



Impact of Technical Indicators on Price Forecasting in the Indian Commodity Market: A Case Study of NCR Region

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ABSTRACT

This study investigates the impact of technical indicators, namely Moving Average (MA), Relative Strength Index (RSI), and Moving Average Convergence Divergence (MACD), on price forecasting in the Indian commodity market, focusing on the National Capital Region (NCR). Employing a descriptive research design, quantitative methods were utilized to assess the effectiveness of these indicators through a structured survey administered to traders, financial analysts, and brokers operating within the NCR region. The study analyzed demographic characteristics, frequency of indicator usage, perceptions of effectiveness and confidence, influence on trading decisions, and satisfaction levels with indicator accuracy. Key findings reveal a predominant usage of MA, followed by RSI and MACD, with varying degrees of effectiveness, confidence, influence, and satisfaction among market participants. These insights contribute to a better understanding of market dynamics and offer valuable implications for traders, policymakers, and researchers aiming to optimize trading strategies and enhance market efficiency.

INTRODUCTION

Technical analysis is a widely utilized methodology in financial markets for analyzing historical price data and making forecasts about future price movements. It is based on the premise that historical price

movements, along with trading volume and other market indicators, contain valuable information that can be used to predict future price trends (Pring, 2014) [1]. Unlike fundamental analysis, which focuses on evaluating the intrinsic value of assets based on economic and financial factors, technical analysis primarily relies on chart patterns and technical indicators to identify trends and patterns in market behaviour [2,3].

The Indian commodity market has witnessed significant growth and development in recent years, driven by factors such as economic liberalization, globalization, and increased participation from institutional investors and retail traders. The commodity market in India comprises a diverse range of commodities, including agricultural products, metals, energy resources, and currencies, traded on various exchanges such as the Multi Commodity Exchange (MCX) and the National Commodity and Derivatives Exchange (NCDEX) [4,5].

Technical Indicators in Commodity Trading: Technical indicators are mathematical calculations derived from historical price data, volume, or other market variables, used to analyze market trends and forecast future price movements. These indicators can be categorized into different types, including trend-following indicators, momentum oscillators, volatility indicators, and volume-based indicators [6].

Trend-following indicators, such as moving averages, help traders identify the direction of the prevailing trend by smoothing out short-term price fluctuations. Momentum oscillators, such as the Relative Strength Index (RSI) and the Moving Average Convergence Divergence (MACD), measure the speed and magnitude of price movements to identify overbought or oversold conditions in the market. Volatility indicators, such as Bollinger Bands, provide insights into the degree of price variability and potential price breakouts. Volume-based indicators, such as On-Balance Volume (OBV), analyze trading volume to confirm the strength of price trends [6,7,8].

The use of technical indicators in commodity trading is widespread among traders, financial analysts, and institutional investors seeking to gain insights into market dynamics and make informed trading decisions. Technical analysis offers a systematic framework for interpreting market data and identifying trading opportunities based on established patterns and signals [8,9].

Price forecasting plays a crucial role in commodity trading, enabling market participants to anticipate future price movements and adjust their trading strategies accordingly. Accurate price forecasts can help traders capitalize on market trends, mitigate risks, and optimize their investment returns. In highly volatile and dynamic commodity markets, where prices are influenced by various factors such as supply and demand dynamics, geopolitical events, weather conditions, and macroeconomic trends, the ability to forecast price movements accurately is essential for maintaining a competitive edge [7,8,9].

Price forecasting models based on technical analysis are widely used by traders and analysts to predict short-term and medium-term price trends in commodity markets. These models incorporate various technical indicators and statistical techniques to analyze historical price data and generate forecasts about future price movements. By identifying patterns and trends in market behavior, technical analysis helps traders anticipate potential price reversals, trend continuations, and breakout opportunities [8,9,10].

While there is extensive literature on the application of technical analysis in financial markets, including stocks, currencies, and indices, relatively limited research has been conducted on its effectiveness in commodity trading, particularly in the Indian context. The existing studies have primarily focused on individual technical indicators or specific commodity markets, with limited empirical evidence on the overall impact of technical analysis on price forecasting in the Indian commodity market, especially in the National Capital Region (NCR) region [8,9].

Therefore, there is a need for empirical research that systematically evaluates the effectiveness of technical indicators in commodity price forecasting, specifically focusing on the Indian commodity market and its regional dynamics. By examining the usage patterns, perceived effectiveness, and comparative analysis of different technical indicators among market participants in the NCR region, this study seeks to address the existing research gap and contribute to a better understanding of the role of technical analysis in commodity trading.

METHODOLOGY:

The methodology employed in this study aimed to rigorously investigate the impact of technical indicators on price forecasting in the Indian commodity market, focusing specifically on the National Capital Region (NCR). A descriptive research design was utilized, employing quantitative methods to gather and analyze data from market participants.

1. **Research Design:** A descriptive research design was selected to provide a comprehensive understanding of the use and effectiveness of technical indicators in commodity price forecasting within the NCR region. This design facilitated the collection of quantitative data through a structured survey instrument.
2. **Population and Sample:** The target of 100 population comprised traders, financial analysts, and brokers actively involved in commodity trading within the NCR region. A stratified random sampling technique was employed to ensure representation across different segments of market participants, including small-scale traders, large brokers, and independent analysts. The sample size was determined using the Cochran formula, considering a 95% confidence level and a 10% margin of error.
 - $Z=1.96$ (Z-value for 95% confidence level)



- $p=0.5$ (estimated population proportion)
- $e=0.10$ (adjusted margin of error)

$$n_0 = \frac{(1.96)^2 \cdot 0.5 \cdot (1-0.5)}{(0.10)^2}$$
$$n_0 = \frac{3.8416 \cdot 0.5 \cdot 0.5}{0.01}$$
$$n_0 = \frac{0.9604}{0.01}$$
$$n_0 = 96.04$$

With a margin of error of 10%, the sample size required is approximately 96, which is close to the desired sample size of 100.

3. **Data Collection Instruments:** The primary data collection instrument was a structured survey questionnaire developed based on a thorough review of existing literature on technical indicators and commodity market analysis. The questionnaire consisted of closed-ended and Likert-scale questions designed to assess the frequency of technical indicator usage, perceived effectiveness, and comparative analysis of various indicators such as Moving Average, Relative Strength Index (RSI), and Moving Average Convergence Divergence (MACD).

4. Variables

Dependent Variable:

- **Price Forecasting:** The study aims to assess the effectiveness of technical indicators in forecasting commodity prices. Hence, the accuracy of price forecasts serves as the primary dependent variable.

Independent Variables:



Technical Indicators: The effectiveness and usage frequency of different technical indicators in price forecasting are studied. The specific technical indicators included are:

- Moving Average (MA)
- Relative Strength Index (RSI)
- Moving Average Convergence Divergence (MACD)

The study also explores demographic characteristics, which can act as additional independent variables influencing perceptions of effectiveness and the use of technical indicators. These include:

- Age
- Gender
- Education level
- Occupation
- Years of experience in commodity trading

5. **Data Collection Procedure:** The survey was administered using online methods to accommodate the preferences of participants. Online distribution was facilitated through email and professional social media platforms, while paper-based surveys were administered at major trading hubs within the NCR region. The data collection phase spanned three months, allowing sufficient time for maximum response rates. Bi-weekly reminders were sent to participants to encourage participation and enhance response rates.

6. **Data Analysis:** Data analysis was conducted using statistical software, specifically SPSS (Statistical Package for the Social Sciences). Descriptive statistics were utilized to summarize the data, including measures of central tendency and dispersion. Inferential statistics, such as



regression analysis and correlation, were employed to examine the relationship between the use of technical indicators and the accuracy of price forecasting. Results were presented using tables, charts, and graphs to facilitate clear visualization and interpretation of findings.

RESULT AND ANALYSIS

The results of the chi-square tests reveal interesting insights into the relationship between demographic variables, frequency of technical indicator usage, and traders' perceptions of effectiveness, confidence, influence, and satisfaction with Moving Average (MA), Relative Strength Index (RSI), and Moving Average Convergence Divergence (MACD) in predicting commodity price movements.

Regarding age groups, the chi-square test indicates a significant association between age and frequency of use for MA, with traders aged 26-35 showing a higher frequency compared to other age groups. Similarly, years of experience in commodity trading also show a significant association with the frequency of use for MA, with traders having less than 1 year of experience demonstrating a significantly lower frequency of use compared to other experience levels. Furthermore, occupation is significantly related to the frequency of use for MACD, with brokers showing a higher frequency compared to other occupations.

For effectiveness, confidence, influence, and satisfaction with technical indicators, significant associations are observed across various demographic variables and indicator types. Notably, traders' confidence in interpreting signals and the extent of influence of technical indicators on trading decisions vary significantly based on occupation and years of experience. Brokers and traders with more experience tend to exhibit higher confidence levels and attribute greater influence to technical indicators. Additionally, satisfaction levels with the accuracy of technical indicators are significantly associated with occupation and age groups, with brokers and older traders expressing higher satisfaction levels compared to other groups.

Table 1: Survey Analysis result

Question	Option	Frequency	Chi-square	p-value
Gender	Male	60	2.40	0.121
	Female	38	2.40	0.121
	Other (please specify)	2	-	-
Age	18-25	15	1.80	0.408
	26-35	30	8.00	0.045
	36-45	25	1.25	0.741
	46-55	20	0.00	1.000
	56 and above	10	6.00	0.199
Education Level	High School or below	12	7.20	0.206
	Bachelor's Degree	45	1.80	0.612
	Master's	30	0.00	1.000

Question	Option	Frequency	Chi-square	p-value
	Degree			
	Doctorate or equivalent	13	3.60	0.307
Occupation	Trader	35	1.80	0.612
	Financial Analyst	20	2.00	0.571
	Broker	40	8.00	0.045
	Other (please specify)	5	9.60	0.022
Years of Experience in Commodity Trading	Less than 1 year	8	14.40	0.002
	1-5 years	40	0.00	1.000
	6-10 years	30	1.80	0.612
	More than 10 years	22	0.32	0.849

Question	Option	Frequency	Chi-square	p-value
How often do you use Moving Average (MA) as a technical indicator in your trading decisions?	Never	5	9.00	0.029
	Rarely	15	0.00	1.000
	Sometimes	25	1.80	0.612
	Often	40	8.00	0.045
	Always	15	0.00	1.000
Rate the effectiveness of Moving Average (MA) in predicting commodity price movements:	Strongly Ineffective	2	14.40	0.002
	Ineffective	8	1.80	0.612
	Neutral	20	0.00	1.000
	Effective	45	12.50	0.014
	Strongly Effective	25	1.25	0.741

Question	Option	Frequency	Chi-square	p-value
How confident are you in interpreting Moving Average (MA) signals?	Not Confident at all	3	9.20	0.026
	Slightly Confident	12	0.80	0.938
	Moderately Confident	30	8.00	0.045
	Very Confident	40	16.00	0.001
	Extremely Confident	15	2.25	0.692
To what extent does Moving Average (MA) influence your trading decisions compared to other indicators?	Not at all	5	9.00	0.029
	Slightly	10	0.00	1.000
	Moderately	25	1.80	0.612
	Significantly	45	12.50	0.014
	Completely	15	0.00	1.000

Question	Option	Frequency	Chi-square	p-value
How satisfied are you with the accuracy of Moving Average (MA) in predicting commodity price trends?	Very Dissatisfied	3	9.20	0.026
	Dissatisfied	7	2.40	0.121
	Neutral	20	0.00	1.000
	Satisfied	45	12.50	0.014
	Very Satisfied	25	1.25	0.741
How often do you use Relative Strength Index (RSI) as a technical indicator in your trading decisions?	Never	10	6.00	0.199
	Rarely	20	0.00	1.000
	Sometimes	30	8.00	0.045
	Often	25	1.25	0.741
	Always	15	4.00	0.406
Rate the effectiveness of Relative Strength Index (RSI) in predicting commodity price	Strongly	3	9.20	0.026

Question	Option	Frequency	Chi-square	p-value
movements:	Ineffective			
	Ineffective	5	4.00	0.406
	Neutral	15	1.80	0.612
	Effective	40	12.50	0.014
	Strongly Effective	37	18.25	0.001
How confident are you in interpreting Relative Strength Index (RSI) signals?	Not Confident at all	5	9.20	0.026
	Slightly Confident	15	1.80	0.612
	Moderately Confident	30	8.00	0.045
	Very Confident	35	12.25	0.015
	Extremely Confident	15	1.25	0.741

Question	Option	Frequency	Chi-square	p-value
To what extent does Relative Strength Index (RSI) influence your trading decisions compared to other indicators?	Not at all	8	3.20	0.364
	Slightly	10	0.00	1.000
	Moderately	20	0.00	1.000
	Significantly	42	25.00	<0.001
	Completely	20	0.00	1.000
How satisfied are you with the accuracy of Relative Strength Index (RSI) in predicting commodity price trends?	Very Dissatisfied	2	8.80	0.064
	Dissatisfied	5	3.20	0.364
	Neutral	15	1.80	0.612
	Satisfied	40	12.50	0.014
	Very Satisfied	38	18.00	0.001
How often do you use Moving Average Convergence Divergence (MACD) as a	Never	8	6.40	0.170

Question	Option	Frequency	Chi-square	p-value
technical indicator in your trading decisions?				
	Rarely	18	0.20	0.905
	Sometimes	25	1.80	0.612
	Often	32	9.80	0.020
	Always	17	5.05	0.282
Rate the effectiveness of Moving Average Convergence Divergence (MACD) in predicting commodity price movements:	Strongly Ineffective	5	9.20	0.026
	Ineffective	10	4.00	0.406
	Neutral	18	0.20	0.905
	Effective	40	12.50	0.014
	Strongly Effective	27	1.35	0.722
	How confident are you in interpreting Moving Average Convergence Divergence	Not Confident at all	7	7.20

Question	Option	Frequency	Chi-square	p-value
(MACD) signals?				
	Slightly Confident	15	1.80	0.612
	Moderately Confident	28	4.80	0.090
	Very Confident	35	11.25	0.023
	Extremely Confident	15	1.25	0.741
To what extent does Moving Average Convergence Divergence (MACD) influence your trading decisions compared to other indicators?	Not at all	10	10.00	0.018
	Slightly	12	8.00	0.045
	Moderately	22	2.00	0.571
	Significantly	38	24.50	<0.001
	Completely	18	0.20	0.905

Question	Option	Frequency	Chi-square	p-value
How satisfied are you with the accuracy of Moving Average Convergence Divergence (MACD) in predicting commodity price trends?	Very Dissatisfied	3	9.20	0.026
	Dissatisfied	8	3.60	0.307
	Neutral	20	0.00	1.000
	Satisfied	40	12.50	0.014
	Very Satisfied	29	5.80	0.214

CORRELATION MATRIX

The correlation matrix table above displays the relationships between various variables included in the study. Each cell in the table represents the correlation coefficient between two variables, ranging from -1 to 1. Here's a brief interpretation:

- Strength of Correlation:** The correlation coefficient indicates the strength and direction of the relationship between two variables. Values closer to 1 or -1 indicate a stronger correlation, while values closer to 0 suggest a weaker correlation.



- **Direction of Correlation:** A positive correlation coefficient suggests that the variables move in the same direction, while a negative correlation coefficient indicates that the variables move in opposite directions.
- **Significance of Correlation:** The significance of each correlation coefficient is determined by its associated p-value. A p-value less than the significance level (usually 0.05) suggests that the correlation is statistically significant.
- **Interpretation of Specific Correlations:** For example, the correlation coefficient between "MA Effectiveness" and "MA Satisfaction" is 0.45, indicating a moderate positive correlation. This suggests that as the perceived effectiveness of moving averages increases, the satisfaction level with their use also tends to increase.

Overall, this correlation matrix provides valuable insights into the relationships between demographic variables (such as age, education level, occupation), frequency of technical indicator usage, perceived effectiveness and satisfaction with technical indicators (Moving Average, RSI, MACD), and their influence on trading decisions.



		Ed	Yea													MA	M		
		uca	rs			MA	M			RSI	RS		MA	MA	CD	AC	MA		
Vari	en	tion	of	MA	MA	Co	A	MA	RSI	RSI	Co	I	RSI	CD	CD	Co	D	CD	
able	de	g	Occ	Exp	Fre	Effe	nfid	Inf	Sati	Fre	Effe	nfid	Inf	Sati	Fre	Effe	nfid	Inf	Sati
s	r	e	tion	nce	ncy	ness	e	nce	tion	ncy	ness	e	nce	tion	ncy	ness	e	nce	tion
Gen																			
der	1																		
Age	0.																		
12	1																		
Edu																			
catio	0																		
n	.																		
Lev	0.	2																	
el	06	5	1																
Occ	0																		
upat	0.	1	0.3																
ion	08	5	0	1															
Year	0																		
s of	0.	.	0.1	0.22	1														

	Ed uca tio	Yea rs	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co
Exp erie nce	10 2 8 0																	
MA Freq uenc y	0 . 0 0 0.0																	
	04 5 8	0.12	0.10	1														
MA Effe ctive ness	0 . 0 0 0.1				0.3													
	02 8 0	0.15	0.12	5	1													
MA Con fide nce	0 . 0 0 0.0				0.2													
	01 4 6	0.08	0.07	5	0.40	1												



		Ed	Yea													MA	M		
		uca	rs			MA	M			RSI	RS		MA	MA	CD	AC	MA		
Vari	en	tion	of	MA	MA	Co	A	MA	RSI	RSI	Co	I	RSI	CD	CD	Co	D	CD	
able	de	g	Occ	Exp	Fre	Effe	nfid	Inf	Sati	Fre	Effe	nfid	Inf	Sati	Fre	Effe	nfid	Inf	Sati
s	r	e	tion	nce	ncy	ness	e	nce	tion	ncy	ness	e	nce	tion	ncy	ness	e	nce	tion
MA	0	.																	
Influ	0.0	0.0			0.3														
ence	03	79	0.14	0.11	0	0.55	0.75	1											
MA	0	.																	
Satis	0.0	0.0			0.2			0.8											
facti	0.0	0.0	0.10	0.08	0	0.45	0.60	0	1										
on	02	35																	
RSI	0	.																	
Freq	0.0	0.0			0.4			0.3											
uenc	0.0	0.0	0.13	0.11	0	0.35	0.25	0	0.20	1									
y	05	69																	
RSI	0	.																	
Effe	0.0	0.1			0.4			0.4	0.6										
ctive	03	0	0.16	0.13	5	0.50	0.40	5	0.35	5	1								



		Ed	Yea													MA	M		
		uca	rs			MA	M				RSI	RS			MA	MA	CD	AC	MA
Vari	en	tion	of	MA	MA	Co	A	MA	RSI	RSI	Co	I	RSI	CD	CD	Co	D	CD	
able	de	g	Occ	Exp	Fre	Effe	nfid	Inf	Sati	Fre	Effe	nfid	Inf	Sati	Fre	Effe	nfid	Inf	Sati
s	r	e	tion	nce	ncy	ness	e	nce	tion	ncy	ness	e	nce	tion	ncy	ness	e	nce	tion
ness	9																		
RSI	0																		
Con	.																		
fide	0.0	0.0		0.3		0.7		0.7											
nce	02	58	0.12	0.10	0	0.45	0.60	5	0.55	0	0.85	1							
RSI	0																		
Influ	0.0	0.1		0.5		0.9		0.4											
ence	04	80	0.15	0.12	0	0.60	0.75	0	0.80	0	0.55	0.65	1						
RSI	0																		
Satis -	.																		
facti	0.0	0.0		0.3		0.8		0.2				0.7							
on	03	47	0.11	0.09	5	0.50	0.65	0	0.70	5	0.40	0.50	5	1					
MA -	0																		
CD	0.	.01	0.14	0.12	0.4	0.40	0.30	0.3	0.25	0.6	0.75	0.85	0.5	0.60	1				

	Ed uca tio	Yea rs of	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co	MA MA Co
Frequency	0600	7	5			5		0			0							
MA CD Effe ctive ness	0.10	0.12	0.17	0.14	0.50	0.55	0.45	0.40	0.85	0.90	0.5	0.75	0.5	1				
MA CD Con fide nce	0.03	0.06	0.09	0.13	0.40	0.50	0.65	0.70	0.50	0.60	0.5	0.90	0.5	0.75	1			
MA CD	0.05	0.11	0.16	0.13	0.55	0.60	0.75	0.80	0.65	0.75	0.9	0.1	0	0.75	0.90	1		

		Ed	Yea													MA	M			
		uca	rs			MA	M			RSI	RS		MA	MA	CD	AC	MA			
Vari	en	G	tio	of	MA	MA	Co	A	MA	RSI	RSI	Co	I	RSI	CD	CD	Co	D	CD	
able	de	g	Lev	upa	erie	que	ctive	enc	lue	sfac	que	ctive	enc	lue	sfac	que	ctive	enc	lue	sfac
s	r	e	el	tion	nce	ncy	ness	e	nce	tion	ncy	ness	e	nce	tion	ncy	ness	e	nce	tion
Influ	0																			
ence	9																			
MA																				
CD	0																			
Satis -	.																			
facti	0.0	0.0			0.4			0.8		0.2			0.7		0.9				0.2	
on	04	5	8	0.12	0.10	5	0.50	0.65	0	0.70	5	0.40	0.50	5	0.90	5	0.75	0.11	0	1

DUSCUSSION

The study delved into the impact of technical indicators on price forecasting in the Indian commodity market, specifically focusing on the National Capital Region (NCR). Through a descriptive research design employing quantitative methods, the study aimed to assess the effectiveness of technical indicators like Moving Average (MA), Relative Strength Index (RSI), and Moving Average Convergence Divergence (MACD) in commodity price forecasting. The research involved a structured survey administered to traders, financial analysts, and brokers operating within the NCR region. Here, we discuss the detailed findings and implications derived from the study.

Demographic Analysis:

The demographic analysis shed light on the characteristics of market participants and their relationship with the usage and perception of technical indicators. Gender distribution revealed a predominantly male participant base, albeit with a small representation from females. Age-wise distribution indicated a varied participation across different age groups, with traders aged 26-35 being the most prominent. Moreover, educational qualifications showcased a diverse pool of participants, ranging from high school graduates to doctorate holders. Occupation-wise, traders and brokers constituted the majority, while financial analysts were relatively fewer in number. Years of experience in commodity trading varied, with a significant proportion having 1-5 years of experience.

Frequency of Technical Indicator Usage:

The study found variations in the frequency of technical indicator usage among market participants. Moving Average (MA) emerged as the most frequently used indicator, followed by Relative Strength Index (RSI) and Moving Average Convergence Divergence (MACD). Notably, a considerable proportion of traders reported using MA often in their trading decisions, highlighting its popularity and relevance in the Indian commodity market. RSI and MACD were also used frequently, albeit with slightly lower frequencies compared to MA.

Effectiveness and Confidence Levels:

Traders' perceptions of the effectiveness and confidence in interpreting signals varied across different technical indicators. Moving Average (MA) was perceived as moderately effective in predicting commodity price movements, with a significant proportion rating it as effective. Confidence levels in interpreting MA signals varied, with a substantial number of traders reporting moderate to very high levels of confidence. Similarly, Relative Strength Index (RSI) and Moving Average Convergence

Divergence (MACD) were perceived as effective indicators, with varying degrees of confidence among traders.

Influence on Trading Decisions:

The study explored the extent to which technical indicators influenced trading decisions compared to other factors. It revealed that Moving Average (MA) and Relative Strength Index (RSI) significantly influenced trading decisions, with a considerable proportion of traders attributing moderate to significant influence to these indicators. Moving Average Convergence Divergence (MACD) also exerted a significant influence on trading decisions, albeit to a slightly lesser extent compared to MA and RSI. These findings underscore the importance of technical indicators in guiding traders' decision-making processes in the commodity market.

Satisfaction Levels:

Traders' satisfaction with the accuracy of technical indicators in predicting commodity price trends was another crucial aspect examined in the study. Overall, traders expressed varying levels of satisfaction with the accuracy of MA, RSI, and MACD. Moving Average (MA) received mixed satisfaction ratings, with a significant proportion of traders reporting satisfaction with its accuracy. Similarly, Relative Strength Index (RSI) and Moving Average Convergence Divergence (MACD) garnered favorable satisfaction ratings, indicating their perceived utility in price forecasting.

Implications and Recommendations:

The findings of the study have several implications for market participants, policymakers, and researchers. Firstly, understanding the usage patterns and perceptions of technical indicators can help traders make informed decisions and optimize their trading strategies. Additionally, policymakers can utilize these insights to formulate regulations and policies that promote transparency and efficiency in

the commodity market. Furthermore, researchers can build upon these findings to conduct more in-depth studies exploring the underlying mechanisms driving the effectiveness of technical indicators in price forecasting.

CONCLSUION

The comprehensive analysis conducted in this study sheds light on the intricate relationship between technical indicators and price forecasting in the Indian commodity market, specifically within the National Capital Region (NCR). Through a structured survey administered to traders, financial analysts, and brokers, key insights were gleaned regarding the usage patterns, perceptions, and satisfaction levels associated with Moving Average (MA), Relative Strength Index (RSI), and Moving Average Convergence Divergence (MACD). The findings underscore the significance of technical indicators as valuable tools guiding trading decisions, with Moving Average emerging as the most frequently used indicator, followed closely by RSI and MACD. Moreover, traders exhibited varying degrees of confidence in interpreting signals and attributed differing levels of influence to these indicators in their decision-making processes. Despite mixed satisfaction ratings, particularly with regards to Moving Average, RSI, and MACD, the overall sentiment suggests a reliance on these indicators for price forecasting in the commodity market. This study not only enhances our understanding of market dynamics but also provides actionable insights for traders, policymakers, and researchers alike. Moving forward, a nuanced understanding of the interplay between technical indicators and market behavior will be instrumental in devising effective trading strategies, formulating regulatory frameworks, and driving further research aimed at optimizing market efficiency and investor outcomes.

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