



Technical and Fundamental Analysis of Selected Securities

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Abstract

This study explores the technical and fundamental analysis of selected securities in the Indian banking sector, focusing on Kotak Mahindra Bank, Bank of Baroda, State Bank of India (SBI), HDFC Bank, and ICICI Bank. Fundamental analysis evaluates financial health through key metrics such as earnings per share (EPS), dividend payouts, and liquidity ratios, while technical analysis examines price trends using indicators like Exponential Moving Averages (EMA), Moving Average Convergence Divergence (MACD), and Signal values. The study reveals that fundamental analysis provides insights into long-term investment potential, whereas technical analysis aids in short-term market predictions. Findings indicate that integrating both methods enhances investment decision-making by balancing risk and return. This research contributes to understanding security price behaviour and assists investors in developing more informed and strategic approaches in dynamic financial markets.

I. INTRODUCTION

Security analysis is the analysis of traceable financial instruments called securities. These can be classified into debt securities, equities, or some hybrid of the two. More broadly, futures contracts and traceable credit derivatives are sometimes included. Security analysis is typically divided into fundamental analysis, which relies upon the examination of fundamental business factors such as financial statements, and technical analysis, which focuses upon price trends and momentum. Quantitative analysis may use indicators from both areas.

In finance, technical analysis is security analysis discipline for forecasting the direction of prices through the study of past market data, primarily price and volume. Behavioral economics and quantitative analysis build on and incorporate many of the same tools of technical analysis, which, being an aspect of active management, stands in contradiction to much of modern portfolio theory. The efficacy of both technical and fundamental analysis is disputed by efficient-market hypothesis

which states that stock market prices are essentially unpredictable.

Fundamental analysis of a business involves analyzing its financial statements and health, its management and competitive advantages, and its competitors and markets. When applied to futures and forex, it focuses on the overall state of the economy, interest rates, production, earnings, and management. When analyzing a stock, futures contract, or currency using fundamental analysis there are two basic approaches one can use; bottom up analysis and top down analysis. The term is used to distinguish such analysis from other types of investment analysis, such as quantitative analysis and technical analysis.

II. OBJECTIVES OF THE STUDY

The basic idea behind undertaking security forecast project is to gain knowledge about technical analysis.

- To study the basic concept of technical analysis for selected companies.
- To study trends of selected securities.
- To understand the practical considerations and ways of considering Security price.
- To analyze different security performance using technical analysis.
- To manage the security forecasting prices.

SCOPE OF THE STUDY

This study explores the performance and investment potential of selected securities using both technical and fundamental analysis. It looks at price trends, patterns, and trading volumes with tools like moving averages and RSI, while also assessing financial health, industry conditions, and broader economic factors. By combining both approaches, the research aims to give investors a clearer picture of market trends, helping them make smarter investment decisions in an ever-changing financial landscape.



LIMITATIONS OF THE STUDY

- The analysis was purely based on the secondary data. So, any error in the secondary data might also affect the study undertaken.
- Technical analysis is new concept and topic related book was not available in library and market.
- This study has been conducted purely to understand Equity analysis for investors.
- The study is restricted to three companies based on technical analysis.
- The study is limited to the companies having equities.
- Detailed study of the topic was not possible due to limited size of the project.
- There was a constraint with regard to time allocation for the research study i.e. for a period of 45 days.
- Suggestions and conclusions are based on the limited data.

III. RESEARCH METHODOLOGY

Security analysis

Basic Security forecast methods: Technical analysis and fundamental analysis

This article provides insight into the two major methods of analysis used to forecast the behavior of the Security market. Technical analysis and fundamental analysis differ greatly, but both can be useful forecast tools for the Security trader. They have the same goal - to predict a price or movement. The technician studies the effect while the fundamentalist studies the cause of market movement. Many successful traders combine a mixture of both approaches for superior results.

RESEARCH DESIGN

My research project has a specified framework for collecting the data in an effective manner. Such framework is called "RESEARCH DESIGN". The

research process which was followed by me consisted of the following steps.

A. PROBLEM:

The problem at hand was to study and measure technical analysis of selected Banks.

B. DEVELOPING THE RESEARCH PLAN:

The development of Research Plan has the following Steps:

I. DATA SOURCES: Two types of data were taken into consideration i.e. Secondary data & primary data. My major emphasis was on gathering the secondary data. The secondary data has been used to make things clearer.

(i) Primary Data: Direct collection of data from the source of information, technology including personal interviewing, survey etc.

(ii) Secondary Data: Indirect collection of data from sources containing past or recent past information like Bank's Brochures, Annual publications, Books, Fact sheets of mutual funds, Newspaper & Magazines etc.

2. RESEARCH INSTRUMENT

3. SAMPLING PLAN

The sampling plan calls for three decisions.

a) Sampling Unit: Banking sector.

b) Sample Size: The sample consisted of 5 banking sectors 5 years' data

c) C. COLLECTING THE INFORMATION

After this, I have collected the information from the money.rediff.com websites

D. ANALYZE THE INFORMATION

The next step is to extract the pertinent findings from the collected data. I have tabulated the collected data & developed frequency distributions. Thus, the whole data was grouped aspect wise and was presented in tabular form. Thus, frequencies & percentages were prepared to render impact of the study.

E. STATISTICAL TOOLS

Adjusted EPS

Dividend per share

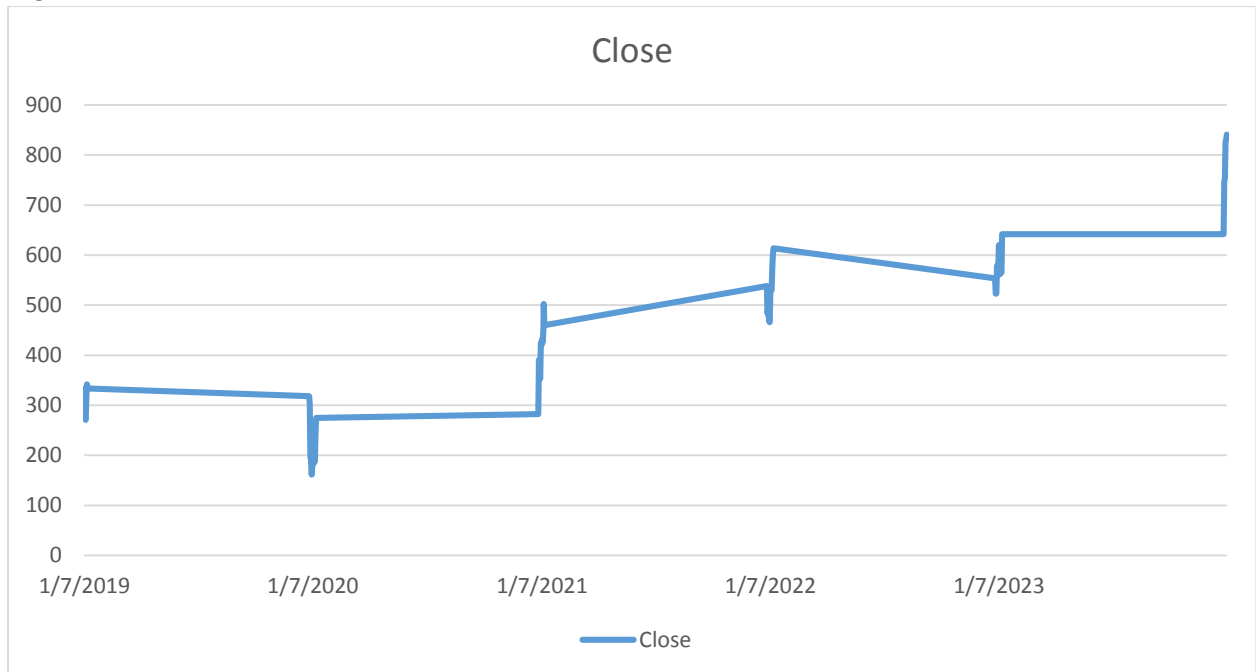
Quick ratio



IV. DATA ANALYSIS

TECHNICAL ANALYSIS

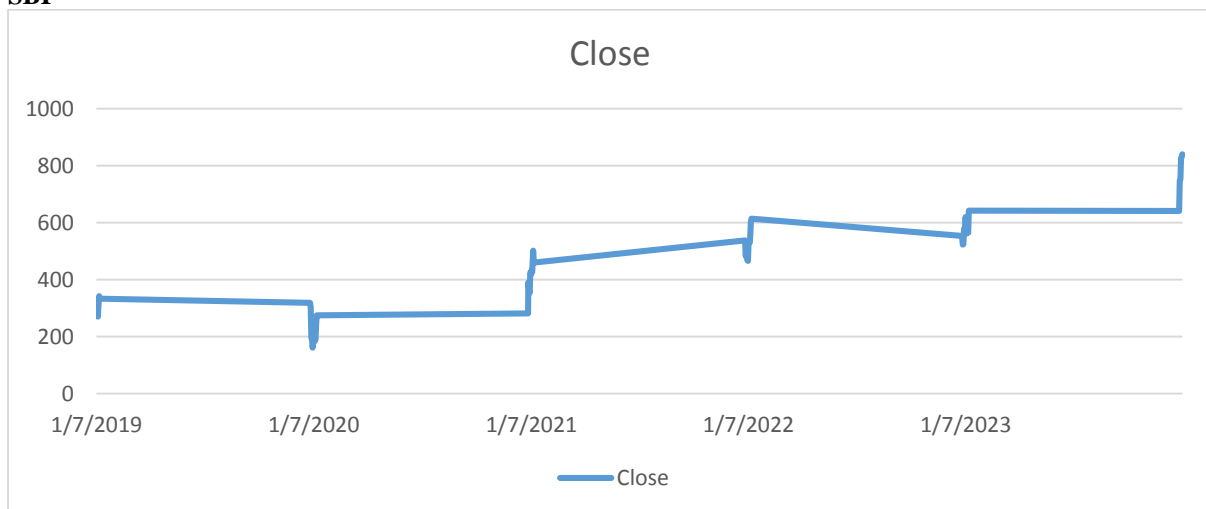
KOTAK



INTERPRETATION: The data tracks Bank of Baroda's daily closing prices from January 2019 to June 2024, along with key technical indicators like the 12-day and 26-day Exponential Moving Averages (EMA), MACD, and Signal values. The 12-day EMA (short-term trend) appears from June 2020, followed by the 26-day EMA (long-term trend). MACD, derived from their difference, indicates momentum—positive values suggest

bullish trends, while negative values signal bearish trends. The Signal line (a 9-day EMA of MACD) helps identify buy/sell signals. Key trends include a strong bullish phase in early 2021, a bearish phase in late 2022 to early 2023, and market volatility in mid-2023. Towards the end of the dataset, rising prices and positive MACD suggest renewed bullish momentum. These indicators help analyse stock performance and identify trading opportunities.

SBI



INTERPRETATION: The data tracks SBI's daily closing prices from January 2019 to June 2024,

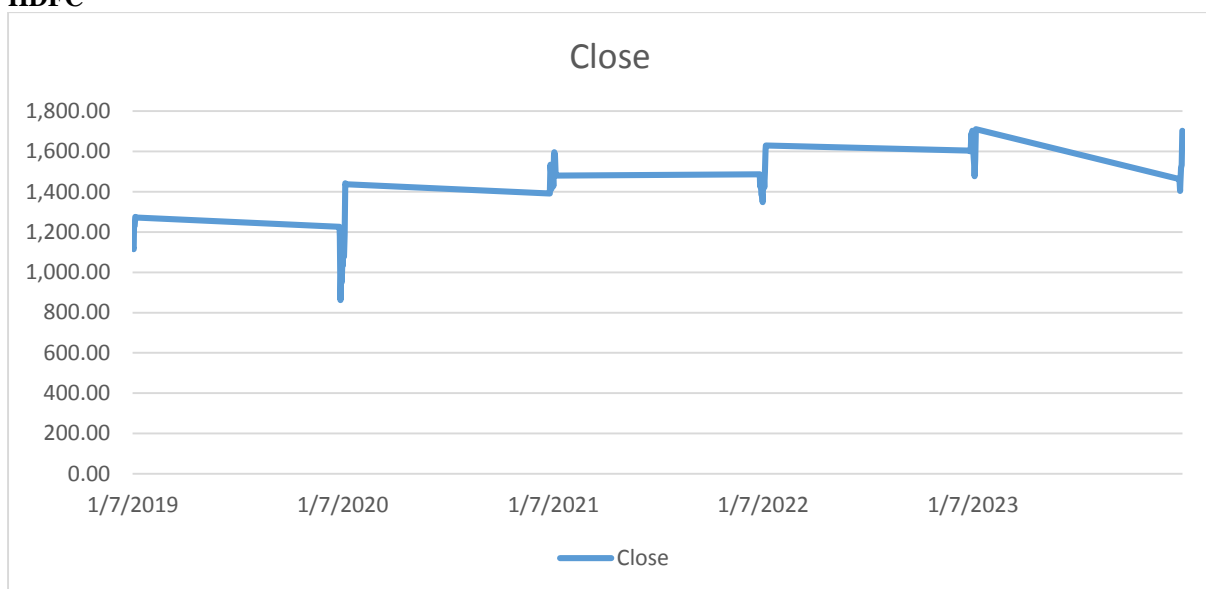
along with key technical indicators like the 12-day and 26-day Exponential Moving Averages (EMA),



MACD, and Signal values. Initially, only closing prices are recorded, but from mid-2020, short-term (12-day) and long-term (26-day) EMA values are added, helping to identify trends. The MACD, derived from these EMAs, signals market momentum—positive values indicate bullish trends, while negative values suggest bearish trends. The Signal line, a 9-day EMA of the MACD, helps identify buy and sell signals. Key trends emerge: A strong bullish phase starts in early 2021, peaking in

mid-2022 around 613.7. By late 2022, the MACD declines, signalling a bearish shift, though prices remain relatively high. Mid-2023 sees market volatility with mixed trends. By late 2023 and into 2024, prices rise again, confirming renewed bullish momentum. Throughout, the 12-day EMA staying above the 26-day EMA during uptrends reinforces the overall direction. This analysis highlights how EMA, MACD, and Signal values help interpret stock trends and identify trading opportunities.

HDFC

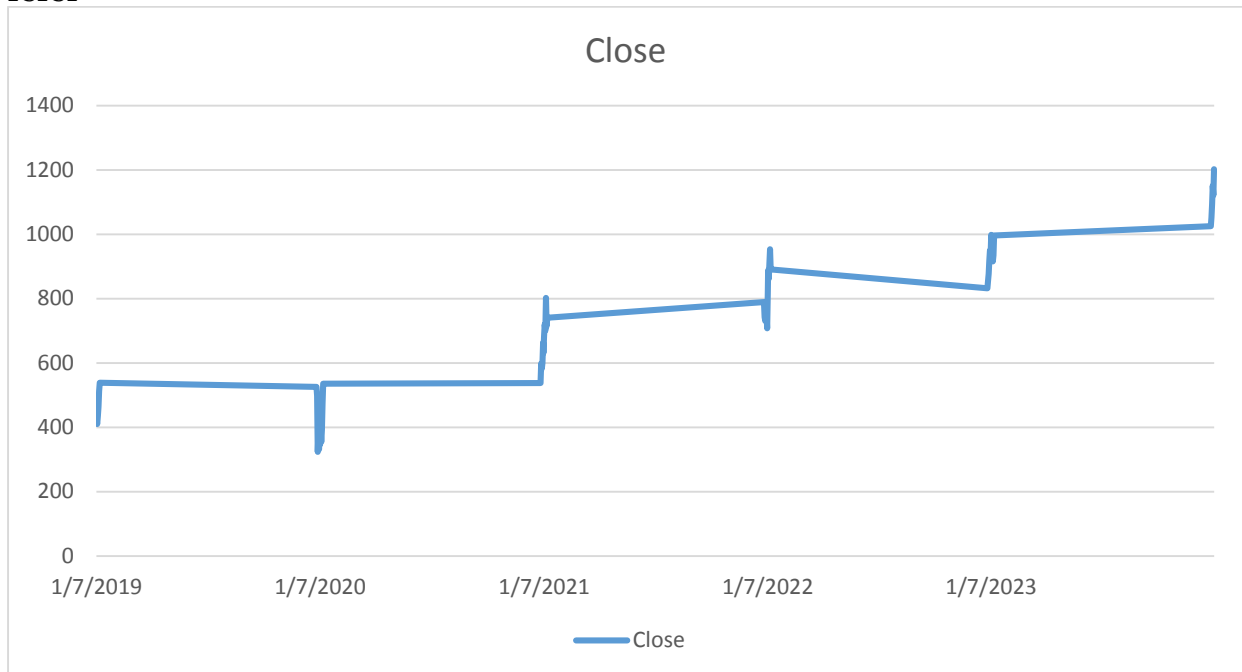


INTERPRETATION: The data tracks HDFC's daily closing prices along with 12-day and 26-day EMAs, MACD, and Signal values from January 2019 to June 2024. Initially, only closing prices are listed, with EMAs appearing from June 2020. The 12-day EMA shows short-term trends, while the 26-day EMA captures long-term trends. MACD, the difference between these EMAs, indicates momentum—positive values signal bullish trends, while negative values suggest bearish trends. The Signal line, a 9-day EMA of MACD, helps identify buy (crossing above) and sell (crossing below) signals. In early 2021, HDFC's stock saw a strong

bullish trend with rising prices and peak MACD values. This momentum continued through the year but started declining in early 2022, leading to a bearish phase by mid-2022. Market volatility followed in 2023, with MACD fluctuating between positive and negative values. By mid-2023, the MACD turned positive again, signalling renewed bullish momentum, which lasted until mid-2024 when short-term bearish trends appeared. Overall, the EMAs, MACD, and Signal values provide valuable insights into stock trends, helping traders identify potential buy and sell opportunities based on shifts in momentum.



ICICI



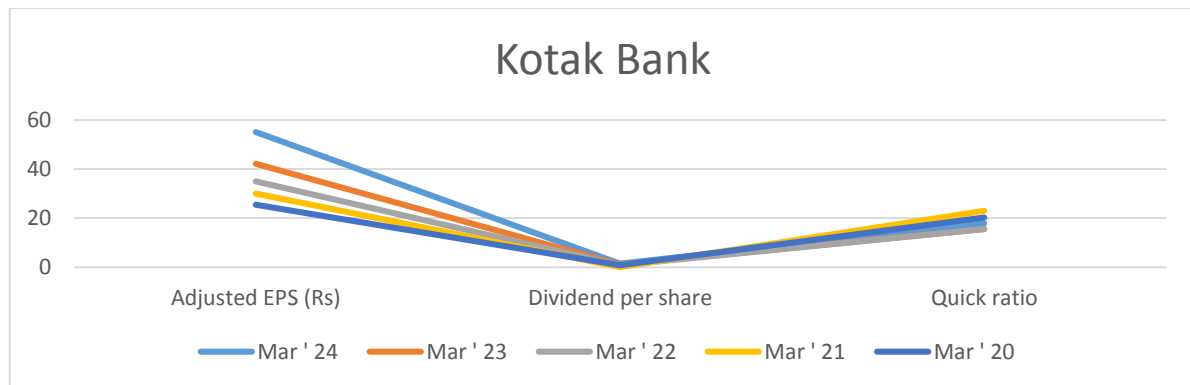
INTERPRETATION: The data tracks ICICI Bank's daily closing prices from January 2019 to June 2024, along with key technical indicators: the 12-day and 26-day Exponential Moving Averages (EMA), MACD, and Signal values. The 12-day EMA reflects short-term trends, while the 26-day EMA represents longer-term trends. MACD, derived from their difference, indicates momentum—positive values suggest bullish trends, and negative values indicate bearish trends. The Signal line, a 9-day EMA of the MACD, helps identify buy and sell signals. Key trends emerge: In early 2021, closing prices surge, with MACD

peaking, confirming a strong bullish phase. Prices remain high through 2021, peaking at 802.05 by mid-year. In early 2022, the MACD declines, signalling a bearish trend, turning negative by mid-2022 and continuing into early 2023. Market volatility is evident with fluctuating MACD values. However, mid-2023 sees a bullish reversal, confirmed by rising closing prices and increasing EMA values. By mid-2024, the MACD remains positive, reflecting strong bullish momentum. Overall, the EMA, MACD, and Signal values effectively capture stock trends, momentum shifts, and potential trading opportunities.

FUNDAMENTAL ANALYSIS

KOTAK BANK

Per share ratios	Mar ' 24	Mar ' 23	Mar ' 22	Mar ' 21	Mar ' 20
Adjusted EPS (Rs)	55.07	42.09	34.94	30.08	25.49
Dividend per share	1.50	1.10	0.90	-	0.80
Quick ratio	17.85	15.57	15.6	23.01	20.24

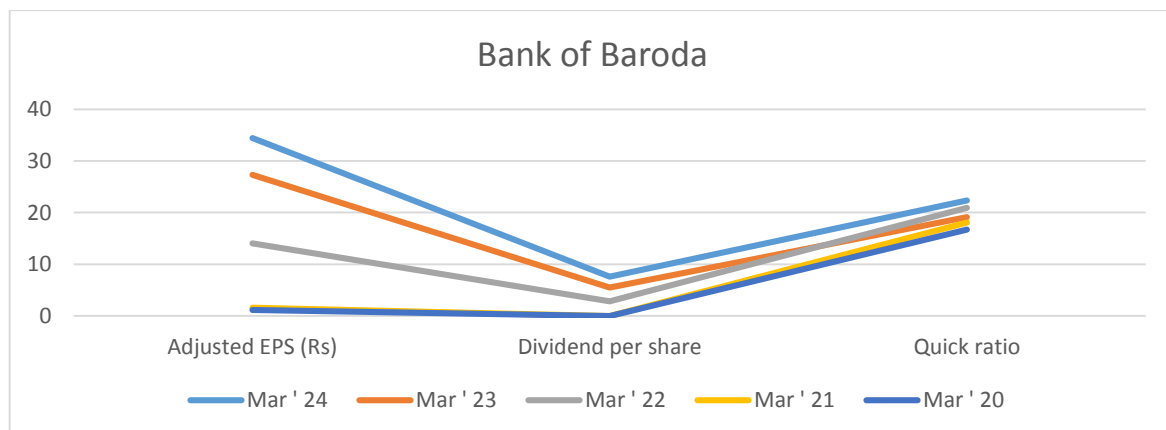


INTERPRETATION: -Kotak Bank has shown strong financial growth in recent years, with earnings and dividends steadily rising. Its Adjusted EPS grew from ₹25.49 in 2020 to ₹55.07 in 2024, reflecting solid profitability. Dividends also increased from ₹0.80 to ₹1.50, despite no payout in

2021. The bank's quick ratio, which measures short-term liquidity, peaked at 23.01 in 2021 before stabilizing between 15.57 and 17.85. With ample liquid assets and a consistent upward trend in earnings, Kotak Bank remains financially strong and continues to enhance shareholder value.

BANK OF BARODA

Per share ratios	Mar '24	Mar '23	Mar '22	Mar '21	Mar '20
Adjusted EPS (Rs)	34.4	27.28	14.06	1.6	1.18
Dividend per share	7.60	5.50	2.85	-	-
Quick ratio	22.37	19.12	20.94	18.09	16.7



INTERPRETATION: -Bank of Baroda's per-share ratios show a significant improvement, particularly in earnings and dividends, indicating a strong upward trend in its financial performance. The Adjusted Earnings Per Share (EPS) increased substantially from ₹1.18 in 2020 to ₹34.4 in 2024. This growth trajectory, especially the jump from ₹1.6 in 2021 to ₹14.06 in 2022 and further to ₹27.28 in 2023, suggests the bank has made substantial progress in enhancing profitability and operational efficiency. Dividend per share has also followed an upward trend, rising from ₹2.85 in

2022 to ₹7.60 in 2024. This growing dividend payout reflects the bank's improved financial health and commitment to providing greater returns to shareholders. The lack of dividend payments in 2020 and 2021 indicates that the bank may have been reinvesting profits to strengthen its position before resuming payouts. The quick ratio, representing the bank's capacity to cover short-term obligations, remains high and has shown steady growth from 16.7 in 2020 to 22.37 in 2024. This strong quick ratio indicates Bank of Baroda's strong liquidity position, ensuring it can meet immediate

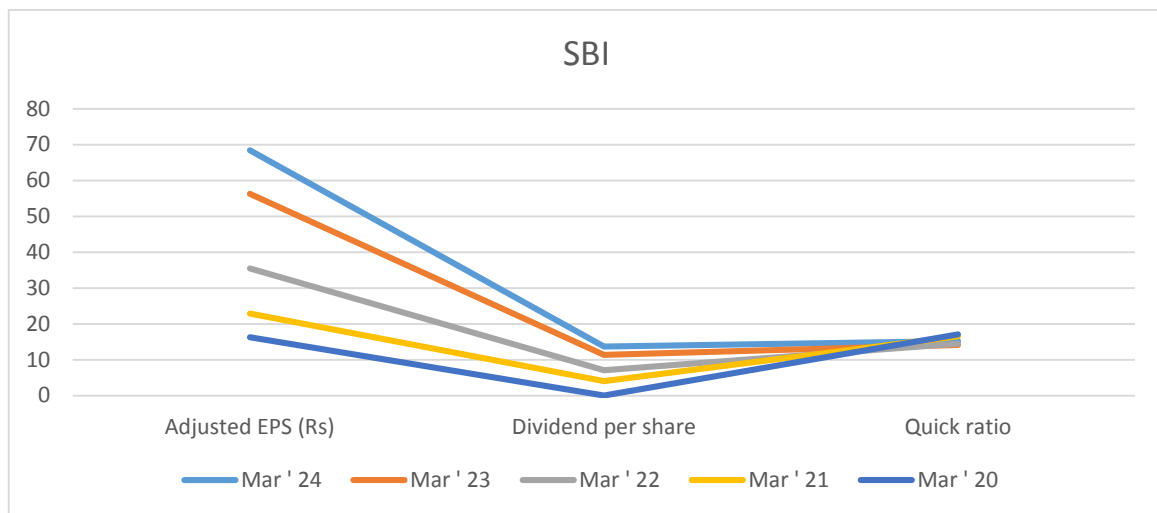


liabilities. Overall, these ratios depict a bank on a growth path, with improving profitability, increased

shareholder returns, and a solid liquidity buffer, signaling financial strength and stability.

SBIBANK

Per share ratios	Mar ' 24	Mar ' 23	Mar ' 22	Mar ' 21	Mar ' 20
Adjusted EPS (Rs)	68.44	56.29	35.49	22.87	16.23
Dividend per share	13.70	11.30	7.10	4.00	-
Quick ratio	15.17	14.11	14.49	16.56	17.05

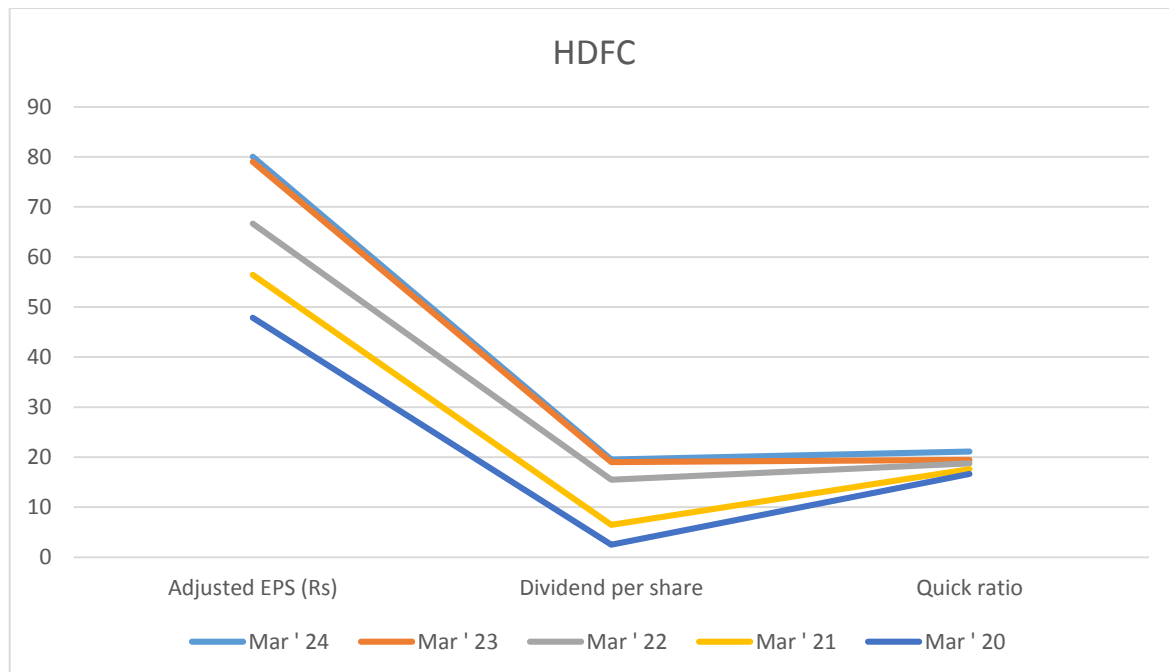


INTERPRETATION: -SBI has shown strong financial growth in recent years. Its Adjusted EPS rose from ₹16.23 in 2020 to ₹68.44 in 2024, reflecting higher profitability and improved shareholder value. Dividends per share also increased from ₹4.00 in 2021 to ₹13.70 in 2024, highlighting the bank's commitment to rewarding

investors. The absence of dividends in 2020 suggests a reinvestment phase that later led to strong payouts. SBI's liquidity remains stable, with its quick ratio fluctuating slightly from 17.05 in 2020 to 15.17 in 2024, ensuring it can meet short-term obligations. Overall, the bank maintains steady growth, strong returns, and financial stability.

HDFCBANK

Per share ratios	Mar ' 24	Mar ' 23	Mar ' 22	Mar ' 21	Mar ' 20
Adjusted EPS (Rs)	80.05	79.05	66.65	56.44	47.89
Dividend per share	19.50	19.00	15.50	6.50	2.50
Quick ratio	21.14	19.48	18.77	17.58	16.62

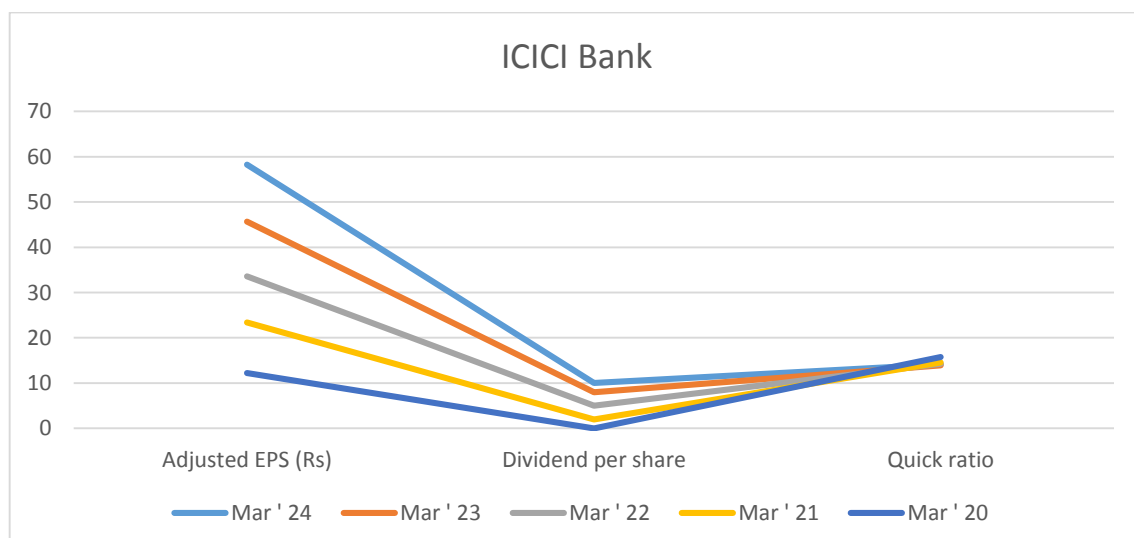


INTERPRETATION: -HDFC Bank has shown strong and stable performance over the past five years. Its Adjusted EPS grew consistently from ₹47.89 in 2020 to ₹80.05 in 2024, reflecting steady profitability. Dividends per share also saw a sharp rise from ₹2.50 to ₹19.50, emphasizing the bank's

commitment to rewarding shareholders. The quick ratio improved from 16.62 to 21.14, ensuring strong liquidity. With solid earnings growth, increasing dividends, and a healthy liquidity position, HDFC Bank remains a resilient and reliable investment choice.

ICICI BANK

Per share ratios	Mar '24	Mar '23	Mar '22	Mar '21	Mar '20
Adjusted EPS (Rs)	58.23	45.68	33.59	23.41	12.25
Dividend per share	10.00	8.00	5.00	2.00	-
Quick ratio	14.15	13.94	14.26	14.52	15.76





INTERPRETATION: -ICICI Bank has shown strong growth in profitability, dividends, and liquidity. Its Adjusted EPS surged from ₹12.25 in 2020 to ₹58.23 in 2024, with a notable jump between 2021 and 2023, reflecting successful expansions and cost management. Dividends per share grew from ₹2.00 in 2021 to ₹10.00 in 2024, signaling financial strength and shareholder rewards after a reinvestment phase in 2020. Liquidity remains stable, with the quick ratio staying above 1, ensuring the bank can meet short-term liabilities. Overall, ICICI Bank's strong financials and steady growth make it a solid investment choice.

V. FINDINGS

- The given data captures the daily closing prices of Kotak Mahindra Bank along with the calculated 12-day and 26-day Exponential Moving Averages (EMA), Moving Average Convergence Divergence (MACD), and Signal values over a period spanning from January 2019 to June 2024.
- The provided data captures the daily closing prices of Bank of Baroda along with the calculated 12-day and 26-day Exponential Moving Averages (EMA), Moving Average Convergence Divergence (MACD), and Signal values from January 2019 to June 2024.
- The provided data details the daily closing prices of State Bank of India (SBI) along with the calculated 12-day and 26-day Exponential Moving Averages (EMA), Moving Average Convergence Divergence (MACD), and Signal values from January 2019 to June 2024.
- The provided data tracks the daily closing prices of HDFC along with the calculated 12-day and 26-day Exponential Moving Averages (EMA), Moving Average Convergence Divergence (MACD), and Signal values from January 2019 to June 2024.
- The provided data tracks the daily closing prices of ICICI Bank, alongside the calculated 12-day and 26-day Exponential Moving Averages (EMA), Moving Average Convergence Divergence (MACD), and Signal values from January 2019 to June 2024.

VI. CONSLUTION

In conclusion, the technical and fundamental analysis of selected securities offers valuable insights for making informed investment decisions. Fundamental analysis evaluates a security's intrinsic value, examining financial statements, industry trends, and macroeconomic

factors to assess long-term growth potential. This approach identifies fundamentally strong companies that are likely to perform well over time, even during market volatility. Conversely, technical analysis focuses on price patterns, trading volumes, and historical data to predict short-term price movements. This method is particularly useful for identifying entry and exit points based on market sentiment and investor behavior. Together, these analyses create a balanced investment strategy: fundamental analysis helps in selecting fundamentally sound securities, while technical analysis assists in timing investments. Integrating both methods enables investors to mitigate risks, maximize returns, and achieve a diversified portfolio tailored to specific risk tolerances and time horizons. This dual approach enhances strategic investment decision-making in today's dynamic financial markets.

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