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Swing trading strategy using MACD and Fibonacci retracement for Indian equities

Introduction

Swing trading aims to capture price swings that last from a few days to a few weeks. In the Indian market, liquid large-cap and mid-cap stocks or ETFs (e.g., NIFTY 50 components) are preferred because they have good liquidity and reasonably narrow spreads. This strategy combines the **Fibonacci retracement** tool—used to identify support and resistance levels during corrections—with the **Moving Average Convergence Divergence (MACD)** indicator, which measures momentum and provides buy/sell signals based on moving-average crossovers.

Fibonacci levels derive from mathematical ratios (23.6 %, 38.2 %, 50 %, 61.8 %) created from the Fibonacci sequence. Zerodha's Varsity explains that after a strong move, a stock often retraces to one of these levels before continuing in the direction of the original trend [1]. Kotak Securities notes that swing traders use these retracement levels to find entries after a pullback in trending markets [2]. The MACD consists of the difference between the 12-period and 26-period exponential moving averages and a 9-period signal line. According to Investopedia, traders buy when the MACD line crosses above its signal line and sell when it crosses below [3]; crossovers are more reliable when they confirm the prevailing trend [4].

This strategy uses Fibonacci retracement levels to identify potential support/resistance, then waits for MACD crossovers at these levels to confirm entries. It also incorporates risk-management principles from Kotak Securities—stop-loss orders, limiting risk per trade to 1–2 % of capital and targeting a risk-reward ratio of at least 2:1 [5].

Step 1 – Set up charts

1. **Select timeframe** – Use a **daily** chart to determine the major trend and draw Fibonacci levels; then use **4-hour** or **1-hour** charts for precise entries and exits. Swing trades usually last several days to a few weeks.
2. **Identify trend** – Apply a trend indicator (e.g., 50-day moving average). A rising moving average and higher swing highs/lows signal an uptrend; falling moving average and lower swing highs/lows signal a downtrend. Avoid trading in choppy sideways markets.
3. **Draw Fibonacci retracement** – After a significant rally or decline, mark the most recent swing low and swing high. Using a chart tool, connect the trough and peak to display retracement levels (23.6 %, 38.2 %, 50 %, 61.8 %). Zerodha's tutorial notes that these levels provide good zones to enter trades in the direction of the trend [6] and that prices often retrace to them before resuming the trend [7].

Step 2 – Entry rules using MACD and Fibonacci

Long (bullish) setup

1. **Uptrend confirmation** – Ensure the stock is in an uptrend on the daily chart.

2. **Wait for retracement** – Price pulls back to a Fibonacci level (preferably the 38.2 %, 50 % or 61.8 % retracement). Kotak notes that swing traders look for retracements to the 38.2 % level before entering in the trend's direction [2]. Avoid entries at shallow 23.6 % retracements unless the trend is very strong.
3. **MACD confirmation** – On the entry timeframe (4-hour or 1-hour chart), watch the MACD line relative to its signal line. When the MACD line crosses **above** the signal line at or slightly after price touches the chosen Fibonacci support, it provides a bullish signal. Investopedia states that traders buy when the MACD line crosses above the signal line [3] and that crossovers are more reliable when they conform to the prevailing trend [4]. The UltraTrader guide notes that a Fibonacci level with a **bullish MACD crossover** (MACD line crossing above its signal line) signals a high-probability trade because MACD adds momentum confirmation to Fibonacci's price-based analysis [8].
4. **Additional confluence (optional)** – Strong setups may also show a candlestick reversal pattern (e.g., hammer/bullish engulfing), increased volume or a support level from previous swing lows. Zerodha emphasises using Fibonacci retracements as a **confirmation tool**, combined with other factors like candlestick patterns, support/resistance and volume [9].
5. **Enter long** – After the bullish MACD crossover and confirmation, enter a long position slightly above the Fibonacci level.
6. **Stop-loss** – Place a stop-loss below the next Fibonacci level or below the recent swing low. Kotak suggests placing stop-loss orders below support levels for long trades [10].
7. **Profit target** – Set an initial target near the previous swing high (0 % retracement). For extended targets, use Fibonacci extension levels (e.g., 161.8 %) once price surpasses the swing high. Consider using a trailing stop to lock in profits as MACD momentum wanes.

Short (bearish) setup

1. **Downtrend confirmation** – Ensure the stock is in a downtrend on the daily chart.
2. **Wait for pullback** – Price rallies to a Fibonacci retracement level (38.2 %, 50 % or 61.8 %).
3. **MACD confirmation** – On the shorter timeframe, watch for the MACD line to **cross below** the signal line near the Fibonacci resistance. Investopedia notes that traders sell or short when the MACD line crosses below the signal line [3]; crossovers after a brief rally within a longer-term downtrend constitute bearish confirmations [4]. UltraTrader's example explains that a bearish MACD crossover at the 38.2 % Fibonacci level after a downtrend suggests a reversal and a short trade [8].
4. **Enter short** – Sell short once the bearish MACD crossover appears and price fails to break above the Fibonacci resistance.
5. **Stop-loss** – Place a stop-loss just above the next higher Fibonacci level or above the recent swing high.
6. **Profit target** – Target the previous swing low (0 % retracement) or use extension levels (e.g., 161.8 %) for larger moves. Use trailing stops if price continues in your favor.

Step 3 – Risk management and trade management

1. **Position sizing** – Limit risk on each trade to **1–2 %** of total trading capital. Kotak emphasises that swing traders should never risk more than a small percentage of capital on a single trade [11]. Calculate position size by dividing the amount you are willing to lose by the distance between your entry price and stop-loss.
2. **Risk-reward ratio** – Aim for a **minimum 2:1** or **3:1** risk-reward ratio. Kotak notes that targeting a 2:1 or 3:1 ratio helps traders remain profitable even if they win less than half their trades [12].

3. **Use stop-loss orders** – Stop-losses protect capital by automatically exiting positions when the market moves against you [10]. Avoid moving stop-losses further away; instead trail them to lock in gains as price moves in your favor.
4. **Avoid overtrading** – Focus on high-probability setups. Kotak warns that overtrading, especially during choppy markets, is a common mistake [13].
5. **Stay aligned with the trend** – Avoid trading counter-trend retracements. Swing trading is more successful when trades are made in the direction of the prevailing trend [14].

Example

Imagine a liquid NIFTY 50 stock rallies from **₹500** to **₹650** over several weeks. On the daily chart, you connect the swing low (₹500) and swing high (₹650) to draw Fibonacci retracement levels. The 38.2 % retracement lies near **₹590** and the 61.8 % retracement near **₹560**.

1. **Retracement and entry** – Price pulls back to ₹590 and forms a hammer candlestick. On the 4-hour chart, the MACD line crosses **above** the signal line near ₹590. Because the MACD bullish crossover at a Fibonacci level signals momentum returning to the upside [8] and the overall trend is bullish, you enter a long trade around ₹592 with a stop-loss below the 61.8 % level at ₹555.
2. **Target and management** – Your initial target is the prior high near ₹650. This yields a risk-reward ratio of roughly 1:2 (risking ₹37 per share to gain ₹58). As price approaches the high and MACD momentum remains strong, you trail the stop up to lock in profits. If price breaks the high, you may use the 161.8 % extension (~₹715) as an extended target.

If the stock were in a downtrend and price rallied back to the 50 % retracement (e.g., ₹575), you would wait for the MACD line to **cross below** its signal line near that level [4] before entering a short trade, with a stop-loss above the next Fibonacci level.

Conclusion

Combining Fibonacci retracement levels with MACD crossovers allows Indian swing traders to identify **high-probability pullback entries** within prevailing trends. Fibonacci retracements provide objective support and resistance levels where prices often pause [1], while MACD crossovers signal changes in momentum [3]. By waiting for price to retrace to a key Fibonacci level and then confirming the trade with a MACD crossover [8], traders improve their entry timing and reduce false signals. Proper risk management—using stop-losses, limiting risk per trade, and maintaining a favourable risk-reward ratio—helps preserve capital and increases the likelihood of long-term success [15].

This strategy is for educational purposes and does not constitute financial advice. Traders should backtest the method on historical data, adjust parameters to suit their risk tolerance, and consider consulting a qualified financial advisor before implementing it in live markets.

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