

# The Options Institute

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# Mental Models for Risk Management

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# Learning Objectives

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- Understand 3 main categories of risk
- Explore mitigations
- Identify risks for your own trading

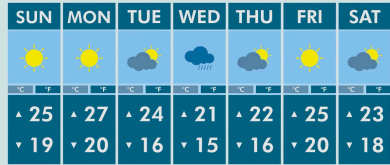


# Building Mental Models

## Baseline vs Progressive



WHAT WILL WE REMEMBER?

# Analogy: Accounting for Weather

Quantifiable Risk	
Unexpected Risk	
Human Factors	

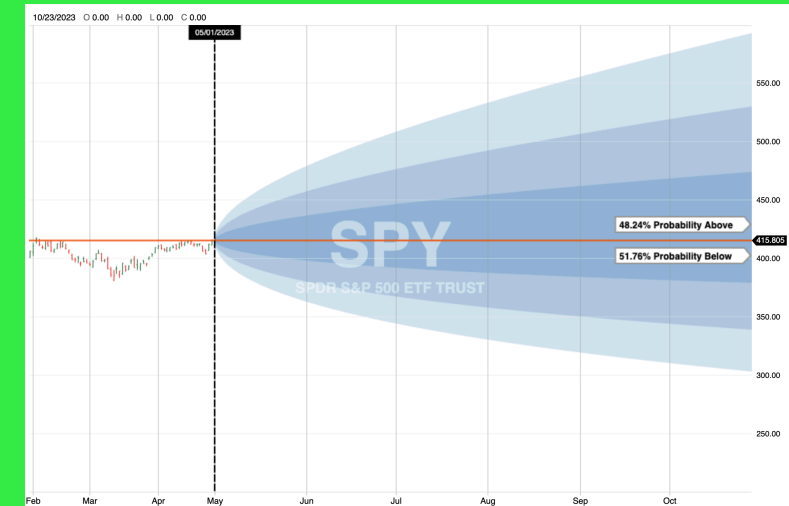
# Quantifiable Risk

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- Margin: borrowing to invest
- Multiplies risk/reward
- Margin call: forced to realize amplified loss

# Quantifiable Risk

- Volatility: expected variation
- VIX index, priced into options



# Quantifiable Risk

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- Other metrics:
  - Debt to equity
  - Credit rating / bond ratings
- Value at risk calculations based on market moves

# Unexpected Risk

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- Black swan events (2008, covid)
  - Rare, but impactful
- Structural issues
  - Unknown correlations
  - Bad ratings / models
- Technical issues
  - Outages (broker, personal, utilities)
  - Flash crash / sudden spikes

# Human Risk Factors

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- Loss aversion: Fear of losses > Love of gains
- Mental Accounting: Separate silos suboptimal
- Home Bias: Familiarity  $\neq$  safety
- Overconfidence & Anchoring: Stuck to first impressions

# Human Risk Factors

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- Success =  
Plan Quality x Chance you follow
- Ex: Perfect workout, perfect diet

# Human Risk Factors

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- Common biases
- Loss aversion (\$50 game)
  - Fear of loss > love of gain
- Mental accounting / sunk cost
  - Re-enter current position?
- Home bias / concentration risk
  - Investments + employer

# Mitigation Strategies

- Diversification: Assets, timing (DCA), accounts
- Negative leverage (margin of safety)
- Hedging
  - Cap risk/reward (spreads)
  - Insurance options to benefit from volatility
- Not letting best be enemy of good
  - Debt payoff (snowball vs. avalanche)
- Automate / lock-in ideal behavior (options contracts)

# Questions/Takeaways

## Know yourself

- What risks can you live with?
- FOMO, loss aversion, need for insurance



## Given your investing history, what categories concern you most?

- Quantifiable: Not using available data?
- Unexpected: Systemic structural issues?
- Human: Emotions / not sticking to decisions?

# Review

**Weather analogy for 3 risk categories**

**Quantifiable: Leverage multiplies risk**  
**Unexpected: Black swans happen**  
**Human: Our behavior isn't perfect**

**Diversify, hedge, margin of safety, automate.**  
**Explore patterns in your own trading history.**

**Slides, links available at  
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