Chapter 1

Indian Economy and Indian Financial System

1. Introduction

Since independence, Indian economy has come a long way. Over the years various efforts are made to make Indian economy strong and capable enough to stand in the category of developed economies. The performance of an economy is judged on the basis of performance of its various sub systems like capital market, economic system, and corporate sector and the performance is measured and judged on various parameters like GDP, GDP Growth Rate, Inflation, performance of the capital market etc. Before initializing the study an effort was made to understand the current status of the Indian economy by analyzing the overstated sub systems and factors.

1.1: Snapshot of the performance of the Indian Economy during the last decade:

An effort was made to understand the performance of the Indian economy over the period of a decade ranging from (2003-2013). During the decade the economy witnessed great ups and downs, many improvements and breakthroughs on the other hand the decade witnessed greatest number of scams and unethical practices. The Indian Economy is on challenging path and is encountering with new challenges every new day. Political turmoil, blame game, insecure society, concerned over unethical practices, society indulged in personal self interest, international competition but is recovering with the help of its fighting spirit.

In order to understand the actual standing of the country’s economy in monetary terms and to identify the value of all economic transactions done within the national boundaries various indicators are calculated. The following section will present the major Economic Indicators of the economy like GDP (In Dollar terms), GDP growth rate, Inflation, Balance Of Payments, Exchange rate etc. Such economic indicators on one hand are helpful to the policy formulators and on the other hand they are very important form the view point of an investor, as they exhibit the present state of the economic activities and what is going to be in the future. Investors before making any investment decision consider the present and future condition of the economy observed through these economic indicators and make decision of investing or not.
A sub category of indicators can also be identified that can be used by the investor in order to understand the state of the respective sub system. With the advancement in the sophistication level of the investor and existence of various research agencies provide timely and useful data with respect to the various subsystems.

Primary Economic Indicators: GDP, GDP growth rate, Inflation, Exchange rate, National Income

Sub Primary Indicators: Sensex, IIP, BOP, fiscal deficit, Per capita Income etc.

Initially the study discussed the macroeconomic factors and analyzed their performance and movement during the study period of 10 years (2003-2013), later discussed the economic indicators related to the Household sector (as they are the basic subject of study), their income, expenditure & saving pattern, followed by analyzing the performance of the sub part of the economic system i.e. the Financial Market. The study of the financial market was done at two sub markets: Money Market & Capital Market. The performance of the two markets was analyzed with the help of various indicators like: trading volume of various securities issued in the market and the turnover percentage.

1.1.1: Gross Domestic Product

The first prime indicator is the GDP (Gross Domestic Product), GDP is one of the prime indicator of an economy’s performance. GDP is the sum total of monetary values of all the economic transactions among all the sectors done within the country by all the sectors whether manufacturing, service or agriculture. Growth in the GDP value indicates the health of the economy. Positive GDP figures over the last year data will indicate a growth in economic activities by all the participating sectors. The value of GDP is calculated on yearly basis and the percentage change among the two years indicates the GDP growth rate. Annually World Bank make the computation of the GDP data indicating the ranking of the various economies (214 in number) on the basis of nominal GDP, which is perhaps the most familiar measure of aggregate economic activity. The calculations are done in quarterly basis. Indian economy for the year ending 2012 stood at the 10th rank out of the World GDP of Mn US $ 7,24,40,449, the Indian economy contributed Mn US $ 18,41,710, contributing 3% to the total GDP value. According to the percentage share US economy stood first by acquiring 22% of the World GDP, with China (11%) stood at second position and Japan (8%) occupied the third.
The Indian economy lost a position of one rank when compared to the year 2011, it had occupied the 9th rank in the world ranking order with contributing Mn US $ 1,729,010 to a total of Mn US $ 6,30,48,823, but maintained the same percentage contribution of 3%. Next in the analysis the performance of Indian economy on individual basis i.e. the growth and decline that the economy faced during the study period (2003-2013) is measured.

During the study period the economy witnessed an average GDP of Bn US $ 1167.29, apart from facing great depression because of Global headwinds coupled with domestically high inflation and investment slowdown led to one of the lowest growth rate in financial year 2013. In spite of recent slowdown, Indian economy has surpassed Japan to become third largest economy in the world and is expected to grow at 6% in FY-2014. Chart 1.2 presented the value of GDP witnessed by the Indian economy during the last decade (2003-2013). In last 10 years India’s GDP grew at a compounded annual growth rate of around 7% with growth rate as high as 9.5% in FY 2006 and 9.3% in more recent year 2011 to as low as 4% in 2003 to 5% in the latest year 2013.

India’s GDP was witnessing a great increasing trend but a big shock by Big Brother US shattered the growth trend and send the economy in the reverse gear and thus witnessed a negative increase in the GDP growth rate. According to the data released by Finance Ministry in Financial express for the year i.e. 2013-14, the GDP was expected to be just 4.9% blamed on the pervasive demand slump amid high inflation, even on the previous year’s low base of 4.5% based on the performance of the primary, industrial and service sectors which are the main determinants of the value of GDP. The rising inflation, and rising crude oil prices acted
as major deterrent in the high value of GDP. Stimulation programs were required to bring the economy in the recovery phase.

Talking of the Economy in terms of number game, The Indian economy witnessed an average growth rate of approx 7.65% in the last decade with the sharing of current year standing to be 6% within the first quarter of the current year i.e. 2013. The growth rate of the economy indicated the effect of the policy decisions taken domestically and the impact of the global factors. During the starting phase of the decade the country witnessed a continuous positive growth rate ranging from 2003-08.

**C1.2: GDP India (2003-2013) in Absolute terms**

![GDP India (2003-2013) in Absolute terms]

Source: tradingeconomies.com The World Bank Group

The economy witnessed a major setback in the year 2008 as an after effect of the global slowdown. The US economy encountered a major setback as a result of the failure of the major financial institutions which failed due to Sub Prime mortgage. The setback created a ripple effect on the entire world economies. The US subprime mortgage crisis was a set of events and conditions that led to a financial crisis and subsequent recession that began in 2008. It was characterized by a rise in subprime mortgage delinquencies and foreclosures, and the resulting decline of securities backed by said mortgages. Several major financial institutions collapsed in September 2008, with significant disruption in the flow of credit to businesses and consumers and the onset of a severe global recession.
1.1.2: GDP Growth Rate

Another prominent measure of economic indicator observed was the GDP growth rate. The previous values indicated the value of economic transactions in absolute terms, while the growth rate is the difference observed in the GDP within a period of one year. The value indicates that by what percentage the economic activities in the economy have increased. The value is greatly affected by the present condition of the economy domestically as well as internationally (when taken together). Chart 1.3 presented the GDP growth rate experienced by the Indian economy during the decade 2003-2013. Year 2008 will always remain in the bad books as it brought down the double digit growth rate to single digit with a major difference. The downfall was because of ripple effect that was initiated in the US economy, and all the world economies suffered the pain.

C 1.3: GDP Growth Rate India (2003-2013)

![GDP Growth Rate Chart](chart1.3)

Source: www.tradingeconmies.com The World Bank Group

During the phase of the crisis the economies of the world suffered equally. The economies underwent the depression phase during the Sub Prime crisis in US economy. India was enjoying a growth rate of 10% but lost 3 % because of the crisis. The shock was so intense that the setback continued for two regular years. The effect was in the form of lower GDP, and its growth rate, lower exports, capital outflow and corporate restructuring.

Later in the year 2010, the economy recovered because of strong fundamentals and serious efforts introduced by the government in the form of stimulus packages routed through tax cuts, bailout packages etc. The government raised over $100 billion reaching out to be 50% of the total GDP and the central bank i.e. Reserve Bank of India started printing new currency
notes. The economy revived from the crisis and the country experienced a growth rate of 10% reacting to the stimulus package.

1.1.3: Inflation

Next economic indicator which greatly affected the sentiments of the investor was the price level existing in the economy. The indicator framed to track the price movement in the economy is the Rate of Inflation. Inflation can be expressed as the rise in the price level or fall in the purchasing power of the money. A rising rate of inflation indicates that the individual is required to shell out extra to purchase the same quantity of the commodity. The inflation rate is very important to be considered while purchasing the fixed income securities as with time the value of money is going to be deteriorated while the returns on the securities remain same earning a negative interest. Investment should be made such that they overpower the rate of inflation. During the year 2012, the world experienced Inflation (consumer price) as 3.7%, while the Indian economy experienced the inflation percentage to be 9.3%, way higher than the world. A comparative analysis of the countries indicated that ranked as top 5 performer among the biggest contributor to world GDP and India, on the basis of the Consumer price Index percentage experienced during the period of (2004-2012) indicated that the Indian economy surpassed all the other economies in the rate of inflation with maximum rise in prices experienced. Chart 1.4 indicated the cumulative performance of the country’s inflation rate experienced during 2004-2012. It is worth noting that during the time of US recession all the countries experienced a negative inflation i.e. deflation, the only country indicated the positive growth was India. As it is observed that the condition of deflation is more harmful than inflation. Inflation is an indicator of both rise in prices as well as economic activities, a certain degree of inflation is good for economy. During the period Indian economy experienced highest inflation rate with 9 % while other nations fall within the range of 0% to 5 % way less than the Indian economy. The price rise is a major area of concern for the Indian authorities and the government is making effort to bring the inflation rate within acceptable range.
C1.4: Inflation rate across major countries (Consumer Index percentage)

Data: World Bank (worldbank.org/indicator)

Inflation rate in the Indian economy is computed at two levels: CPI and WPI where CPI stands for Consumer price Index and WPI is Wholesale Price Index. The difference between the two is with respect to the item included for the computation as well as the frequency of computation. The rates are also differentiated on the basis of their applicability in rural or urban areas. From the economic point of view both the rates are of great importance but for a retail investor or general individual what affects the most is the CPI. According to a report published in Times of India in Dec. 2013, the inflation rate stood to be 9.87%, and was termed as “the Indian economy witnessed the highest rate of inflation amongst the Asian economies and also the world economies.” During the study period of 10 years the country experienced an average rate of inflation of 7.82%, with a maximum of 14% after the post crisis period and as low as 3% at the initial phase of study period.
An increasing inflation rate is not always bad for the economy, as a not growing price level in the economy is an indication of its stagnancy, what the economies desire is to have an increasing rate of inflation but within the scope of expectancy and manageable limit. The price rise level should compliment or comprehend with the rising income level of the society. John Yemma (2011), indicated that “Inflation actually boosts economic activity as people buy at today's prices so they won't have to pay more later and is lot better than the alternative deflation. A modest level of inflation is good for the economy, such modest inflation was experienced by the Indian economy till the year 2008, until affected by the major hurricane of US economy.

1.1.4: Exchange Rate

Globalization has increased the level of economic activities and has opened plethora of opportunities to the stand alone economies, but the recession of 2008 of US economy has proved to be one of the biggest critique to the process of globalization. The effect as later studied shattered the Indian capital market, the Sensex dipped to an all time low.

Now since the term globalization is in vogue, the next economic indicator that crashes the mind is the Exchange Rate. As soon as an economy decides to go global, it becomes important to determine the value of its currency in terms of the currencies of other countries that the country is interested in trading with. The country cannot act as standalone country for its development and to meet its requirement (purchasing Inputs or selling outputs), the country needs to interact and mutually purchase and sell goods. In order to adopt a uniform
pattern, the country decides on the rate at which its currency will be valued in terms of other currencies. The exchange rate is a key financial variable that affects decisions made by foreign exchange investors, exporters, importers, bankers, businesses, financial institutions, policymakers and tourists in the developed as well as developing world. Exchange rate fluctuations affects the value of international investment portfolios, competitiveness of exports and imports, value of international reserves, currency value of debt payments, and the cost to tourists in terms of the value of their currency. Movements in exchange rates thus have important implications for the economy’s business cycle, trade and capital flows and are therefore crucial for understanding financial developments and changes in economic policy.

It is in the hand of the policy formulators and monetary authorities to fix the rate of domestic currency in terms of other currencies (prominent one) or to leave it on the market conditions i.e. demand and supply to determine the value of the currency. Both the processes have their pros and cons, but if the policy formulators and monetary authorities want the currency to be competitive with other currencies, it has to be made floating (term used when the currency is not pegged or fixed). As far as the Indian Rupee is concerned the currency initially functioned under Fixed rate regime, later with the adoption of liberalization policy the authorities decided to make the currency floating (Post mid 1990).

C 1.6: Exchange Rate India (2003-2013) (Rs./ Dollar)

![Exchange Rate Chart]

Source: Data.worldbank.org, Tradingeconomies.com,

India’s exchange rate is determined in terms of all major currencies of the world like dollar, euro, yen etc. The most studied and usable exchange rate is Rupee dollar exchange rate, the
rate is presented in the chart 1.6. The chart depicted that exchange rate hovered around an average of Rupee 50 per dollar during the study period of 10 years even the currency was not affected much and moved around the range of 40-55 rupee/ dollar, while currently the exchange rate is going through a very bad phase with Rs. 65 rupee per dollar. The factors held responsible for currency devaluation were India’s weak government, the slow pace of promised economic reforms, disappointing progress in developing the country’s creaking infrastructure and genuine fears over its tax policies. On a continuous spree various serious improvement strategies are taken by monetary authorities to bring the exchange rate in comfortable zone.

The prior section talked of the major economic indicators, the performance of these indicators was reviewed to measure the health and performance of the economy. Cumulative views of these indicators were important from the point of view of the investors: domestic as well as international. Before making investment in an economy, it is very important for an investor to understand about the economic fundamentals indicating the health of the economy. The international ranking of the economy as well as its individual performance must be considered for analysis. Another important set of indicators were the indicators related to the financial markets. The indicators of the financial market like Sensex, interest rate, market capitalization and performance of various participants could conclude the health status of the financial system.

The economic indicators are the absolute terms which are clearly expressed in terms of money, so the economic performance is clearly a rational phenomena but when we talk of the capital market, the indicators not only express the rational values or the monetary values they also include a very important aspect of the society i.e. the human sentiments.

All the numbers that are mentioned regarding the performance of the economy are not the only factors that need to be considered while evaluating the performance of the economy, but one very important terminology that is associated is the Sentiment and belief of the individuals that are residing in the economy. Whenever a bad or good news is spread in the market, it is the individual’s sentiment that is affected resulting in a cascading effect of the news over the economy. Such phenomenon is very strongly observed in case of capital market.

1.2: Economic Indicators: Household Sector
Since the study was targeted specifically to study the behaviour of Retail Investor, few of the other major macroeconomic indicators were also important to be calculated and analyzed. The section discussed the National Income domestically and compared internationally, Per capita Income, trends in the Household saving and investment pattern. Investing is the function of an individual’s or corporate Income. All the indicators experienced a growing trend with only exception was the investment made by the household sector in investment avenue of shares and debentures. Because of the market uncertainty, the household investors lost their confidence and withdrew their funds from the uncertain market. The behaviour of the household sector w.r.t. their investment specifically in secondary equity market was discussed in the later section. The current analysis only presented a generalised view of the overall analysis of the economic indicators related to the household sector.

1.2.1: National Income

National income is the total value of a country’s final output of all new goods and services produced within a fiscal year. The final output generated within an economy involves three elements – expenditure by purchasers, income received by sellers, and the goods traded as a result there are three ways to measure national income.

a. The Income method, which adds up all incomes received by the factors of production generated in the economy during a year. This includes wages from employment and self-employment, profits to firms, interest to lenders of capital and rents to owners of land.

b. The Output method, which is the combined value of the new and final output produced in all sectors of the economy, including manufacturing, financial services, transport, leisure and agriculture.

c. The Expenditure method, which adds up all spending in the economy by households and firms on new and final goods and services by households and firms.

The economic indicator of National Income indicates the earning capacity of the various factors of production, a measurement of the size of the economy and level of country’s economic performance it helps to trace the trend or the speed of the economic growth in relation to previous year(s) also in other countries. In an effort to appraise the income earned by the Indian economy, a comparative analysis was done with the other major economies of the world.
During the analysis, the National Income of the Indian economy was first compared by its international counterparts. The data on the Gross National income was obtained from World Bank. The National Income for international comparison was computed as the GNI (Gross National Income) per capita based on Purchasing Power Parity (PPP).

According to World Bank: “PPP GNI is gross national income (GNI) converted to international dollars using purchasing power parity rates across different economies.”

“An international dollar has the same purchasing power over GNI as a U.S. dollar has in the United States. GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad.” Data was presented in current international dollars.

After the comparative analysis of the National Income with few nations, Indian counterparts seem to earn the lowest. The Per capita national income of US economy occupied first position, followed by Germany, Japan and France earned almost similar amount, next in line was China, the last position was occupied by Indian counterparts.

C 1.7: Per Capita National Income across different Nations (2003-2012)

Source: worldbank.org

Indian economy’s National Income though indicated growth trend but still the economy was found to be lagging behind its international counterparts.

A household income earned through different sources is divided in two parts mainly
Income = Consumption + Saving

Both consumption and saving are a function of Income. Higher the income generated by the factors of production (from economics point of view) in the form of Salary & wages, interest, and rent, more is the amount to be distributed among the two components i.e. consumption and saving. Depending on the other prevalent economic indicators like rate of interest, and rate of inflation, the household or the income earner takes the decision of distributing the amount. If the economy is witnessing high rate of inflation i.e. the individual has to shell out more money to maintain his daily spending and leaving less amount as saving and thus reducing the amount of investment. If the economy is offering good interest rate on the investments, the household will be tempted to spend less and save more. The process goes on. During the analysis phase, the first factor to be analyzed was the cumulative value of income generated by the economic units i.e. National Income per capita.

After analyzing the performance of the National Income on Per Capita basis of Indian economy with their international counterparts, it was important to analyze the trend in National Income on an individual and domestic basis also. Though on comparative basis, Indian economy was lagging behind but upon doing individual and domestic analysis, the economy depicted a growth trend.

C1.8: Per Capita National Income: India (2003-2012)

Source: Worldbank.org (International $)

The economy experienced a growth rate of 114% during the study period with an average growth rate of 11% every year. In the year 2012 the per capita national income came to be
3910 with just 1820 at the initial period of 2003. On fitting the trend line the line observed an increasing linear trend. After analyzing the trend in the per capita income, next in the analysis it was important to identify what was the status of saving rate in the Indian Household and also to understand how and where the earner did kept the amount of saving?

1.2.2: Household Saving India

The other important component in the National Income Equation is the National Saving, since saving form the basis for the Investment so before analyzing the investment aspect, it was important to analyze the trend observed in the saving. Within an economy the activity of saving is conducted by Household, corporate and government. Budhedeo (2010) though indicated that “the Indian Household sector is the largest saver with the lion’s share in GDS observed during the period of 1950 to 2007. When compared with Private corporate sector, it was observed that they saves very low, while the public sector even dissaves.” There had been some dramatic and drastic substitutions within the saving composition, with household preferences shifting from the conventionally most sought after saving instruments such as currency, life funds, provident and pension funds to bank deposits, shares and debentures, and other small-saving assets. M.L. Sukhdeve (2008), indicated in his report that “in India, it is the household sector which occupies a position of dominance over the institutional sectors like private corporate sector and the public sector in terms of generating savings.”

The following graph presented the amount of saving generated by the Indian household sector. During the study period of 10 years, the economy had experienced a growth rate of 292% with an average annual saving of Rs. Bn. 12761.02.

C1.9: Indian Household Saving (2003-2013)
The amount of saving generated by the household sector which proved to be the biggest saver in the economy forms the basis for the various investment activities proposed to be conducted within an economy. Depending on the risk and return appetite of the Household sector, and taking advantage of various incentive schemes and considering the economic environment, the household sector decides to park its funds in the most suitable investment ventures.

Following table presented the expected growth rate of Domestic saving and its proportion divided among the different saving agencies in the economy. Household sector was expected to contribute heaviest in the saving, followed by private corporate, public sector enterprises, and government agencies. Household sector emerged as the agency with highest saving percentage.

**Gross Domestic Saving across different economic units**

<table>
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<tr>
<th>Particulars</th>
<th>Real Gross Domestic Product Growth</th>
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<tbody>
<tr>
<td></td>
<td>7%</td>
</tr>
<tr>
<td>XI Plan Approach Paper Projections</td>
<td>27.1</td>
</tr>
<tr>
<td>(Rate of Gross Domestic Saving)</td>
<td></td>
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<tr>
<td>I Household</td>
<td>20.1</td>
</tr>
<tr>
<td>II Corporate</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Source: tradingeconomies.com
During the study period the national Income and the saving percentage expressed a positive trend and the percentage would stay in the positive zone only when the other economic fundamentals remain strong and when the economy provided better perspective in the presence of a stable political system and stable policy decisions.

Next in the description, lies very crucial component of the Indian economic system i.e. the Indian Financial System.

**1.3: Financial System**

An economy comprises of economic units. Economic units can broadly be classified in different categories viz. household sector, corporate sector, and government sector. Financial market acts as an intermediary between the various economic units. Another classification of the economic units stands as the units with surplus funds and units with deficit funds. Among the three major categories any one can occupy any position at a given point of time.

![Flow of Funds Diagram]

The role can be interchanged as the seeker of the capital can also be the household and that point of time and suppliers would be the corporate. All the units taking advantage of plethora of investing instruments suitable to their risk and return requirement selects and meet the capital requirement mutually.

A sound financial system is the backbone of an economy. All the money related transactions are performed in the financial market. Organizations for expansion, technological
development, and diversification needs capital, government for policy implementation, infrastructural development and providing subsidy for national development, while individuals for securing their future and asset purchases need capital. Need of capital ranging from few thousands to multi millions is existing in the market, a sound financial system is one which is able to meet all the requirement. A sound financial system offers plethora of instruments meeting the requirement of each and every participant.

As mentioned earlier the economic units could be differentiated on the basis of their investment capacity, risk appetite, return percentage, time horizons etc. Indian financial system is a sound system as it is sophisticated enough to offer each category of economic unit with suitable investment option.

<table>
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<th>High</th>
<th>Low</th>
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<tr>
<td><strong>Investment capacity</strong></td>
<td></td>
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<tr>
<td><strong>Risk Appetite</strong></td>
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<tr>
<td>Corporate</td>
<td>Government</td>
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**Return Percentage**

**Time horizons**

By looking above one can identify the intricateness of the financial system, the formulators and financial engineering experts are required to devise financial instruments meeting the requirement of all the participants of the market.

The initial base of categorizing the financial market is on the basis of time horizon of investment avenues. The financial market is categorized as

a. Money Market: when the money is traded for a shorter period i.e. less than one year
b. Capital Market : when the money is traded for longer period of time i.e. more than one year

Over the years of development, both the markets have increased horizontally and vertically, satisfying all the degrees requirement of the investors in terms of risk and return.

**1.3.1: Money Market**
Money Market is a key component of the financial system which is used by the Central Bank in its monetary operations. It is a market of short-term funds with maturity ranging from overnight to one year and includes financial instruments that are deemed to be close substitute of money. Indian money market had come a long way and experienced major reforms after the liberalization (1992). Indian money market is complex structure offering product ranging with a maturity from one day to one year and with different monetary denomination. Through money market the Banks and other financial institutions have been able to meet the high opportunity of short term financial support of important sectors like the industry, services and agriculture. At the initial times the market was working under the hands of public sector entity but with the introduction of reforms and decisions by the government the market had experienced the healthy competition from their private counterparts. Indian money market is featured with the participating members both from the organised sector and unorganised sector. Indian money market is still experiencing an active but traditional way of money lending i.e. the unorganized sector. The market is famous in sub urban and villages where the people still resort to domestic money lenders and indigenous bankers for meeting their capital requirement. The drawback is the high interest rate charged by such lenders.

Regulated market is comprised of Central monetary authority i.e. RBI which regulates and maintains transparency in the system. All the agencies working under organized sector abide by the rules and regulations framed by RBI from time to time. The market is loaded with various products with main categories as

a. Treasury Bill  
b. Certificate of Deposit  
c. Repurchase Agreement  
d. Commercial Papers

The value of the market is determined by the aggregate values of all the instruments traded in the money market. For the study, the performance of the money market was studied in terms of the performance of the different investment instruments like Call money market, Treasury Bills, Certificate of Deposits. The data was obtained from the central repository of Reserve Bank of India. The data was given for all economic transactions classified on the basis of their respective markets as well as different economic sectors. The data related to various money market transactions were obtained from the website. The data availability on the RBI
website (dbie.rbi.org.in) was provided under different study period for different instruments, for some instruments data was available on daily, some weekly and some on monthly bases, so the instruments were analyzed on the basis of the availability of data. The first and most popular instrument of the money market is the call money where the money is borrowed and lend for a maximum duration of 14 days to the minimum of one day. The data of the performance of the call money market was given on weekly average basis, the data was converted in yearly basis by obtaining a sum of all the weekly average data for a particular year. The study period for the call money market was Apr. 2008-Jan 2014, during the study period the market witnessed a total turnover of Rs Bn. 60737.96, with an average turnover of 8676.85/ year. After computing the growth rate for the call money market, the call money market experienced a growth rate of 50% over the base of study period and an average of 10% every year.

Maximum percentage growth was experienced in the year 2009 as 30%, the movement in the call money market is determined by the level of economic activities.

C1.10: Call Money Market of India (2003-2013)

![Call Money Market Graph]

Source: RBI (dbie.rbi.org)

The data for the year 2014 was not used while computing the growth rate but used while representing the turnover, as the data was only available till the month of January, so not logical to use the data to compute the growth rate. Next in the analysis were the Treasury bills, another important instrument of money market. The bills are issued by central government under different maturity period ranging from 91-182-364 days. The instruments are issued to manage liquidity and to stabilize the system.

C1.11: Treasury Bill Market (2008-2014) (Rs. Bn.)
The most famous T bills were identified to be 91 days. Over the years the turnover of the other two TB’s was less than 91 days TB’s. In the year 2013, 91 days and 364 days TB’s observed equal turnover. Another important money market instrument traded actively in the market were the Certificate of Deposit, the instrument is the devise issued by the banks with a maturity ranging between 7 days to a year. The deposits appear similar to the conventional bank deposits with interest rate usually higher than conventional bank deposits the only additional feature is their negotiability, the quality of the instrument can easily be judged as they are rated by the authentic rating agencies (CARE, ICRA, CRISIL, and FITCH) increasing their tradability. The performance of the certificate of deposit is evaluated over the study period and the data analyzed included the COD’s issued during the fortnight for the study period 2008-2013.

While analyzing the table provided on the RBI website indicted two values: Total amount of COD’s outstanding as well as the COD’s issued during the fortnight. The data found suitable for the analysis was the data pertaining to the COD’s issued during the fortnight. With the help of the series, annual issuance of the COD’s was computed by summing up the COD’s issued fortnightly.

The certificates are issued by the banks in order to meet their cash requirements. The study period experienced a COD issuance with a total valuation of Rs. Bn. 37357.42 and experienced an average turnover of 6226 Rs. Bn. The year 2011 experienced maximum issuance of COD’s. From the year 2008, the market observed a continuous surge of COD’s issued by banks indicating their increased capital requirement. The COD market experienced many fold increase i.e. growth rate to the extent of 440%, averaging to 80% per year.

When the entire market was taking advantage of the instrument of Mutual fund, money market also participated by launching the Money Market Mutual Fund Scheme in the year March 1997 by Kothari pioneer along with UTI, the funds invested their corpus in money market instrument since the maturity value of the money market instruments cannot exceed more than a year, so was the feature of the money market mutual fund schemes. MMMF’s schemes are offered by the fund houses UTI, Bank sponsored mutual fund houses, and Financial Institutions sponsored mutual fund houses.

The study included the analysis of the net resources mobilized by the various Mutual Fund houses. The amount of net resources mobilized was calculated after deducting the amount of inflow and outflow.

The graph indicated that the value of net resource mobilized by the UTI fund house always occupied the first position followed by the private sector MF’s and then with the fund houses lead by financial institutions. The schemes were popular during the initial phases of study period i.e. during 2007-08, later the scheme lost their shine and the market saw more withdrawals than inflow. During the year 2012-13, the inflows gained positive growth among all the fund houses and entered a positive zone.

1.3.2: Capital Market

Capital market as the name suggests is the subset of financial system where the long term monetary needs of the agencies are met. Capital market enables the corporate, and government agencies to raise capital from the surplus units of the economy, same as money market but the only difference is the tenure of borrowing, the money raised through capital market is borrowed for long term. The market was initiated when Bombay Stock Exchange came in existence, initially the trading was done under open outcry system on the exchange floor, later the Indian financial markets acknowledged the use of technology (National Stock Exchange started online trading in 2000) later in the year.

Capital market in India had grown exponentially as measured in terms of listed companies, market capitalization, number of IPO’s, market turnover, market indices etc. In the market corporate creates the instrument of equity and offer it to sale in the open market asking participation of general investor. The equity is offered to create finance within organization usable for any purpose like expansion, diversification, modernization etc. When the equity is offered for the first time, the market is termed as Primary market “IPO” or the “NIM” New Issue Market. Chart 1.14 presented the IPO issues made on the NSE through the Book Building process during the study period.
Looking at the positive prospects of the economy when the GDP growth rate of the economy was touching its peak values, the exchange also witnessed a surge of IPO by the organizations favouring further the positive sentiment among the investors and trust in the economy. The year of recession showed its effect also on the trust of the corporate and the number broke down, the market regained its confidence in the year 2010, but after that because of political uncertainty and poor economic growth acted as a deterrent to the expansion plans of various corporate, who wished to expand but halted their plans for the economy to enter in a positive zone. After the equity is issued in the primary market, the securities are listed on the stock exchange for further tradability.

**C1.14: IPO listed during 2003-2013 (NSE)**

![IPO listed during 2003-2013 (NSE)](chart)

Source: nseindia.com

Today the corporate have the option of trading or listing their equity on two exchanges: BSE and NSE. Both the markets are said to be secondary equity market. In order to measure the performance of the capital market of a country, the indicator used is the value of market capitalization. The value of market capitalization indicates the value of the shares outstanding and their respective value in Rs. Terms. The volume indicates the turnover of the market, high market capitalization value is indicative of the high volume of shares traded at good price. Chart 1.15 indicated the market capitalization of BSE for the study period of 10 years ranging from 2003-2013.

**C1.15: Market Capitalization BSE US $ Bn**

![Market Capitalization BSE US $ Bn](chart)
The value of market capitalization is affected by a variation in any one of the element used for determining its value. If there are any changes in the number of outstanding shares (fresh issue (New IPO, conversion) or redemption of shares (buy back)), or there is any change in the value of the security i.e. the market price (increase because of increased market demand out of good corporate performance, speculation or positive sentiment (positive economic indicators and international movement etc) or decrease in demand, poor corporate performance, negative sentiment, poor economic indicators, international breakdown etc). are all factors responsible for variation in the market capitalization. The value of market capitalization is greatly affected by the market sentiment: market sentiment comprises of investor sentiment and corporate sentiment with respect to the current performance of the International market and economies, Domestic market and economy, and anticipated future about the entire market forces and behaviour of the participants.

Today about 7800 scrips are listed on the Indian stock market, while less than 3,000 are actively traded. During the study period, at the initial period of 2003 the market was at the value of US $ Bn. 341.18, it touched the peak in the year 2009-10 at raised at US $ Bn. 1520.09, rising with a percentage of 345% with an average market capitalization of US $ Bn. 963.75 during the study period. The market was following a growth trajectory till the year 2008, but lost 50% of its value in the recession year and gained the equal amount in the preceding year because of the faith of the investor in the market. Since the entire structure has a speculative culture, it exposes investors to greater risks and restricts real capital
formation. Another indicator of measuring the performance of the stock market or the exchange is through the analysis of market turnover. As the term turnover indicates it is the activity of buying and selling of any item in the study’s case it is shares for a particular time period. Turnover indicates the total value of purchasing and selling of shares. More the turnover more is the activity in the market.

C1.16: Market Turnover (Rs. Cr.) (2003-2014)

The Chart 1.16 indicated the average daily turnover of the shares: purchasing and selling of shares, indicating Rs. Cr.8,81,300.86. Market turnover is the activity in the market characterised by both purchasing and selling of shares. Sometimes the sentiments were positive and the market turnover was because of high purchasing of shares resulting in price rise and improvement in market capitalization. While expecting negative events in the near future the turnover is because of high selling (investors with contrarian strategy will invest) resulting in low prices and ultimately creating a negative impact on market capitalization. The two terms: Market Capitalization and Market turnover are compared in the form of Share Trading Velocity (STV). STV is an indicator of the liquidity of the market. A high STV indicates good breadth and liquidity of the market, while a low STV indicates poor breadth and liquidity of the market. STV is calculated by the following formula

Share Trading Velocity = \( \frac{\text{Domestic Total Trading Volume}}{\text{Domestic Market Capitalization}} \)
The indicator enables to understand the liquidity of the system and frequency of tradability of the share. It is observed that most of the shares in the exchange exist at the dormant state while few dominate the market trading.

Table 1.14: Share Trading Velocity around different prominent exchanges

<table>
<thead>
<tr>
<th>Country</th>
<th>Dec-13</th>
<th>Jan-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Stock Exchange India</td>
<td>40.0%</td>
<td>46.4%</td>
</tr>
<tr>
<td>BSE India</td>
<td>7.2%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Hong Kong Exchanges</td>
<td>39.6%</td>
<td>51.5%</td>
</tr>
<tr>
<td>Japan Exchange Group – Tokyo</td>
<td>132.2%</td>
<td>147.4%</td>
</tr>
<tr>
<td>NYSE Euronext (Europe)</td>
<td>43.2%</td>
<td>61.0%</td>
</tr>
<tr>
<td>NASDAQ OMX Nordic Exchange</td>
<td>42.0%</td>
<td>64.6%</td>
</tr>
</tbody>
</table>

India VIX, the volatility index, has risen steadily since early 2013 from 13 to a high of 32 in September 2013. That's another reason retail investors are staying away.

Indian economy has come a long way and the economy has witnessed various crusts and trough’s, still the economy and its residents maintained their calm and believed in the system and invested in the economy and faced the challenging situations.

Next discussed in the study were the objectives of the research.

**Research Objectives**

Objectives are the broad guidelines or the broad areas the research will cater to. For the study the following objectives were decided to be analyzed and studied

1. To study and appraise the performance of the secondary equity market and to identify the pattern of investment demonstrated by the Indian Financial market participants
2. To study the relationship between demographic variables and their impact on the investment decision taken by retail investor
3. To study the relationship between behavioral finance biases and their impact on the secondary market investment made by retail investor
4. To study the problems and difficulties encountered in secondary market investment and its impact on the investment made by the retail investor in secondary equity market
5. To analyze the WISDOM equation of Reason and Intuition and its applicability on the investment made by retail investor in secondary equity market
6. To analyze the results and make conclusion about the attitude of the retail investor toward investing in secondary equity market and make necessary suggestions to the retail investor to face the market volatility

Research Questions

Research questions are the specific statements generated from the research objectives. The framing of the research questions identifies the specific details of the objectives the researcher wanted to pursue. The research questions portray the specific interest that the researcher is interested in. Under the current study the research questions were developed after considering each and every objective separately. The following section presented the research questions developed and derived from the individual objective
Objective 1: To study and appraise the performance of the secondary equity market and to identify the pattern of investment demonstrated by the Indian Financial market participants

Research questions related to the first objective are presented in the following section. In order to develop research question from the first objective, the objective was segregated in two parts

a. Research questions based on the studying and appraising the performance of secondary equity market
   i.) Studying the movement in the secondary equity market through the index “Sensex” on daily basis for a duration of 5 years (March 2008- March 2013)
   ii.) Studying the factors affecting the secondary equity market and developing a matrix of the factors considering their frequency of occurrence and the volatility created by the factors.

b. Research Questions based on Pattern of investment exhibited by the secondary equity market participants: FII’s, Mutual Funds and Retail Investors.
   a. Studying the pattern of investment exhibited by the FII’s in the secondary equity market during the period of 1st March 2008- 31st March 2013
   b. Studying the pattern of investment exhibited by the Mutual Funds in the secondary equity market during the period of 1st March 2008- 31st March 2013
   c. Studying the pattern of investment exhibited by the Retail Investors in the secondary equity market during the period of 1st March 2008- 31st March 2013
   d. Studying cause and effect relationship between the FII investment and stock market movement
   e. Studying cause and effect relationship between the FII investment and Mutual Fund Investment.

Objective 2: To study the relationship between demographic variables and their impact on the investment decision taken by retail investor

Research Questions

a. To identify the demographic prolife of the retail investors residing in the NCR region
b. To identify the investment profile of the retail investors residing in the NCR region
c. To study the relationship among the demographic profile and the investment preference exhibited by the retail investors residing in the NCR region.
d. To study the relationship between the experience in investing and the investment preference exhibited by the retail investor residing in the NCR region.

Objective 3: To study the relationship between behavioral finance biases and their impact on the secondary market investment made by retail investor

Research Questions

a. To identify the demographic profile of the retail investors residing in the NCR region
b. To identify the investment profile of the retail investor residing in the NCR region on the basis of their investment in secondary and non secondary market based investment
c. To identify the general perception of the retail investor toward investing in secondary equity market
d. To identify the degree of confidence exhibited while taking a decision by the retail investor residing in the NCR region.
e. To study the inclination towards Intuitive decision making by the retail investors residing in the NCR region.
f. To study the inclination toward numerology and astrology for taking investment decision by the retail investor residing in the NCR region.
g. To study the effect of confidence level, intuitive decision making, belief in the system, usage of numerology and astrology on the attitude formation of the retail investor toward investing in secondary equity market residing in the NCR region

Objective 4: To study the problems and difficulties encountered in secondary market investment and its impact on the investment made by the retail investor in secondary equity market

Research Question

a. To study the problems and difficulties encountered while investing in secondary equity market by the retail investors residing in the NCR region
b. To study the effect of experience in investing and the problems encountered by the retail investors
c. To study the effect of demographic variables and the problems encountered by the retail investors

**Objective 5: To analyze the WISDOM equation of Reason and Intuition and its applicability on the investment made by retail investor in secondary equity market**

**Research Questions**

a. To study the degree of usage of the Intuitive and Reasoning while taking decision and the attitude of the investor toward the secondary equity market.
b. To study the usage of Intuitive and Reasoning skills and the impact of the demographic variables

**Objective 6: To analyze and conclude about the attitude of the retail investor in secondary equity market and make necessary suggestions**

Necessary suggestions were made to the retail investor to face the market volatility and how to overcome the behavioral biases, to the Brokerage Houses on how to increase their customer base and to attract more investors in the market, to the researchers on what parameters the research could be extended.

**Research Hypotheses**

On the basis of the research objectives & questions, set of hypothesis were formed. Hypothesis is the statement indicative of the type of relationship and association among the variables under study. The set of hypothesis discussed in the section were categorized on the basis of type of data utilized for their testing. The analysis used both primary & secondary data for analysis. The techniques and the software used for the analysis dependent on the type of data.
1. Hypotheses tested using Secondary data

The first set of hypotheses were formed to test the association between the variables observed from secondary data like Movement in the two indices “BSE Sensex”, “CNX Nifty”, Net investment made by the FII’s, Mutual Funds & Retail Investors.

i.) Hypothesis: Cointegration (Tested using Johansen Cointegration test)
   a. Hypothesis Cointe1.1: “BSE Sensex” & “CNX Nifty” have no cointegrating equation
   b. Hypothesis Cointr1.2: FII net investment & “BSE Sensex” have no cointegrating equation
   c. Hypothesis Cointr1.3: Mutual Funds net investment & “BSE Sensex” have no cointegrating equation

ii.) Hypothesis: Causality (Tested using Granger Causality test)
   a. Hypothesis causa1.1: “BSE Sensex” & “CNX Nifty” have no cause & effect relationship
   b. Hypothesis causa1.2: FII investment & “BSE Sensex” have no cause & effect relationship
   c. Hypothesis causa1.3: Mutual Funds Investment & “BSE Sensex” have no cause & effect relationship
   d. Hypothesis causa1.4: FII investment & Mutual Funds Investment have no cause & effect relationship

After formation of the hypotheses based on secondary data, the study formulated the hypotheses based on primary data

2. Hypotheses tested using Primary data

Another set of hypotheses were formed from the variables based on demographic & investment profile and the behavioral variables studied during the study.
Variables based on Demographic & Investment Profile
1. Age
2. Gender
3. Marital Status
4. Qualification
5. Occupation
6. Income
7. Experience in Investing
8. Market Exposure

Hypothesis between Market Exposure & Demographic Profile 1.1 - 1.7