A STUDY ON

"SHARE MARKET"

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ABSTRACT:

The study aims to examine the role of stock market development in influencing the performance of non-financial firms listed on Pakistan Stock Exchange from 2001 to 2017. Stock market development is a foremost issue of debate nowadays in emerging and developing economies. The theories and empirical studies strongly refer that stock market development is a tool to mobilize the savings and investment to promote the industrialization and firm's performance. This study is an effort to establish the empirical relationship between stock market development and firm's performance. Three indicators of stock market development like stock market volatility, stock market liquidity and stock market liquidity are used for assessing the book and market performance of firms. For this purpose, two-step system Generalized Method of Moments (GMM) estimator was employed in a dynamic panel model for empirical testing of hypothesis. The findings indicate that stock market volatility is a significant factor which attempts to decrease the firm performance. On the other hand, stock market capitalization and stock market liquidity significantly cause the increase in firm performance.

KEYWORDS:

Stock market development, stock market capitalization, stock market liquidity, Pakistan Stock Exchange, firm performance.

INTRODUCTION:

A well-developed financial system improves the efficiency of capital allocation with more productive investments (Rafael et al., 1999). Furthermore, equity markets are illiquid and highly concentrated which play a prominent role in the development of the stock market and are considered as main factors of stock market development. It seems to assume that stock market measures the ability of firms to mobilize the capital and their performance (Bokpin & Ishaq, 2008). Notably, the equity markets and firms operating in stock markets are facing the serious issues related to their performance after the financial crisis. A large part of the savings of an economy is intermediated with productive investments through financial markets and intermediaries (Levine, 1997). Since capital accumulation is a fundamental determinant for the long-term growth of any firm and an efficient financial system is essential for the development of an economy. Therefore, stock market development plays an important role for predicting the future economic growth and survival of firms (Kunt & Maksimovic, 1996; Singh, 1997; Levine & Zervos, 1998). Developed stock markets are more liquid, less volatile, highly concentrated and is associated with high stock market capitalization. Existing models suggested that stock market development is a multifaceted concept involving issues of market size, liquidity, volatility, concentration, integration with world capital markets, and institutional development. The development of stock market is likely to be affected by stock market volatility, stock market capitalization, and trading volume. All these indicators play a decisive role for the development of stock market which in turn increases the performance of firms. This leads to the expectations that as the stock market develops, firms would prefer

equity financing over debt financing in return less burden on firms" profits (Agarwal & Mohtadi, 2004).

Recent theoretical studies have already commenced the first step to link the financial market and the rate of economic growth; it is proposed that higher per capita income may affect many aspects of the economy and stock market performance. Gurley and Shaw (1955, 1960 and 1967) argued that financial development is a positive function of real income and wealth. This study supports the quantitative work of Goldsmith (1969) who discovered that, in most of the 35 countries investigated, both developed and developing, the ratio of the financial institution to GDP tends to increase with higher real income and wealth. This relationship between growth and financial system size is further supported by more recent evidence from the World Bank (1989). Much of the research within empirical studies concurs that finance is strongly associated with economic growth rate. Financial markets are today classified as bank-based or market-based systems. This division can be further exemplified by the Anglo-Saxon market-based models which are capitalist economies and allow for private investment and private ownership and the other, largely exemplified by Germany, which is the bank-based model that has been practised more widely by Eastern European countries. These latter are centrally-planned or, to be politically correct, communist economies (Hall and Soskice, 2001). The UK and US are market-based as these countries have similar long-term growth rates1. Throughout the world, the type of financial model practised by sovereign countries reflects the type of government as a regime in power. Many, Eastern European, Middle Eastern and African countries, including Libya, have practised socialism for a long time. However, in the light of recent trends, and under the direction of the IMF and World Banks, many countries are now reforming their economies and gradually adopting capitalism, largely as a result of the failure of socialism and particularly in order to rescue their economies. In this context, the World Bank (1994, 1989) has argued for the establishment and promotion of stock markets in developing countries in line with those existing in developed countries.

REVIEW OF LITERATURE:

A stock market can be a very sophisticated market place, where stocks and shares are the traded commodity. At the same time, it is central to the creation and development of a strong and competitive economy. It is a key to structural transformations in any economy; from traditional, rigid, insecure bank-based to a more flexible, more secure economy that is immune to shocks, fluctuations and lack of investors' confidence (Stapley, 1986). According to Arnold (2004), stock markets are where government and industry can raise long-term capital and investors can purchase and sell securities. Typically, markets, whether they be shares, bonds, cattle or fruit and vegetables, are simply mechanisms to allow the possibility of trade between individuals or organisations. Whilst some markets (e.g. for livestock) are physical where buyers and vendors meet to trade, others (e.g. for foreign currency) are a national network, based on communication using telephone lines and computer links, with no physical meeting place. Additionally, very few stock exchanges around the world still possess a physical location where buyers and sellers meet to trade.A stock market can be a very sophisticated market place, where stocks and shares are the traded .

Patrick and Wai (1973) argued that stock markets are those markets that deal with capital, both in the short and long-term, where companies sell stocks in order to generate long-term capital that can be channelled into their profitable options. This is because people would rather invest in winners than losers; buyers hold on to their stocks for future dividend pay-outs. The activities of buying and selling stocks and shares on the stock market are extremely significant for the allocation of capital within economies (Pratten, 1993). In addition,

transaction prices and quotations provide investors with an indication of the market value of their wealth which may influence their decisions about consumption expenditure (Pratten, 1993). Although, when prices are at historically high levels and/ or rising, this indicates confidence among investors and may affect the confidence of businessmen and, hence, their investment. Furthermore, the stock market is a crucial factor in business investment decisions because the price of shares affects the amount of funds that can be raised by selling newly issued stock to finance investment spending. Johnson (1983:32) suggested that: "The stock markets are a complex of institutions and mechanisms through which funds for purposes longer than one year are pooled and made available to business, government, and individuals and through which instruments already outstanding are transferred. The stock markets are well organised and are local, regional, national, and world-wide in scope." According to Tweles and Bradly (1987), the word stock in North American tradition, means ownership or equity. In corporations these stocks are traded in a market called the "stock exchange". Curry and Winfield (1994:25) offered a brief definition of the stock exchange as: "…… an institution where quoted investments (stocks and shares) may be exchanged between buyers and sellers." Fabozzi et al. (2002) classified three types of stock market role: first, the interactions of buyers and sellers in a stock market determine the price of the traded asset; second, stock markets provide a mechanism for investors to sell a stock asset; finally, the third economic function of a stock market is that it reduces the cost of transacting. Mishkin and Eakins (2003) provided that a stock is a security that represents a share of ownership on the earnings and assets of the corporation. The stock market, in which claims of the earnings of corporations (shares of stock) are traded, is the most widely followed market in the American economy. Stock markets can be classified as debt and equity markets, short-term debt instruments (money market) and longer-maturity financial assets (capital markets), including cash or spot market and futures markets.

Firms Performance is the mainstream theme of corporate finance and is a crucial component for financing decisions. The firms" performance and the components of the firms" performance are the most extensive research area in the field of finance. A well-developed stock market minimizes the cost, maximizes the benefits and increases the firms" performance (Myers & Majluf, 1984). In this way, they can achieve the objective of maximization of shareholder's wealth.

A stock market can be a very sophisticated market place, where stocks and shares are the traded commodity. At the same time, it is central to the creation and development of a strong and competitive economy. It is a key to structural transformations in any economy; from traditional, rigid, insecure bank-based to a more flexible, more secure economy that is immune to shocks, fluctuations and lack of investors' confidence (Stapley, 1986). According to Arnold (2004), stock markets are where government and industry can raise long-term capital and investors can purchase and sell securities. Typically, markets, whether they be shares, bonds, cattle or fruit and vegetables, are simply mechanisms to allow the possibility of trade between individuals or organisations. Whilst some markets (e.g. for livestock) are physical where buyers and vendors meet to trade, others (e.g. for foreign currency) are a national network, based on communication using telephone lines and computer links, with no physical meeting place. Additionally, very few stock exchanges around the world still possess a physical location where buyers and sellers meet to trade.

Alti et al. (2012) argued that in emerging markets, the quality of information flow is poor, and investors wait for subsequent confirmation news to set stock prices which leads to persistence in firms returns. Walkshausl (2013) argued in a study that the effect of stock market volatility is associated with the quality of firms. Stock market capitalization indicates

the firm's ability to allocate the funds in investment projects and provide significant opportunities for risk diversification to investors (Sukcharoensin, 2013). Firms are having more liquid stocks have better operating performance and capital gains. Levine and Zervos, 1998 measured the stock market liquidity as the value of stock trading to the size of the stock market. Stock market liquidity can also be measured through trading volumes which is a source of information for investors and a signal of new information release. Trading volumes are an increasing function of the stock market development which develops a significant role in firm performance (Hamon & Jacquillat, 1992; Krigman et al., 1999).

OBJECTIVES OF THE STUDY:

- To study the socio-economic profile of retail investors.
- To analyse the factors influencing the investment behaviour of retail investors.
- To examine the trading practices of retail investors in equity markets.
- To identify the factors influencing the risk-taking ability of retail investors.
- To present the problems of retail investors in the capital market.
- To elicit the opinion of the retail investors on the policy issues of capital markets,
- To suggest certain measures to the policy makers for the protection of retail investors.

RESEARCH METHODOLOGY:

SELECTION OF SAMPLE:

The data needed for the study is collected from the select target respondents of Visakhapatnam city. The target respondents are adults of age 18 or over who had traded any RISK products in the past two years. Risk investment products include stocks and derivatives listed on BSE and NSE, Mutual Funds and Equity Linked Saving Schemes (ELSS).

DATA COLLECTION:

The data needed for the study is collected from both primary and secondary sources. The Secondary data is collected from published and unpublished reports and records of different capital market institutions. The Data related to the retail investors in Visakhapatnam City is collected from the institutions like, Karvy Consultants Ltd., Steel City Securities Ltd., India Bulls, Anagram Securities, India Infoline.Com, Way 2 Wealth etc. The primary data is collected with the help of a well-structured, pilot tested schedule.

SAMPLING DESIGN:

The stratified random sampling technique is used to collect information from the target respondents. The population from which the sample is drawn is divided into different stratas based on different factors like Age, Education, Income, Occupation and stage of life cycle.

STATISTICAL TOOLS:

1. The entire data collected is coded and computerized in Excel sheets and Bi- Variate analysis is applied.

2. Index numbers and Compound Annual Growth Rates (CAGR) are used to explain growth in the capital markets in India.

3. Discriminant analysis is a well-known statistical tool which helps to identify the factors behind identified groups which are homogeneous within themselves and heterogeneous with others. In the present study an attempt is made to identify the characteristics of moderate risk takers and high-risk takers using Discriminant analysis.

HYPOTHESIS:

Having identified the objectives, the study was also focused on identifying the characteristics of the high-risk takers and moderate risk takers using Discriminant analysis. The Age, Education, Occupation, Income and Stage of life Cycle are considered to discriminate the two groups viz., the high risk and moderate risk takers. It is assumed that age, level of education and income are negatively associated with risk. It is assumed that investors who are into business/professional occupations have more ability to take higher risk when compared to others. It is further assumed that as the dependents increase, preference to take risk declines as responsibilities increase with family life. From the analysis it is noted that the groups are distinctly different from each other as the f-value 55.64 is found to be statistically significant at 1% level of significance.

THEORETICAL CONCEPTS:

PRE-MODERN ERA IN FINANCIAL THEORY:

As the foundation of modern financial innovations and theories, Bernouli's Definition and Measure of risk, Irving Fisher's Asset return in terms of probability Distribution, Keyne's Liquidity Preference Theory, Marsckak's Preference for investment by Indifference curve in mean variance space, Neuman&Morgen's Theory of choice under uncertainty play a vital role in pre modern era in financial theories. (Ang, Goetzmann& Schaefer, 2011; Barakat, Elgazzar&Hanafy, 2015; Lin, Fang & Cheng, 2008).

THEORIES IN MODERN FINANCIAL ECONOMICS WITH TECHNOLOGICAL DEVELOPMENT (COMPUTING):

After the end of World War II, the traditional approach of financial theories got a big turn into a modern era. (Archer and D' Ambrosio, 1969). In this sense, emphasis was placed on sources of resources. However, the early 1950s brought rapid economic expansion, pushing internal controls for accounts receivable, accounts payable, and inventory into the spotlight (Weston, 1975). The post-war period therefore saw a change of focus in finance studies, which began to feature the dominance of internal routines and the concern with organizational structure that characterize the administrative approach, according to Archer and D'Ambrosio (1969).

MODERN PORTFOLIO THEORY/MEAN-VARIANCE ANALYSIS (1952):

Harry M. Markowitz published in 1952 a path-breaking article (Markowitz, 1952), in which he argued that the traditional application of one-dimensional investment criteria such as the Net Present value (NPV) criterion should be replaced by two dimensions: Expected returns and risk defined as the standard deviation of the return distribution. (Balling & Gnan, 2013) In 1990, Markowitz received the Nobel Prize in economics for having developed a strong analytical basis for that wise recommendation, which can be followed by individuals, firms, mutual funds and institutional investors.

SEPARATION THEOREM/LIQUIDITY PREFERENCE THEORY (1958):

Tobin (1958) contributed to the expansion of the concepts introduced by Markowitz (1952). Using Keynesian Theory as a starting point, Tobin (1958) argued that investors choose situations that fall between a state of total liquidity and a point of total investment in high-risk assets. In his work, Tobin (1958) noted that investors prefer liquidity, due to two aspects: one concerns individual inelasticity towards the expected interest rate, and the other, uncertainty as to the future of interest rates. In other words, investors are inclined to avoid the risk of

losing the wealth of their capital as a consequence of unpredictable asset price fluctuations (market risk). Additionally, Tobin (1958) developed the observation that investors make their decisions by combining a risk-free asset with the portfolio located at the Efficient Frontier introduced by Markowitz (1952), leading to the Separation Theorem, which states that the two investment decisions made by individuals are independent and separate.

These decisions consist of:

- Determining the most efficient risky asset portfolio;
- Defining the proportion of resources to be allocated to risk-free assets and risky assets. (Saito, Savoia, & Fama, 2013).

ARBITRAGE PRICING THEORY (1976):

There are two versions of the APT: factor loading model and macro variable model. Factor loading model uses artificial variables created through the factor analysis technique. While macro variable model uses macroeconomic variables based on the economically interpretable effect on stock prices (Erdugan, 2012). Ross (1976) developed the APT and Roll and Ross (1995) provided a more intuitive explanation of the APT and discussed its merits for portfolio management.

EMH AND EXPECTED RETURN:

Efficient markets hypothesis (EMH) asserts that in an efficient market price fully reflect available information. Efficiency is defined at three different levels, according to the level of information reflected in the prices. Three levels of EMH are expressed as follows: weak form, semi-strong and strong form. Weak-form version of EMH asserts that prices of financial assets reflect all information contained in the past prices.

THEORIES IN VALUE CREATION, CSR AND BEHAVIORAL FINANCE:

In 1973, Fischer Black and Myron S. Scholes published an article (Black and Scholes, 1973), which revolutionized financial theory and laid the foundation of a phenomenal growth in derivatives markets in the following decades. The so-called "Black-Scholes Formula" determines the value of a European call option as a function of the exercise price, the market price of the underlying asset, the time distance to exercise, the risk-free interest rate and the volatility of the underlying asset. The formula is based on the assumption that investors are able continually to adjust their portfolios.

DATA ANALYSIS AND INTREPRETATION

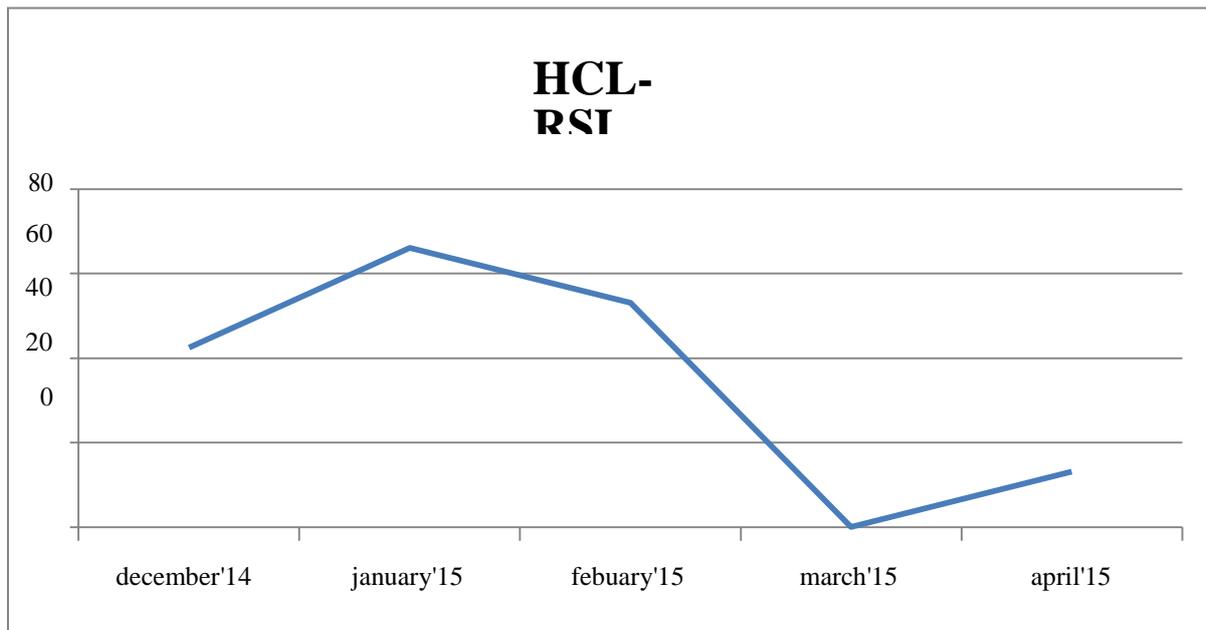| Months	Hexaware	Polaris	HCL	TCS	Tech Mahindra
Dec'14	37.7873563	39.47368	42.46728213	39.08074	45.7268
Jan'15	68.8262195	30.82386	66.17685647	43.83256	71.01649
Feb'15	89.4543787	40.33613	53.17315226	62.86856	47.68603
Mar'15	89.4543787	64.06728	0.130494505	96.07012	97.94602
Apr'15	66.5738808	45.83684	13.19389634	45.83684	20.69689

Figure 1: Showing RSI of HCL Tech Limited for the Months of December 2014 - April 2015

INTERPRETATION

The Relative Strength Index is an oscillator used to identify the inherent technical strength or weakness in particular scrip.RSI foretells a rise or fall in scrip. As a rule of thumb, whenever the RSI goes above seventy, one had better prepare for a downturn similarly, and then the RSI goes below thirty. It is time to pick up the scrip.

The above chart shows the 20 days RSI chart of HCL tech for 5 months from December 2014 to April 2015. In the month of December, the price picks up, rises above 60 which is nearing to 70 which shows the point to where there will be down turn in price in the month of March RSI falls down below 30 and touch as zero and price moving up.
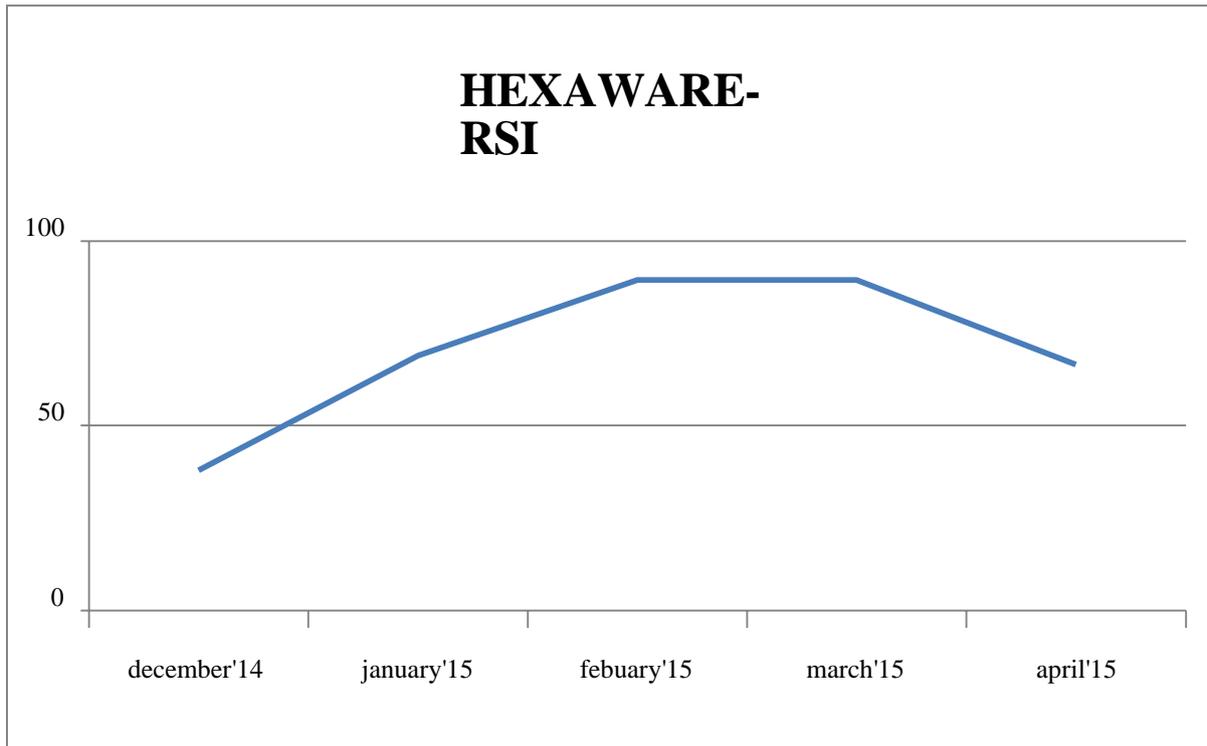
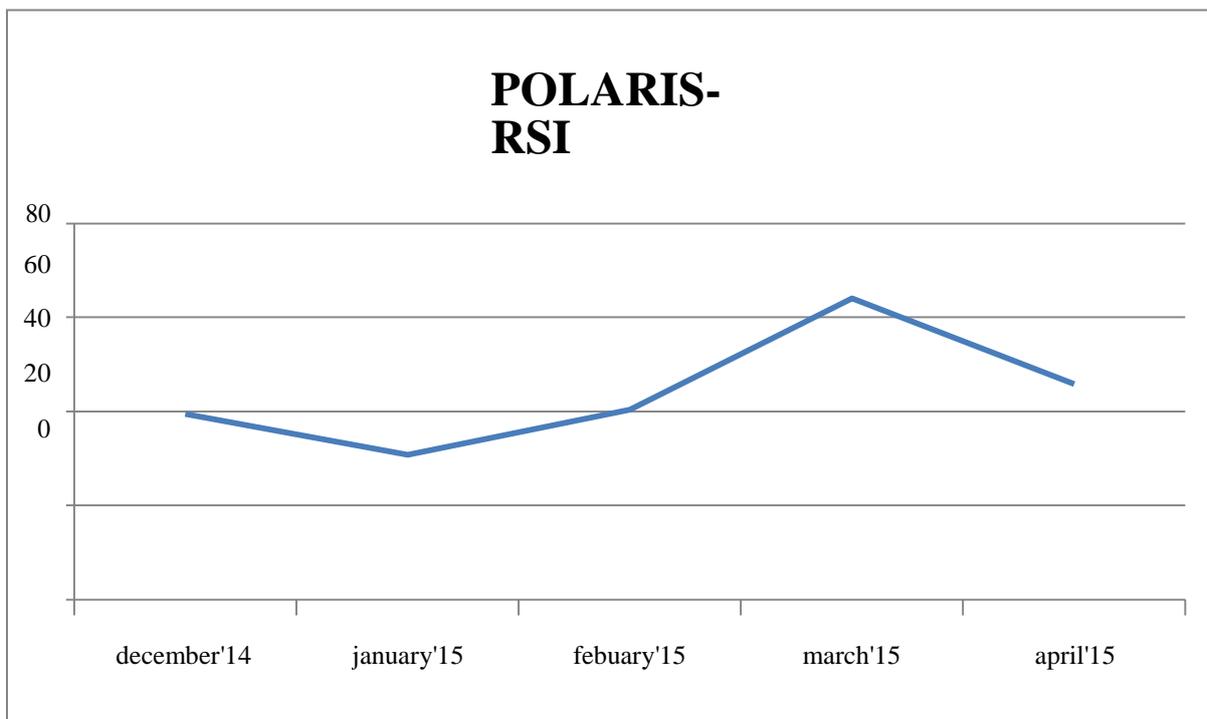Figure 2: Showing RSI of Hexaware for the Months of December 2014 - April 2015.

INTERPRETATION:

The above chart shows the 20 days RSI chart of HEXAWARE for 5 month from December 2014 to April 2015.In the month of January the price pick up, rises above 60 which is nearing to 70 which shows the point to where there will be down turn in price in the month of mid-march RSI falls down below 70 and it does not touch as zero and price moving up.

Figure 3: Showing RSI of Polaris Limited for the Months of December 2014 - April 2015

INTERPRETATION:

The above chart shows the 20 days RSI chart of POLARIS for 5 month from December 2014 to April 2015.In the month of March the price pick up, rises above 60 which is nearing to 70 which shows the point to where there will be down turn in price in the month of April RSI falls down below 30 and does not touch as zero and price moving up.
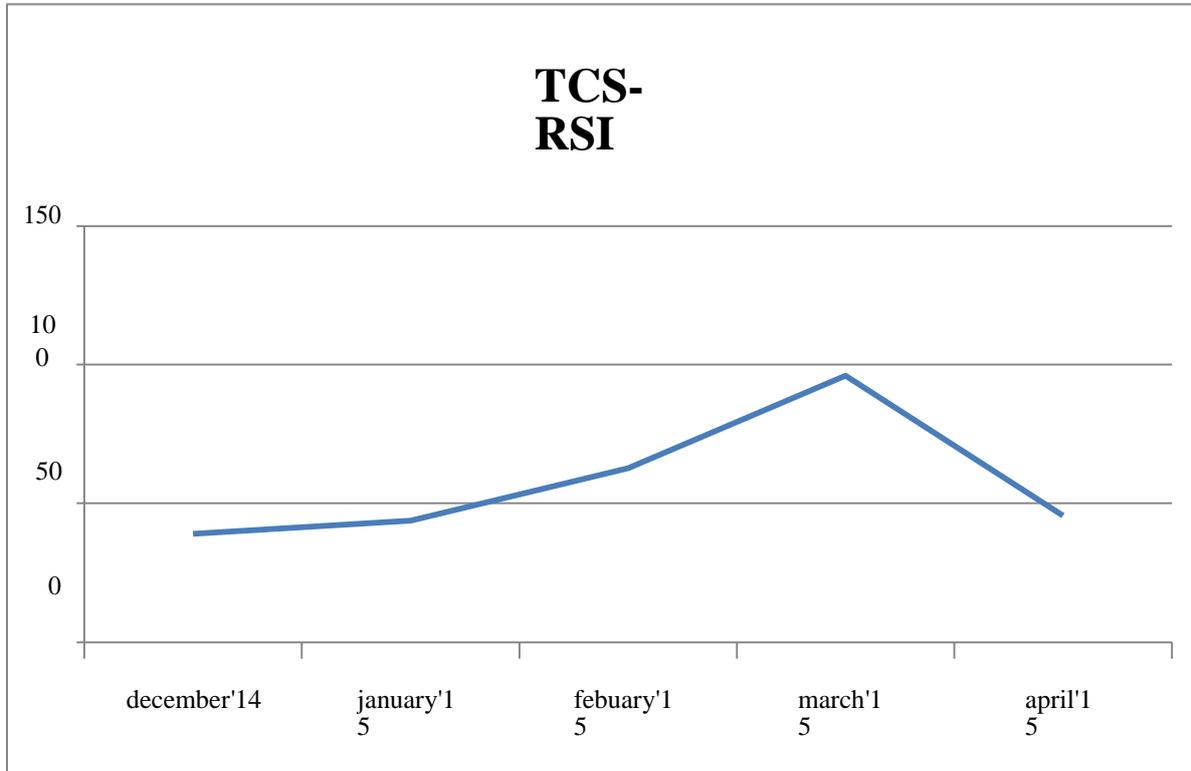

Figure 4: Showing RSI of TCS Limited for the Months of December 2014 - April 2015

INTERPRETATION:

The above chart shows the 20 days RSI chart of TCS for 5 months from December 2014 to April 2015. In the month of march the price pick up, rises above 60 which is nearing to 70 which shows the point to where there will be down turn in price in the month of March RSI falls down below 40 and does not touch as zero and price moving up.
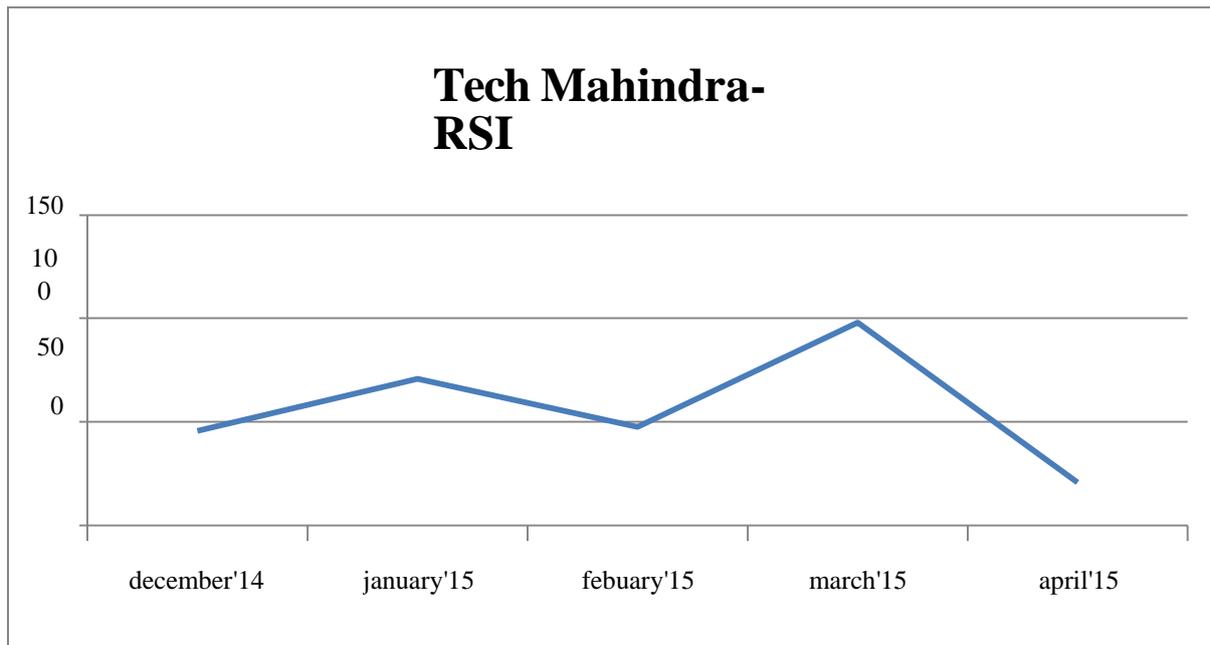
Figure 5: Showing RSI of Tech Mahindra for the Months of December2014-April2015

INTERPRETATION:

The Relative Strength Index is an oscillator used to identify the inherent technical strength or
The above chart shows the 20 days RSI chart of Tech Mahindra for 5 month from December
2014 to April 2015 in the month of December the price pick up, rises above 60 which is
nearing to 70 which shows the point to where there will be down turn in price in the month of
March RSI falls down below 30 and does not touch as zero and price moving up.
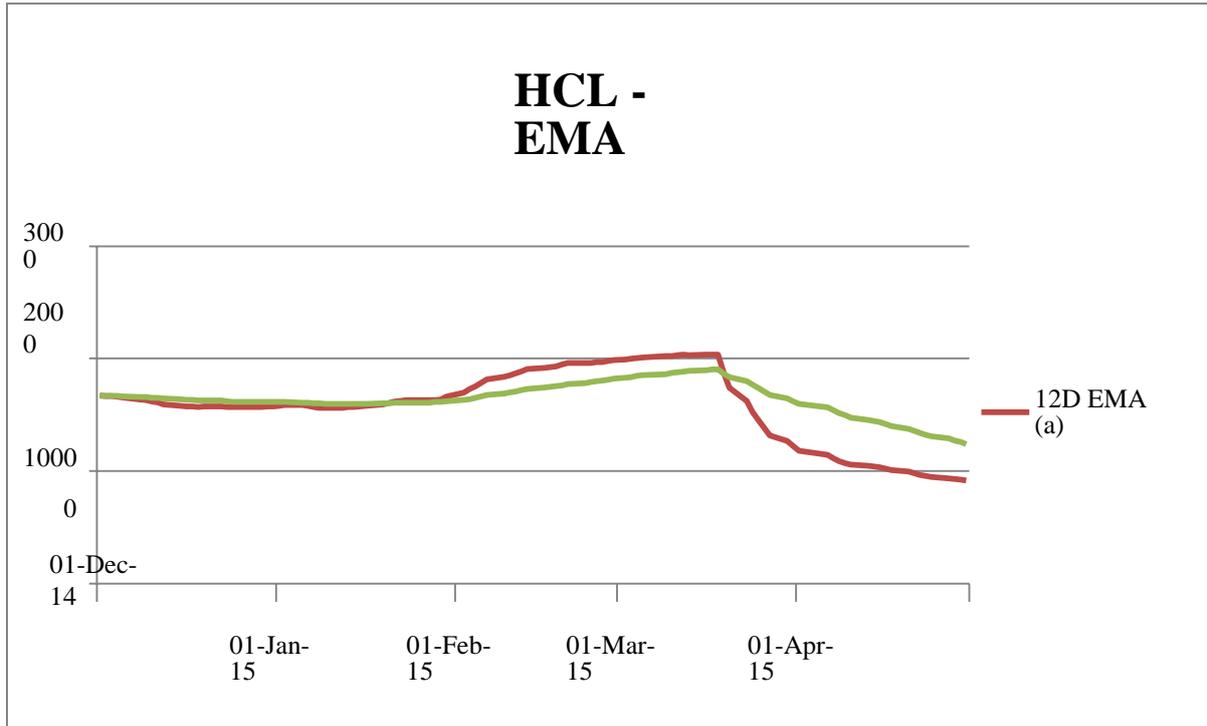
Figure 6: Showing EMA of HCL Tech for the Months of December 2014 - April 2015

INTERPRETATION:

The analyst uses a combination of two moving averages. One is short term moving average i.e. 12 days and the other one is a longer-term average i.e. 48 days. The buy and sell signals are generated by the intersection of the two moving averages. The above chart shows that the two moving averages for the months of December'14- April 2015, the long moving average cuts the short moving averages and moves down. It's a signal to sell the HCL TECH shares. During end of February and in the mid of March it has the signal to buy the HCL TECH shares.
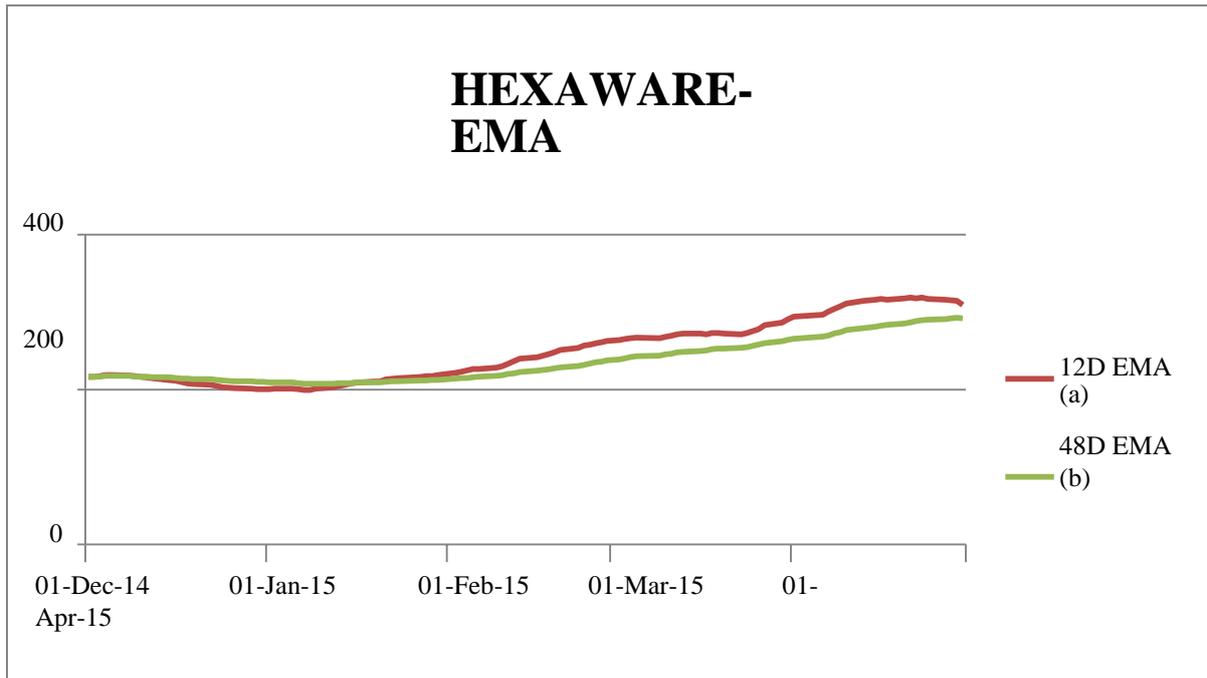
Figure 7: Showing EMA of Hexaware for the Months of December 2014 - April 2015

 INTERPRETATION:

The above chart shows that the two moving averages for the months of December 2014-
April'15, the long moving average cuts the short moving averages and moves up. It's a signal
to sell the Hexawareshares. During end of March and in the mid of April it has the signal to
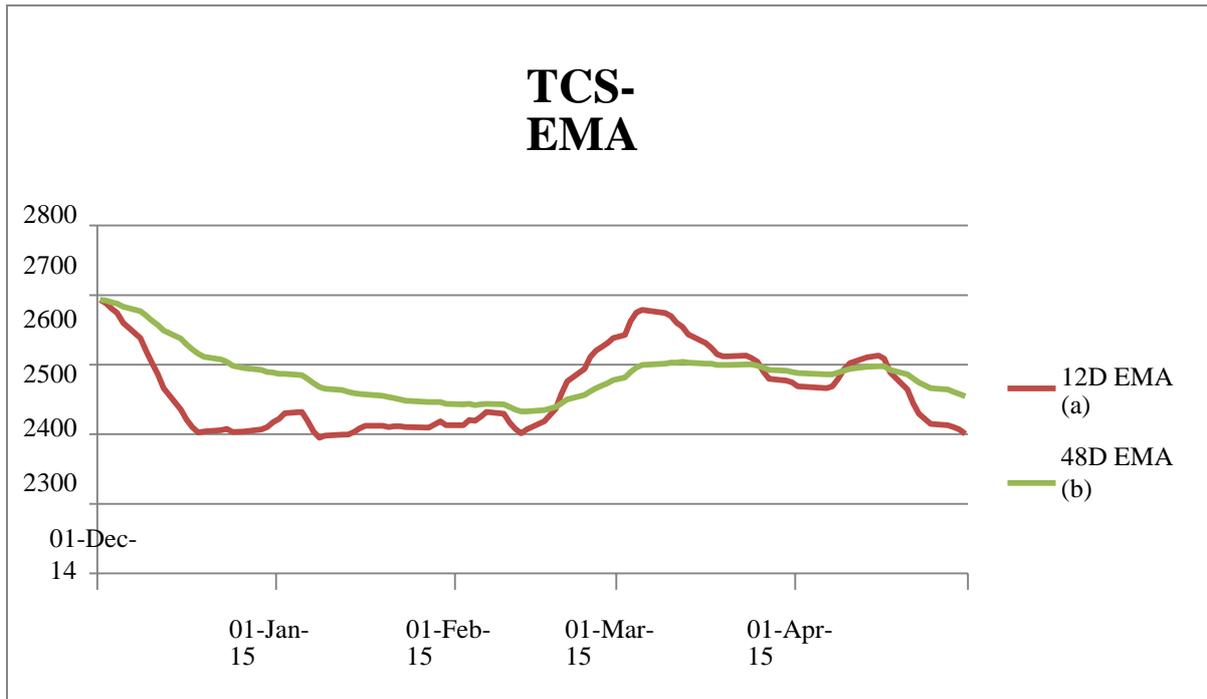buy the Hexawareshares.

Figure 8: Showing EMA of TCS for the Months of December 2014 - April 2015

INTERPRETATION:

The above chart shows that the two moving averages for the months of December 2014-april'15, the long moving average cuts the short moving averages and moves down. It's a signal to sell the TCS shares. During end of March and in the mid of April it has the signal to buy the TCS shares.
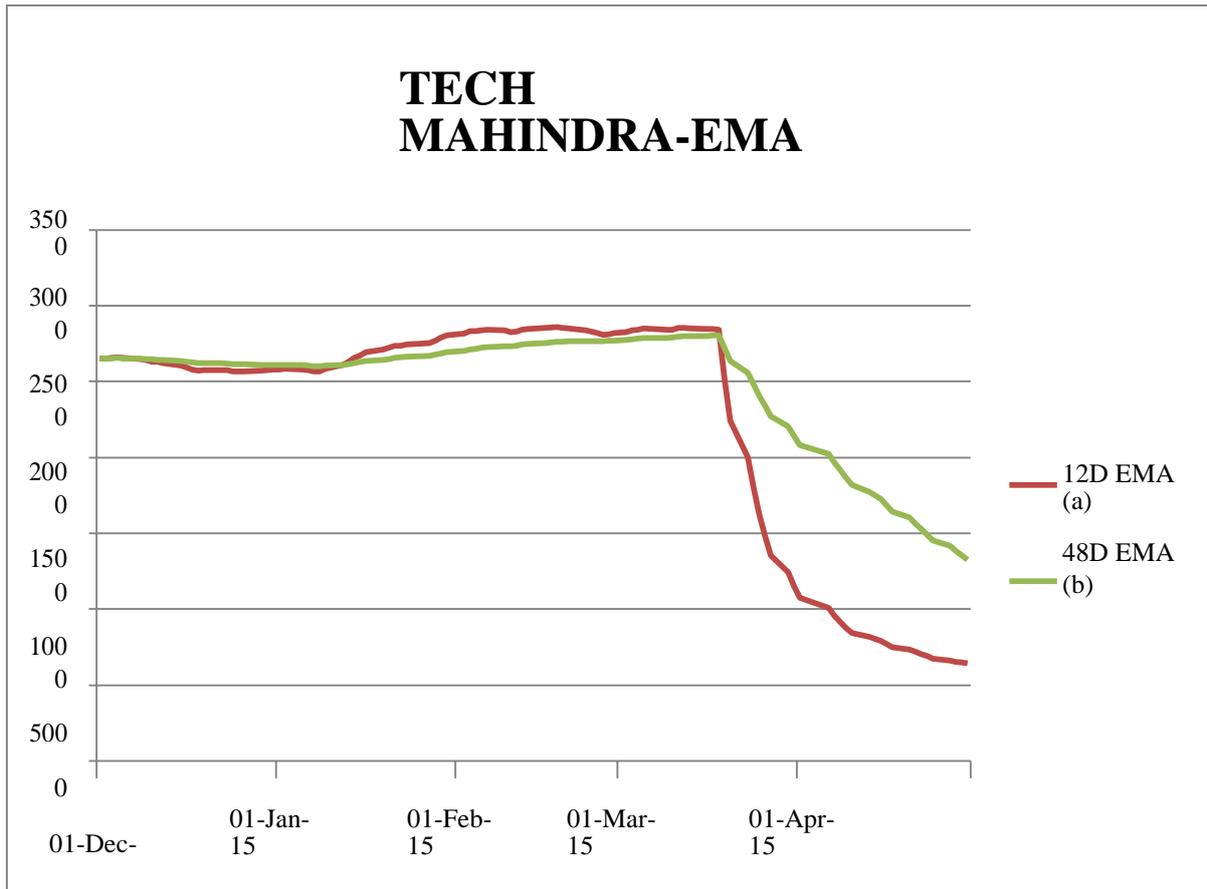
Figure 9: Showing EMA of tech Mahindra for the months of December 2014 - April 2015

INTERPRETATION:

The above chart shows that the two moving averages for the months of December 2014-April'15, the long moving average cuts the short moving averages and moves down. It's a signal to sell the Tech Mahindra shares. During end of March and in the mid of April it has the signal to buy the Tech Mahindra shares.
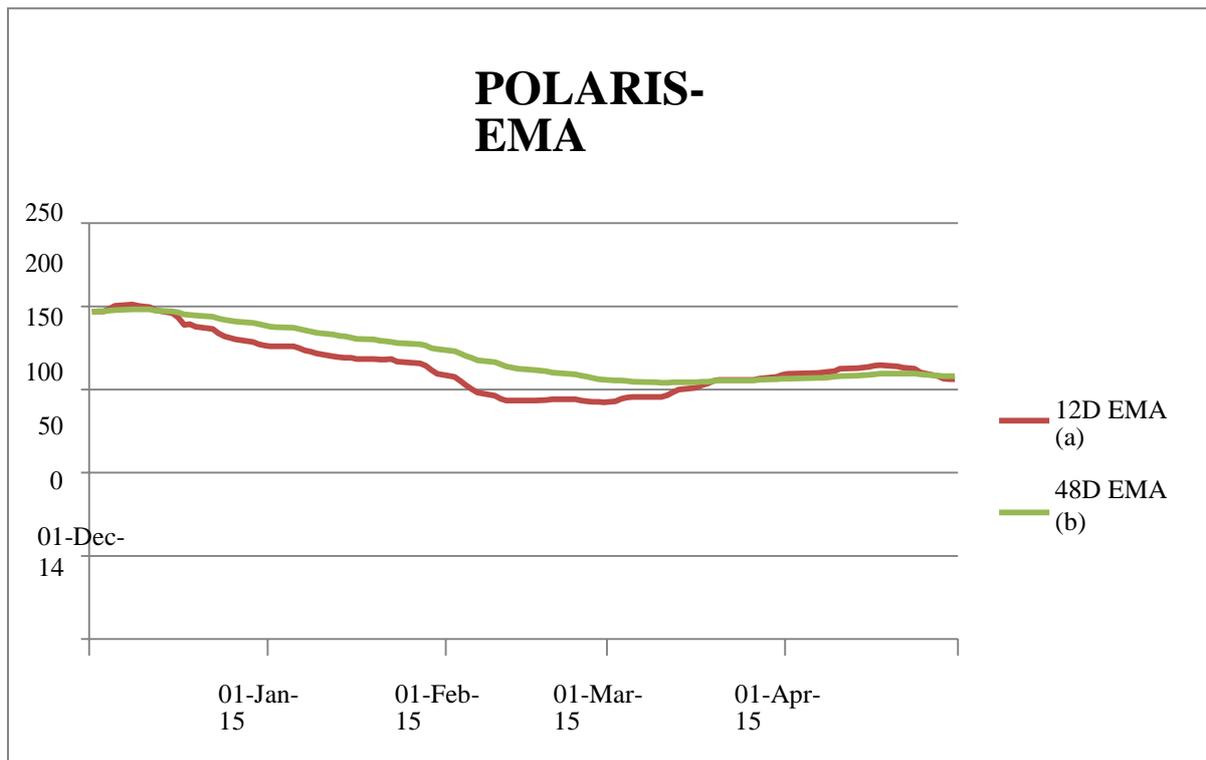
POLARIS-EMA

Figure 10: Showing EMA of polaris for the months of december 2014 - April 2015

INTERPRETATION:

The above chart shows that the two moving averages for the months of December'14- April '15, the long moving average cuts a signal to sell the Polaris shares. During end of Marchand in the mid of April it has the signal to buy the Polaris shares.

FINDINGS AND SUGGESTIONS:

- Each and every IT company has its own significance.
- The Technical tool helps the investors to get the clear idea about the value of the shares of particular company.
- For a short-term investment decision Technical analysis will suites best to give buy and sell signal based on the trend the price movement follows during the particular period.
- By using the chart patterns from the technical analysis, the investors can came to know about the price fluctuations and market trend of a particular IT company.

CONCLUSION:

In this study, some basic theories are mentioned that are relevant to explaining stock price behaviour. There has been a remarkable interaction between theory and practice. Academic research has contributed to the understanding of investor behaviour and the functioning of financial markets. Academic research has also stimulated financial innovation and led to development of new financial instruments and markets (Balling & Gnan, 2013). So, the review of the existing literature on stock price behaviour can contributed to future research to step ahead to the next directions.

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