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A Study on the Stock Broker's Influence on Investment Decision

Bharat Ghosh

Abstract

Stock markets are considered to be integral part of the economy. They are considered to be the best indicators of performance of economy when it comes to buying and selling of securities. It is worthwhile to mention that investor's perceptions play an important role in deciding the direction of stock market. With regard to stock markets investor perceptions play a significant role in it. The choice of their investment depends on their perception about stock market activities, brokers and investment avenues available. Investors are the heart of stock exchanges in any country. Without them it is impossible to imagine trading of securities in the stock markets. Perception, a psychological factor, influences the behavior of people whether it is in home or work place or businesses. A successful investor should understand the factors affecting the stock market operations. Therefore it is important for the investors to understand the influences of various factors on investment decisions. Indian stock markets have experienced significant changes in the last few decades. Several research studies have identified the factors influencing investor's perception towards stock markets while it is important to test whether it influences the investment decisions of investors. The investment of fund in stock is remarkable among business operations in that it is virtually always predicated in some degree on recommendation received from others. The more preponderant part of investors is non-professional. Naturally they feel that in culling their stock they can make profit by professional guidance. Yet there are unorthodox essential attribute in the very concept of investment advice. Businessmen seek professional advice on sundry elements of their business, but they do not expect to be told how to make a profit. Non-business people, rely on others to make investment profits for them, they are postulating a kind of copacetic outcome for which there is no true obverse in mundane business affairs. This study seeks to identify whether factors influencing investor perceptions has a significant impact on their investment choices and arrives at a meaningful conclusion which can benefit people dealing in stock exchanges.

Keywords: *Investor, Investor Perceptions, Advisor, Stock Markets, Investment Choices.*

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Introduction

The stock markets play an important role in the Indian Economy. Apart from various economic indicators like GDP, per capita income etc, stock market indices like SENSEX, NIFTY also indicates the performance of the economy. Investors judge the performance of the markets for investment decisions based on these indices. Investment decisions of the investors also depend upon various other factors. Investor perceptions play an important role in deciding the trend of the market. Of course, trend of the market and investor perceptions are interrelated. At present scenario, it is important to study the importance of various factors influencing investors perception towards investment decisions. During the last few months, Indian stock markets have reached its enormous heights and also witnessed some falls too irrespective of unfavorable conditions in the market. Hence it becomes necessary to study the impact of various factors affecting investor perceptions towards their investment decisions. Individual investments behaviour is concerned with choices about purchases of small amounts of securities for his or her own account. Investment decisions are often supported by decision tools. It is assumed that information structure and the factors in the market systematically influence individuals' investment decisions as well as market outcomes.

Recommendation on investments may be secured from a different source of society. These include: A relative or friend, presumably knowledgeable in stock, a local commercial banker, a brokerage firm or investment banking house or an investment counselor. If the investor rely on the recommendation of others in handling his investment, then either he must limit himself and his advisers rigidly enforced to standard, conservative and even not utilizing forms of investment or he must have an unwontedly familiar and expressing approbation erudition of the person who is going to direct his mazuma into other channels. The Expected utility theory verbalizes that the individual investment decision is a trade-off between two kind of consumption which is immediate consumption and deferred consumption. When financial decisions are made, then the participants in the market have for a long time relied on the notion of efficient markets and the rationality of the deportment of the investor. It is optically discerned that the conception of rational investors, those who have a proclivity to maximize their utility and exhibit total self-control is becoming recherche. Investors are postulated to be rational, equitable and consistent in an efficient market. Such investors make investment decisions without emotion or ardency. They make their culls which aim at maximizing their expected utility. Moreover decision makers do not act in the way as explicated by the traditional economic model. It has been visually perceived through contemporary research that the investment cull process is more human as compared to analytical. India has not given its due to research in behavioral finance as compared to other countries around the globe. Albeit Behavioral finance has greatly gone ahead but it has by no designates demeaned the rudimental work that is been done by proponents of efficient Market hypothesis. Instead, it is denoted to examine the consequentiality relaxing Fictitious behavioral posits and make it more proximate to the truth. It does this by integrating more individual aspects of decision-making process in financial markets. Certain aspects of financial markets are arduous to decipher if these contributions of behavioral finance are not studied.

Review of Literature

De Bondt and Thaler (1985) while investigating the possible psychological basis for investor

behaviour, argue that mean reversion in stock prices is an evidence of investor over reaction where investors overemphasise recent firm performance in forming future expectations.

Suguna G (1986) studied an investors attitude towards saving pattern in coimbatore. There exists poor positive savings are increasing when the income increase but in the same perception. There exists high positive correlation between income and tax indicating that the tax are increasing when the income increases most of the bank executives expressed the view that due to insufficiency of income they were not able to contribute to savings scheme like public provident fund, post office time deposit.

Shanmugam (1990) studied a group of 90 investors to examine the factors affecting investment decisions. The study focused its analysis on investment objectives and the extent of awareness of factors affecting investment decisions. The study concluded that the investors were high risk takers, then interested in capital gains and current dividend income. Investors possessed adequate knowledge of govt. regulations, monetary and fiscal policy.

Rajeshwari T.R and Ramamoorthy V.E (2002) studied the financial behaviour and factors influencing fund/scheme selection of retail investors by conducting Factor Analysis using Principal Component Analysis, to identify the investor? s underlying fund / scheme selection criteria, so as to group them into specific market segment for designing of the appropriate marketing strategy.

Balaji K (2005) conducted a study entitled "A survey on investment pattern in debt scheme of mutual fund investments? in Chennai with special reference to Karvy Consultants Limited. This study was undertaken to know the Investment pattern of investors in the debt scheme of mutual funds. In the survey, they studied the investment pattern, awareness about mutual fund and performance of the investor in various ways of investment avenues. In Mutual Funds, the debt scheme is the one, which provides good returns with reasonable risk. In recent days, debt schemes are gaining momentum among investors and through this project this fact has been proved. The choice of Investment Avenue of individual investors mainly depends on annual income and the percentage of income allotted for savings. The survey on investment pattern in debt scheme of mutual funds gives an idea of the investor?s choice based on returns, rating of Mutual funds etc., particularly relating to city.

Efficient Market Hypothesis: Paradigm of Standard Finance is based on the prominent theory of efficient market hypothesis. According to Ritter (2003), efficient market hypothesis which is the building block of modern finance, is based on the assumption that investors compete for seeking abnormal profits.

Traditional Finance Paradigm: Standard Finance is that body of knowledge that is built on the pillars of the arbitrage principles which were given by Miller and Modigliani, the portfolio principles given by Markowitz, the capital asset pricing theory of Sharpe, Lintner and Black and the option - pricing theory of Black, Scholes, and Merton.

Emergence of New Paradigm: Conventional finance capabilities of individuals are also limited so they are compelled to be irrational several times if not so most of the time. It has been observed by Kahneman and Tversky, (1974, 1979) that people cannot update beliefs in the right way, moreover they have references that are different from rational agents.

Behavioural Finance: Behavioural Finance is a new field study of finance. It has come up in understanding and predicting, systematic financial market implications in relation to psychological decision-making.

Investment Bankers: Investment bankers are a firm or associate that engage to an important extent in originating, underwriting, and selling new issues of stock and bonds. Investment banking is perhaps the most respectable department investment community, because it is here that finance plays its constructive role of supplying new capital for the expansion of industry.

Santi Swarup K (2003) in her research article "Measures for improving common investor confidence in Indian primary market a survey", concentrates on the decisions taken by the investors while investing in primary markets, the study indicates that the sample investors give importance to their own analysis as compared to broker?s advice. They also consider market price as a better indicator than analyst recommendations. The study also identifies factors that are affecting primary market situation in India. Issue price, information availability, market price after listing and liquidity emerge as important factors. This study suggests that investors need to be assured of some return and current level of risk associated with investment in the market is very high. They have had bad experience in terms of lower market price after listing and high issue price. Accordingly number of measures in terms of regulatory, policy level and market oriented were suggested to improve the investor confidence in equity primary markets. However, this paper does not highlight the measures for improving investor confidence in secondary market.

Ippolito (1992) reported that fund selection by investors is based on past performance of the funds and money flows into winning funds more rapidly than they flow out of losing funds.

Shiffrin (2000) A book titled Beyond Greed and Fear on behavioural finance and EMH has provided a great introduction to behavioural finance. Understanding Investor Behavior:-Social psychology has provided confirmation of a variety of societal effects which help to better understand the behavior of the investor in the context of stock markets. It has been said by Miller, (1956) that at a specific time, we can process only seven (plus or minus two) pieces or chunks of information.

A. Lalitha and M. Surekha (2008) in their article "Retail Investor in Indian Capital Market : Profile, Pattern of Investment and Profitability" published in The Indian journal of commerce, July-September 2008 concluded that the retail investor is here to stay and the capital markets may well emerge as strong contenders for traditional investment avenues like bank/post office deposits. They also focused on investor's education and investment decision of retail investors.

Rajarajan V (2000) had conducted a study on the title of "Investors life styles and investment character". The study reveals that active investors are dominated by the age group below 35 years, individuals group by above 50 years and passive investors by the age group of 35 to 50 years. Active investors group and passive investors group have short term perspective while making their investment decision. Most of the investors read two or more sources of information to make investment decisions and most of them tend to make investment decisions on their own.

Abdul Aziz Ansari and Samiran Jana (2009) in their article "Stock Price Decision of Indian Investors" published in The Indian journal of commerce, July-September 2009 concluded that there will be two kinds of investors - rational traders and noise traders. His study shows that rational traders are using both fundamental analysis and technical analysis as stock selection tools, which does not support the view of finance theorist. In an uncertain situation decision making process of noise trader will go through mental biases - self attribution bias, loss aversion bias, confirmation bias and overconfidence bias. As a result the noise traders will belief that some irrelevant information will be more important for price decision and they will trade more. This study has proved that some of the rational traders decision process also guided by all these biases. So rational traders also will not be able to predict the mental behavior of noise traders and effect of sentiment will be at Indian stock market.

Sikidar and Singh (1996) carried out a survey with an objective to understand the behavioral aspects of the investors of the North Eastern Region towards equity and MFs investment portfolio. The survey revealed that the salaried and self employed formed the major investors in MF primarily due to tax concessions.

Alex Wang (2011) in his article "Younger Generations' Investing Behaviors in Mutual Funds: Does Gender Matter?" published in The Journal of Wealth Management, Spring 2011 concluded that This study aims to understand younger generations' investing behaviors in mutual funds in order to help wealth advisors understand how better to work with younger generations. his study reveals that knowledge, experience, and income are important factors that influence younger generations' investing behaviors in mutual funds. Moreover, gender emerges as the most important factor that differentiates younger generations' investing behaviors in mutual funds. The findings point out challenges for younger women's wealth management, as they tend to exhibit fewer investing behaviors in mutual funds than their counterparts do. Consistent with previous research on wealth management among older generations, gender differences have significant implications for wealth advisors. As a result, wealth advisors should help younger women enhance their wealth management and financial future by facilitating their acquisition of necessary financial knowledge and experiences and their involvement with their wealth management.

Sirri and Tufano (1998) attributed the asymmetry between the investor reaction to past winners and losers to marketing as fund families tend to advertise top past performers. Their explanation would suggest that convexity will be more pronounced among investors that are swayed by advertising. Since being susceptible to behavioral biases and to the influence of advertising are features commonly associated with naive investors, these arguments suggest that flow-performance convexity is inversely related to investor sophistication.

Objectives of the Study

- To find out the influence of broker's advice on the decisions of the investors.
- To analyze the dependency level of investors on stock brokers.

Research Methodology

The data required for this study is collected from secondary sources through government publications and various other public sources like the internet, newspapers, journals, magazines and Relevant Statistical Data from broking houses.

Indian Stock Market

The Indian capital markets have had many turbulent times in the last 140 years of their existence. The imposition of wealth and expenditure tax in 1957 by Mr. T.T. Krishnamachari, the then finance minister, led to a huge fall in the markets. The dividend freeze and tax on bonus issues in 1958-59 also had a negative impact. This led to a ban on forward trading in commodity markets in 1966, which was again a very bad period, together with the introduction of the Gold Control Act in 1963.

Primary Market: Primary market provides an opportunity to the issuers of securities, both Government and corporations, to raise capital to meet their requirements of investment. Secondary Market: Secondary market refers to a market where stocks are traded after being presented to the public in the primary market or listed on the Stock Exchanges.

Products in the Secondary Markets

Following are the main financial products/instruments dealt in the Secondary Market which may be divided broadly into Shares and Bonds.

Market Participants: The stocks market has three categories of participants (i) the investors, (ii) the issuers, (iii) the intermediaries. These participants are regulated by the Securities and Exchange Board of India (SEBI), Reserve Bank of India (RBI), Ministry of Corporate Affairs (MCA) and the Department of Economic Affairs (DEA) of the Ministry of Finance.

Stock Brokers: A Member of Stock Exchange who acts as an agent for clients and buys and sells shares on their behalf in the market. Though strictly a stock Broker is a agent, yet for the performance of his part of the contract both in the market and with the client, he is deemed as a principal, a peculiar position of dual responsibility.

Types of Advisors

Recommendation on investments may be secured from a different source of society. These include:

- A relative or friend, presumably knowledgeable in stock
- A local (commercial) banker
- A brokerage firm or investment banking house
- A financial service
- An investment counselor

Financial Services: Financial services are organizations that send out uniform tips to their subscribers. The tips or recommendation may include the state and prospects of business, the behavior and prospect of the stock market, and information and recommendation concerning individual issues.

Brokerage Houses: Probably the largest volume of information and advice about the security come to public from stockbrokers. These are members of Stock Exchange, who execute buying and selling orders for a brokerage. Practically all the houses that deal with the public maintain a statistical or analytical department, which answers inquiries and makes recommendations.

The CFA Certificate for Financial Analysts: The chartered financial analysts (CFA) are those

professional who pass required examination and meet other tests of fitness. The subjects covered include security analysis and portfolio management. The investor should use his intelligence not only in formulating his financial policies but also in the associated details. These include the selection of a reputable broker to execute his orders.

Findings

- **Investors:** The stock market operations depends upon the investor perception which in turn depend upon various factors influencing their perception. This study will benefit the investors as it will provide them with an insight about the investing pattern of others investors trading in the stock market. So the investors who have not considered so far the factors considered in this study, through the results of this study can revise criteria in their future investment decisions.
- **Brokers:** The stock brokers play an important role in the stock market. They act as intermediaries between buyer and seller of securities. This study will benefit the stock brokers as this study will enable them in understanding the various factors which has a significant impact on investor choice of investment avenues. This understanding will enable them to reap maximum benefits during peak stock market conditions and protect themselves and the investors during adverse market conditions.
- **Companies:** The companies dealing in stock markets will also benefits from this study. The study will provide them with the idea about the influences of various factors in investor decision. This will help them in formulating strategies during unfavorable market conditions and protect themselves from major fall in their position in the stock market. In otherwords, it will help them in taking proactive approach rather than reactive approach.

Conclusion

Good financial background alone is not sufficient to be successful investor. Investors should be risk loving to be successful in the investments. Not all investors are successful investors. The success of the investor in the stock market depends on his or her investment decision. The right investment choice will give right benefits to the investors. Early they enter more profitable opportunities for them. Therefore investors should consider economic factors, company factors and their demographic profile while deciding the investment avenues.The study gives directions to all investment advisory firms and stock broking organizations to understand the behavior of retail equity investors. The study will also be helpful for the first time investors in the equity market to understand the working of the brokers and make safe investments. The study finds that economic factors have a significant impact on investment decisions of the investors. Similarly company factors have a significant impact on investment decisions of the investors. Primarily the investors should consider various factors before choosing a investment avenue. Economic factors like GDP, inflation rate, BOP position indicates performance of the market. Therfore investors should consider these factors before investing. Stock Indices reflect the market. Apart from various factors discussed by the study, the investors should also consider the nature of investment avenues and its past performance in the market. Similarly investors should invest with the objective of long term holding rather than for short term gains. They can start less risky investments like mutual funds and after developing a good knowledge of stock markets can go for equity investments and after a period 8 to 10 years can diversify their investments.

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The Various Aspects of Core and Non-Core Cash Flows & Income Statement as a Descriptive Study

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Abstract

The cash flow statement is considered an important financial statement as it helps the analysts and investors in making the correct investment decisions. Apart from that it is also useful for the financial managers to chalk out future strategies. But normally, profit is given utmost importance which is derived through an income statement; which is based on accrual accounting system. In this research paper, an honest attempt has been made to study different aspects of cash flow statement as well as income statement which form different variables of the study as well. In total, there are 8 variables and 20 manufacturing companies have been selected for the said study. For this purpose, descriptive statistics method has been used and specifically univariate analysis has been done. The broader findings of the paper say the following points: a).The mean value of core and non-core cash flow can be of great help to critically analyze them. b).With the help of standard deviation and the coefficient of variation, one can clearly know the amount of deviation from the set standards. c).If the mean and median are equal or has a very less difference, we can know that the data is evenly distributed. d).Only mean value cannot fetch accurate results. Hence skewness and kurtosis come in the picture.

Keywords: *Core Cash Flow, Non-Core Cash Flow, Accrual Accounting, Profit, Total Income*

Introduction

The financial statements include Trading and Profit & Loss Account, Profit & Loss Appropriation Account, Balance sheet, fund flow statement & Cash flow statement. Out of which, cash flow statement has got the utmost importance. This is because one can know the real liquidity position only through the cash flow statement. No doubt, the Income statement and Balance sheet are equally important; but the figure of profit can be misleading. This is due to some non-cash income and non-cash expenses included in the amount of profit. Taking a crucial investment decision is a tough task that the investors and the financial analysts have to perform. For doing this, the previous financial statements are of greater help. Analysts take into account all the financial statements when it comes to make any important strategic

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decision/s. But the layman may not understand the depth and the difference between the income statement and the cash flow statement. Since years, profit has been considered as the only yardstick to evaluate the performance of the business.

While preparing cash flow statement, there are three different cash flows which are considered such as 'cash flow from operating activities, cash flow from investing activities & cash flow from financing activities. That means cash flows from core & non-core activities are considered here. The cash flow ratios undoubtedly help the management to predict the future cash flows. If any company is having sound financial position that clearly means it is having sound cash position. Such company's aim would be to maintain this sound financial health by continuous growth. This is possible with planning certain strategies & implementing them. But for chalking out the strategies, one should know future state of cash position. Hence it becomes very important to predict the future cash flows with great care & accuracy. The honest attempt has been made here to study and analyze various aspects of cash flow statement i.e. core and non-core cash flow and income statement. The main purpose is to find out the facets of all the variables chosen for the study.

Research Objectives

To know the core & non-core cash flows of Indian non-finance listed companies selected for the present study as a pilot project.

- To know the characteristics of each of the variable used for the study.
- To study the aspects of cash flow statement and income statement.
- To know whether the data distribution is normal.

Research Methodology & Research Design

The researcher has taken a sample of 20 manufacturing companies. Purposive sampling method has been used. There are eight different variables for each company namely core cash flow or operating cash flow, investing cash flow, financing cash flow, total income, operating income, non-core income, profit after tax and free cash flow. The data has been derived from CMIE Prowess database and it is for a period of 11 years starting from 2005 to 2015. The descriptive statistics method has been used for the study wherein the statistical techniques of measures of central tendency like mean & median and measures of dispersion like standard deviation, coefficient of variation, skewness and kurtosis have been used. The univariate analysis method has been used by the researcher to throw light on each of the aforesaid variables related to every company. The actual amounts have not been given here in the table. Only the statistical calculation is shown.

Descriptive Statistics

- **ABB India Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO-CFI)*
Mean Value	204.0036	-162.208	-53.5691	6350.245	6305.376	44.86818	263.3336	41.79545
Median Value	220.68	113.9	62.16	6695.23	6638.39	50.72	218.68	110.44
Standard Deviation	156.084	109.5168	154.5873	2010.461	2017.693	27.11284	152.0217	225.6197
Skewness	0.039193	-0.94366	-0.87845	-1.05	-1.02976	0.268185	0.810641	-0.83798
Kurtosis	-0.41227	-0.41671	3.605198	-0.153	-0.17767	0.526911	-0.26514	-0.28283
Coefficient of variation	76.51038	-67.5162	-288.576	31.65959	31.99957	60.42777	57.72968	539.8188

- **ACC Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO-CFI)*
Mean Value	1478.273	-836.442	-625.787	9208.552	8802.452	406.1	1107.517	641.8309
Median Value	1571.31	823.28	621.39	9008.96	8609.29	426.19	1168.29	537.89
Standard Deviation	508.3677	598.0048	318.6763	3258.148	3140.896	163.8534	358.9749	512.9195
Skewness	-0.21044	-1.13213	0.062436	-0.13645	-0.15658	-0.36543	-1.03559	0.01191
Kurtosis	-0.40355	1.292575	-0.91509	-0.97223	-0.91222	-0.08171	0.913561	-1.6359
Coefficient of variation	34.38931	-71.4939	-50.9241	35.38176	35.68206	40.34805	32.41258	79.91506

- **Ajanta Pharma Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO-CFI)*
Mean Value	89.92364	-66.87	-20.2482	556.2127	549.3545	6.858182	76.58727	23.05364
Median Value	38.85	-50.2	-8.54	386.05	385	1.38	28.54	9.54
Standard Deviation	91.43969	54.04366	52.00148	407.4144	397.3619	11.18343	99.02886	56.1099
Skewness	0.877927	-1.01525	-0.38715	1.216559	1.183067	2.360197	1.772362	0.58133
Kurtosis	-0.6335	0.254911	-1.15827	0.424247	0.309226	5.495507	2.320425	-0.87846
Coefficient of variation	101.6859	-80.819	-256.82	73.24795	72.33251	163.0669	129.302	243.3885

- **Adani Enterprises Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO- CFI)*
Mean Value	152.4255	-771.775	666.0773	10975.84	10348.4	627.4355	247.8691	-619.349
Median Value	-43.83	-656.92	375.33	11824.68	11379.65	493.49	269.11	-312.55
Standard Deviation	502.5641	1505.769	1483.051	3641.609	3473.467	423.4374	187.7101	1638.595
Skewness	0.727113	-0.56549	0.693633	-0.93281	-1.1836	1.262151	-0.65014	-1.09593
Kurtosis	-0.89197	0.678027	-0.40272	0.30228	0.458547	-0.36184	3.902693	0.003493
Coefficient of variation	329.7114	-195.105	222.6546	33.17841	33.56524	67.487	75.72953	-264.567

- **Ambuja Cements Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO- CFI)*
Mean Value	1575.424	-661.125	-640.422	8540.43	8084.367	456.0627	1313.321	914.2982
Median Value	1708.85	-621.22	-504.43	7995.96	7763.93	397.35	1297.06	1085.25
Standard Deviation	445.6524	405.5533	238.6459	2526.413	2412.603	270.2408	324.7153	453.8367
Skewness	-1.03849	-1.52351	-0.9252	-0.63094	-0.5651	0.814598	-1.74836	-0.71614
Kurtosis	0.696957	3.393123	-0.1263	0.906372	0.562568	0.398086	5.018204	-0.42438
Coefficient of variation	28.28778	-61.3429	-37.2639	29.5818	29.84282	59.25518	24.72475	49.63771

- **Ashok Leyland Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO- CFI)*
Mean Value	719.6209	-645.379	-83.8564	10215.8	10000.83	214.9655	367.3318	74.24182
Median Value	728.3	-722.2	-13.63	9276.45	9192.27	95.49	363.5	89.79
Standard Deviation	582.289	495.0065	474.8803	3588.603	3467.041	211.0417	168.6891	754.8017
Skewness	-0.43797	0.258002	-1.14762	0.101605	0.097372	1.436308	-0.4422	1.045268
Kurtosis	1.795962	-1.63238	1.746425	-1.4726	-1.45588	0.948015	0.512232	3.335391
Coefficient of variation	80.91608	-76.7001	-566.302	35.12798	34.66753	98.17471	45.92281	1016.68

- **Asian Paints Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO-CFI)*
Mean Value	685.2236	-311.804	-314.663	7020.027	6931.523	88.50455	674.9427	373.42
Median Value	743.25	-292.27	-239.12	5952.07	5793.72	63.67	774.5	288.8
Standard Deviation	415.0855	187.855	216.5657	3974.025	3931.485	52.07197	418.385	286.2838
Skewness	0.227154	-0.40398	-0.90338	0.538545	0.540234	0.472599	0.184599	0.596559
Kurtosis	-1.34862	-0.92164	-0.433	-1.08533	-1.09115	-1.6598	-1.58631	-1.37681
Coefficient of variation	60.57665	-60.2479	-68.8247	56.60983	56.71893	58.83536	61.98822	76.66535

- **Bharat Forge Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO-CFI)*
Mean Value	447.1527	-358.361	-40.8545	2816.106	2733.354	82.75273	292.0109	88.79182
Median Value	344.58	-350.17	32.79	2491.47	2367.84	83.38	273.59	57.07
Standard Deviation	251.8929	249.6493	424.8335	1080.573	1057.646	43.09362	170.3236	353.1209
Skewness	0.562674	-0.10653	1.076831	0.486797	0.539801	-0.30055	1.607357	0.526306
Kurtosis	-0.82469	-1.0527	1.791081	-0.61617	-0.60865	-0.71791	3.63843	0.179204
Coefficient of variation	56.33263	-69.6642	-1039.87	38.37119	38.69409	52.07517	58.32783	397.6953

- **Bharti Airtel Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO-CFI)*
Mean Value	11264.2	-10983.6	-202.135	34037.93	32990.23	1047.701	6275.974	280.6055
Median Value	12389.83	-11588.3	340.14	36838.1	35609.5	525.27	6244.19	132.89
Standard Deviation	4526.32	4818.398	2819.549	16611.15	15584.46	1485.225	3374.301	2847.928
Skewness	-0.58726	0.150687	0.214299	-0.17608	-0.3443	2.796506	0.511175	-0.45404
Kurtosis	-0.10291	0.254932	1.264025	-0.79326	-0.95975	8.41801	0.828508	1.50394
Coefficient of variation	40.18325	-43.8691	-1394.88	48.80188	47.23962	141.7604	53.76537	1014.923

- **Cadila Healthcare Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO- CFI)*
Mean Value	431.9364	-359.009	-53.6364	2839.082	2399.936	439.1455	495.2364	72.92727
Median Value	371.7	-259.9	-58.8	2490.8	1964.6	526.2	498.6	65.4
Standard Deviation	327.1794	248.9487	291.37	1435.657	1153.138	328.5221	354.1185	298.4879
Skewness	0.841302	-0.7175	0.555418	0.810941	1.210726	-0.02741	1.108547	-0.14533
Kurtosis	0.067451	-0.47792	0.012659	-0.13779	1.16243	-1.83058	0.903253	-0.57318
Coefficient of variation	75.74712	-69.3433	-543.232	50.56765	48.04867	74.80941	71.50495	409.2953

- **Century Textiles Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO- CFI)*
Mean Value	460.1582	-678.028	222.6064	5126.125	5057.963	68.16273	142.5391	-217.87
Median Value	484.85	-758.19	185.49	5040.22	4980.26	59.58	109.63	-155.67
Standard Deviation	142.7154	337.9575	269.8312	1772.477	1763.361	24.53052	135.0007	267.6876
Skewness	0.074183	0.683247	-0.07204	0.5977	0.572932	1.429716	0.033072	-0.04253
Kurtosis	-1.61303	-0.49462	-0.01983	-0.49666	-0.55981	1.7629	-1.75049	-0.06928
Coefficient of variation	31.01443	-49.8442	121.2145	34.57733	34.86306	35.98818	94.71136	-122.866

- **Cipla Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO- CFI)*
Mean Value	857.11	-874.722	24.56909	6144.958	6000.705	144.2536	945.9909	-17.6118
Median Value	987.34	-657.23	172.06	5860.4	5678.62	133.63	960.39	-142.87
Standard Deviation	600.9952	570.6398	395.3631	2638.174	2597.106	63.54574	344.0813	374.4694
Skewness	0.311329	-0.76924	-0.18171	0.318503	0.313057	0.982652	0.151063	0.174653
Kurtosis	-1.51371	0.448961	-0.16093	-1.021	-0.99984	0.598814	-0.92209	-0.17781
Coefficient of variation	70.11879	-65.2367	1609.189	42.93234	43.28001	44.05139	36.37258	-2126.24

- **Coal India Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO- CFI)*
Mean Value	5539.558	5.058182	-5493.58	7186.749	546.7809	5374.287	6045.765	5544.616
Median Value	3241.35	-175.77	-1941.52	4844.01	608.19	4165.695	3860.3	2672.44
Standard Deviation	5014.065	3259.43	6902.936	5079.981	141.0295	4591.003	4798.998	6730.937
Skewness	0.60596	2.171118	-2.01815	0.882396	-0.90993	1.384154	0.971246	1.922338
Kurtosis	-1.3744	6.303107	3.991798	-0.65457	0.425376	1.259763	-0.44669	3.654428
Coefficient of variation	90.51381	64438.76	-125.655	70.68539	25.79268	85.42533	79.37785	121.3959

- **Colgate Palmolive (India) Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO- CFI)*
Mean Value	356.6836	-41.87	-288.818	2389.994	2342.085	47.90909	345.5364	314.8136
Median Value	357.91	-10.25	-322.99	2123.71	2079.48	44.23	402.58	362.01
Standard Deviation	171.9654	102.6664	122.936	1083.13	1070.454	24.14417	165.2951	152.9717
Skewness	0.307108	-1.38522	0.520031	0.600695	0.613883	2.389543	-0.19828	-0.40083
Kurtosis	-0.64149	1.41496	-1.2973	-0.93051	-0.88493	6.828093	-1.63415	-0.03946
Coefficient of variation	48.21232	-245.203	-42.5652	45.31938	45.70516	50.3958	47.83726	48.59119

- **DLF Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO- CFI)*
Mean Value	180.3609	-594.175	499.0473	3320.561	2485.986	834.5745	900.0155	-413.814
Median Value	395.25	-629.16	23.94	3880.36	2468.02	1046.29	765.06	-29.26
Standard Deviation	1351.764	2892.214	3555.238	1665.441	1386.453	502.6656	715.8676	3432.753
Skewness	-0.83932	-0.21079	1.292893	-0.41217	0.688201	-0.40443	1.31375	-0.87875
Kurtosis	0.97756	1.154024	2.441377	-0.3375	1.435538	-1.17417	2.032827	1.271526
Coefficient of variation	749.4773	-486.762	712.4051	50.15541	55.77074	60.23016	79.53948	-829.541

- **Dabur India Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO- CFI)*
Mean Value	453.64	-216.844	-215.418	3116.935	3063.731	53.20364	424.7091	236.7964
Median Value	358.99	-218.58	-213.87	2935.09	2891.51	40.04	433.14	223.03
Standard Deviation	219.4562	163.5968	143.5424	1498.6	1459.121	40.93831	195.7419	149.8731
Skewness	0.553112	-1.42125	-1.04071	0.391091	0.376835	0.853796	0.287521	1.671218
Kurtosis	-0.98313	3.07411	1.168461	-1.10121	-1.11976	-0.32097	-0.72949	3.453288
Coefficient of variation	48.37672	-75.4446	-66.6343	48.07929	47.62562	76.94646	46.08846	63.29198

- **Dr. Reddy's Laboratories Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO- CFI)*
Mean Value	740.2191	-888.291	117.6655	5794.816	5624.993	169.8236	911.0127	-148.072
Median Value	554.2	-880.8	110	5087	4882.6	185.3	893.4	-230.1
Standard Deviation	554.318	562.6576	215.0939	2901.769	2868.492	61.61184	579.2457	461.6208
Skewness	0.671963	-0.43671	0.765693	0.355497	0.349015	-0.53727	0.322984	-0.49518
Kurtosis	-0.64295	0.779903	1.665793	-0.93468	-0.95449	-0.91478	-0.47823	-0.45167
Coefficient of variation	74.88567	-63.3416	182.8012	50.07526	50.99548	36.2799	63.58261	-311.755

- **Emami Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO- CFI)*
Mean Value	194.9118	-108.825	-57.2436	1094.278	1046.188	48.09	153.5827	86.08727
Median Value	147.6	-51.21	-45.33	1048.89	1008.15	40.74	92.75	113.87
Standard Deviation	167.2212	148.5193	161.2532	669.8151	624.5559	52.05906	138.5072	168.9053
Skewness	0.599064	-2.05321	1.048832	0.336459	0.245656	2.099179	1.543234	-1.19515
Kurtosis	-1.09484	4.927001	1.907579	-1.05783	-1.27246	5.099033	1.770781	1.878717
Coefficient of variation	85.79324	-136.476	-281.696	61.21068	59.69824	108.2534	90.18413	196.2024

- **Glaxosmithkline Consumer Healthcare Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO-CFI)*
Mean Value	328.7491	-77.3873	-125.547	2540.79	2456.06	84.73	294.6809	251.3618
Median Value	326.21	-79.05	-90.52	2117.05	2076.73	49.34	232.78	177.09
Standard Deviation	206.3749	184.1967	82.01546	1470.891	1406.226	68.44049	199.1866	265.0098
Skewness	0.403665	0.626455	-0.35531	0.920702	0.888693	1.470041	0.868912	1.865242
Kurtosis	-1.49097	1.86016	-1.78487	-0.22989	-0.26452	0.838353	-0.30717	4.85595
Coefficient of variation	62.77582	-238.019	-65.3264	57.8911	57.25534	80.7748	67.59399	105.4296

- **Grasim Industries Ltd. (Amounts are in Rs. crores)**

Descriptive Statistics	*Core Cash Flow (operating activities)*	*Non- core cash flow (Investing cash flow)*	*Non- core cash flow (financing activities)*	*Total income*	*Total operating income (Sales)*	*Non-core income Total income- (sales)*	*Profit after tax*	*Free Cash Flow (CFO-CFI)*
Mean Value	1222.79	-1004.42	-234.21	8268.135	7866.523	401.6127	1297.089	218.3655
Median Value	1050.46	-881.51	-328.18	7441.86	7232.03	352.08	1181.71	323.31
Standard Deviation	692.1119	811.4845	334.4072	2445.785	2442.669	166.8645	531.7004	331.5366
Skewness	-0.06798	-0.02964	0.836612	0.74218	0.718006	0.48857	0.574882	-0.93319
Kurtosis	-1.0576	-1.11967	-0.21827	-0.67029	-0.64403	-1.09278	-0.44914	-0.20953
Coefficient of variation	56.60105	-80.791	-142.781	29.58085	31.05144	41.54861	40.99182	151.8265

Broader Findings

- There is no much difference in the average amount of core cash flow and PAT for most of the companies except DLF Ltd., a real estate company, where the mean value for PAT is 900.01 crores for 11 years from 2005 to 2015 and the mean for the core cash flow is 180.36 crores.
- The mean for investing cash flow is negative which can be a good sign as it tells us that the amount has been invested in capital assets.
- The amount of free cash flow is a difference between cash flow from operations and cash flow from investments. If the company has enough amount of free cash flow availability, it doesn't have to rely on loans much.
- It has been observed that the mean for free cash flow is positive for most of the companies except DLF Ltd. Adani Enterprises, Dr. Reddy's Laboratories Ltd.,Cipla Ltd, whose average free cash flow is negative.

- The dispersion is too high in the case of important variables like core cash flow of some companies like Ajanta Pharma Ltd., Adani Enterprises Ltd., DLF Ltd., Dr. Reddy's Laboratories Ltd.
- The degree of dispersion i.e. coefficient of variation is too high for financing cash flow in case of 70% of the companies.
- The degree of dispersion as denoted by CV is very high for free cash flow in case of 70% of the companies.

Conclusion

From the above study, we get the clear cut idea about the eight variables and their different features in terms of descriptive statistics in the following manner:

- With the help of mean value of core cash flow and non-core cash flow, the company can know the average amount of core and non-core cash flows and also it can compare between the same and can prepare certain plan of action.
- With the help of standard deviation and the coefficient of variation, one can clearly know the amount of deviation from the set standards. If the deviation is high, the company can prepare certain strategies to curtail the deviation percentage.
- The median value informs about the middle most value of the data. If the mean and median are equal or has a very less difference, we can know that the data is evenly distributed.
- It is true that one can predict the future cash flows with the help of standard deviation provided the distribution of the data is normal. With the help of skewness and kurtosis, we get to know the normality of the data distribution.
- A positive mean with a positive skew is good, while a negative mean with a positive skew is not good. If a data set has a positive skew, but the mean of the returns is negative, it means that overall performance is negative, but the outlier months are positive.
- Kurtosis is a statistical measure that defines how heavily the tails of a distribution differ from the tails of a normal distribution. In other words, kurtosis identifies whether the tails of a given distribution contain extreme values. It also informs the investors about the financial risk involved.

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