# **Project Dissertation Report on**

# "TECHNICAL ANALYSIS OF PHARMACEUTICAL COMPANIES"

Submitted By
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2K20/DMBA/53

Under the Guidance of Mrs Deepali Malhotra Assistant Professor, DSM



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**CERTIFICATE** 

This is to certify that Mr. Jatin Suri (Roll No. 2K20/DMBA/53) has completed her

Dissertation Report entitled "TECHNICAL ANALYSIS OF PHARMACEUTICAL

**COMPANIES**" towards partial fulfilment of therequirements for the award of the Master of

Business Administration.

This report is the result of her own work and to the best of my knowledge, no part of ithas

earlier comprised any other report, monograph, dissertation or book. This report was carried

out under my overall supervision.

Date:

Place: New Delhi

Mrs Deepali Malhotra

(Faculty Guide)

2

# **Declaration by the Student**

I, Mr. Jatin Suri (Roll No.: 2K20/DMBA/53), have completed and submitted my Dissertation Report entitled "TECHNICAL ANALYSIS OF PHARMACEUTICAL COMPANIES" towards partial fulfilment of the requirements for the award of Master of Business Administration.

This report is the result of my own work, no part of it has earlier compromised any other report, monograph, dissertation or book.

**Jatin Suri** 

#### ACKNOWLEDGEMENT

I would like to take this opportunity to extend my heartiest gratitude towards **Mrs Deepali Malhotra** without her impeccable guidance and insights, this project report could not have been materialized. This Dissertation has been a learning experience and the exposure has enriched me with further knowledge regarding the **TECHNICAL ANALYSIS OF PHARMACEUTICAL COMPANIES**.

**Jatin Suri** 



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#### **EXECUTIVE SUMMARY**

Holistically, this study is concerned with identifying the major factors that are there and provides insight for the investor on whether should buy, hold or sell a share of a public company. By using the technical and fundamental analysis, we have tried to predict the investor decisions regarding the shares of the company taken into consideration (i.e., Buy, sell & hold). We have chosen 2 companies namely Sun Pharma and Divis laboratory. After analyzing the Shareholding pattern, financial ratio, annual report, RSI, MACD, Volume Chart, EMA, Bollinger Band and Chart Pattern, we have shared our advice on these companies. We have also shared a general overview of this industry and, companies and done the SWOT analysis for the same.

# TABLE OF CONTENTS

S.No.	Particulars	Page No.
1.	Introduction	7
2.	Research Methodology 2.1 OBJECTIVES OF THE STUDY 2.2 METHODOLOGY 2.3 LIMITATIONS OF THE STUDY	8
3.	Concepts & Key Terms 3.1 FUNDAMENTAL ANALYSIS 3.2 TECHNICAL ANALYSIS	9-11
4.	Indian Pharma Industry 4.1 SECTOR FINANCIALS 4.2 TECHNICAL PATTERN OF PHARMA SECTOR	12-15
5.	Company Analysis 4.1 SUN PHARMA 4.2 DIVIS LABORATORIES	16-40
6.	Findings and Conclusion	41
7.	Reference	42

## 1. <u>INTRODUCTION</u>

An equity market is a market in which shares of companies are issued and traded, either through exchanges or over-the-counter markets. Also known as the stock market, it is one of the most vital areas of a market economy. It gives companies access to capital to grow their business, and investors a piece of ownership in a company with the potential to realize gains in their investment based on the company's future performance.

The stock exchange is a secondary market. It performs functions such as trading stocks, securities, bonds, wallets and assets. Many people invest their money in stocks. They use professional stockbrokers for this purpose. The Stock Broking industry is proliferating a more and more people are attracted to the stock market to make a good profit.

This project aims to provide a detailed financial analysis and recommendations for buying, holding, or selling a particular investment. Banks often use equity analysis as a way to "support" their bank investments and salesand trading.

It specializes in the Indian PHARMA industry, gaining a prominent place among the pioneers in the global market, as can be seen in its contribution to India's GDP (Domestic Product Total).

# **EQUITY MARKET**

The Stock Market examination empowers financial backers to distinguish the inborn worth of security even prior to putting resources into it. All securities exchange tips are figured out after exhaustive exploration by specialists. Stock examiners attempt to figure out an instrument/area/market movement later on.

By utilizing stock analysis, financial backers and brokers show up at value trading choices. Contemplating and assessing past and current information helps financial backers and brokers to acquire an edge in the business sectors to settle on informed choices. Key Research and Technical Research are two kinds of examination used to investigate and are worth security.

## 2. RESEARCH METHODOLOGY

# **2.1 OBJECTIVES OF THE STUDY:**

- 1) To study the concept of technical Analysis of the pharma industry (MACD, RSI etc).
- 2) To predict investor decisions regarding the shares of the company (i.e., Buy, sell & hold).
- 3) To know the future trend of Sun Pharma and Divis Laboratories in the capitalmarket.
- 4) To analyse the best time to purchase a stock.

## **2.2 METHODOLOGY:**

The project has been completed using the secondary data collected from the annual reports of the company, relevant textbooks on the subject matter and tompany's official website and trading view.

- 1. Moving Average Method.
- 2. Relative Strength Index (RSI).
- 3. Candlestick Charting.
- 4. MACD
- 5. Volume Chart
- 6. Bollinger Band

## **2.3 LIMITATIONS OF THE STUDY:**

- 1. The study is limited only to the Pharma sector and two companies.
- 2. Fundamental Analysis is used to analyses only the financial performance of thecompanies.
- 3. Technical Analysis is only used to predict the stock prices of the companies.

# 3. CONCEPTS & KEY TERMS

#### **FUNDAMENTAL ANALYSIS**

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Fundamental Analysis involves examining the economic, financial & otherqualitative as well as quantitative factors related to security to determine its intrinsic value. There are two approaches to fundamental Analysis:

- 1. Top-down approach: This approach includes national and international economic indicators, like energy prices, GDP growthrates, inflation and interest rates.
- 2. Bottom-up approach: We investigate focusing on aspecific business, irrespective of the industry or region.

Financial Analysis incorporates examining an organization's budget reports i.e., pay articulation, monetary record and income proclamation. Devices like proportion examination are utilized to compute an organization's monetary strength. Proportion examination should be possible for industry-wise proportion correlation and furthermore for past five-year correlation of the

organization's proportions. These proportions incorporate various parts of an organization's exhibition as follows:

- Liquidity ratio: Liquidity ratios measure the adequacy of current and liquid assets and help analyzing the ability of the business to pay its short-term debts.
- Profitability ratios: Profitability ratios measure the efficiency of the company in the employment of business resources to earn profits. These ratios indicate the success or failure of a business enterprise for a particular period of time.
- Activity ratios: Activity ratios also known as turnover ratios measure the efficiency of a firm or company in generating revenues by converting its production into cash or sales. Generally, a fast conversion increases revenues and profits.
- Solvency ratios: Solvency ratios measure the ability of a business to survive for a long period of time. These ratios were very important for stockholders and creditors.

## **Pros and cons of fundamental Analysis**

# **Pros of fundamental Analysis**

Fundamental Analysis helps dealers and financial backers to assemble the right data to come to levelheaded conclusions about what position to take. By putting together these choices with respect to monetary information.

Instead of laying out sections and leave focuses, the principal Analysis looks to comprehend the worth of a resource so dealers can take a significantly longer-term perspective available. When the merchant has decided a mathematical incentive for the resource, they can contrast it with the ongoing business sector cost to evaluate whether it is finished or underestimated. The objective is to then benefit from the market adjustment.

# **Cons of fundamental Analysis**

Fundamental Analysis can be tedious; it requires different areas of Analysis, making the interaction incredibly confounded.

As basic Analysis takes a significantly longer-term perspective available, the consequences of the discoveries are not reasonable for speedy choices. Dealers hoping to make an approach for entering and leaving exchanges the present moment may be more qualified for technical Analysis. Considering the best and the worst situation imaginable is additionally fundamental. While principal examination gives an all the more balanced market view, negative financial, political or administrative changes can amaze markets.

#### **TECHNICAL ANALYSIS:**

Technical Analysis is a trading method used to evaluate investments and identify trading opportunities by analyzing statistical trends from trading activity, such as RSI, MACD, price movement and volume charts. Unlike fundamental Analysis, which attempts to assess a security's value based on business results such as sales and earnings, technical Analysis focuses on the study of price and volume.

It evaluates securities by analyzing statistics generated by:

- Market activity
- Past Prices, and
- Volume



Across the industry, there are hundreds of patterns and signals that researchers have developed to support technical analysis trading. Technical analysts have also set numerous trading systems to help them forecast and trade on price movements.

Some indicators are focused primarily on identifying the current market trend, including support and resistance areas. In contrast, others are focused on determining the strength of a movement and the likelihood of its continuation. Technical indicators and charting patterns commonly include trendlines, channels, moving averages, and momentum indicators.



#### 4. INDIAN PHARMA INDUSTRY

India is one of the largest suppliers of generic medicines worldwide. The Indian medical industry supplies quite 50% of the worldwide demand for various vaccines, 40% of the overall need within the US and 25% of all UK drugs.

Globally, India is ranked 3rd in volume production and 14th in total. The domestic pharmaceutical industry comprises a network of 3,000 drug companies and 10,500 manufacturing companies.

According to the Indian Economic Survey 2021, the domestic market will triple in the next ten years. India's domestic medicine market is estimated at the US \$ 42 billion by 2021 and is likely to reach \$ 65 billion by 2024 and increase andreach ~ \$ 120-130 billion by 2030.

# SECTOR FINANCIALS

	10-			
	Net Sales	PBIDT	Net Profit	Mcap (₹ mn)*
Sun Pharma	30.9	27.7	24.4	1,194,623
Cipla	15.6	11.4	4.2	450,343
Cadila Healthcare	18.1	18.1	20.3	385,490
Dr Reddy's Labs	8.1	4.0	3.0	351,433
Biocon	14.7	14.9	11.8	347,190
Lupin	24.2	25.1	23.6	345,974
Aurobindo Pharma	21.6	24.7	27.6	335,095
Divi's Lab	18.8	19.7	19.0	288,671
Torrent Pharma	16.3	25.5	25.9	212,828
GSK	6.7	-3.5	-4.8	187,627

The Indian biotechnology industry includes biopharmaceuticals, bio-services, bio-agriculture, bio-industry, and bioinformatics. India's biotechnology industry costs \$64 billion by 2019 and is expected to reach US \$150 billion by 2025.

The Indian medical equipment market stands at \$ 10.36 billion in FY20. The market is expected to grow at a CAGR of 37% from 2020 to 2025 to reach \$ 50 billion.

As of August 2021, CARE Estimates expect India's pharmaceutical business to grow at an annual rate of ~ 11% to reach more than the US \$ 60 billion over the next two years.

In the global pharmaceutical sector, India is an important and growing player. India is the world's largest supplier of generic medicines, accounting for 20% of the world's total volume of drugs and providing about 60% of the global vaccination requirement. The Indian medical industry is worth \$ 42 billion and isranked 3rd in volume and 13th globally.

In August 2021, the Indian pharmaceutical market increased by 17.7% per annum, up from 13.7% in July 2020. According to India Ratings & Research, India's pharmaceutical market revenue is expected to exceed 12% YoY in -FY22.

# **4.2 Technical Pattern of the Pharma Industry**



Source: Tradingview



Source: Tradingview

On viewing the above graph pattern, we can see RSI, MACD, and Chart Pattern are showing a downward trend. MACD's blue line is below the red line showing a downward trend. RSI is below 40 shows there is over-selling in the market for pharma stock in the last few days. Similar case with Bollinger Bands as well. Candles are touching the lower band showing bearishness in the market. Overall, the market is showing a downward trend in the pharma sector.

<b>STRENGTH</b>	WEAKNESS
1.) Growing treatment naivepatient	1.) Presence of more unorganised players
population.	versus the organized.
2.) Breadth of service offering.3.)	2.) Poor all-round infrastructure is the
Ease of scalability.	biggest challenge.
4.) Global and 24/7 delivery.	3.) Poor health insurance
	coverage.
	4.) Decreasing competitive
	advantage.
<u>THREAT</u>	<u>OPPORTUNITY</u>
	4) (1) 11 12
1.)Wage inflation.	1.)Global demand for generic
2.) Increase competition. 3.)	medicine is rising.
Entry of foreign players.	2.)Large demand for quality
	diagnostic services.



# 5. COMPANY ANALYSIS

#### **5.1 SUN PHARMA**

Sun Pharma is the world's fourth-largest generic speciality generic pharmaceutical company and No. 1 in India. They provide high-quality, affordable medicines trusted by customers and patients in over 100 countries. Sun Pharma's global presence is supported by more than 40 manufacturing facilities spread across 5 continents, R&D centres across the globe and a multi-cultural workforce comprising more than 50 nationalities. Sun Pharma build excellence through innovation supported by strong R&D capabilities comprising around 2,000 scientists and R&D investments of over 7-8% of annual revenues.

Sun Pharma has achieved growth with selected acquisitions over the past two decades. In 1996, Sun bought a mass-producing drug factory in Ahmednagar at Knoll Pharmaceuticals and a MJ Pharma-based base in Halol both authorized by the U.S. FDA today. In 1997, Sun Pharma acquired Tamil Nadu Dadha Pharmaceuticals Limited (TDPL) based in Chennai, mainly with their comprehensive gynecology and oncology products. And in 1997, Sun Pharma began to enter the US market profitable through the acquisition of Detacoit-basedCaraco Pharmaceuticals.

In 1998, Sun acquired a number of respiratory products from Natco Pharma. Other notable purchases include Milmet Labs and Gujarat Lyka Organics (1999), Pradeep Drug Company (2000), Phlox Pharma (2004), the construction industry in Bryan, Ohio and ICN, Hungary from Valeant Pharma and Able Labs (2005), and Chattem. Chemicals (2008). In 2010, the company acquired a major share in Taro Pharmaceuticals, among the largest generic dermatology companies in the US, operating throughout Canada and Israel. The company currently owns 69% of the shares in Taro, for about \$ 260 million.

# QUATERLY RESULTS & BALANCE SHEET

QUARTERLY	SEP 2021	JUN 2021	MAR 2021	DEC 2020	SEP 2020
<b>Total Income</b>	9,848.82	9,871.26	8,633.98	9,151.73	8,808.91
<b>Total Income Growth</b>	-0.23	14.33	-5.66	3.89	13.82
(%)					
<b>Total Expenses</b>	7,526.36	8,031.95	7,700.84	6,962.58	6,858.45
<b>Total Expenses</b>	-6.29	4.30	10.60	1.52	-30.52
Growth (%)					
EBIT	2,322.46	1,839.31	933.14	2,189.15	1,950.46
EBIT Growth (%)	26.27	97.11	-57.37	12.24	-
Profit after Tax (PAT)	2,047.01	1,404.04	894.15	1,913.41	1,812.79
PAT Growth (%)	45.79	57.03	-53.27	5.55	-
EBIT Margin (%)	23.58	18.63	10.81	23.92	22.14
Net Profit Margin (%)	20.78	14.22	10.36	20.91	20.58
Basic EPS (₹)	8.50	6.00	3.70	7.72	7.56

ANNUAL	FY 2021	FY 2020	FY 2019	FY 2018	FY 2017
<b>Total Assets</b>	67,666.73	68,252.46	64,693.81	64,302.80	61,410.24
Total Assets Growth (%)	-0.86	5.50	0.61	4.71	10.59
Total Liabilities	18,186.90	19,127.77	19,971.21	22,318.08	20,979.71
Total Liabilities Growth (%)	-4.92	-4.22	-10.52	6.38	13.63
Total Equity	49,479.83	49,124.69	44,722.60	41,984.72	40,430.53
Total Equity Growth (%)	0.72	9.84	6.52	3.84	9.07
Current Ratio (x)	1.89	2.02	1.79	1.59	1.84
Total Debtto Equity (x)	0.07	0.17	0.24	0.26	0.22
Contingent Liabilities	7,057.73	7,508.95	9,316.47	9,388.43	7,954.48

# **Shareholding Pattern**

CATEGORY	31 DEC 2021	30 SEP 2021	30 JUN 2021	31 MAR 2021
Promoters	54.48	54.48	54.48	54.48
Pledge	4.79	6.52	6.36	8.62
FII	13.00	12.07	11.50	11.67
DII	21.00	21.72	21.98	21.62
Mutual Funds	11.80	11.72	12.03	11.93
Others	11.52	11.73	12.04	12.23

## PRICE CHART



# **Technical Analysis Using RSI**

Relative StrengthIndex								
Suenguinidex								
(RSI)								
DATE	close	Gain	Loss	RS	RSI	12EMA	26EMA	MACD
4/1/2021	610.75							
4/5/2021	608.8	0.00	1.95					
4/6/2021	620.45	11.65	0.00					
4/7/2021	621.05	0.60	0.00					
4/8/2021	614.25	0.00	6.80					
4/9/2021	636.75	22.50	0.00					
4/12/2021	619.35	0.00	17.40					
4/13/2021	627.35	8.00	0.00					
4/15/2021	633.25	5.90	0.00					
4/16/2021	646.05	12.80	0.00					
4/19/2021	640.65	0.00	5.40					
4/20/2021	645.15	4.50	0.00					
4/22/2021	639.95	0.00	5.20					
4/23/2021	637.95	0.00	2.00					
4/26/2021	634.7	0.00	3.25	1.570238	61.09			
4/27/2021	639.25	4.55	0.00	1.686905	62.78			
4/28/2021	643.4	4.15	0.00	1.8015	64.30			
4/29/2021	644.5	1.10	0.00	1.834212	64.72			
4/30/2021	654.45	9.95		2.152861	68.28			
5/3/2021	659.2	4.75		2.316681	69.85			
5/4/2021	645.15	0.00	14.05	1.522292	60.35			
5/5/2021	683.4	38.25		2.527618	71.65			
5/6/2021	679.4	0.00		2.270548	69.42			
5/7/2021	679.45	0.05		2.271917	69.44			
5/10/2021	698.2	18.75		2.824821	73.85			
5/11/2021	708.1	9.90		3.139211	75.84			25.42365
5/12/2021	702.85	0.00		2.661371	72.69			26.12422
5/14/2021	691.45	0.00		1.962731	66.25	677.9058		25.46599
5/17/2021	687.15	0.00		1.773605	63.95	679.328		24.31705
5/18/2021	690.8	3.65		1.861689		681.0929		23.43093
5/19/2021	703.4	12.60	0.00	2.189153	68.64	684.5248	661.05	23.474

5/20/2021	686.85	0.00	16.55	1.496133	59.94	684.8825	662.9611	21.9214
5/21/2021	690.4	3.55	0.00	1.569261	61.08	685.7314	664.9936	20.73773
5/24/2021	690.95	0.55	0.00	1.581463	61.26	686.5342	666.9163	19.61791
5/25/2021	696.1	5.15	0.00	1.704499	63.02	688.0059	669.0781	18.92781
5/26/2021	703.8	7.70	0.00	1.902606	65.55	690.4357	671.6501	18.78568
5/27/2021	699.5	0.00	4.30	1.700059	62.96	691.8302	673.713	18.11722
5/28/2021	669.75	0.00	29.75	0.948059	48.67	688.4333	673.4195	15.01382
5/31/2021	668.3	0.00	1.45	0.926547	48.09	685.3359	673.0402	12.29561
6/1/2021	671.05	2.75	0.00	0.972892	49.31	683.138	672.8928	10.24521
6/2/2021	677.45	6.40	0.00	1.089045	52.13	682.263	673.2304	9.032563
6/3/2021	675.5	0.00	1.95	1.049063	51.20	681.2225	673.3985	7.823989
6/4/2021	673.95	0.00	1.55	1.017098	50.42	680.1037	673.4394	6.664293
6/7/2021	675.35	1.40	0.00	1.046736	51.14	679.3723	673.5809	5.791433
6/8/2021	678.75	3.40	0.00	1.124251	52.92	679.2766	673.9638	5.312794
6/9/2021	672.85	0.00	5.90	0.982	49.55	678.2879	673.8813	4.406592
6/10/2021	676.05	3.20	0.00	1.055905	51.36	677.9436	674.0419	3.901658
6/11/2021	681.3	5.25	0.00	1.186483	54.26	678.46	674.5796	3.880394
6/14/2021	677.1	0.00	4.20	1.066504	51.61	678.2507	674.7663	3.484471
6/15/2021	673.2	0.00	3.90	0.968561	49.20	677.4737	674.6502	2.823455
6/16/2021	668.55	0.00	4.65	0.866397	46.42	676.1008	674.1984	1.902448
6/17/2021	665.05	0.00	3.50	0.798154	44.39	674.4007	673.5207	0.879979
6/18/2021	668.5	3.45	0.00	0.881767	46.86	673.4929	673.1488	0.344085
6/21/2021	671.35	2.85	0.00	0.956153	48.88	673.1632	673.0156	0.147654
6/22/2021	666.8	0.00	4.55	0.847735	45.88	672.1843	672.5552	-0.37089
6/23/2021	665.25	0.00	1.55	0.813879	44.87	671.1175	672.014	-0.89658
6/24/2021	664.8	0.00	0.45	0.803842	44.56	670.1455	671.4797	-1.33412
6/25/2021	672.25	7.45	0.00	1.02372	50.59	670.4693	671.5367	-1.06742
6/28/2021	676.3	4.05	0.00	1.152445	53.54	671.3663	671.8896	-0.52322
6/29/2021	677.6	1.30	0.00	1.196943	54.48	672.3254	672.3126	0.012805
6/30/2021	675.45	0.00	2.15	1.109047	52.59	672.8061	672.545	0.261116
7/1/2021	684.15	8.70	0.00	1.429055	58.83	674.5513	673.4046	1.146703
7/2/2021	681.25	0.00	2.90	1.281808	56.18	675.5819	673.9857	1.596132
7/5/2021	680.2	0.00	1.05	1.232298	55.20	676.2923	674.446	1.846298
7/6/2021	673.25	0.00	6.95	0.966262	49.14	675.8243	674.3575	1.466841
7/7/2021	680.1	6.85	0.00	1.19541	54.45	676.4821	674.7828	1.699269
7/8/2021	666.9	0.00	13.20	0.810153	44.76	675.0079	674.1989	0.809013
7/9/2021	667.9	1.00	0.00	0.836446	45.55	673.9144	673.7323	0.182073
7/12/2021	668.55	0.65	0.00	0.854851	46.09	673.0891	673.3484	-0.25934
7/13/2021	683	14.45	0.00	1.295489	56.44	674.6139	674.0634	0.55048
7/14/2021	685.95	2.95	0.00	1.392366	58.20	676.3579	674.9439	1.414011
7/15/2021	683	0.00	2.95	1.260825	55.77	677.3797	675.5406	1.839125
7/16/2021	688.6	5.60	0.00	1.453959	59.25	679.1059	676.508	2.597957
7/19/2021	689.25	0.65	0.00	1.4781	59.65	680.6666	677.4518	3.214728
7/20/2021	676.45	0.00	12.80	0.977596	49.43	680.0179	677.3776	2.640236

2/1/2022	891.75	57.25	0.00	2.344373	70.10	835.3908	826.3603	9.030512
2/2/2022	890.65	0.00	1.10	2.293002	69.63	843.8922	831.1225	12.76973
2/3/2022	883.55	0.00	7.10	1.989908	66.55	849.9934	835.006	14.98741
2/4/2022	893.95	10.40	0.00	2.198421	68.73	856.756	839.3722	17.38374
2/7/2022	887.05	0.00	6.90	1.913365	65.68	861.4166	842.9039	18.51267
2/8/2022	894.1	7.05	0.00	2.056038	67.28	866.4448	846.6962	19.74858
2/9/2022	886.45	0.00	7.65	1.76223	63.80	869.5225	849.6409	19.88158
2/10/2022	894.3	7.85	0.00	1.920146	65.76	873.3344	852.949	20.38542
2/11/2022	880.1	0.00	14.20	1.468417	59.49	874.3753	854.9602	19.41509
2/14/2022	864.85	0.00	15.25	1.154335	53.58	872.9099	855.6928	17.21709
2/15/2022	876.8	11.95	0.00	1.334835	57.17	873.5084	857.2563	16.25207
2/16/2022	868.85	0.00	7.95	1.181983	54.17	872.7917	858.1151	14.67661
2/17/2022	862.55	0.00	6.30	1.076758	51.85	871.216	858.4436	12.77245
2/18/2022	862.9	0.35	0.00	1.082084	51.97	869.9366	858.7737	11.16296
2/21/2022	843.85	0.00	19.05	0.824634	45.19	865.9233	857.6682	8.255084
2/22/2022	845.8	1.95	0.00	0.850861	45.97	862.8274	856.7891	6.038318
2/23/2022	840.25	0.00	5.55	0.787551	44.06	859.354	855.564	3.789987
2/24/2022	818.25	0.00	22.00	0.597698	37.41	853.0303	852.8	0.230298
2/25/2022	831.55	13.30	0.00	0.754645	43.01	849.7256	851.2259	-1.50029
2/28/2022	843.9	12.35	0.00	0.911591	47.69	848.8294	850.6833	-1.85388
3/2/2022	820.9	0.00	23.00	0.693345	40.95	844.5325	848.4771	-3.94454
3/3/2022	820.9	0.00	0.00	0.693345	40.95	840.8968	846.4343	-5.53757
3/4/2022	829.65	8.75	0.00	0.798977	44.41	839.1665	845.1911	-6.02456
3/7/2022	822.65	0.00	7.00	0.732331	42.27	836.6255	843.5213	-6.89585
3/8/2022	855	32.35	0.00	1.147479	53.43	839.4523	844.3716	-4.91927
3/9/2022	868.25	13.25	0.00	1.330597	57.09	843.8828	846.1404	-2.25763
3/10/2022	869.55	1.30	0.00	1.349945	57.45	847.8316	847.8744	-0.04287
3/11/2022	902	32.45	0.00	1.870059	65.16	856.1652	851.8837	4.281433
3/14/2022	892.25	0.00	9.75	1.600673	61.55	861.7167	854.8738	6.842852
3/15/2022	891.65	0.00	0.60	1.585536	61.32	866.3218	857.598	8.723818
3/16/2022	889.2	0.00	2.45	1.522236	60.35	869.8415	859.9389	9.90265
3/17/2022	911.6	22.40	0.00	1.91533	65.70	876.2659	863.7656	12.50028
3/21/2022	913.8	2.20	0.00	1.956908	66.18	882.0404	867.4719	14.56851
3/22/2022	914.1	0.30	0.00	1.963013	66.25	886.9726	870.9258	16.04682
3/23/2022	900.8	0.00	13.30	1.519936	60.32	889.0999	873.1387	15.9612
3/24/2022	908.85	8.05	0.00	1.66706	62.51	892.1384	875.784	16.3544
3/25/2022	902.35	0.00	6.50	1.477976	59.64	893.7094	877.7518	15.95756
3/28/2022	905.9	3.55	0.00	1.544688	60.70	895.5849	879.8369	15.74799
3/29/2022	919.35	13.45	0.00	1.816884	64.50	899.2411	882.7638	16.47726
3/30/2022	920.6	1.25	0.00	1.844127	64.84	902.527	885.5665	16.96057
3/31/2022	914.75	0.00	5.85	1.621489	61.85	904.4075	887.7282	16.67928

#### RSI OF SUN PHARMA SCRIP



**Source: Tradingview** 

A 14-day RSI is calculated for stock. It is recommended by wilder that a 14 period will be a good momentum indicator. By using the simple formula RSI =  $\{100-[100/(1+RS)]\}$ . Traditionally RSI of below 30 indicates buying & ifit crosses above 70 indicates selling. From  $1^{ST}$  April 2021 to 31st March 2022, the RSI is calculate; thee best time to buy the stock was between 29th November to  $2^{nd}$  December since the RSI was close to 30 & the best time to sell the stock was between  $30^{th}$  July to  $8^{th}$  of August since the RSI was above 75 during that time.

# **Technical Analysis using Candle Stick**



#### Source: Tradingview

Japanese Candle Stick is used to analyse the pattern of stock movement. The candle is the same as the bar chart. Still, the colour is different red candle is used to indicate the bearish t,rend and the green candle is an indicator of a bullish trend Japanese candle use the historical prices of a stock in the prescribed manner, i.e., Open, High, Low, Close. The size of the candle is known by its magnitude of open and close, and the size of the shadow is known by its high and close. In the above Candle Stick Chart, it is clear that the Stock Price of Sun Pharma has increased. It indicates that the investors are becoming more bullish than bearish. As far as Sun Pharma is concerned, a bullish market trend is taking place heree. It is a suitable time for partial selling the Scrip.

#### **EMA**



**Source: Tradingview** 

This picture shows that Exponential Moving Averages, which is in yellow, blue and black line, shows 5 days, 8 days and 13 days EMA respectively. The yellow line is below blue and black line shows that the market is bearish on this stock and last 7-8 candlesticks also showing the same result and is dominated by bearish only. Best time to purchase in when yellow line cut blue line from bottom steeply.

# **MACD**



Source: Tradingview

This is the MACD indicator chart. In this, I have chosen criteria as 12 days moving average and 26 days moving average for the MACD period and 9 days for the signal period In this chart, the black line is showing MACD and red line is showing signal. It is clearly shows that MACD line is in downward trend the it us under the signal line which means that the sell signal is very strong. Best time to purchase the stock was after January when blue line cut red line from below steeply.

#### **VOLUME CHART**



#### **Source: Tradingview**

In this Fig., we can see the volume chart of SUN Pharma is showing mix signal as domination by both red and blue color bars. The Blue Color bar is an indication of UP volume red shows down volume. From this indicator, we can see a little bullishness in trend as last bar is blue in color. The best time to purchase the stock was on 1<sup>st</sup> week of February, when volume was very high.

#### **Bollinger Band**



**Source: Tradingview** 

There are three lines that compose Bollinger Bands: A simple moving average (middle band) and an upper and lower band. The upper and lower bands are typically two standard deviations +/- from a 20-day simple moving average. This chart shows that the closing price is closer to the lower band. The closer the prices move to the lower band, the more oversold the market. This is showing a downtrend.

#### **5.2 DIVIS LABORATORIES**



Divi's Laboratories Limited is one of the largest API companies in the world, with ~ \$ 960M in revenue and exports to more than 95 countries.

Founded in 1990, we have been involved in the production of standard APIs, Nutraceutical Ingredients and custom integration of APIs and Intermediates in companies developing innovative products that are widely exported to regulatedmarkets such as the US and Europe.

With two production centers, an international market presence and a team of 17,000 workers, Divi continues to develop new ways to deliver robust strategies to facilitate sustainable production processes.

Divi's Laboratories Limited is an Indian Pharmaceuticals company that manufactures active pharmaceutical ingredients (APIs) and is headquartered in Hyderabad, Telangana, India. Divi's Laboratories is India's most important medical company with market capitalization.

The company initially began to develop marketing processes for producing APIs and intermediaries. Divi Research Center changed its name to Divi's Laboratories Limited in 1994 to reflect its intention to enter the API and the middle production industry Following this, the company established its first Production Center in 1995 in Choutuppal, Telangana. In 2002, the company's second production facilitybegan operating in Chippada near Visakhapatnam.

The company came out with its IPO on February 17, 2003. In 2010, the company established a research center in Hyderabad.

# QUARTERLY RESULTS AND BALANCE SHEET

QUARTERLY   ANNUAL	SEP	JUN	MAR	DEC	SEP
	2021	2021	2021	2020	2020
<b>Total Income</b>	2,006.62	1,996.61	1,811.71	1,720.76	1,762.94
<b>Total Income Growth</b>	0.50	10.21	5.29	-2.39	0.87
(%)					
<b>Total Expenses</b>	1,246.79	1,181.85	1,142.01	1,078.41	1,069.29
<b>Total Expenses</b>	5.49	3.49	5.90	0.85	-1.59
Growth (%)					
EBIT	759.83	814.76	669.70	642.35	693.65
EBIT Growth (%)	-6.74	21.66	4.26	-7.40	4.91
Profit after Tax (PAT)	606.46	557.11	502.02	470.62	519.59
PAT Growth (%)	8.86	10.97	6.67	-9.42	5.59
EBIT Margin (%)	37.87	40.81	36.97	37.33	39.35
Net Profit Margin (%)	30.22	27.90	27.71	27.35	29.47
Basic EPS (₹)	22.84	20.99	18.91	17.73	19.57

ANNUAL	FY 2021	FY	FY 2019	FY 2018	FY 2017
		2020			
Total Assets	10,774.07	8,535.70	8,038.25	6,783.15	6,158.53
Total AssetsGrowth (%)	26.22	6.19	18.50	10.14	25.63
<b>Total Liabilities</b>	1,479.46	1,225.78	1,081.10	858.35	801.14
<b>Total Liabilities</b>	20.70	13.38	25.95	7.14	31.59
Growth (%)					
<b>Total Equity</b>	9,294.61	7,309.92	6,957.15	5,924.80	5,357.39
Total Equity Growth	27.15	5.07	17.42	10.59	24.78
(%)					
Current Ratio (x)	5.55	5.05	5.49	6.97	6.08
<b>Total Debt to</b>	0.00	0.00	0.02	0.01	0.01
Equity (x)					
Contingent	1,107.13	1,222.84	1,031.35	502.90	537.81
Liabilities					

#### SHAREHOLDING PATTERN

CATEGORY	31 DEC 2021	30 SEP 2021	30 JUN 2021	31 MAR 2021
Promoters	51.95	51.95	51.95	51.95
Pledge	0.00	0.00	0.00	0.00
FII	23.26	24.03	24.17	23.57
DII	13.77	13.02	13.00	13.04
Mutual Funds	13.35	12.63	12.61	12.59
Others	11.02	11.00	10.88	11.44



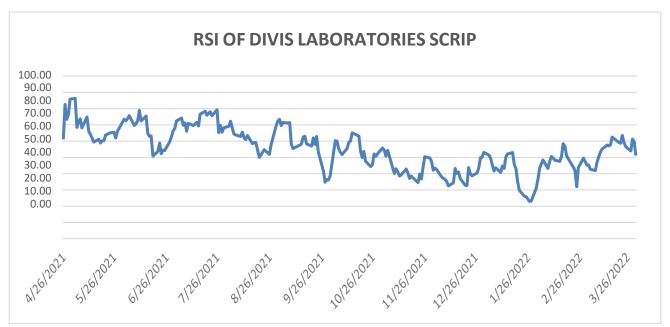
# **Technical Analysis Using RSI**

Relative Strength								
Index								
(RSI)								
DATE	close	Gain	Loss	RS	RSI	12EMA	26EMA	MACD
4/1/2021	3,616.10							
4/5/2021	3,611.05	0.00	5.05					
4/6/2021	3,688.10	77.05	0.00					
4/7/2021	3,698.95	10.85	0.00					
4/8/2021	3,715.15	16.20	0.00					
4/9/2021	3,752.35	37.20	0.00					
4/12/2021	3,779.65	27.30	0.00					
4/13/2021	3,718.45	0.00	61.20					
4/15/2021	3,783.40	64.95	0.00					
4/16/2021	3,821.85	38.45	0.00					
4/19/2021	3,807.10	0.00	14.75					
4/20/2021	3,779.70	0.00	27.40			3730.988		
4/22/2021	3,755.25	0.00	24.45			3734.72		
4/23/2021	3,779.75	24.50	0.00			3741.648		
4/26/2021	3,784.35	4.60	0.00	1.570238	61.09	3748.217		
4/27/2021	3,908.95	124.60	0.00	4.76511	82.65	3772.946		
4/28/2021	3,882.60	0.00	26.35	2.758204	73.39	3789.815		
4/29/2021	3,910.85	28.25	0.00	3.244473	76.44	3808.436		
4/30/2021	4,062.35	151.50	0.00	6.052851	85.82	3847.5		
5/3/2021	4,074.00	11.65	0.00	6.28542	86.27	3882.346		
5/4/2021	3,985.35	0.00	88.65	2.163016	68.38	3898.193		
5/5/2021	4,035.45	50.10	0.00	2.562188	71.93	3919.309		
5/6/2021	4,063.05	27.60	0.00	2.799006	73.68	3941.423		
5/7/2021	4,029.10	0.00	33.95	2.130608	68.06	3954.912		
5/10/2021	4,139.30	110.20	0.00	2.965361	74.78	3983.279		
5/11/2021	4,073.60	0.00	65.70	1.930633	65.88	3997.175	3855.992	141.1825
5/12/2021	4,061.45	0.00	12.15	1.805185	64.35	4007.063	3871.211	135.8519
5/14/2021	4,020.55	0.00	40.90	1.461028	59.37	4009.138	3882.274	126.8647
5/17/2021	4,043.25	22.70	0.00	1.57498	61.16	4014.386	3894.198	120.1885

5/18/2021	4,023.95	0.00	19.30	1.426177	58.78	4015.858	3903.809	112.0485
5/19/2021	4,039.65	15.70	0.00	1.508945	60.14	4019.518	3913.871	105.6466
5/20/2021	4,040.80	1.15	0.00	1.515474	60.25	4022.792	3923.273	99.51867
5/21/2021	4,079.90	39.10	0.00	1.754536	63.70	4031.578	3934.875	96.70253
5/24/2021	4,097.20	17.30	0.00	1.868446	65.14	4041.674	3946.899	94.77419
5/25/2021	4,097.85	0.65	0.00	1.873056	65.19	4050.316	3958.081	92.23519
5/26/2021	4,098.60	0.75	0.00	1.878783	65.26	4057.744	3968.49	89.25466
5/27/2021	4,079.20	0.00	19.40	1.620281	61.84	4061.045	3976.691	84.35476
5/28/2021	4,120.25	41.05	0.00	1.933814	65.91	4070.154	3987.325	82.82914
5/31/2021	4,194.00	73.75	0.00	2.540434	71.75	4089.207	4002.634	86.57313
6/1/2021	4,220.10	26.10	0.00	2.77163	73.49	4109.344	4018.742	90.60191
6/2/2021	4,214.25	0.00	5.85	2.625132	72.41	4125.484	4033.224	92.2592
6/3/2021	4,232.20	17.95	0.00	2.79979	73.68	4141.902	4047.963	93.93817
6/4/2021	4,261.60	29.40	0.00	3.107866	75.66	4160.317	4063.788	96.52837
6/7/2021	4,229.95	0.00	31.65	2.28997	69.60	4171.03	4076.097	94.93292
6/8/2021	4,241.20	11.25	0.00	2.39071	70.51	4181.825	4088.327	93.49849
6/9/2021	4,267.45	26.25	0.00	2.64385	72.56	4194.998	4101.595	93.40316
6/10/2021	4,372.55	105.10	0.00	3.735336	78.88	4222.314	4121.666	100.6481
6/11/2021	4,334.50	0.00	38.05	2.620269	72.38	4239.573	4137.431	102.142
6/14/2021	4,388.05	53.55	0.00	3.072709	75.45	4262.416	4155.996	106.4202
6/15/2021	4,313.05	0.00	75.00	1.82637	64.62	4270.206	4167.629	102.5765
6/16/2021	4,300.70	0.00	12.35	1.703816	63.02	4274.897	4177.486	97.4108
6/17/2021	4,302.35	1.65	0.00	1.713471	63.15	4279.121	4186.735	92.38516
6/18/2021	4,197.30	0.00	105.05	1.030989	50.76	4266.533	4187.518	79.01482
6/21/2021	4,229.10	31.80	0.00	1.160835	53.72	4260.774	4190.598	70.17577
6/22/2021	4,288.75	59.65	0.00	1.423135	58.73	4265.078	4197.869	67.20928
6/23/2021	4,224.60	0.00	64.15	1.09154	52.19	4258.851	4199.849	59.0018
6/24/2021	4,250.35	25.75	0.00	1.192262	54.39	4257.543	4203.59	53.95319
6/25/2021	4,248.75	0.00	1.60	1.18428	54.22	4256.19	4206.935	49.25524
6/28/2021	4,314.40	65.65	0.00	1.480107	59.68	4265.145	4214.895	50.25023
6/29/2021	4,356.15	41.75	0.00	1.682709	62.72	4279.146	4225.359	53.78762
6/30/2021	4,408.25	52.10	0.00	1.954986	66.16	4299.008	4238.906	60.10223
7/1/2021	4,435.70	27.45	0.00	2.109475	67.84	4320.038	4253.483	66.5544
7/2/2021	4,519.65	83.95	0.00	2.618293	72.36	4350.747	4273.199	77.54793
7/5/2021	4,559.95	40.30	0.00	2.881338	74.24	4382.932	4294.44	88.49217
7/6/2021	4,524.20	0.00	35.75	2.302682	69.72	4404.666	4311.459	93.20641
7/7/2021	4,552.55	28.35	0.00	2.474191	71.22	4427.417	4329.318	98.09925
7/8/2021	4,510.50	0.00	42.05	1.942128	66.01	4440.199	4342.739	97.46033
7/9/2021	4,599.70	89.20	0.00	2.433391	70.87	4464.738	4361.773	102.9648
7/12/2021	4,588.75	0.00	10.95	2.284991	69.56	4483.817	4378.586	105.2304
7/13/2021	4,606.05	17.30	0.00	2.388753	70.49	4502.622	4395.435	107.1864
7/14/2021	4,623.20	17.15	0.00	2.499527	71.42	4521.172	4412.307	108.8655
7/15/2021	4,607.30	0.00	15.90	2.250609	69.24	4534.423	4426.751	107.6719
7/16/2021	4,757.60	150.30	0.00	3.264394	76.55	4568.758	4451.258	117.4996

11/26/2021	4,937.80	138.00	0.00	1.016121	50.40	4843.715	4925.436	-81.721
11/29/2021	4,921.35	0.00	16.45	0.985241	49.63	4855.658	4925.133	-69.4744
11/30/2021	4,878.80	0.00	42.55	0.908346	47.60	4859.219	4921.701	-62.4821
12/1/2021	4,752.20	0.00	126.60	0.726631	42.08	4842.754	4909.145	-66.3909
12/2/2021	4,777.30	25.10	0.00	0.769344	43.48	4832.684	4899.379	-66.6945
12/3/2021	4,757.05	0.00	20.25	0.741815	42.59	4821.048	4888.836	-67.7877
12/6/2021	4,646.80	0.00	110.25	0.613169	38.01	4794.241	4870.907	-76.6665
12/7/2021	4,624.80	0.00	22.00	0.591139	37.15	4768.173	4852.677	-84.5042
12/8/2021	4,604.95	0.00	19.85	0.571198	36.35	4743.062	4834.327	-91.2653
12/9/2021	4,576.95	0.00	28.00	0.543355	35.21	4717.506	4815.262	-97.756
12/10/2021	4,506.45	0.00	70.50	0.479921	32.43	4685.036	4792.387	-107.351
12/13/2021	4,530.40	23.95	0.00	0.522632	34.32	4661.246	4772.981	-111.735
12/14/2021	4,654.40	124.00	0.00	0.760776	43.21	4660.193	4764.197	-104.004
12/15/2021	4,588.70	0.00	65.70	0.669765	40.11	4649.194	4751.197	-102.003
12/16/2021	4,601.45	12.75	0.00	0.694767	40.99	4641.849	4740.105	-98.2562
12/17/2021	4,511.45	0.00	90.00	0.58381	36.86	4621.787	4723.167	-101.38
12/20/2021	4,408.45	0.00	103.00	0.487797	32.79	4588.966	4699.855	-110.889
12/21/2021	4,405.70	0.00	2.75	0.485501	32.68	4560.771	4678.066	-117.294
12/22/2021	4,563.50	157.80	0.00	0.776339	43.70	4561.191	4669.579	-108.388
12/23/2021	4,478.50	0.00	85.00	0.664268	39.91	4548.469	4655.425	-106.956
12/24/2021	4,447.25	0.00	31.25	0.628355	38.59	4532.897	4640.005	-107.108
12/27/2021	4,473.20	25.95	0.00	0.676704	40.36	4523.713	4627.649	-103.936
12/28/2021	4,525.35	52.15	0.00	0.781342	43.86	4523.965	4620.071	-96.1065
12/29/2021	4,621.60	96.25	0.00	0.989322	49.73	4538.986	4620.185	-81.1989
12/30/2021	4,627.90	6.30	0.00	1.003982	50.10	4552.665	4620.756	-68.0913
12/31/2021	4,678.20	50.30	0.00	1.130036	53.05	4571.978	4625.011	-53.0333
1/3/2022	4,651.25	0.00	26.95	1.053418	51.30	4584.174	4626.955	-42.7812
1/4/2022	4,621.70	0.00	29.55	0.975331	49.38	4589.947	4626.566	-36.6187
1/5/2022	4,558.45	0.00	63.25	0.832997	45.44	4585.101	4621.52	-36.4187
1/6/2022	4,489.15	0.00	69.30	0.710632	41.54	4570.339	4611.715	-41.3753
1/7/2022	4,516.70	27.55	0.00	0.773523	43.62	4562.087	4604.677	-42.5894
1/10/2022	4,465.80	0.00	50.90	0.687495	40.74	4547.274	4594.389	-47.1156
1/11/2022	4,516.55	50.75	0.00	0.806913	44.66	4542.547	4588.624	-46.0765
1/12/2022	4,492.90	0.00	23.65	0.761289	43.22	4534.909	4581.533	-46.6239
1/13/2022	4,590.05	97.15	0.00	1.011419	50.28	4543.392	4582.164	-38.7716
1/14/2022	4,616.60	26.55	0.00	1.085035	52.04	4554.655	4584.715	-30.0597
1/17/2022	4,630.35	13.75	0.00	1.126093	52.97	4566.3	4588.095	-21.7947
1/18/2022	4,527.15	0.00	103.20	0.845503	45.81	4560.277	4583.581	-23.3034
1/19/2022	4,481.50	0.00	45.65	0.755792	43.05	4548.158	4576.019	-27.8614
1/20/2022	4,329.75	0.00	151.75	0.547738	35.39	4514.557	4557.777	-43.2204
1/21/2022	4,179.40	0.00	150.35	0.423382	29.74	4462.994	4529.749	-66.7551
1/24/2022	4,056.60	0.00	122.80	0.352907	26.09	4400.472	4494.701	-94.2291
1/25/2022	4,049.20	0.00	7.40	0.349136	25.88	4346.43	4461.701	-115.271
1/27/2022	3,939.85	0.00	109.35	0.298389	22.98	4283.879	4423.045	-139.166

/28/2022	3,940.70	0.85	0.00	0.299606	23.05	4231.082	4387.316	-156.234
1/31/2022	4,036.10	95.40	0.00	0.446672	30.88	4201.085	4361.3	-160.215
2/1/2022	4,108.35	72.25	0.00	0.566618	36.17	4186.818	4342.563	-155.745
2/2/2022	4,219.65	111.30	0.00	0.765606	43.36	4191.869	4333.458	-141.589
2/3/2022	4,262.45	42.80	0.00	0.848013	45.89	4202.728	4328.198	-125.471
2/4/2022	4,304.50	42.05	0.00	0.935203	48.33	4218.385	4326.443	-108.058
2/7/2022	4,201.50	0.00	103.00	0.760329	43.19	4215.787	4317.188	-101.401
2/8/2022	4,277.55	76.05	0.00	0.909014	47.62	4225.289	4314.252	-88.9625
2/9/2022	4,329.45	51.90	0.00	1.018289	50.45	4241.314	4315.378	-74.0636
2/10/2022	4,313.75	0.00	15.70	0.983285	49.58	4252.458	4315.257	-62.799
2/11/2022	4,291.25	0.00	22.50	0.933746	48.29	4258.426	4313.479	-55.0527
2/14/2022	4,277.90	0.00	13.35	0.904625	47.50	4261.422	4310.843	-49.4212
2/15/2022	4,325.80	47.90	0.00	1.025135	50.62	4271.326	4311.951	-40.6248
2/16/2022	4,465.15	139.35	0.00	1.40269	58.38	4301.145	4323.299	-22.1539
2/17/2022	4,442.20	0.00	22.95	1.314656	56.80	4322.846	4332.107	-9.26063
2/18/2022	4,353.40	0.00	88.80	1.04212	51.03	4327.547	4333.684	-6.13731
2/21/2022	4,258.30	0.00	95.10	0.841036	45.68	4316.893	4328.1	-11.2066
2/22/2022	4,224.80	0.00	33.50	0.783671	43.94	4302.725	4320.448	-17.723
2/23/2022	4,181.60	0.00	43.20	0.715863	41.72	4284.09	4310.163	-26.0726
2/24/2022	3,936.65	0.00	244.95	0.468387	31.90	4230.638	4282.495	-51.8573
2/25/2022	4,138.35	201.70	0.00	0.774947	43.66	4216.44	4271.818	-55.3781
2/28/2022	4,265.00	126.65	0.00	0.982247	49.55	4223.911	4271.313	-47.4022
3/2/2022	4,160.90	0.00	104.10	0.829953	45.35	4214.217	4263.134	-48.9175
3/3/2022	4,160.45	0.00	0.45	0.829355	45.34	4205.945	4255.528	-49.583
3/4/2022	4,094.70	0.00	65.75	0.744824	42.69	4188.83	4243.615	-54.7845
3/7/2022	4,074.95	0.00	19.75	0.72105	41.90	4171.31	4231.121	-59.8108
3/8/2022	4,164.25	89.30	0.00	0.876472	46.71	4170.224	4226.168	-55.9436
3/9/2022	4,234.05	69.80	0.00	1.0073	50.18	4180.043	4226.752	-46.7081
3/10/2022	4,300.90	66.85	0.00	1.142238	53.32	4198.637	4232.244	-33.6073
3/11/2022	4,339.40	38.50	0.00	1.225929	55.07	4220.293	4240.182	-19.8889
3/14/2022	4,393.80	54.40	0.00	1.353279	57.51	4246.986	4251.561	-4.57458
3/15/2022	4,386.25	0.00	7.55	1.328001	57.04	4268.411	4261.538	6.873649
3/16/2022	4,402.25	16.00	0.00	1.37063	57.82	4289.002	4271.961	17.04108
3/17/2022	4,504.35	102.10	0.00	1.663579	62.46	4322.132	4289.175	32.95755
3/21/2022	4,456.25	0.00	48.10	1.44832	59.16	4342.766	4301.551	41.21509
3/22/2022	4,448.55	0.00	7.70	1.416717	58.62	4359.04	4312.44	46.60074
3/23/2022	4,553.55	105.00	0.00	1.737159	63.47	4388.965	4330.3	58.66528
3/24/2022	4,494.65	0.00	58.90	1.455419	59.27	4405.224	4342.474	62.75042
3/25/2022	4,454.15	0.00	40.50	1.299369	56.51	4412.751	4350.746	62.00516
3/28/2022	4,416.55	0.00	37.60	1.173563	53.99	4413.336	4355.62	57.71522
3/29/2022	4,561.60	145.05	0.00	1.575801	61.18	4436.146	4370.878	65.26738
3/30/2022	4,538.60	0.00	23.00	1.47452	59.59	4451.908	4383.302	68.60576
3/31/2022	4,402.05	0.00	136.55	1.045064	51.10	4444.237	4384.691	59.5466



**Source: Tradingview** 

A 14-day RSI is calculated for stock. It is recommended by wilder than a 14 period will be a good momentum indicator. By using the simple formula RSI = {100- [100 / (1+RS)]}. Traditionally RSI of below 30 indicates buying & ifit crosses above 70 indicates selling. From 1<sup>ST</sup> April 2021 to 31st March 2022, the RSI is calculated; the best time to buy the stock was between 24<sup>TH</sup> January to 31<sup>st</sup> January since the RSI was close to 30 & the best time to sell the stock was between 28<sup>th</sup> April to 3rd of May since the RSI was above 75 during that time.

TECHNICAL ANALYSIS USING CANDLE STICK



**Source: Tradingview** 

Japanese Candle Stick is used to analyse the pattern of stock movement. Candle is same as bar chart but the colour is different red candle is used to indicate the bearish trend and green candle is an indicator of bullish trend Japanese candle use the historical prices of a stock in the prescribed manner i.e., Open, High, Low, Close. The size of the candle is known by its magnitude of open and close, and the size of the shadow is known by high and close. In the above Candle Stick Chart, it is clear that Stock Price of DIVIS LABS has increased initially then started showing downtrend from the month of November. Currently it is in sideways trend. Here, as far as Divis Labs is concerned, sideways market trend is taking place. It is a right time for the partial buying of the Scrip.

#### **EMA**



**Source: Tradingview** 

In this picture, we can see that Exponential Moving Averages, which is in yellow, blue and black line shows 5 days, 8 days and 13 days EMA respectively. The yellow line is below blue and black line shows that market is bearish on this stock and the last 7-8 candlesticks also showing the same result and is dominated by bearish only. Best time to purchase in when yellow line cut blue line from bottom steeply around 10 Februry.

#### **MACD**



In this MACD indicator chart. I have chosen criteria as 12 days moving average and 26 days moving average for the MACD period and 9 days for the signal period in this chart, the black line shows MACD and the red line shows signal. It is clearly shown that the MACD line is a in downward trend it is under the signal line but very close to the signal line which means that the sell signal is strong but the trend can be changed. Best time to purchase this stock according to MACD was on around 5-6 Februry when blue line cuts red line.

#### **VOLUME CHART**



Source: Tradingview

In this Fig., we can see the volume chart of SUN Pharma is showing mix signal as domination by both red and blue colour bars. The Blue Color bar is an indication of UP volume Red shows down the volume. From this indicator, we can see a little bullishness in trend as volume are increasing.

#### **Bollinger Band**



Source: Tradingview

There are three lines that compose Bollinger Bands: A simple moving average (middle band) and an upper and lower band. The upper and lower bands are typically two standard deviations +/- from a 20-day simple moving average. This chart shows that the closing price is closer to the lower band. The closer the prices move to the lower band, the more oversold the market. This is showing a downtrend. But the last few candles are closer to the middle line expecting the trend might be changed in future.

#### **FINDINGS AND CONCLUSION**

- 1. In the case of the RSI of SUN PHARMA, the best time to sell the stock was between 29th November to 2<sup>nd</sup> December since the RSI was close to 30 & the best time to sell the stock was between 30<sup>th</sup> July to 8<sup>th</sup> of August since the RSI was above 75 during that time.
- 2. In the case of Divis Labs, the best time to buy the stock was between 24<sup>TH</sup> January to 31<sup>st</sup> January since the RSI was close to 30 & the best time tosell the stock was between 28<sup>th</sup> April to 3rd of May since the RSI was above 75 during that time.
- 3. It was also observed that the RSI value for Sun Pharma was never below 30 for the entire duration considered.
- 4. Indian Economy is consistently achieving tremendous growth in the Pharma sector also due to the Covid-19 outbreak.
- 5. Divis Laboratory trend is similar to pharma sector trend but Sun Pharma company performing better than the peers in last 4-5 months.
- 6. Overall, Industry performance is not good in the last 3-4 months.

#### **REFERENCE**

- 1. Adam, T. R., and Chitru, F. S. (2006). Hedging, speculation and shareholder value. *Journal of Financial Economics*, 8, 283-309.
- 2. Adis, Warren (2007). A risk modelling framework for the pharmaceutical industry. *Communication of IIMA*, 7.
- 3. Alexander, Carol (2009). Practical financial econometrics. London: John Wiley & Sons, Ltd.
- 4. Annavarapu Sridivya (2015, December 31st), Slide Share.net. The Indian government has started to encourage the growth of drug manufacturing by Indians. Retrieved from http://www.slideshare.net/sridivyaannavarapu/present-scenario-of-indian-pharmaceutical-industry-inview-of-global-market, August 1st, 2016.
- 5. Anthony, L. What is a market-based pricing strategy? Small Business Chron.com. Retrieved from http://smallbusiness.chron.com/market-based-pricing-strategy-5121.html, May 21st, 2015.
- 6. Aurobindo Pharma Ltd., NSE India. Retrieved from https://www.google.com/finance?cid=5362129, May 23rd, 2015.
- 7. Aurobindo Pharma Ltd., Money Control. Retrieved from http://www.moneycontrol.com/financials/aurobindopharm/consolidated-ratios/AP, April 13th, 2015.
- 8. Aurobindo Pharma Ltd., Money Control. Retrieved from http://www.moneycontrol.com/competition/aurobindopharma/comparwason/AP#AP, April 13th, 2015.
- 9. Aurobindo Pharma, Money Control. Retrieved from http://www.moneycontrol.com/india/stockpricequote/pharmaceuticals/aurobindopharma/AP April 15th, 2015.
- 10. Bollinger Bands, Stock charts. Retrieved from http://stockcharts.com/school/doku.php?id=chart\_school:technical\_indicators:bollinger\_bands, April 17th, 2015.