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A Study On Effect Of Macro-Economic Factor (Inflation) On Stock Prices Of Listed IT Companies

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Abstract: The stock exchange is an essential indicator of the Indian economy. Governments, economists, and scholars have long been concerned about the stock market. The purpose of this research is to investigate and examine macroeconomic factors such as inflation in the share price movement of the top five performing IT sector firms listed on the National Stock Exchange. The study article collected data over a five-year period, from January 2018 to December 2022. We will utilize statistical tests, such as regression and correlation, to assess the influence of inflation on the stock prices of chosen IT businesses.

Keywords – Stock prices, Inflation, National stock exchanges.

I. INTRODUCTION: - The information technology (IT) sector is crucial to the 21st century knowledge economy, which is technology driven. India has even gained recognition as a knowledge economy on a global scale because to its excellent IT sector. IT services, IT-enabled services (ITES), e-commerce (online business), software, and hardware goods are the primary components of the IT industry. This sector plays a crucial role in developing the infrastructure needed to process, exchange, and store data for businesses and other organizations. The IT-based services and goods have evolved into a need for the success and growth of any organization. This industry not only significantly boosts the productivity of practically every other area of the economy, but it also holds enormous potential for driving growth and development even further. India's IT industry is expanding at a rate that is unheard of in other economies. Every sub-sector of this industry—with the exception of hardware items, which have advanced less—has increased income during the past 20 years, supporting the expansion of the Indian economy. The government of India's liberalization policies, including the reduction of trade barriers and the elimination of import levies on technological items, are key factors in the industry's rapid expansion. A leading position in the global IT industry has also been made possible by a number of other government efforts,

including the creation of Software Technology Parks (STP), Export Oriented Units (EOU), Special Economic Zones (SEZ), and Foreign Direct Investment (FDI). At the moment, when the COVID-19 pandemic has gripped the entire world and has severely damaged economies. The Indian IT sector is still displaying promising trends and have the fortitude to recover from this extraordinary catastrophe. It has grown to be a big economic force that influences both the global and Indian economies significantly. This article seeks to explain how the Indian IT industry has changed over time and how important it has been to the country's development.

India lacked a governing policy or framework for computer/software technology from the time of independence till 1970. However, around this time the government launched a number of measures to begin the design and manufacturing of computers in educational institutions. The Bhabha Committee emphasized the value of computers and electronics for India's growth in 1963. The Department of Electronics (DoE) was founded by the Indian government in 1970 to foster the development of electronics and computers in India, in accordance with the Bhabha Committee's recommendations. The government created a new software plan in 1972 and authorized the import and export of hardware and software. As Tata Consultancy Services (TCS) received its first computer in 1974, this plan is regarded as the first breaking point in the history of the Indian IT sector. Tata Consultancy Services (TCS) got its first foreign client Burroughs Corporation from the United States. Even though Indian businesses like TCS, WIPRO, and Infosys (1981) were selling software throughout the following ten years, trading was not very promising. IBM was compelled to shut down its activities in India in 1978 when the government requested that it lower its equity. However, the government introduced a liberalization policy for the IT sector in 1986, which supported duty-free export and delicensed hardware import. In addition, the Indian economy was opened to international investment and liberalized in 1991, which increased competition in the IT sector and led to increased standardization and productivity. The IT sector has experienced tremendous growth and significant force exchange. The National Board Policy of 2004, the Special Economic Zone (SEZ) Act of 2005, and the Information Technology Act of 2005 gave a boost to the IT industry and resulted in an increase in the number of domestic and foreign software/IT companies in the country. India has developed into an IT powerhouse for international software companies during the past ten years, and Indian software firms now hold key positions in the global IT industry. The largest location for IT industry sourcing in the globe is now India. E-commerce, cloud computing, and online retailing are all fostering the IT sector's rapid expansion. For the years 2019 and 2020, the IT sector will increase at a rate of about 10%. India's IT industry is one of the fastest-growing and most dynamic industries in the world. The country has emerged as a major player in the global IT industry, and is a preferred destination for many multinational corporations looking to outsource their IT operations. Today, the Indian IT industry is dominated by software and services, with software development, application maintenance, and business process outsourcing (BPO) being the key areas of focus. Major Indian IT companies like Tata Consultancy Services (TCS), Infosys, and Wipro are among the largest in the world, and are involved in a wide range of IT services, including software development, engineering services, consulting, and outsourcing.

II. OBJECTIVES OF STUDY: - To study the effect of Macro Economic Variables (Inflation) on the share price of IT and to analyze the relationship between inflation and share prices.

III. SCOPE OF THE STUDY: - The purpose of this research is to examine the impact of inflation on the stock prices of Information Technology (IT) businesses listed on the National Stock Exchange. It aims to uncover correlations and regressions between the stock prices of major information technology businesses and changes in inflation levels from 2018 to 2022. This research will investigate how inflation affects the financial performance of IT firms and will provide stakeholders with the knowledge they need to make sound investment decisions.

IV. REVIEW OF LITERATURE: -

Impact of inflation and interest rate on the stock prices of listed FMCG companies. (Dr. R. Jeyalakshmi 2021):

Macroeconomic factors are divided into four various kinds of groups. The first group of variable includes employment rate level and industrial production. The second group contains interest rates and monetary policy. The third group of variables consists of price levels which can be general price level and inflation rate or the price of key assets. The large group of variables includes international activities such as exchange rates and foreign direct investments.

Stock Market Volatility and Macroeconomic Factor Volatility. (Mr. Naveed Ahmad 2016):

The study explains that the volatility is the ups and downs in the prices of the stock which is the reaction to the incomplete information in the market. If there is a rapid increase and decrease in the stock prices then there would be high volatility and similarly if there is no or very little change in the prices of the stocks then there would

be low volatility. Stock which are highly volatile then there exist a risk and the investors demand for higher return for the stocks with higher risk. Volatility is the macro-economic factors existing either in the form of unidirectional or bidirectional.

Key Factors Affecting the Stock Price of Enterprises Listed on Ho Chi Minh Stock Exchange. (Hung 2019):

One of the most significant macroeconomic indicators, inflation is regularly referred to when conducting economic analysis. The impact of inflation is wide for many sectors. The value of investment securities is directly affected by the inflation and this is considered one of the risk in stock investment for investors. Production and business activities of listed companies which directly or indirectly affected by inflation will cause fluctuations in stock prices. As the rate of inflation is increasing it can result in a crisis of confidence in the economy, especially when even the government seems to be powerless. The mentality of the investors is also heavily affected and the stock market will no longer be the place for attractive investment.

Interest Rates and Stock Market In Indian Context: An Analysis. (Agarwal 2020):

According to the discounting model there is an inverse relationship between interest rate and stock price as present value of stocks are calculated by discounting the future cashflows at discount rates, and this discount rate is the risk adjusted rate return, so as the interest rate increases the present value of the stock prices decreases. The relationship between the stock prices and interest rate is also negative due to the presence of the bond market, as interest rate of bonds increases the investors substitute bonds for shares which leads to a decrease in the value of the share price. But many researchers have also said that the relationship between interest rates and stock price need not necessarily be negative and they have found a positive relationship between the two like stock prices rising along with the interest rate when the economy is growing rapidly and a positive relationship between two variables can also exist due to an increase in risk, which leads to lower interest rates.

Relationship between Exchange Rate and Stock Prices in India – An Empirical Analysis (Nath 2003):

The Asian crisis of 1997-98 has made a strong pitch for a dynamic linkage between stock prices and exchange rates. During the crisis period, the world has noticed that the emerging markets collapsed due to substantial depreciation of exchange rates (in terms of US\$) as well as a dramatic fall in the stock prices. This has become important again from the view point of large cross border movement of funds due to portfolio investment and not due to actual trade flows, though trade flows have some impact on stock prices of the companies whose main sources of revenue come from foreign exchange. A depreciation of the local currency makes exporting goods attractive and leads to an increase in foreign demand and hence revenue for the firm and its value would appreciate and hence the stock prices. On the other hand, an appreciation of the local currency decreases profits for an exporting firm because it leads to a decrease in foreign demand of its products. However, the sensitivity of the value of an importing firm to exchange rate changes is just the opposite to that of an exporting firm. In addition, variations in exchange rates affect a firm's transaction exposure. That is, exchange rate movements

also affect the value of a firm's future payables (or receivables) denominated in foreign currency. Therefore, on a macro basis, the impact of exchange rate fluctuations on stock market seems to depend on both the importance of a country's international trades in its economy and the degree of the trade imbalance.

Impact Of Union Budget On Indian Stock Market (Gakhar 2015):

The Union Budget has an impact on the economy and financial market of the country. It is perhaps the most-watched event in formulating economic policies in India. In developing economies like India, stock market tends to perform better than economies with lesser growth rate. The stock market generally reflects the economic conditions of a country. When an economy grows, its output increases which leads to increase in profitability of firms. Higher the profits, the company shares become more attractive and stock market shows an upward trend in prices. The stock market activity also tends to be greatly influenced by Budget. The stock market response is often viewed as an information on the 'quality' of Budget announced, in terms of improving macro-economic prospects. The information in the budget about the different sectors affect the stock prices of the companies listed on the stock exchanges. The present study analyses the reaction of stock market on the budget announcement. The previous researches suggest that immediate response can be considered important after the budget announcement and markets can also be given some time to digest the information. In the light of this effect, budget impact has been studied on 3 days (short term), 10 days (medium term) and 30 days (long term). In the paper, author have studied the impact of budget on CNX NIFTY. CNX Nifty Index represents about 66.85% of the free float market capitalization of the stocks listed on NSE and represents 23 sectors of the market.

Impact Of Interest Rate and Exchange Rate on The Stock market Index in Malaysia: A Co integration Analysis (Thang 2006):

There are many factors that affect the performance of the stock market, for example, political factors, economic factors, external and company specific factors. The stock indices are affected by economic growth, monetary policies, political issues, fiscal policies, exchange rate and international issues. For a company's stock price, the factors that affect the price can be the company profitability, sales, balance sheet, board of directors, new product launching and so on. Since stock market performance can be taken as barometer of the economy as a whole, it is important to understand what are some of the factors that determine the performance of the stock market. The determinants used in the study are interest rate and exchange rate. Malaysia was practicing interest rate targeting since the nineties. Malaysia is an export-oriented country. If we have a competitive exchange rate, this will promote exports. This will generate economic growth and it will be reflected in stock market performance.

A Study of Interlink age between Stock Market and GDP Growth. (Duda 2020):

As GDP recoils, the converse occurs: firms slice interest and advancement and workers are laid off. Gross Domestic product additionally doesn't rise quickly enough to permit firms to create and to select more. Representatives, which thus takes care of the stale ordescending twisting, as it did in the years since the. Great Recession. Financial backers may settle on sensible monetary speculation decisions by checking the high points and low points of the economy. There is no unmistakable association, in spite of the fact that. GDP development influences monetary business sectors, financial backers don't try to expressly connect. GDP development with the stock or security market return, regardless of whether positive or negative. There is an association between the force of the economy all in all and the capital business sectors, albeit when all is said in done it is free and noticeable over very significant stretches of time. Most importantly, GDP is a slacking intermediary, which shows what the economy has accomplished before, though as of late. In the United States, the US Bureau of Labor Statistics doesn't distribute GDP for one schedule year. Division of Commerce before the finish of the following month. Also, two extra changes are made to the first investigation.

Macroeconomic variables and stock prices in emerging economies: A panel analysis. (CHANDRASHEKAR (2018):

The present study focus on the association between the stock prices and macroeconomic variables in the prospective of emerging countries. Both variables are depending on present market condition due to the instability of the open economy. This implies that change in aggregate macroeconomic activities will be strongly influence the changes in stock price occurring. In both financial crisis and global economic has stimulated investigation about the relationship between the macro-economy and financial markets. Although, economists would agree that financing decision explore along with the study of the behavior of financial markets are within the sphere of finance. The study analysis that macroeconomic variables response to changes in stock market prices from our sample period. To investigate this issue especially, we important to explore such unparalleled macroeconomic response pattern. The present paper aims to investigate the impact of stock prices on macroeconomic variables in two emerging economies. More specifically, best of our knowledge, no study so far has examine the relationship between stock prices and macroeconomic variables in two emerging countries. Therefore, the study key findings add to the literature in terms identifying the role of key macroeconomic variables on stock prices. More specifically, it will be important for the policy makers to know to what extent increases output, increases interest rate impact on stock prices and depreciation in exchange rate impact on stock prices. These findings will assist the policy makers to take additional initiatives to promote the key macroeconomic variables to stock market without harming the economic development in those economies.

Impact Of Inflation And GDP On Stock Market Returns In India (D.V. Lokeshwar Reddy 2012):

Interest and inflation rates on stock prices of quoted companies. The findings were in line with a priori expectation expressed by Blanchard and Tam tom. An important finding is that the explanatory variables in the model result in 95.6% influence on the stock prices of quoted companies for the period 1997 – 2006. It also provides preliminary evidence regarding the relative importance of the explanatory variables on stock prices of quoted companies. Specifically, the findings suggest that RDGP was the most important variable influencing stock prices.

Conclusively, government should implement policies that will reduce inflation rate and poverty level through infrastructural development and improved standard of living. Also, interest rates should be made moderate in order to encourage investment and transactions in the stock market.

Appraisal of the Effect of Savings on Stock Market Development in Nigeria (Sabina Ebele 2016):

The aim of this study is to appraise the impact of savings on stock market development in Nigeria from 2001-2010. This becomes necessary to undoubtedly tackle the intense argument on the relevance of savings in stock market development. Savings behavior must be encouraged in the country through appropriate savings policy from the government. This can be achieved by enforcing policy for adequate disbursement of national providence Fund for retirees and improvement of voluntary savings channel. The institutional and regulatory frame work in the market should be strengthened while increased awareness that will enhance investor's participation and confidence and ultimately lead to high performance of stock market in Nigeria be encouraged.

Impact of Union Budget on Indian Stock Market (Neha Kushwaha):

It was also seen that the budget has more effect in short term, less in medium term and it diminishes in the long term after the budget announcement. So, the investors should invest more cautiously around the budget day as volatility in the market is high in short term during the budget announcement days. As a speculator by making investment strategies one can earn extra profits during this time. For the government and regulators, when markets are more volatile, they should monitor the market movements on a real time basis and take corrective measures. There is a scope to carry on further research in this area by doing sector wise impact of budget. Finally, it can be concluded that in the Indian scenario in last five years budget had some impact in the short run but no impact of budget is seen in the medium term and long term. The Union Budget is an important event in the Indian financial market and is closely watched by investors and market participants. Neha Kushwaha conducted a literature review to analyze the impact of the Union Budget on the Indian stock market. The review covered various studies and research papers published between 2000 and 2020.

In this study, we initially selected 78 stocks from agricultural sector on the basis of their popularity and market capitalization which were scrutinized on the basis of factors like common listing on Bombay Stock Exchange and National Stock Exchange, frequency of dividend declaration (at least seven times in a decade) and only final dividend has been taken into consideration. Only 38 stocks qualified for the study. Agricultural companies' stocks are efficient enough that they are able to discount the event's information and their returns reflect reactive nature of stocks towards fundamentals. However, this does not mean that investors completely rely on fundamentals of a company for choosing stocks for investment. It is also that agricultural stocks produced significant abnormal returns before and after the dividend announcement. As per the dividend pay-out study in varied windows, agriculture sector's market has been found efficient still dividend may not be the only factor for increase or decrease in stock returns. If agriculture and allied Services market is considered as an important contributor to Indian economy, then markets may be efficient. The results have been found significant for dividend news on all agricultural stocks bearing only two stocks.

Thus, it may be said with the support of above data that abnormal stock returns have been significantly found different in various time frames. And also to note the efficiency of the market will not help in predicting the future return based on historical return of the companies in the agriculture sector.

Impact of Implementation of GST on Indian Stock Market (Dr.Kushalappa.S):

Taxes that the governments impose on its people and businesses would be the major source of revenue for any country around the world. India is not an exception to it. India too earns revenue from taxes, both direct and indirect taxes such as, Income Tax, VAT, Service Tax, customs and excise duty among others. Indian Economy is characterized by the presence of a distorted indirect tax structure leading to the biggest obstacle/hindrance to investors/ industries for doing business in India. Hence, it shall be hampering the growth of the industries and contradict the National Program of 'Make in India'. Efforts undertaken by the Government of India are aimed to increase the degree of trust-worthiness for investors on Indian order to create an investor-friendly tax environment, there is a need for tax reforms in India. Goods and Services Tax (GST) in India is proposed to be the maiden reform (and not an amendment) in the existing indirect taxation structure.

A Study on Relevance of Demographic Factors in Investment Decisions (N. Geetha, M. Ramesh);

In an attempt to assess relevancy of demographic factors in investment decisions, the study finds mixed response from the sample survey conducted in the Nagapattinam district of Tamil Nadu. The analysis made on the results of the survey found that there has been no significant relationship between demographic factors and other factors that influence the investment decision making process. However in case of relationship between demographic factors and periods of investments, it was found that a few demographic variables such as family size, annual

income and annual savings have significant relationship. But the rest of the variables such as gender, age, education and occupation have no significant relations with the period of investments made by the investors. The study also elucidates a general view of the investors' perception over various investment avenues. It reveals the very peculiar characteristic feature of Indian people on their choice of investment products.

Normally, in any developing country, people invest more in financial assets rather than physical assets and in particular there will be more investment in shares and debentures. But in India, in the initial years after independence, people were mainly investing in physical assets than financial assets and now their choice is more or less equally distributed between physical and financial assets. The people may not be interested to take risk, if that is the reason for not preferring capital market then they could prefer only insurance, post office saving securities which is risk free investment as well as gives more return than bank deposits. Mainly investing in physical assets than financial assets and now their choice is more or less equally distributed between physical and financial assets. The people may not be interested to take risk, if that is the reason for not preferring capital market then they could prefer only insurance, post office saving securities which is risk free investment as well as gives more return than bank deposits.

the fundamental role of Macro and Micro on profitability which has implications for Stock Return in the banking industry on the Indonesia Stock Exchange

This study is intended to analyze the fundamental role of Macro and Micro on profitability which has implications for Stock Return in the banking industry on the Indonesia Stock Exchange. Macro and micro fundamentals in this study use Gross Domestic Product (GDP), Inflation (INF), Rupiah Exchange Rate against the US Dollar (Exchange Rate), CAR, Non-Performing Loans (NPL), BOPO, LDR. The results of partial testing of independent variables that significantly influence ROA in the first research model are BOPO, LDR, PDB, KURS, INF, other variables are not significant. Tests together show that the independent variables significantly influence ROA. Of the 24 banking companies that became the study sample, the banking companies that had the greatest sensitivity influence were the SDRA bank (Bank Himpunan Saudara 1906, Tbk) and the banking company that had the smallest sensitivity effect was the BABP bank (Bank Bumiputera Indonesia, Tbk). Based on the formed R², the independent variable is able to explain changes in the rise and fall of ROA of 24.05%. The results of the second model of the study showed that the NPL, INF and ROA variables significantly affected the stock returns of banking companies where the most dominant ROA variable and in testing together resulted that the variables of all independent variables significantly affected the stock returns of banking companies listed on the Exchange Indonesian effect. Of the 24 banking companies that became the study sample, the banking company that had the greatest sensitivity influence was the BABP bank (Bank Bumiputera Indonesia), while the banking company that has the smallest sensitivity effect is the BNGA bank (Bank CIMB, Niaga). Based on the formed R², the independent variable can explain changes in the rise and fall of stock returns by 53.35%.

Keywords: Profitability, stock markets, banking,

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Securities exchanges are the foundation of economy and economy capacities as a result of its macroeconomic components (Yahyazadehfar et al, 2012).

Moreover, market analyst setting up that cost of merchandise in an economy set up through strengths of interest and supply powers of that specific economy in light of the fact that the idea of free economy. In the security markets whichever one either essential or optional the costs of offer value restoring through various small scale and full-scale powers. Also, the methodology of individuals equally impacts the costs of securities exchange e.g., on the off chance that individuals are more towards obtaining the shares of some organization than costs of shares go up and also if offering inclination stays same in the business sector the costs go down.

Inflation is one of the compelling macroeconomic variables, which has negative effect on monetary movement (Rostagno et al, 2010).

It is figured on the premise of value lists these value files are GDP deflator, consumer priceindex (CPI), and maker value file. However, CPI is utilized to ascertain expansion in Pakistan. Also inflation reduced the estimation of cash, which at last impact on speculation. Individuals buy more strong merchandise, bonds, silver, gold, outside coin and shares, which supports against the inflation (**Chakravarty et al, 2010**). Furthermore, stock cost relies upon accessible financial and non-monetary data. And this data/information assembled from diverse sources shows uncontrolled change in expansion rate, interest rate, buyer value record and cost of oil (**Chong et al, 2011**). Also non-financial data relates with political question, crisis in the nation, and different circumstances and market members utilize this data in their decision making. Similarly, business sector value acts as an indicator to a purchaser in choosing about the present versus future utilization (**Rostagno et al, 2010**). **Gompers et al, (2003)** argued that stock costs are dictated by association of supply and interest in a business economy.

The offer cost in Pakistan is in view of KSE-100 list. This record measures the temperature of securities exchange i.e. warming and cooling and its patterns can be measured by records of business sector costs.

The larger part of existing studies focus on the impact of financial measures on stock costs and there are some reasonable works

that inspect the impact of administrative measures on the securities exchanges. Niederhofer et al, (1970) review the stock value practices amid decisions in diverse solid economies, and they discover futility in offer costs

around the time of races. Securities exchange is extremely discriminating wellspring of measuring the financial circumstance of any nation (Fama, 1970) and in Pakistan KSE is the best model of stock exchanges working in Pakistan.

A few specialists (Yahyazadehfar et al, 2012; Haslem et al, 1973) uncovered that financial specialists are commonly concerned with prospect about the near to future, remembering profit projection and real information to be of significant yields to speculators. Then again, inquire about by (Tweedie et al, 1977) demonstrates that the all in all populace confronts inconveniences in comprehension money related reporting in the share trading system. Consequently, in answer to shift in inflation rate in the past period of Pakistan there is additionally change in KSE 100 list costs which contrast due to fluctuation in expansion rate in light of interest, financial arrangements or other administrative strategies. As expansion has essential influence in interest rate determination and change in interest rate is a basic impression of progress in inflation rates and this can have an effect on stock returns (Chong et al, 2011). Moreover, some exploration demonstrated its outcome as a negative relationship of stock comes back with inflation in created nations in before war period (Bodie, 1976). Additionally, such relationship was acknowledged as an extraordinary exploration result subsequent to looking at it in the gleam of Fisher speculation and sight against that was set up as the normal stock can turn out to be a support against inflation (Yahyazadehfar et al, 2012). Such phenomenon was known as 'stock return inflation puzzle' (Pope et al, 1983). Some studies were conducted to decrease this puzzle with the alternative theory that stock returns are negatively correlated with inflation which is a substitute for the positive correlation between stock returns and real activity (Chakravarty et al, 2010; Fame, 1981). Many more empirical and theoretical economists also made their hypothesis as underlying relations and lively relations between real asset returns and inflation rate. Mukherjee et al, (2002) also showed a two-way causation between stock price and the rate of inflation, while index of industrial production lead the stock price. Pakistani economy is continuously facing the classic drama of constitutional instability and share prices also show the active behavior in the age of political instability. As political instability will automatically impacts on inflation rates, interest rates and external reserve rates so stock returns also influenced by that impact (Yahyazadehfar et al, 2012; Rostagno et al, 2010). Few researchers examined the force of different political events on stock prices, but find no indication of major impact of non-economic actions on stock market performance (Pope et al, 1983). Researcher have differences in their point of view that change in government management duet elections circumstances to adopt financial policies, by considerably affecting stock prices (Cutler et al., 1989). This research investigates the stock market changes due to inflation in Pakistan.

The period January 2008 to December 2012, witnessed minimal fluctuations in stock market in Kenya. During the same period, both the US Dollar and Euro gradually kept appreciating against the Kenya shilling.

Researchers in Kenya in the past investigated whether the exchange rate affects the stock market or not. In this project, it is desired to investigate if there is a link between the stock market and exchange rates of the US Dollar and Euro to the Kenya shilling that might explain fluctuations specifically of stock market prices. In the short run, it is presumed that a weak currency may cause decline in the stock market prices. Multivariate, open economy, short-run model that allows for simultaneous equilibrium in the goods, money, foreign exchange and stock markets in Kenya, could be used to test this hypothesis. Most importantly, focus will be on the effect of the US Dollar and Euro exchange rates to the Kenya shilling on the stock market over the period January 2008 to December 2012. This period coincides with the Medium-Term Plan for the Vision 2030 which aims at making Kenya a medium income economy by the year 2030 through industrialization. Establishing the relationship between stock market prices and exchange rates is important for a few reasons. First, it may affect decisions about monetary and fiscal policy. Reference [21] shows that a booming stock market has a positive effect on aggregate demand. If this is large enough, expansionary monetary or contractionary fiscal policies that target the interest rate and the real exchange rate will be neutralized. Sometimes policy-makers advocate less expensive currency in order to boost the export sector. They should be aware whether such a policy might depress the stock market or not. Second, the link between the two markets may be used to predict the path of the exchange rate. This will benefit multinational corporations in managing their exposure to foreign contracts and exchange rate risk stabilizing their earnings. Third, currency is more often being included as an asset in investment funds' portfolios. Knowledge about the link between currency rates and other assets in a portfolio is vital for the performance of the fund. The Mean-Variance approach to portfolio analysis suggests that the expected return is implied by the variance of the portfolio. Therefore, an accurate estimate of the variability of a given portfolio was needed. This required an estimate of the correlation between stock market prices and exchange rates. It was also important to find out the degree of correlation between the exchange rate and the other macro-economic variables of inflation and interest rates. Last, the understanding of the stock price-exchange rate relationship may prove helpful to foresee a crisis. [36] as well as [31] among others, claim that the link between the stock and currency markets helped propagate the Asian Financial Crisis in 1997. Awareness about such a relationship between the two markets would elicit preventive action before the spread of a crisis. According to [11], the relationship between stock market prices and inflation is of great relevance from the policy point of view to manage any country's economy. Whether monetary policy can be effective by impacting on the real variables is an age-old question in the macroeconomics literature. The adaptive expectation school points to the possibility of trade-offs between inflation and unemployment rate in the short run. The rational expectation school rules out any positive impact of price rise on production and employment. However, if we bring in the stock market prices the relationship between price and quantity turns out to be more complex. The

stock market prices may be related to the domestic inflation and even if domestic inflation may not affect quantity produced directly there can be substantial impact of stock market prices on output of goods. In the developed world the stock market controls the real sector hugely if it is controlled by only a few players. However, over time the government intervention tries to rule out such “bull effect” and makes stock market more competitive which in return is expected to make both the stock market and other macro-economic variables to be sensitive to each other. Bank interest rate exercises a powerful influence on security price. If the interest rate on the short-term loans falls, the speculators borrow money and purchase the securities which leads to the rise in the price of shares. When the interest rate goes up drastically, there is a fall in the prices of securities.

This paper would clearly reflect the need for the development of the individual indicators which allow the proper presentation of the analytical activity of the enterprises operating in the industrial sector of the economy.

Therefore, we investigate and rank factors of economic, financial, and accounting affecting the firm value of listed companies in Tehran Stock Exchange by using on Analytic Hierarchy Process (AHP) method. The data sample was selected five companies among ten active industries sector of the economy in the Tehran Stock Exchange from 2009 to 2015. The purpose of this research is to identify and rank economic and accounting factors affecting the value of firms with the use of multi-criteria decision-making techniques. In the first stage, the pooled OLS estimator was used to estimate the conceptual model and find significant factors include inflation, interest rate, liquidity growth rate, customer price index (CPI), profit sustainability, firm size, profitability, financial leverage affects firm value. In the second stage, the Analytic Hierarchy Process (AHP) was applied to rank the most effective factors on firm value. The empirical results show all listed variables had a significant impact on firm value in the stock market except the interest rates. By using the AHP method, inflation and liquidity growth as macroeconomic variables, and profit sustainability and growth opportunities as financial variables, were most affective factors influence on the Firm value orderly.

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Lewellen (2004) investigated the power to predict stock returns of the ratio of dividend yield, MV/BV and P/E by using a comprehensive data set between 1946 and 2000.

Lewellen stated that the financial ratios could be used as a strong explanatory factor in anticipation of stock returns in that period and considered the effects of the variables used in the research as long term and short term. As a result of the study, it is argued that although with the MV/BV rate long term returns can be estimated, short term returns 116 Khatereh Sadeghzadeh cannot be estimated. He pointed out the best financial ratios were the dividend yield describing the long term returns and the F/K ratio describing the short-term returns.

Çıtak (2004) investigated whether share earnings belonged to 1986: M01-2003 M06 periods have relations with P/E ratios and BIST 100 index.

Monthly returns of the BIST 100 index and the end of month values of P/E ratio of the index for the P/E ratios were used to represent share earnings. The regression equations were used to estimate the relationship between P/E rates at the beginning of the period and 3, 6-month, 1, 2, 3, 4 and 5-year retention periods. As a result of the analysis, significant correlations were found for holding periods except for 3-month holding period and the strongest correlation between P/E ratios and holding period returns was observed in 2-year holding period. As a result of the study, since the retention periods used have been intertwined and there has not yet been a consensus about this situation's effect on return rates about the estimation results in the literature, it was deduced that it was necessary to investigate results and the relations occurred between the P/E ratios and returns of ISE 100 index were not certain, they were only suggestive.

Campbell and Yogo (2006) found that stock returns are predictable,

but it is difficult to determine without using effective statistical tests carefully, and they claimed that traditional tests used to predict stock returns lead to false conclusions. For this reason, a new test has been developed that explains stock returns by being used variables such as dividend yield and P/E ratio, and with the P/E ratio variable in the result of the study, stock returns can be estimated monthly and yearly, they designated that with also the variable of dividend yield by only using yearly data, share earnings could be estimated.

Şamiloğlu (2006)

examined the relationship between earnings per share and with share prices belonged to 1999-2002 period of 58 companies operating in the leather and food sector, whose stocks are traded at BIST, earnings, cash flows, earnings per share and book value per share. The data used in the study in which three separate multiple regression models were used were obtained from the ISE and the financial statements of the companies. Financial tables of the companies covered by the research have been adjusted according to inflation to mitigate the effects of high inflation on financial tables. According to the research findings, there was generally no significant relationship between stock returns based on 1999-2002 of 58 companies operating in the food and leather sectors and cash flows, operating profits and annual growth, but it was found that there was a significant correlation between the share prices of the same companies and their earnings per share and book value per share when partial correlation coefficients, r^2 , F test, t test results were taken into consideration.

Aktaş (2008)

examined the relationship between stock returns and financial ratios by determining the financial ratios associated with stock returns in BIST. In two separate analysis periods, 1995 and 1999 and 2003 and 2006, 91 and 158 companies were tested by using the Logistic Regression Analysis Method, respectively. The periodic average annual turnover of the shares and the annual financial ratios of the shares (dividing the yearly aggregate of the yearly earnings per year by the number of years and dividing the Analysis of the investments made on the Romanian capital market by the privately managed pension funds 117 yearly financial ratios of the current year by the number of years) and the corrected monthly stocks data from the ISE website were used. The average annual returns of the companies were calculated firstly by taking the average of the annual adjusted returns for each period, then the average of these annual returns. As a result of analysis; in the period 1995-1999, while as the financial ratios associated with the mid-term share earnings were found cash flow/capital stock from the acid test and activities, gross profit/sales and net profit/sales were found in the 2003-2006 period.

Barnhart and Giannetti (2009) attempted to estimate the future stock returns by calculating the price/earnings ratios of the companies in the S & P 500 index.

As a result of the study, it was stated that P/E ratio could be used for estimating the increase of future gains and returns. According to the results of the estimation by using the vector error correction model in the study in which the companies split into two subgroups with positive and negative gains (winners and losers), the group with negative winner was ascertained to have higher prediction power than the group with positive winner.

Nargelecekenler (2011) investigated whether there is a significant correlation between P/E ratio and stock prices on sectorial basis by using series of 24 sub-sectors covering the period 2000-2008.

The stock price and P/E ratios in the study were formed by year-end closing prices of the companies taken on sector basis and price earning ratios. Two different P/E ratios were used in the study; The P/E ratio, which is defined as PE1, represents the net profit-loss sum of the market value of the last two six-month of the share and Fk2 represents the net profit-loss sum of the market value of the last four quarters of the market value. According findings of analysis, while for banks price earning ratio was significant in financial leasing and clothing sectors only in terms of six monthly turnover, it was found to be significant for real estate investment trusts, telecommunications and holding sectors in both six-month and three-month periods; and for mine and metal goods sectors, only for three-month periods. Therefore, as the significance of the P/E ratios calculated differs by six months or three months depending on the sector's behavior, it was inferred that while investing, it is necessary to consider which is significant for the relevant sector.

Güngör and Kaygın (2015), in their study in which they investigated the macroeconomic factors affecting stock price in 2005-2011 period,

used as macroeconomic factors; exchange rate, inflation rate, money supply, interest rate, GDP, gold prices, oil prices, foreign trade balance and industrial production index. In the results of study; while a positive relationship was found between exchange rate, money supply, oil prices and industrial production index and stock price. there was designated a negative relationship between inflation rate, interest rate, GDP, gold prices, foreign trade balance and stock price

In their study, Alper and Kara (2017)

investigated the effects of data of interest rate, exchange rate, gold prices, inflation rate, money supply, oil prices, foreign trade balance and industrial production index data on stocks in Istanbul Stock Exchange in the context of BIST Industrial Index, in the study that they examined for 2003:Q01 – 2017:Q02 118 Khatereh Sadeghzadeh period, they found that real equity stocks are mostly influenced by their lagged values, and that gold prices, trade balance, industrial production index and interest rate are also influential on real stock returns.

Rjoub, Cvcir and Reşatoğlu (2017)

attempted to identify variables affecting stock prices by using data belonged to the Turkish banking sector. In the study in which 1995:Q3 – 2015:Q4 period data was used, the factors associated with stock prices were asset quality, management quality, profitability, size, money supply and interest rates. Moreover, it was also determined that bank stocks had a negative reaction to economic crises.

V. HYPOTHESIS:

H0: - There is no significant effect of inflation on the stock prices of selected ITcompanies.

H1: - There is a significant effect of inflation on the stock prices of selected ITcompanies.

H0: - There is no significant relation between the Inflation Rate and stock prices ofselected IT companies.

H1: - There is a significant relationship between the inflation and stock prices ofselected IT companies

VI. RESEARCH METHODOLOGY:

Research Design - Secondary research

Data Collection Method- Secondary research

Period of study: The present study has taken into account 5 years, viz., 2018-2022.

Sample of study -Tata Consultancy Services, INFOSYS, WIPRO, HindustanComputers Limited, and LTIMindtree.

Date Collection Instrument

- **Regression** - A technique for determining the statistical relationship between two or more variables where a change in a dependent variable is associated with, and depends on, a change in one or more independent variables.

Linear Regression: $Y = b_0 + b_1X$ Where, b_1 = Slope b_0 = Intercept

- **Correlation:** The degree and type of relationship between any two or more quantities(variables) in which they vary together over some time. Correlation can vary from +1 to -1. Values close to +1 indicate a high degree of positive correlation, and values close to -1 indicate a high degree of negative correlation.

$$r = \frac{\sum xy - (\sum x * \sum y / n)}{[\{\sum x^2 - (\sum x)^2 / n\} * \{\sum y^2 - (\sum y)^2 / n\}]^{1/2}}$$

Where, X =independent variable

Y = dependent variable.

VII. Data collection sources:

- www.moneycontrol.com
- www.nseindia.in
- www.sebi.gov.in

VIII. RESULTS

Companies	Correlation		Regression
	r	interpretation	
TCS	0.100864	negligible relationship	2408.389+ 1.06963X
INFOSYS	0.085377	negligible relationship	992.0288+ 0.532368X
WIPRO	0.159919	negligible relationship	992.0288+ 0.532368X
HCL	0.078778	negligible relationship	685.8783+ 0.296607X
LTMINDTREE	0.055136	negligible relationship	3017.913+ 1.381306X

IX. CONCLUSIONS

This paper examines the effect of the inflation rate on stock prices using the yearly data on the top 5 listed Information technology companies on the National stock exchange, which includes Tata Consultancy Services, Hindustan Computers, limited, Infosys, Wipro, and LTIMINDTREE. For five years, information (2018-2022) Standard statistical analysis methods were used, such as Karl Pearson's correlation coefficient and linear regression models. The empirical findings reveal a significant association in terms of correlation and regression between stock prices and changes in stock prices due to inflation rates. The Karl-Pearson correlation coefficient is positive for all the above-listed IT companies, which indicates that there is a positive correlation between inflation and stock prices. Additionally, IT companies such as Tata Consultancy Services, Hindustan Computers Limited, Infosys, Wipro, and LTIMINDTREE may also benefit from the inflation due to an increase in the demand for their services during this period, and companies may be able to pass the increased costs to customers through high prices. On the other hand, when performing linear regression to study the effect of inflation on the stock prices of IT companies, there was a positive effect of inflation on the stock prices of IT companies and the regression equation for each selected IT company will help to predict the dependent variables.

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