

Semester: VIIISubject: AIFBAcademic Year: 2024-25

Entries, Exit and Profitability in Trading:-

In trading entries, exit and profitability are key to a successful strategy.

Entries (Trade Entry Point):

A trade entry point is when a trader opens a position (buy/sell) based on signal.

Entry strategies:

- * Moving Average Crossovers → Buy when short SMA crosses above long SMA (Golden cross).
- * Breakout Trading → Buy when price breaks above resistance with high volume.
- * Momentum Entry → Enter based on high RSI or MACD bullish cross.

Example:

A trader enters Stock A at \$50 after seeing an RSI breakout above 70.

Exit (Trade Exit Point)

An exit is when a trader closes a position, either locking in profit or cutting losses.

Exit strategies:

- Take Profit (TP) → Exit when price hits a predetermined profit target.
- Stop Loss (SL) → Exit when price falls below a certain loss threshold.

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Example:

If stock A rises to \$60, the trader exits with a \$10 profit per share.

Profitability (Measuring Trade Success):

Probability depends on risk-reward ratios and win rate.

Risk Reward Ratio (R:R) in Trading:

The Risk reward Ratio helps traders evaluate whether a trade is worth taking by comparing potential profit to potential loss.

Formula:-

$$R:R = \frac{\text{Potential Profit (Target)}}{\text{Potential Loss (Stop Loss)}}$$

A higher R:R means you risk less for more potential reward.

Example:-

A trader enters a stock at \$50. He sets stop-loss at \$45 and take-profit at \$60. calculate R:R.

Given:

Stock = \$50.

Sets stop loss at \$45 (Risk = \$5)

Take profit at \$60 (Reward = \$10)

$$R:R = \frac{10}{5} = 2:1$$

This means the potential profit is twice the potential loss.

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Win Rate is the percentage of successful trades out of the total trades taken. It helps traders understand how often they win and its impact on overall profitability.

Formula:

$$\text{Win Rate} = \left(\frac{\text{No. of Winning Trades}}{\text{Total Trades}} \right) \times 100$$

- * A higher win rate means more trades are profitable.
- * Win Rate alone is not enough — it should be combined with a good Risk-Reward Ratio (R:R).

Example:

A trader makes 10 trades, out of which 7 are winners. Calculate the win rate.

$$\text{Win Rate} = \left(\frac{7}{10} \right) \times 100 = 70\%$$

This means the trader wins 7 out of every 10 trades.

How win rate affects profitability?

- * High win rate (eg. 80%) → Even a lower R:R (1:1) can be profitable.
- * Low Win Rate (eg. 40%) → Needs a higher R:R (2:1 or 3:1) to stay profitable.

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Formula for Expected Profitability:

$$\text{Expected Return} = (\text{Win Rate} \times \text{Avg Win}) - (\text{Loss Rate} \times \text{Avg Loss})$$

Example:-

A trader has the foll. performance.

Win Rate = 60% , Avg. Win = \$200, Loss Rate = 40%

Avg Loss = \$100. Calculate expected return.

$$\begin{aligned} \text{Expected Return} &= (0.6 \times 200) - (0.4 \times 100) \\ &= 120 - 40 \end{aligned}$$

$$= 80$$

The trader expects to make \$80 per trade on average.