



Expected Value: Optimal Sizing and Managing Risk

PRESENTED BY:

GaryL

DISCLAIMER

BearBullTrading.com employees, contractors, shareholders and affiliates, are **NOT an investment advisory service, a registered investment advisor or a broker-dealer** and does not undertake to advise clients on which securities they should buy or sell for themselves.

You understand that **NO content published as part of the Bear Bull Trading Room and its Website constitutes a recommendation** that any particular investment, security, portfolio of securities, transaction or investment strategy is suitable for any specific person.

You further understand that **none of the creators or providers of our Services or their affiliates will advise you personally** concerning the nature, potential, value or suitability of any particular investment, security, portfolio of securities, transaction, investment strategy or other matter.

What is EV?

Risk:Reward

- Risk is the Stop Loss of your trade. It is not a \$ Amount
- Size executed determines the dollar amount risked
- Size should be a function of your account
- Reward – It is the money you make if the stock moves in your favor.
- 1:1 is the least you want

Probability

- Embrace the concept of chance. markets are unpredictable
- Likelihood of your trade going in your favored direction
- Understanding price action helps in determining probability
- Function of screen time and back testing strategies

Expected Value

- $EV = (PW*AW)-(PL*AL)$
- PW = Probability of winning
- AW = Average Win
- PL = Probability of losing
- AL = Average loss

Casino Roulette Example

Casino has a roulette table where in each round players place a \$10 bet. If the player wins, they gain \$10, and if they lose, the casino keeps the \$10.

18 Black Numbers, 18 Red Numbers and 2 Green numbers (which you can't bet on).

When you analyze the set up of a roulette table, you'll realize that on each round, the house (casino) has a 52.6% (20/38) chance of winning, while the player has a 47.4% (18/38) chance.

EV for Casino = $(0.526 * \$10) - (0.474 * \$10) = \$5.26 - \$4.74 = \$0.52$.

We can conclude that on one particular spin Casino might win or lose \$10, but on multiple interactions the number would smoothen out to \$0.52 in favor of the casino per spin.

What is EV?

Trader 1

- Win Rate = 40%
- Avg Winner = \$300
- Avg Loser = \$100
- R:R = 1:3
- Expected Value = $(0.4 \times 300) - (0.6 \times 100) = \60
- On average the trader is expected to make \$60 per trade

Trader 2

- Win Rate = 10%
- Avg Winner = \$20
- Avg Loser = \$200
- R:R = 10:1
- Expected Value = $(0.9 \times \$20) - (0.1 \times 200) = -\2
- On average the trader is expected to lose -\$2 per trade

Position Sizing & EV in Day Trading

Risk Per Trade	1
Reward Per Trade	4
Win Probability%	70%
Expected Value	2.5

Trade Quality	EV Score	Sizing	How to think about it
Load The Boat	4	1.0%	Price Location + A+ Setup
A+ Trade	3.5+	0.33%-0.50%	Confluence+Community
A Trade	2.5-3.5	0.20%-0.33%	Confluence
B Trade	1.5-2.5	0.10%-0.20%	Everyday Trade Setup

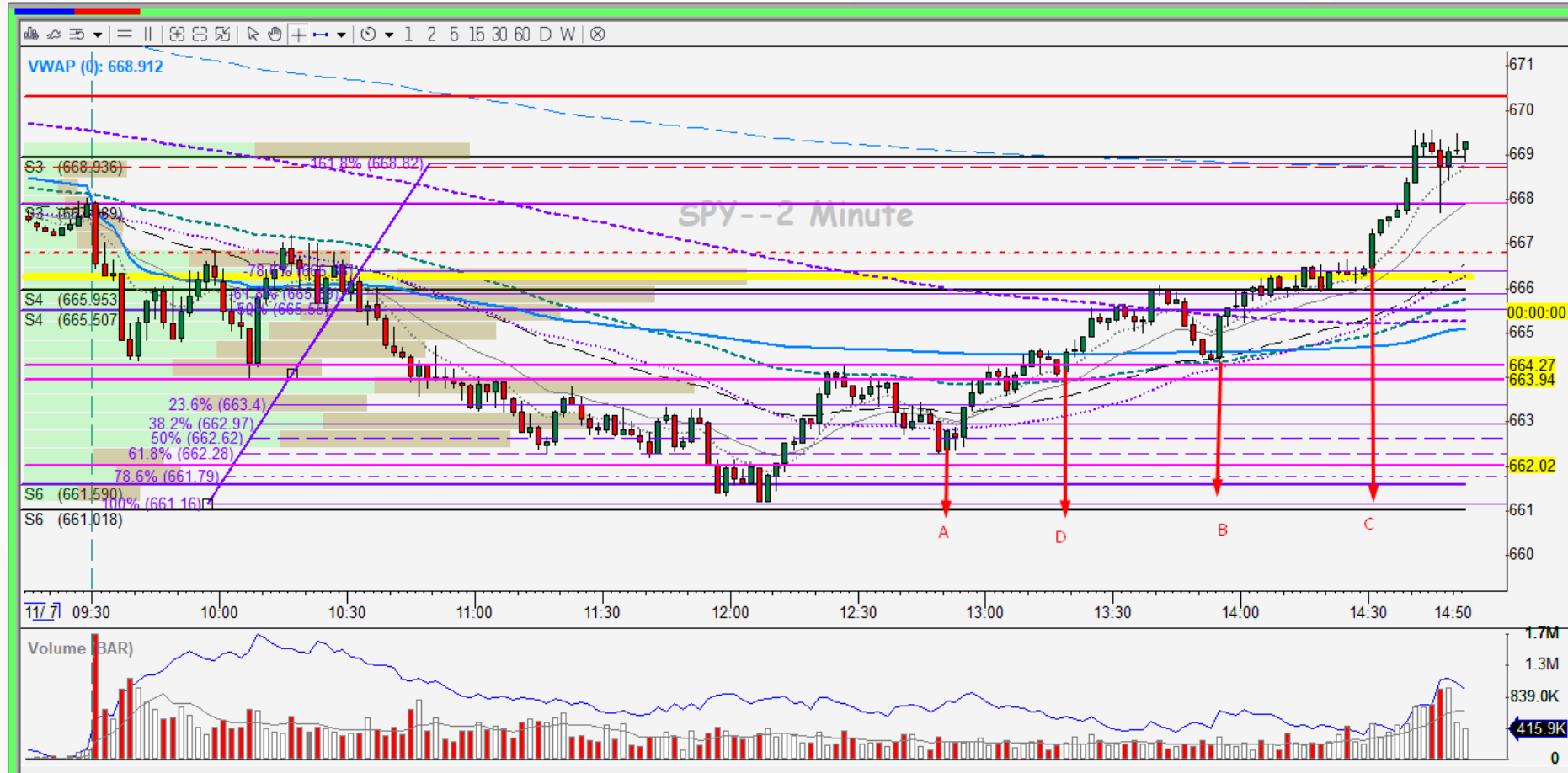
Account Size	\$	100,000
Trade Quality		B
Risk Size		0.10%
Risk \$ Amount	\$	100.00
Expected Value	\$	250.00

Expected Value Formula

$(\text{Reward Per Trade} * \text{Win Probability}) - (\text{Loss Per Trade} * \text{Loss Probability})$

$$(4 * 0.7) - (1 * 0.3) = 2.5$$

Quality of Trade Example



Why is EV important

Psychology

- Using EV provides a forward looking metric, forcing you to take the trade if a setup presents itself.
- This removes emotion out of the equation.

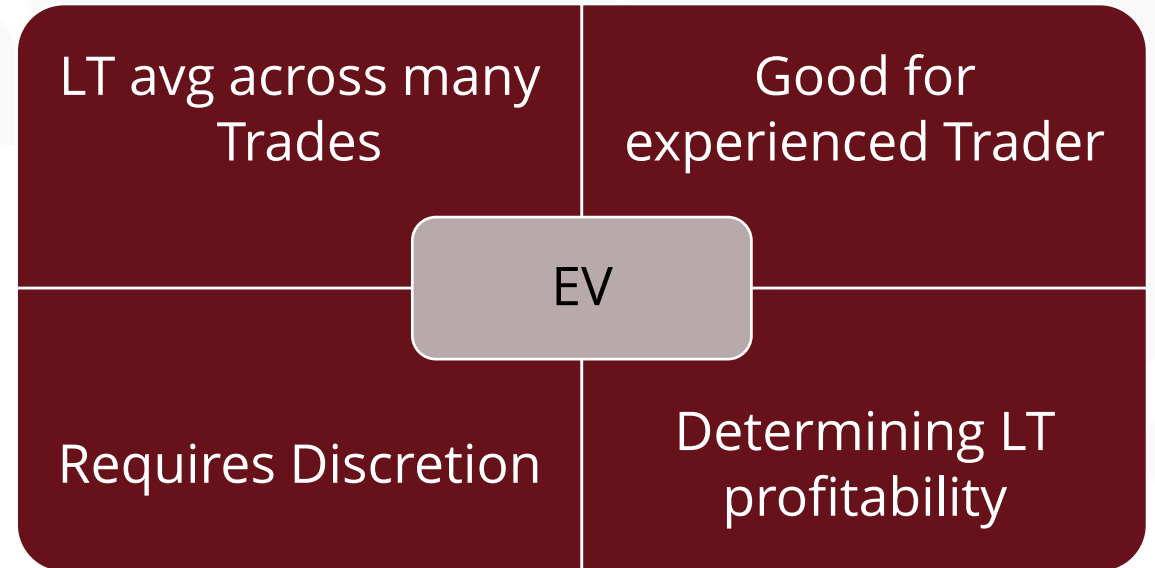
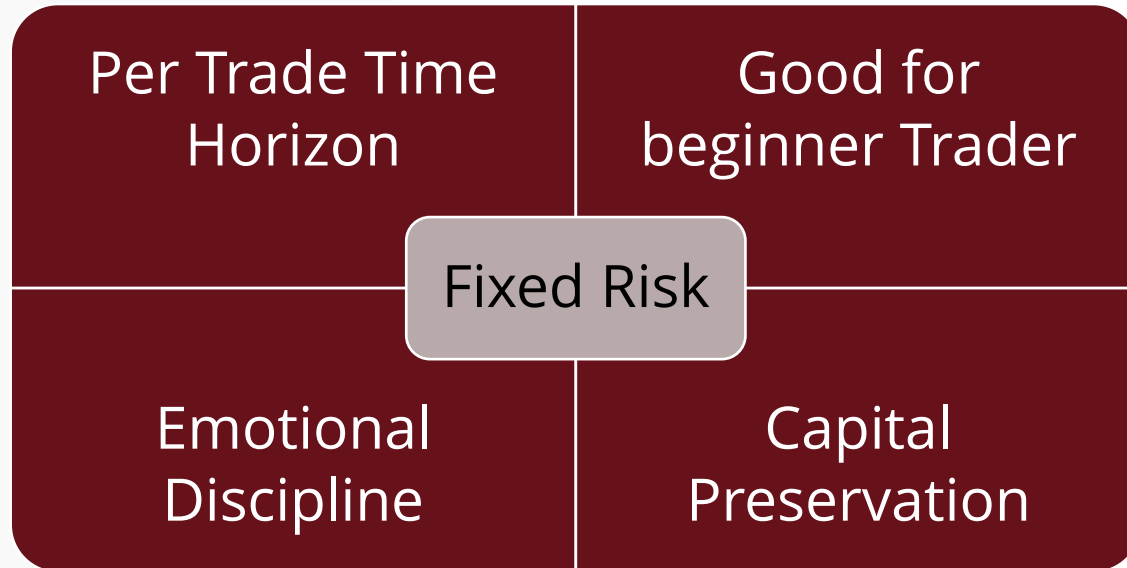
Risk Management

- Evaluating trades through EV helps you determine the dollar amount to risk.
- Higher grade setups should have higher dollar risked

Long Term Profitability

- Losing money is part of the process, losses become a statistical number, they are to be expected
- This is a statistical measure which evaluates if your strategy has an edge in the long run

Fixed Risk vs EV Trading



Strategy vs System

Strategy

A strategy is your set of rules for a trade.

Strategies can be Learned.

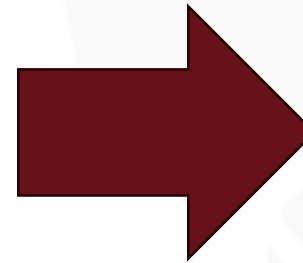
There are 26 strategies on BBT website

System

Strategy + Management

Nobody can teach you a system. You need to build it yourself

Record and evaluate data to calculate +ve EV



Journal your trades

Partial less

Hold for Targets

Takeaways

Embrace Probability

- Trading is a game of probability – you will have loses, accept them.
- Let your winners run and cut your losers

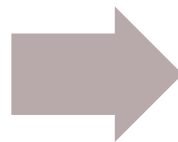
Be selective

- Each lower EV trade impacts your LT profitability
- Small numbers add up.

Think Long term

- This is not a business to get rich quick
- Think in terms of 100 trades not this one particular trade

The entire goal of a professional trader is to find strategies, journal and evaluate data



Turn them into proven, +EV **systems**.