

Impact Of Large Cap Stocks On Movement Of Sectoral Index Of Nse

Dr.G.Sankararaman, Dr.S.Suresh, Dr. TC. Thomas

Abstract: Indian pharmaceutical industry have attracted a colossal amount of FDI in recent times. The pharma stocks prices have been rising in the markets ahead of the adverse stock market conditions. This has made the pharma stocks to be considered as a defensive stocks in securities market. The study has made an attempt to find out the impact of select pharma stocks on pharma index for a period of five years starting from 2014 to 2019. An analytical research method is adopted in this study. The five pharma stocks viz., Biocon, Divis Labs, Glenmark Pharma, Piramal Enterprises and Sun Pharma selected for this study based on the market capitalisation. The day-to-day closing prices of the above select pharma stocks have considered for this study. Multiple regression is applied to find out the impact of pharma stocks on pharma index. The results revealed that all the pharma stocks included in this study have significantly influenced the pharma index of NSE except Piramal Enterprises for the period 2015-16 and Divis Lab in 2017-18.

Key Words; Large Cap, Pharma stocks, Multiple Regression

I. INTRODUCTION

Economy of any country is deeply impacted by various parameters like, Inflation, Purchasing Power Parity, Savings and behaviour of People, GDP in Goods and Services, Stock Market Behaviour, Commodities Market Behaviour etc. In this study the researchers have considered stock market behaviour in India and in Particular Bombay Stock Exchange the pioneer and national Stock Exchange the

follower. Many studies have already been conducted, but it is inevitable to study the same to get the impact of it on the economy of the country, hence it is taken. The researchers have also taken the Pharma securities to compare it in both the Stock Markets, since Pharma business is Defensive Security for all weather.

II. REVIEW OF LITERATURE

1. Xavier Gabaix et al (2006) in the paper contributed a premise of surplus stock exchange unpredictability, in which market engagements are owing to trades by extremely big institutional investors in comparatively less liquid markets. Such trade develops important effect in proceeds and quantity, still in the nonappearance of significant reports concerning basics. The authors get the most favorable trading performance of these investors, which permits to offer a combined clarification for actually detached experiential routines in proceeds, trading quantity and saver range.

2. Krishna Reddy Chittedi (2008) in the article considered a show of the sensex. FPIs in Indian securities exchange and a number of of the majority considered regarding changes of sensex opening with the stock exchange outline of every year. FPI s savings in BSE sensex disclose that the liquidity as well as unpredictability was extremely prejudiced by FPI inflows. FPIs are important issues formative the liquidity and precariousness in the scrip rates. After considering all the investigation about the stock market in last 2 years, we can utter that stock market touched its max out at 21000 but then stopped poorly. Although the sensex is a indicator and after considering such unusual behaviour one could be scared of putting their money. So yet following such downturns, we can be confident for a optimistic market.

3. Dima Alberg et al (2008) in their study say that A complete experiential study of the signify return and provisional discrepancy of Tel Aviv Stock Exchange (TASE) indices is measured by means of a variety of GARCH models. The forecast presentation of these provisional altering inconsistency models is compare to newer asymmetric GJR and APARCH models. The authors enumerate the day-of-the-week result and the influence result and experiment for asymmetric volatility. Our results show that the asymmetric GARCH model with fat-tailed densities improves overall judgment for measuring provisional inconsistency. The EGARCH model using a tilted Student-t distribution is the majority winning for predicting TASE indices.

4. Gaurav Agrawal et al (2010) in the paper, measure the association sandwiched between Nifty proceeds and Indian rupee-US Dollar Forex rates. Quite a few statistical tests have been used in order to learn the performance and changes of both the sequence. The paper also studies the shock of both the occasion sequence on each other. The period for the work has been taken from October, 2007 to March, 2009 using every day final indices. The authors have found that Nifty proceeds as well as Exchange Rates were strangely spread. From side to side unit cause examination, it was also recognized that both the time series, Exchange rate and Nifty returns, were motionless at the plane form itself. Association flanked by Nifty returns and Exchange Rates was establish to be pessimistic. Additional study into the fundamental connection between the two variables using Granger Causality test painted unidirectional affiliation between Nifty returns and Exchange Rates, operation from the previous towards the concluding.

5. Nikolaos Vlastakis (2012) et al, In their paper learn in order demand and supply at the organisation and market stage using facts for 30 of the major stocks traded on NYSE

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and NASDAQ. Stipulate is approximated in a narrative way from weekly internet search volume time sequence strained from the lately released Google Trends database. The work makes contributions in four main directions. First, although information demand and supply tend to be optimistically linked, their dynamic connections do not permit convincing inferences concerning the information finding process. Second, demand for in turn at the market level is drastically positively related to past and oblique events of unpredictability and trading quantity, even after scheming for market returns and information supply. Third, information demand increases appreciably throughout periods of elevated proceeds. Fourth, analysis of the predictable discrepancy risk best confirms for the first time empirically the premise that investors insist more in sequence as their stage of risk dislike increase.

6. Jessica a. Wachter (2013) explains the reason for equity best so high is, and the reasons for stocks so unstable. The study also explains stock proceeds in surplus of government bill rates unsurprising. This paper shows a reply to these queries based on a occasion-unreliable likelihood of a use disaster. In the model, collective use follows a usual allocation with low unpredictability most of the time, but with some likelihood of a use understanding far out in the absent tail. The option of this deprived result considerably increases the equity best, while time-difference in the likelihood of this result drive high stock exchange instability and surplus revisit unavoidability.

7. GeertBekaert and Marie Hoerova (2014) in their article decay the square VIX indicator, resulting from US S&P500 options rates, keen on the provisional difference of stock proceeds and the equity discrepancy best. They measure a overabundance of high-tech unpredictability estimate models to create a correct gauge of the provisional difference. The authors inspect the extrapolative influence of the VIX and its two mechanisms for securities exchange proceeds, financial movement and economic unsteadiness. The discrepancy best estimate stock proceeds while the provisional securities exchange difference predicts financial movement and has a moderately superior extrapolative influence for economic unsteadiness than does the discrepancy best.

8. Jayashree. S.(2014) in her paper suggests one of the most deep and sweeping monetary occurrence in the late twentieth century and the initial part of this century is the unstable increase in worldwide financial dealings and funds flow in the middle of a variety of monetary market in promising and LDCs. This occurrence in global business is not only a effect of the liberalization of resources market in LDCs and Promising nations and the mounting assortment and difficulty of monetary instruments, but also a effect of the escalating relativity of the LDCs and developed nations as developing nations turn into additional included in global flow of business. More autonomy in the stirring of funds

III. RESEARCH METHODOLOGY

The main objective of the study is to measure the impact of Large Cap Pharma Stocks on Movement of Pharma Index of NSE. The researchers have adopted Quantitative and Analytical Research. The data collected for the study are Secondary in nature. Secondary data obtained from periodicals, journals and websites. Top performing pharma companies were chosen based on market capitalisation and

flows improves the share of funds internationally, permitting wherewithal to shift to areas with upper rates of arrival. Defiantly, attempts to curb wealth flow pilot to distortion of wealth arrangement that are in general expensive to the economy striking the gearshift. Thus, the improve in global wealth flows and monetary deal is ongoing and, to a convinced point, unalterable method. These learn covers a choice of global stock exchanges from diverse socio-political and economic locale.

9. G.Sankararaman, S.Suresh, TC. Thomas, Vishnupriya,(2019) have considered that Securities exchange is an very important and strong piece of economic markets of any nation. Instability study is measured as single of the majority difficult time sequence forecasts due to complexity and density. In this manuscript the researchers say that although securities exchange condition is vivacious and untraceable but it will be slanted by several noticeable securities exchange facts. previously completed framework on time sequence on securities exchange and shakiness estimate can be divided into two categories of one market factor on the stock market irregularity or estimate by past price inconsistency of scrip. The securities exchange shows a key position in the development process of any nation. on the other hand, flux in the stock market can augment the charge of equity which is able to persuade profitable increase damagingly. The study is about the stock exchange fickleness show between the Nifty index and Sector index i.e, Nifty FMCG , Nifty Bank, Nifty IT and Nifty Financial Services.

10. G.Sankararaman, S.Suresh, TC. Thomas, (2019) have studied Securities exchange is an significant and energetic part of investment markets. The behaviour of persons as well as firms may be affected due to quite a few decisions taken by the comprehensive agencies such as Government, RBI, SEBI, etc. It has been affirmed that the securities exchange is lively and unseen but it will be subjective and affected by several evident factors and decisions. The involvement of securities exchange to the development course of any financial system is not in uncertainty. The work is about the securities exchange reactions and show of the BSE Sensex and Sector index i.e, of Eight Sectors namely Automobile, Bank, Capital Goods, FMCG, Healthcare, IT, Reality and Telecom. In this work, Multivariate study has been used to study the collision of financial decisions. Applicable statistical tools and techniques were used to place up a noteworthy relationship between a varieties of descriptive variables documented through the observed analysis bearing in brain the accessible studies. The examination shows that economic decisions can force the securities exchange progress. These factors can be used by retail segment, mutual funds and brokers to make balanced and brilliant savings decisions.

their impact on Pharma sector index of NSE were measured by using Multivariate Analysis and ANOVA. The day wise closing stock prices of select pharma stock and Pharma Index of NSE data considered were for a period from 2014 April to 2019 March (5 Years). The stocks of the following companies were considered for the study Biocon, Glen Mark, Sunpharma, Piramal Enterprises Ltd and Divi's Laboratories Ltd.

IV.RESULTS AND DISCUSSIONS

TABLE 1 – EFFECT OF SELECTED PHARMA STOCKS ON NSE- PHARMA INDEX VALUE DURING 2014 -15

Variable	Coefficient	t test	Sig Value	VIF
C	90.410	.415	.679	1.335
Biocon	-3.705	-9.700	.000	6.433
Divis Labs	2.201	15.383	.000	7.050
Glenmark Pharma	2.420	8.760	.000	3.917
Piramal Enterprises	2.534	12.831	.000	6.058
Sun Pharma	5.783	29.774	.000	1.335
R2	0.990			
Adjusted R2	0.990			
F test	4.93			
Sig Value	0.000**			
Durbin – Watson stat	2.41			
Source : Author's own calculation		Note : ** statistically significant at 5%		

During 2014-15, the pharma stocks which included in this study have influenced the behaviour of NSE-Pharma Index. It could also be observed from the VIF values that the prices of stocks selected for this study have not auto correlated with each other. The value of R^2 (0.990) revealed

that the 99.90 per cent of the pharma stocks included in the study have an effect on the NSE-Pharma Index during 2014-15. It could be found from the results of F test (4.93, $p=0.000$) that the overall fitness of the stocks selected in this study statistically significant at 5 percent

TABLE 2 – EFFECT OF SELECTED PHARMA STOCKS ON NSE- PHARMA INDEX VALUE DURING 2015 -16

Variable	Coefficient	t test	Sig Value	VIF
C	3191.307	6.170	.000	1.164
Biocon	-1.615	-2.278	.024	2.157
Divis Labs	-.476	-10.278	.000	1.653
Glenmark Pharma	5.078	31.700	.000	1.076
Piramal Enterprises	-.061	-.173	.863	1.396
Sun Pharma	6.655	32.175	.000	1.164
R2	0.907			
Adjusted R2	0.905			
F test	470.64			
Sig Value	0.000**			
Durbin – Watson stat	2.35			
Source : Author's own calculation		Note : ** statistically significant at 5%		

During 2015-16, the pharma stocks except Piramal enterprises which included in this study have influenced the behaviour of NSE-Pharma Index. It could also be observed from the VIF values that the prices of stocks selected for this study have not auto correlated with each

other. The value of R^2 (0.907) revealed that the 90.70 per cent of the pharma stocks included in the study have an effect on the NSE-Pharma Index during 2015-16. It could be found from the results of F test (470.64, $p=0.000$) that the overall fitness of the stocks selected in this study statistically significant at 5 percent.

TABLE 3 – EFFECT OF SELECTED PHARMA STOCKS ON NSE- PHARMA INDEX VALUE DURING 2016 -17

Variable	Coefficient	t test	Sig Value	VIF
C	3249.216	12.427	.000	4.025
Biocon	-.380	-2.119	.035	2.325
Divis Labs	.812	14.460	.000	2.560
Glenmark Pharma	2.332	9.192	.000	8.427
Piramal Enterprises	.582	6.235	.000	2.844
Sun Pharma	5.817	27.626	.000	4.025
R2	0.935			
Adjusted R2	0.934			
F test	699.98			
Sig Value	0.000**			
Durbin – Watson stat	1.57			
Source : Author's own calculation		Note : ** statistically significant at 5%		

During 2016-17, the pharma stocks which included in this study have influenced the behaviour of NSE-Pharma Index. It could also be observed from the VIF values that the prices of stocks selected for this study have not auto correlated with each other. The value of R^2 (0.935) revealed

that the 93.50 per cent of the pharma stocks included in the study have an effect on the NSE-Pharma Index during 2016-17. It could be found from the results of F test (699.98, $p=0.000$) that the overall fitness of the stocks selected in this study statistically significant at 5 percent.

TABLE 4 – EFFECT OF SELECTED PHARMA STOCKS ON NSE- PHARMA INDEX VALUE DURING 2017 -18

Variable	Coefficient	t test	Sig Value	VIF
C	1817.004	7.271	.000	2.452
Biocon	-.493	-8.155	.000	2.482
Divis Labs	.128	1.549	.123	4.926
Glenmark Pharma	2.561	11.183	.000	1.470
Piramal Enterprises	.744	12.506	.000	3.709
Sun Pharma	7.504	20.168	.000	2.452
R2	0.902			
Adjusted R2	0.900			
F test	443.507			
Sig Value	0.000**			
Durbin – Watson stat	1.32			
Source : Author's own calculation Note : ** statistically significant at 5%				

During 2017-18, the pharma stocks except the Divis Labs which included in this study have influenced the behaviour of NSE-Pharma Index. It could also be observed from the VIF values that the prices of stocks selected for this study have not auto correlated with each other. The value of R^2

(0.902) revealed that the 90.20 per cent of the pharma stocks included in the study have an effect on the NSE-Pharma Index during 2017-18. It could be found from the results of F test (443.507, $p=0.000$) that the overall fitness of the stocks selected in this study statistically significant at 5 percent

TABLE 5 – EFFECT OF SELECTED PHARMA STOCKS ON NSE- PHARMA INDEX VALUE DURING 2018 -19

Variable	Coefficient	t test	Sig Value	VIF
C	951.704	4.855	.000	1.111
Biocon	1.585	5.940	.000	2.842
Divis Labs	.955	17.807	.000	2.166
Glenmark Pharma	3.024	14.707	.000	1.449
Piramal Enterprises	.239	7.877	.000	1.926
Sun Pharma	6.735	53.863	.000	1.111
R2	0.963			
Adjusted R2	0.962			
F test	1.26			
Sig Value	0.000**			
Durbin – Watson stat	2.07			
Source : Author's own calculation Note : ** statistically significant at 5%				

During 2018-19, the pharma stocks which included in this study have influenced the behaviour of NSE-Pharma Index. It could also be observed from the VIF values that the prices of stocks selected for this study have not auto correlated with each other. The value of R^2 (0.963) revealed

that the 96.30 per cent of the pharma stocks included in the study have an effect on the NSE-Pharma Index during 2018-19. It could be found from the results of F test (1.26, $p=0.000$) that the overall fitness of the stocks selected in this study statistically significant at 5 percent.

V.CONCLUSION

Indian pharmaceutical industry have attracted a colossal amount of FDI in recent times. The pharma stocks prices have been rising in the markets ahead of the adverse stock market conditions. This has made the pharma stocks to be considered as a defensive stocks in securities market. The study has made an attempt to find out the impact of select pharma stocks on pharma index for a period of five years starting from 2014 to 2019. An analytical research method is adopted in this study. The five pharma stocks viz., Biocon, Divis Labs, Glenmark Pharma, Piramal Enterprises and Sun Pharma selected for this study based on the

market capitalisation. The day-to-day closing prices of the above select pharma stocks have considered for this study. Multiple regression is applied to find out the impact of pharma stocks on pharma index. The results revealed that all the pharma stocks included in this study have significantly influenced the pharma index of NSE except Piramal Enterprises for the period 2015-16 and Divis Lab in 2017-18. It is suggested that this study could be extended for other sector stocks which are listed and traded in Indian and international markets.

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