



National Institute of Bank Management

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Trading using Technical Analysis: Part A-Stock Selection

1. The Dilemma

The silence was deafening as Rupa made her way to the end of the table: her laptop and the papers balanced precariously on her hand. She could sense the eyes on her as she readied herself for presentation. Rupa Mansingh was the equity dealer at India Bank, one of India's largest public sector banks and this was her first presentation to the team on the strategy for stock selection and trading. While such presentations were part of the game, the markets were choppy, the dealers had no room for mistake, and her views differed widely from her boss, a fact known to the rest of team. It was the third facet which probably made the team so alert for the presentation today.

Her immediate boss, Shikha Sharma, a woman, with a veneered reputation as a trader who sensed markets, had a ten-year experience in dealing desk. Shikha believed that there was no method to trading, just the madness: information from other dealers, a close look at the company fundamentals, and the most crucial part being the gut feeling. Her trades were heroically successful, and had made huge profits for the bank.

When Rupa came in, she asserted her own trading strategy, majorly based on technical analysis. Initially while it seemed all roads finally lead to a successful trade, she realized soon it was much more than that: she had to prove herself with both an intuitive reasoning which dealers could fathom and back it up with successful trades. The stock selection she was presenting today was the latest in the series of disagreements: she trusted technicals, and her trading strategy, but most of the team advised her to the contrary.

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² **This case has been written to aid classroom discussion and do not intent to illustrate the efficient and inefficient handling of a managerial situation. The views or opinions presented do not, in any way, reflect the views and opinions of the institution the author represents.**

2. Choice of the Stock

The first part of her presentations was the choice of stock from a particular sector the bank was keen on investing in. An understanding of the relative performance of different sectors is required for the sectoral allocation. However, for Rupa's bank, the India Bank, the sectoral allocation was a board level call. Her job right now was to select the stocks from the banking sector, and then deciding the trade call for the particular stock. Using programming tools Rupa had set up an algorithm which could pick up stocks depending on certain set conditions. However, what would be those conditions a point of contention for the team right now.

Below are Exhibits 1 and 2 with the criteria for selection. Daily data is used for the calculations, and Rupa prefers an algorithm to pull up the stocks using the yahoo fin database, based on the Exponential Moving average and Relative Strength Index. However, she has also looked at fundamentals like Market Cap and PE values.

The first exhibit looks at the Price to Earnings ratio (P/E) and market capitalisation, one of the most widely used valuation and size indicators in equity selection. Market capitalisation acts as a robust proxy for firm size and stability, given the support in empirical literature that larger banks typically enjoying scale advantages, deeper liquidity, and more predictable earnings, in line with the Efficient Market Hypothesis (Fama, 1970). P/E ratios show how the market prices current earnings relative to expectations of future growth. Lower P/E banks mostly suggest undervaluation, whereas higher P/E banks typically reflect stronger market confidence. Empirical asset-pricing literature (see for example Basu's 1977) shows that low-P/E stocks often outperform high-P/E stocks. Investors generally prefer large-cap banks for stability, and within that universe, use P/E as a relative valuation filter to identify attractively priced opportunities.

While fundamentals looked at company financials, technical analysis believed that price reflects all information. This in fact make the work of the analyst easy, given that as opposed to looking at large number of indicators, they could focus on the price action alone. One of the core principles of Technical Analysis was that market moves in trends. However, the trend that are market is presently showing must be seen in in context of the entire market movement which meant that trend is only relevant in a particular time frame. For a technical analyst, the 'trend is a friend': the effort is to be on the long side when the trend is bullish and on the short side when trend is bearish.

Of the trend following indicators, one of the most trusted is the moving average (Roy Trivedi 2020, Murphy 1999). Moving average is widely used to understand the trend and which position in the market would be beneficial. As compared to a simple moving average, exponential moving average is a better indicator given that it places greater weightage on the immediate prices (Murphy 1999). Exhibit 2 shows the ranking of the stocks in terms of price compared to the exponential moving average.

The final two columns of exhibit 2 gives the momentum-based ranking. If trend measures the direction of price movement Momentum measured the strength of the price movement. Relative strength index is amongst the most stable momentum indicators using a 14-period smoothing of the price momentum (Murphy 1999, Pring 2015, Roy Trivedi and Kyal 2020). Values of relative strength index above 50 shows a bullish momentum while values below 50 represented a bearish momentum. Interestingly while values above 50 represented bullish momentum when RSI reached above 70 (80) the market is said to be over valued. Similarly values under 30 (20) represent undervaluation. Exhibit 2 gives the price relative to RSI values for the index Nifty 50.

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For Rupa, it was technical analysis indicators which would guide her decision and on the basis on the same she had selected the stocks. However, given the strong discussions now in the trading room surrounding the inside information on the stocks and the PE value, she was having second thoughts on whether to go ahead with her presentation. Her seniors almost always looked at the PE ratio³ and the market wisdom on which companies were doing well, while she preferred a momentum or moving average based strategy. She had in front of her notes with both fundamental and technical strategies.

Based on her analysis, the stocks she wanted to support for long were the undervalued Bank of Baroda and Canara Bank, both showing bullish force with price exceeding 200 period EMA and RSI above the index momentum. Importantly, the RSI value did not reach near 70/80 to suggest overvaluation. What she taking the right factors? The next in line to keep in horizon where those with momentum less than the index momentum: a close watch to be kept for them. In the daily time frame, no shorting was recommended for the bank. The trading team it seemed were rooting for HDFC and SBI with information that the banks were investing heavily in digital platforms, which could reflect improved earnings forecast.

Should she stick to the technical analysis-based stock selection or go for a combination of fundamental technical analysis or simply trust the trading room instincts? Was the criterion used by her suitable? The question for Rupa was: did the indicators show a strong enough signal for her to go ahead with the decision?

Exhibit 1
Fundamental criterion

<i>Ticker</i>	<i>Trailing PE</i>	<i>Market Cap</i>	<i>MarketCap Rank</i>	<i>PE Rank</i>
HDFCBANK.NS	22.77	1.53E+13	1	8
ICICIBANK.NS	18.44	9.75E+12	2	7
SBIN.NS	10.81	8.97E+12	3	4
KOTAKBANK.NS	23.13	4.3E+12	4	9
AXISBANK.NS	14.67	3.8E+12	5	5
BANKBARODA.NS	7.87	1.51E+12	6	2
PNB.NS	8.15	1.39E+12	7	3
CANBK.NS	6.36	1.36E+12	8	1
IDFCFIRSTB.NS	46.45	7.31E+11	10	11
AUBANK.NS	33.76	7.31E+11	9	10
FEDERALBNK.NS	16.60	6.53E+11	12	6

Source: Author's calculations based on yahoo data

³ Price to earnings (P/E) ratio is obtained by market price per share divided by earnings per share, reflecting what investors are willing to pay per unit of a firm's earnings and presents a core valuation metric reflecting expectations about growth, risk, and profitability (Graham & Dodd, 1934).

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Exhibit 2

Ticker	Last Price	EMA_200	RSI_14	Above_EMA200	RSI_gt_Index	RSI	EMA
CANBK.NS	150.3	120.4	59.1	TRUE	TRUE	59.1	120.4
BANKBARODA.NS	294	255.7	59.6	TRUE	TRUE	59.6	255.7
AUBANK.NS	984.45	784.1	66.0	TRUE	TRUE	66.0	784.1
IDFCFIRSTB.NS	85.35	73.5	67.8	TRUE	TRUE	67.8	73.5
FEDERALBNK.NS	269.15	215.6	76.9	TRUE	TRUE	76.9	215.6
AXISBANK.NS	1233.2	1172.4	42.4	TRUE	FALSE	42.4	1172.4
HDFCBANK.NS	987.7	957.5	46.1	TRUE	FALSE	46.1	957.5
ICICIBANK.NS	1368.5	1364.2	49.5	TRUE	FALSE	49.5	1364.2
KOTAKBANK.NS	2149.7	2059.9	52.8	TRUE	FALSE	52.8	2059.9
PNB.NS	121.31	110.6	53.7	TRUE	FALSE	53.7	110.6
SBIN.NS	974.3	860.5	56.9	TRUE	FALSE	56.9	860.5
INDUSINDBK.NS	856.4	852.1	57.9	TRUE	FALSE	57.9	852.1

Source: Author's calculations based on yahoo data

Exhibit 3

Movement in select stocks and NIFTY



Source: LSEG

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