) There is a significant effect of Operating, Investing and Financing activities on the Net Profits of the selected companies.

2.7 DATA COLLECTION :

In this study, mainly secondary data is collected. This data has been obtained from the following sources:

- Published Annual Reports of the companies for the financial year 2004 – ’05 to 2011– ’12.
- Directory of Mumbai Stock Exchange

- Websites of the selected Companies
- Information and Library Network centre (INFLIBNET)
- Other websites viz.

  www.nse.com

  www.bse.com

2.8 STATISTICAL TECHNIQUES :

The statistical analysis technique is selected to analyze the Cash Flow Statements of the companies understudy. For this, following techniques are being used:

- Mean
- Standard Deviation
- Co – efficient of Variation
- Multiple Regression Analysis

2.9 LITERATURE REVIEW:

A literature review is a report which is based on assessment of the values, qualities and significance of the studies related to a particular topic or area. The summary, description, evaluation and clarification of literature should be done by the review. A theoretical base for the research should be given by the review of literature. A review of literature should help the researcher to determine the nature of the selected topic or area. For reviewing the literature, one should select limited number of literatures which are closely connected to the selected topic instead of selecting large number of literatures which are not of much importance.

A literature review is more than merely search for information. The relationship between the literature and the area of research is identified in the review of literature. Different studies have different forms of literature reviews. In spite of having different forms, the basic purposes remain same in the review of literature:

- Helps to make the meaning of research clear and meaningful.
- To prove that research is reasonable and necessary.
- Ensures that the research is not duplicated.
- Helps the researcher to study on the subject from the previous level.
- Focus on the theory or argument of previous research which is less effective or less valid.

- Explain the gaps of previous research in a general way.
- Ensures that the research adds knowledge and understanding power of the selected topic.
- Helps in deciding where the topic fits into the existing body of thesis.
- Helps in understanding how the topic of research has been studied in the past.
- Helps in refining, refocusing and even changing the topic by removing all other substances.

Some important literature reviews regarding cash flow statement have been discussed as under:

(1) H. Y. Hung, Monica Chan Annie Yhi (1995) had undertaken study "The usefulness of cash flow statement". They mentioned that during the last few years, reporting of cash flow statement has become an important aspect in the banking sector. This trend helps in bringing the important parts of the cash flow statement which helps in comparing the cash flow statement of direct business. Cash flow statement can be prepared by two ways. In this study, the usefulness and importanceof cash flow statement is examined by the empirical study in the Hong-Kong context. The results of this study stated that cash flow statement is having greater importance and majority of the users are using it.

(2) Helen Kwok and Tuen Mun (2002) undertook the study "The effects of cash flow statement on Lenders' decisions" They mentioned that while taking decisions about lending loans, bank officers use cash flow statement as a document as it provides an important information about cash inflow and cash outflow. As an experiment, subject from group of four persons using financial reports was taken up. These were auditors, accounting academies, financial analysts and bank loan officers. Each of these subjects were given annual reports of two loan applicant companies and were asked to make independent lending decisions on whatever data was provided. This data included the cash flow statement of one company was given in the direct format and the other was presented in the indirect format. The latter format was used as an additional for the fund flow statement. The result that was presented clearly indicated that a majority of the subject obtained information from the Balance-

sheet. However, it was also found that the cash flow statement was the second most used financial information base. Even notes to the financial statements were taken into account almost ignoring the cash flow statements. No subject was found to be using fund flow statements as the base of their financial reports.

(3) Allen K. Hunt, Linda M. Lovata and Michael L. Costigan (2008) had undertaken study “Characteristics of companies using different Cash Flow methods”. They mentioned that it has been found that the Financial Accounting Standard Board (FASB) allows the use of both the direct and the indirect method in preparing a cash flow statement. In many cases however, it has been found that the FASB would like the use of the direct method because it has been found in the practice the indirect method gives less information than the direct method. Though this is the case, somehow or other it has been found that a majority of the companies select indirect method. Comparing the both, the resultant conclusion is that smaller firms with fewer branching segments are using the direct method. Companies with a happy cash flow within are more likely to use the direct method. It has been found that companies with a weaker cash flow become more accustomed to the indirect method.

(4) Boyd, Thomas, Cortese – Danile and Teresa M. (2000) had undertaken the study “Using the Cash Flow Statements to Improve credit Analysis.” They mentioned that anyone who extends a loan, be it an individual or a firm is bound to be asked the question that whether the loan and its interest will be returned completely and on time. The loaner is bound to study the loanee’s financial statements of the past so that he can make an estimate of the financial ability of the borrower and his capacity to repay the loan. It is hear that a record of the loanee’s cash flows in the recent past comes in as a healthy data to decide upon the grant of the loan. The FASB has accepted that an understanding the use of cash is of primary importance in financial reporting. Such reporting should provide all information to help present and potential investors, creditors and other users. This information should include receipts from interest, dividend and proceeds from sale.

(5) Fawzi Laswad and Rachel F. Baskerville (2007) had undertaken study “An analysis of the value of Cash Flow Statements of New Zealand Pension Schemes”. They mentioned that retirement schemes should mention their earnings basically value based and should reflect recent changes towards fair value reporting in financial reporting. Fair value earnings in similar schemes should include two kinds of earnings realized earnings and unrealized changes in the value of assets and liabilities. Conclusions arrived in this study brought in the fact that realized earnings are negatively brought into an unrealized earnings positively associated with cash flow operations. At the same time, no connection is found between unrealized earnings and cash flow from day-to-day workings. Therefore suggests that value reporting has reduced the difference between realized earnings and operating cash flows. Hence, the reporting of cash flow information from that reported in realized earnings. In spite of all this, the results always have suggested that the unrealized earnings give additional information to users.

(6) Ken Little had undertaken study “Cash Flow ratios are a better measurement of a stock’s value than price earning (P/E) ratio”. He mentioned that no company can have a long time without undertaking cash. This is perhaps a simplistic way of stating the obvious, but the truth is that we have a long list of companies or institution that failed at every point because too short supply of cash. The price to cash flow is usually calculated by dividing the stock’s price by cash flow per share. Free cash flow is an improvement of cash flow that goes beyond a step further and brings together onetime expenses, capital expenses, dividend payments and other non-recurring charges. All these are brought back to cash flow. The result showed how much cash the company has been able to generate in the twelve months that went by. A lesser contribution to its industry and sector will show that the market has undervalued the stock. In terms of ratios, like always they don’t tell the whole story. You must be prepared to check up and look at other matrix to verify the real value. Almost like P/E, the cash flow ratios can be used to indicate how the market values the company. Lower number would suggest that the market has undervalued the stock. In many cases, the ratios do not tell the whole story

but they cannot be ignored because these cash flow ratios do give some important information as to the standing of the stock in the market.

(7) Scott Allen had undertaken study “Cash (Flow) really is king”. He mentioned that most of the businesses failed not due to lack of profit but due to lack of cash flows. Why this is happened? He explains two main reasons: (1) while predicting the cash flow, the owners of the business always remain unrealistic. They estimate higher incomes and lower expenses. (2) Owners of the business are also not able to estimate when cash would be required and how much cash would be required. Sometimes, in spite of having active customers, they cancel or cease the operations. The best policy is to adopt conservatism policy. If your accounts show a cash surplus at the end, there are two options available for it: (i) It can be re-invested in the business for expansion. (ii) To keep it to meet the unanticipated shortage of cash in the future. But, you would not think of alternative use of surplus cash. At the same time, if your account shows a cash deficit at the end, it may result into loosing of suppliers, employee separation, closing the entire business etc. While making business plan for potential investors, past cash flow statements and future projects of cash flow are required as the compulsory financial statements in its annual reports. After some time of adopting such plan, you will find such plan as an absolutely essential management tool for the business.

(8) In an article of the Institute of Chartered Accountants of India (2009) it was pertaining to analysis – AS - 3 Vs. IAS - 7 – Cash Flow Statements mentioned that there are some points of differences between AS-3 and IAS-7: (i) AS-3 covers all the business entities excluding some business entities in the Small and Medium Enterprises (SMEs) sector whereas IAS-7 includes all the entities. It has no such exemption. (ii) AS-3 includes only cash on hand and bank demand deposits whereas IAS-7 covers large physical areas which includes cash on hand, demand deposits with bank and borrowings from which may be repayable on demand. (iii) Under AS-3, payment of interest and dividends are recorded under financing activities whereas there is no such explanation under IAS-7. (iv) Under AS-3, extra-ordinary items are recorded separately under Operating, Investing or Financing activities whereas under IAS-7 no such specific disclosure is required for extra- ordinary items.

(9) Goyal & Mahendra K (2004) had undertaken study "A survey on popularity of the direct method of cash flow reporting". They mentioned that which method – direct approach or indirect approach – should be used for preparing cash flow statement, the debate on this cash flow statement. (i) In United States of America, most of the business enterprises use an indirect method for the cash flow statement even accounting standard SFAS-95 allows an option to use any method. (ii) But, in Australia, accounting standard AASB -1026 provides compulsory use of direct method. The main object of this study is to examine which method – direct or indirect – is more useful to the users of financial statements in decision making process. For this study Managers, Shareholders, Employees, Creditors, Suppliers and Customers were selected as a target group. The survey shows the result that direct method for cash flow reporting is superior to the indirect method. Managers and shareholders respond that direct method is more useful due to following reasons: (i) It is useful in understanding the data which is presented in the cash flow statements (ii) It is useful in satisfying the needs which are used for decision making purposes. (iii) It is relevant and reliable than indirect method. A small group of employees, suppliers and customers believe that the direct method is more useful than the indirect method of cash flow reporting. The survey also showed that a majority of the employees and customers were neutral about the use of direct or indirect method of cash flow reporting.

(10) Christian Leuz (1999) had undertaken study "The development of voluntary cash flow statements in Germany and the influence of International reporting standards". He mentioned that the purpose of this study is to examine the format of the cash flow statement and the method adopted for preparing cash flow statement over a period of time. This paper also presents how the voluntary cash flow statement has been developed by the German firms. It is an important change in the evolution of the various recommendations of the German professionals and various International standards. Various statistical techniques like Probit regression and Factor analysis have been used to analyze the cross-sectional determinants of voluntary cash flow statement. The results of this paper are consistently showing that cash flow statements

disclosures are driven by the capital market forces. These forces are in connection with the various International reporting standards.

(11) Hussey, Roger, Bence and David (1992) had undertaken study “Analysts and the cash flow statement”: They mentioned that an interview was conducted of twenty-one investment analysts to find out how they view, judge and interpret corporate annual reports. The results of this study showed that the analysts did not prefer annual reports as the source of information. Investment advisors gave preference to the Preliminary statements, Personal interviews, Interim statements and Company representatives. Out of the various respondents of preferred statements, 71% preferred cash flow statement while only 19% preferred the fund flow statement. Most of the analysts also believe that cash flow statements are better than the fund flow statement. The reason behind this was that cash flow statements are more standardized and gives more and accurate comparison between the organizations.

(12) Paul B.W. Miller and Paul R. Bahnson undertook a study on “Fast Track to Direct Cash Flow Reporting”. They mentioned that most of the managers prefer the indirect method for reporting of operating cash flow in spite of having lots of reasons for using the direct method. Direct method is considered as the superior method to the indirect method of cash flow reporting. The reason behind this is that direct method provides more useful information than the indirect method. Such information helps the capital markets for estimating the time, amounts and future cash flow of the company. Also, it is very easy to apply the direct method. The information which is needed by the users of financial statements can be easily provided in the direct method. By adopting direct method, the recommendations of the Financial Accounting Standard Board (FASB) can be satisfied by complying with the minimum GAAP. The recommendations of the Association for Investment Management and Research (AIMR) about cash flow statement can also be satisfied by direct method. As a result of this, the investors, creditors and managers will get the more and accurate information. It will also reduce the cost of capital and will increase the prices of stock.

(13) Padmini Srinivasan and M. S. Narasimhan conducted a survey on "An Evaluation of Value Relevance of Consolidated Earnings and Cash Flow Reporting in India". They mentioned that in this study, the relevance of the various financial statements and cash flow statements in Indian stock market has been examined. Very few countries provide information in these two contexts. In this way, the Indian context is unique and has greater importance of these financial statements. Evidence for preparation of the financial statements and cash flow statement is provided in this study. The result of the study stated that as far as market adjusted stock return is concerned; there is no significant association between earnings and the cash flow statements. On the other side, positive relationship is found between earnings and the stock returns. The results in this study are different from the existing literature on value relevance of other countries. This study also focus on the path to which market reacts to the information in the Indian market which is emerging. The results of this study also have a policy adoption for different regulatory authorities as most of the countries are moving towards adopting the International Financial Reporting Standards.

(14) Dariusz Wedzki conducted a survey on "Cash Flow in Corporate Bankruptcy". He reported that in this study, it is mentioned that how financial ratios on cash flow are used for predicting corporate bankruptcy. In the area of bankruptcy modeling, it was observed that (i) there is a significant difference between net income statement and cash flow statement and hence cash flow statement gives important information. (ii) Cash flow statement has greater importance than the simplified measures of cash flow. At the time of constructing various financial ratios for cash flow, some suggestions for future research were also given. (iii) At last, a conclusion was drawn that bankruptcy is due to the so-called sign analysis of cash flow an under-explored over.

(15) Dyna Seng conducted a survey on "Earnings Versus Cash Flows as Predictors of Future Cash Flows: New Zealand Evidence". He reported that in this study forecast of one period and two-period ahead cash flows during the period 1989-92 is examined. In this study, various models of research methodology done by Bowen, Burgstahler and Daley (1986) are used. As a secondary goal of this study, the correlation and association between earnings and various

cash flow measures is also examined. In this cash flow measures, different variables such as net income, depreciation and amortization and operating working capital are examined. The results of this study stated that cash flow from financing activities is considered as best predictor of one-period and two-period ahead as earnings. The results also stated that there is a highly positive correlation between traditional cash flow measures and earnings. It also suggested that both are similar. But, on the other hand, there is very low correlation between measures of reported cash flows and measures of traditional cash flows.

(16) A. J. Arnold, C. D. B. Clubb, S. Manson & R. T. Wearing conducted a survey on "The Relationship between Earnings, Funds Flows and Cash Flows: Evidence for the UK". They mentioned that Like US, the studies conducted in the UK about the relationship between earnings and prices of shares. It also has identified the reasons due to which operating cash flow is facing lack of information. In this paper, the direct relationship between earnings, cash flow statement and fund flow statement is measured. For this study, the period of 1965-84 is taken. In this study, the tests of association and predictive tests based on research methodology adopted by Bowen, Burgstahler and Daley (1986) in US have been used. The results of this study stated that in the US findings, the relationship between earnings, cash flow statement and fund flow statement is like the situation where two events or situations which happen at the same period of time and it can be predicted. But, this situation is not found in UK. This study does not provide any support about the view that earnings are better than cash flow as predictor of cash flow in the future.

(17) International Financial Reporting Standard (IFRS) no. 107 is relating to the cash flow statements. It provides the guideline that cash flow statement is an integral part of the firm's financial statements. It also provides that "Information about cash flow is very useful in predicting the enterprises' ability to generate cash and cash equivalents". In this study, an attempt is made to find out the predictive ability of the operating cash flow and data based on accrual accounting to predict future cash flow from operating activities. For this study, Multivariate Regression Models and Panel data were used. In this study, 173 companies were taken as sample from the companies

which were listed on the Bursa Malaysia. In this study, to predict future cash flows from operating cash flow during the period 1997-2005, following three predictor variables have been used: (i) Net income before extraordinary items (NI) (ii) Net income before extraordinary items + Depreciation and Amortization (NDA) (iii) Cash flow from Operating Activities (CFO).

(18) Dan Givoly, Carla Hayn, Reuven Lehavy conducted a survey on "The Quality of Analysts' Cash Flow Forecasts". They mentioned that in this study, the analysts' ability of predicting future cash flow is examined. It is compared with the analysts' ability of predicting future earnings. The results of this study stated that the analysts' ability of predicting future earnings is more accurate than the ability of predicting future earnings. The results also stated that during the forecast period, ability of predicting future cash flow improves at a lower rate. Also, there is a negative extension between analysts' cash flow forecast and future forecast. The cash flow forecast provides limited information for estimated changes in working capital. The results also indicated that the analysts' ability of predicting future cash flow provides very limited information. They are connected and associated with returns on stock. The results also stated that the comparison between analysts' earnings forecast and their cash flow forecast does not provide the information which may result in a better prediction of earnings management.

(19) Marta Ballester, Dov Fried and Joshua Livnat conducted a survey on "Pension Plan Contributions, Free Cash Flows and Financial Slack". They mentioned that in this study, it is examined whether for meeting financial slack, managers are using pension plans or not. The results of this study stated that there is an important and positive relationship between free cash flow levels and pension plan contributions. In this study, it is suggested that the phenomenon should not be limited to an ability to pay. It should be more than this. The main reason behind this suggestion is that the relationship between free cash flow levels and pension plan contributions is driven by the firms having positive free cash flows and not by the firms having negative cash inflows. The results obtained in this study are consistent with the theory of Myers and Majluf. It observes that the management hoard excess free cash flows and uses it for

meeting financial slack so that it can be used for profitable investment projects in future. The results of this study also stated that management may keep the additional cash flow in its portfolio of choice of investment after meeting the demand of financial slack. The results also indicated that the profit or return which is earned on pension contributions may be higher than any other investment plans. So, it is leading to invest more in pension plans.

(20) ROYA Darabi, M.Adeli, M.Torkamani conducted a survey on “The Effect of Cash Flow Shocks on Capital and Asset Structure”. They mentioned that in this study, financial constraints’ effect is examined on the cash flow in Tehran Stock Exchange. For this study, the period from 2005 to 2010 has been selected. In this study, the cash flow sensitivity is defined as the ratio of changes in the cash reserves to the changes in cash flow from operating activities. For this, an applied and regression descriptive research has been used. The companies are classified and divided into two categories after considering the following three distinctive criteria viz. size of the company, dividend pay-out ratio, ranking of the company. Such classification of companies includes companies with financial constraints and companies without financial constraints. Such classification is done in order to test the two hypotheses of the study. The results obtained in this study show the hypotheses were rejected. The results also stated that there is no effect of financial constraints on the sensitivity of cash flow.

(21) Negrea Laura, Matis Dumitru, Mustata V. Razvan conducted a survey on “Cash Flow Reporting and Creative Accounting”. They mentioned that in this study, two hypotheses are formulated to achieve the proposed objective: H1: Creative accounting represents the cash flow reporting in an untrue way but within the limits of regulations which are present. H2: The reporting cash flow is being manipulated by the actually existed activity. To uncover the various issues which were not taken into account, some steps were followed to analyze the IAS-7 relating to cash flow statement. In the final step, relevant results and their observations were mixtured. Beyond this, in this study, some techniques relating to creative accounting and manipulation of real activity were also identified. The results of this study stated that whatever the limits were set by

the standard, the techniques were also within such limits. As the activities manipulated actually are very difficult to detect, should be considered. This should be done if the analysis is not done within the figures stated in the Profit and Loss account and the important notes available to financial reports. The results also provide a base why cash flow statement should be analyzed with reference to creative accounting. By using various methods and techniques, this study provides a base for future study about the effect of such practices on cash flow forecast.

(22) Thomas A Jackman conducted a survey on "Corporate Bankruptcy and Prediction: An Analysis of Multi-Discriminate, Logit and Survival Models Using the Statement of Cash Flows". He mentioned that in this study, three techniques of different characteristics are compared and contrasted. These techniques include Multidiscriminant analysis, Logit analysis and Survival analysis. Such comparison is made on the predictive ability of corporate bankruptcy. In the previous studies, time period of 6-12 years was taken to evaluate various models. But, in this study, a period of 18 years is taken which includes the total business cycle of the organization. In this study, whether variables arise from cash flow statement and other macroeconomic variables are adding predictive ability to the models or not. For this study, various predictive models used in the past are used as a literature with cash flow variables and other variables. The results of this study stated that Multiple Discriminate technique is considered as most useful and consistent. For the sample taken, this technique performs the best. But, macroeconomic variables do not add more to the models' predictive ability. The results also contributed the variables of cash flow statement works well for the variables which do not receive financial support from any other organization. But, it does not add more to the models which are having variables of accrual accounting.

(23) Gholamhosein Mahdavi, Mehdi Saberi, Maryam Golmohammadi conducted a survey on "Specifying Optimum Model for the Prediction of Operating Cash Flows (Case Study: Companies listed in Tehran Stock Exchange)". They mentioned that in this study, the predictive ability of the various models about the operating cash flow is investigated. This study is conducted in the listed companies of the Tehran Stock Exchange. This is done to predict the model of

operating cash flows. For this study, a period of 1997-2006 and 73 companies of Tehran Stock Exchange were selected. This data was analyzed by using the Panel data analysis. To test the coefficient of different variables of regression model, correlation coefficient and linear regression techniques have been used. In the same way, to test the research hypotheses, various tests like F, T and Durbin-Watson were used. The results of this study stated that the cash flow's predictive ability increases with the bifurcation of the earnings to its cash and cash equivalent components. The results also indicated that cash flow predicting model which is based on bifurcating into six components can predict the cash flow from operating activities in a better way as compared to other tests.

(24) Christine Yap conducted a survey on "International Harmonization of Accounting Standards: The Case for a Mandatory Requirement for the Direct Method of Reporting Operating Cash Flows". He mentioned that due to the difference in the methods of operating cash flow reporting, the year 2005 has been selected as the target date by the European Union Parliament and the Australian Financial Reporting Council. This target date is set for adopting the various standards set by the IASB. It is assumed that there will be an improvement in the financial reporting by adopting the policy of accepting International Accounting standards. When the chairman of the IASB, David Tweedie criticized the Australian accounting standards by saying that this is very bad and unacceptable, such type of view was presented. The results of this study stated that even after adopting International standards, all the Australian standards would not be approved. Such conclusion is arrived after studying the various cash flow statement literatures.

(25) Dwi Martani, Mulyono, Rahfiani Khairurizka conducted a survey on "The Effect of Financial Ratios, Firm Size, and Cash Flow from Operating Activities in the Interim Report to the Stock Return". They mentioned that in this study, the relationship between accounting information and stock return is examined. For this, study, various factors such as profitability, liquidity, solvency, size and ratio of market, cash flow etc. is used in place of accounting information. As variables of return on stock, cumulative abnormal return and return on market adjustment are used. In this study, some listed

companies of Indonesian Stock Market have been taken as samples which are in manufacturing industry. For this, a time period of 2003-2006 has been selected. The results of this study stated that stock return is significantly affected by profitability, sales and market ratio. The result of this study is consistent with the various studies conducted by Utama and Santoso (1998), Hobart (2006), and Retraningsih (2007) in the past.

(26) Harley M. Courtney, Roberta Ann Jones and David O'Bryan had undertaken a study on "Direct Method Cash Flow Statements: Their Time has come". They mentioned that Researches of Knutson (1993) and Broome (2004) suggest that for preparing cash flow statement, direct method is more preferred by the users. Financial Accounting Standard Board (1987) and SFAS No-95 suggests using the direct method. But, it allows the companies to use the indirect method. Some companies argued that the adoption of direct method is very costly ass it requires some changes their accounting systems. Due to this argument, the compromise was done about the method. But, during the 1980s, it may be true. In the present era of technology, to continue the use of indirect method may not be justified because users prefer the direct method for cash flow statements. To prepare a cash flow statement using the direct method, an effective way is not provided by the present accounting information system. In this article, how cash flow statement can be prepared by using the current accounting software – is illustrated. It focuses on the various difficulties in using the direct method. It also suggests some changes in the accounting systems that developers uses. This would lead to a use of direct method for preparing cash flow statements as easy as Income statement and a Balance sheet.

(27) Norvald undertook a study on "Cameral Accounting and Cash Flow Reporting: Some Implications to use the Direct or Indirect Method". He mentioned that at the time of preparing cash flow statements and reporting cash flow from operating activities, the common question arise for a business enterprise is whether to use the direct method or indirect method. In this article, it is argued that the companies or people think double-entry bookkeeping only within the limits of commercial accounting. Due to this reason, the question of using the direct or indirect method cannot be solved.

This article is not limited to the discussion of whether to use the direct or indirect method in terms of commercial accounting which is specially designed to deal with the government organizations' cash transactions. The commercial accounting should learn the following points from commercial accounting: (i) To make the distinction between cash and non-cash balance sheet changes. (ii) To prepare cash flow statement directly from the cash transactions of the cash account of single-entry system before entering them into double entry system. (iii) To provide the net result and the information related to balance sheet. The direct method of preparing statement of cash flow becomes the normal method by applying this process.

(28) Negrea Laura , Mati Dumitru, Musta V. Razvan conducted a survey on "Free Cash Flow as part of Voluntary Reporting". They mentioned that the main object of this study is to show that the attitude exists of the state of art about free cash flow. It also focus on to remove the main problems and to produce an image which is objective in this matter. The object of this paper is to provide answers of main three questions: (i) What are the definitions of cash flow and which methods are used to calculate free cash flow? (ii) How agency theory is affected by free cash flow? (iii) Why interest is taken in free cash flow? To obtain the answers of these questions, four data were used which were based on International basis. Beyond this, some articles and researches were also used. The results of this study stated that no generally accepted method or definition is accepted for cash flow. The format of cash flow depends on the various users of the report. The cash flow reporting interest is based on various factors such as assessment of liquidity, valuation of company, choice of investors. The results also stated that managers are interested in choice of investment possibilities that may satisfy their interest and also fulfill the object of the company. This study contributed as a review of literature by focusing on comporting approach.

(29) Mamoun M. Al-Debi'e conducted a survey on "Are Operating Cash Flows a Superior Predictor of Future Operating Cash Flows than Earnings? Evidence from Jordan". He mentioned that in this study, the predictive ability for future operating cash flow and current earnings is examined. For this, some

companies which are listed on the Amman Stock Exchange in Jordan have been taken ass sample from service and industrial sectors. A period of 2000-2009 has been taken in this study. The results of this study stated that the operating cash flow has strong predictive ability about operating cash flow than earnings. This is happened in case of 1-3 year advance predictive ability. Beyond this, the results also show that predictive ability is high for huge companies, for companies having short operating cycle, for companies having positive operating cash flow. The results of this study are important and useful for purpose of valuation. The results are also useful in comparing the earnings and operating cash flows and raising questions about their value relevance.

(30) Dumitru Matis, Alina Beattrice Vladu, Laura Negrea conducted a survey on "Cash-Flow Reporting Between Potential Creative Accounting Techniques and Hedging Opportunities : Case Study Romania". They mentioned that in this study, the issues relating to cash flow reporting in Romania have been studied. This study is to find out if there is any relation between the creative accounting techniques and the cash flow reporting. The other object of this study is to focus on whether there is any possibility of various opportunities that can be used by the Romanian companies' financial managers. This is done with a view to reduce the effect of various influencing factors on the future cash flow. In this study, a questionnaire has been developed and it is given to the auditors of 208 audit companies and 267 individual auditors of Romanian companies. The results of this study stated that the Romanian companies are not much aware about the creative accounting techniques and it is not much used for predicting cash flow. In the same way, Romanian managers were also not much aware about the hedging techniques and were not using it properly. Some debt and other instruments relating to bank and insurance are used such as factoring, insurance receivables, financial instruments, and interest and foreign exchange rates.

(31) Paul Mizen and Philip Vermeulen conducted a survey on "Corporate Investment and Cash Flow Sensitivity-What drives the Relationship?" They mentioned that in lots of studies, the understanding and awareness of the investment to cash flow has been cleared. Latest researches in different countries have identified the level of understanding and awareness. It also

explains the relationship between the lender and borrower in the financial system of various countries. In this study, new techniques, methods and results have been offered. This is done to know whether there is any association between the differences and various structural explanations. Such structural explanations include financial system's nature, size and credit worthiness of the industry and composition of industry. The results of this study stated that the data's are controlled systematically for competing explanations in more than one country. The results also concluded that credit worthiness is the main factor which forces the sensitivity of cash flow.

(32) Catherine Shenoy and Paul D. Koch conducted a survey on "The Firm's Leverage-Cash Flow Relationship". They mentioned that in this study, the relationship between the financial leverage of the firm and its cash flow is measured. For this, two different views of capital structure have been used for the different information. A positive relationship is suggested by the signaling theory whereas negative relationship is suggested by the order behavior. Thus, both the theories are contradictory. But, in literature of practical experience of various bodies, both the theories are found to be supportive. Positive relationship is supported by the studies of leverage-changing event whereas negative relationship is supported by the studies of cross-sectional factors. The results of this study revealed that there is positive relationship between the leverage and the future cash flow in the across time. But, there is negative relationship between these two in the same time period. In this study, the controversy between the literature of theoretical and empirical aspect can be adjusted by considering the different and dynamic aspects. These aspects are considered between the leverage and cash flow relationship of the firm.

(33) Naveen D. Daniel, David J. Denis, Lalitha Naveen conducted a survey on "Sources of Financial Flexibility: Evidence from Cash Flow Shortfalls". They mentioned that the firms which are facing shortage of cash for payment of dividend and for investment purposes have to adopt any one of the various options such as reduction in dividends, reduction in investments, to sell the securities and to raise more funds, sale of assets, to reduce the cash reserves. The results of this study revealed that only 6% firms adopted the option of reducing the dividends. On the other hand, a large group of 68% firms reduced

the level of investment. Half of the cash shortfall was covered by reducing the investment whereas the other half was covered by obtaining debt from outside sources. Some options like issue of equities, cash balance reduction and sale of assets were not much important and were not taken into consideration seriously in reducing the cash shortfall.

(34) Mehdi Alinezhad Sarokolaee and Zahra Asadzadeh conducted a survey on "Applying the Free Cash Flow to Equity Valuation Model in Iran Khodro". They mentioned that in this study, an example is given of how to apply the free cash flow to equity valuation model which was proposed by Damodaran in 2006. Damodaran said that the stock value is nothing but it is the present value of the future cash flow to discounted equity. In this study, to calculate the present value of the Iran Khodro, free cash flow to equity model and super-normal growth model are combined. Beyond this, for calculating free cash flow to equity, how the various factors such as growth rate, the long term growth rate, beta and cost of equity are calculated – is also explained in this study. Free cash flow to equity was determined for the period of 2001-2009 for meeting the various objectives and goals. For predicting the future value of free cash flow to equity for a period of five years, the predictive growth rate was used. For calculating the present value of free cash flow was also predicted about the stock's discounted rate of Iran Khodro for the period of 2009-2013. At last, by using a total of five predicted free cash flow to equity and the value of the firm at t=5, the real value of the firm will be determined.

(35) Ross Kirkham conducted a survey on "Liquidity Analysis Using Cash Flow Ratios and Traditional Ratios: The Telecommunications Sector in Australia". He mentioned that the objective of this study is to undertake the liquidity analysis of the companies. This is done by using the traditional ratios as well as the latest cash flow ratios. In this study, a comparison is made between the traditional ratios and cash flow ratios. For this, a period of five years and a sample of 25 companies were taken from the telecommunication sector in Australia. The data was taken from the database of financial analysis. The Current ratio, Quick ratio, Interest coverage ratio, Cash flow ratio, Critical needs cash coverage ratio, Cash interest coverage ratio were examined. The results of this study explained the differences between the traditional ratios

and cash flow ratios for liquidity analysis. If the decision about the liquidity is taken only on the basis of traditional ratios, the results may be misleading. In some cases, it may happen that even if company is facing problems of cash flow, it seems to be liquid. In the same way, it may also happen that even if company is having enough cash flow, it may not seem to be liquid.

2.10 LAY-OUT OF THE SUDY:

This study is presented in seven different chapters. The highlight of each chapter is as under:

CHAPTER – 1

This chapter deals with introduction to the subject, different components of cash flow statement and their legal requirement for presentation. In includes definitions, legal provisions as per AS-3, benefits of cash flow information, format of the cash flow statement, operating activities, investing activities and financing activities.

CHAPTER – 2

This chapter deals with research methodology adopted by researcher which includes rational for the study, objectives of the study, period of the study, hypothesis formulated, collection of data, different literature survey done by different researcher regarding cash flow statement and limitations of the study.

CHAPTER – 3

This chapter deals with an overview of Indian Chemical Industry and history, plants, products and performance of the selected companies.

CHAPTER – 4

This chapter deals with analysis of the cash flow statements of last eight years of the selected companies.

CHAPTER – 5

This chapter deals with preparing comparative statement and comparing Means, Standard Deviation and Co-efficient of variation, conducting Trend Analysis and also using Multiple Regression for operating, investing and financing activities.

CHAPTER – 6

This chapter deals with observations made by the researcher and recommendations of researcher.

2.11 LIMITATIONS OF THE STUDY :

Every researcher tries to give justice to his research. Yet, there are some limitations to his findings because he has to depend on information given by some published or unpublished records and other sources. So, the further research can be carried out by considering the aspects given below.

This study is entirely based on the published financial statements of the company and other information received from the company officials. So, all analysis is based on this data. So it can be reliable to that extent.

1. As the information is collected from limited sources, it is not possible to use all the tools and techniques of statistical analysis.

2. Some external factors also could affect directly or indirectly to the companies' efficiency. But it is not easy to judge completely right about them.

3. The entire study is limited to ten companies only. It can be carried out by including Industry. So that, the actual efficiency and profitability position of the companies can be measured comparatively and we can see the true and fair picture of any company.

4. The study is based on secondary data; the secondary data has its own limitation.