

The background features a dark blue gradient on the left, transitioning into a series of curved, overlapping lines on the right. These lines are composed of a fine grid pattern, creating a sense of depth and movement, similar to a tunnel or a stylized architectural structure.

INTRO TO INVESTMENTS, FINANCE & CREDIT

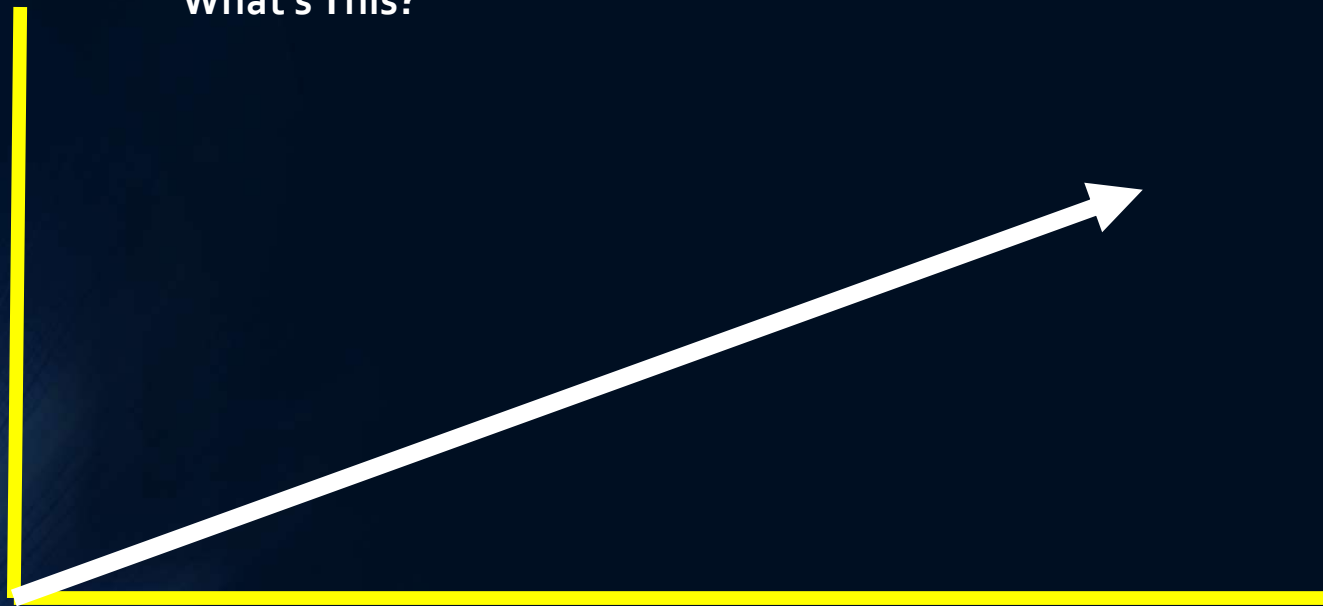
PORTFOLIO ANALYSIS CONCEPTS

Risk, Return, Time and Allocation

Introduction to Investments, Finance and Credit

INVESTMENTS, FINANCE AND CREDIT OVERVIEW

What's This?



INVESTMENTS, FINANCE AND CREDIT OVERVIEW

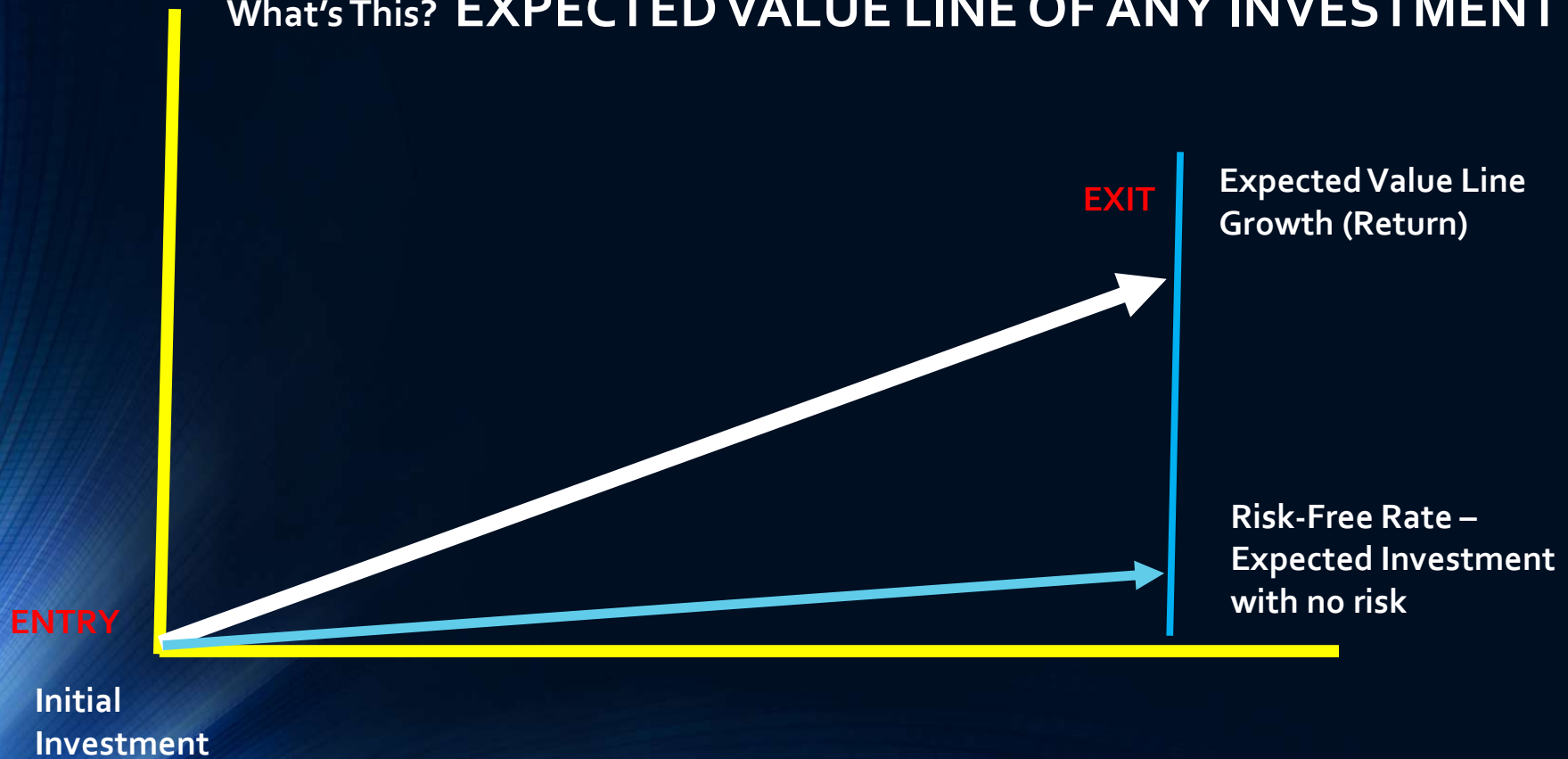
What's This? Everyone's Expectation

EXPECTED VALUE LINE OF ANY INVESTMENT

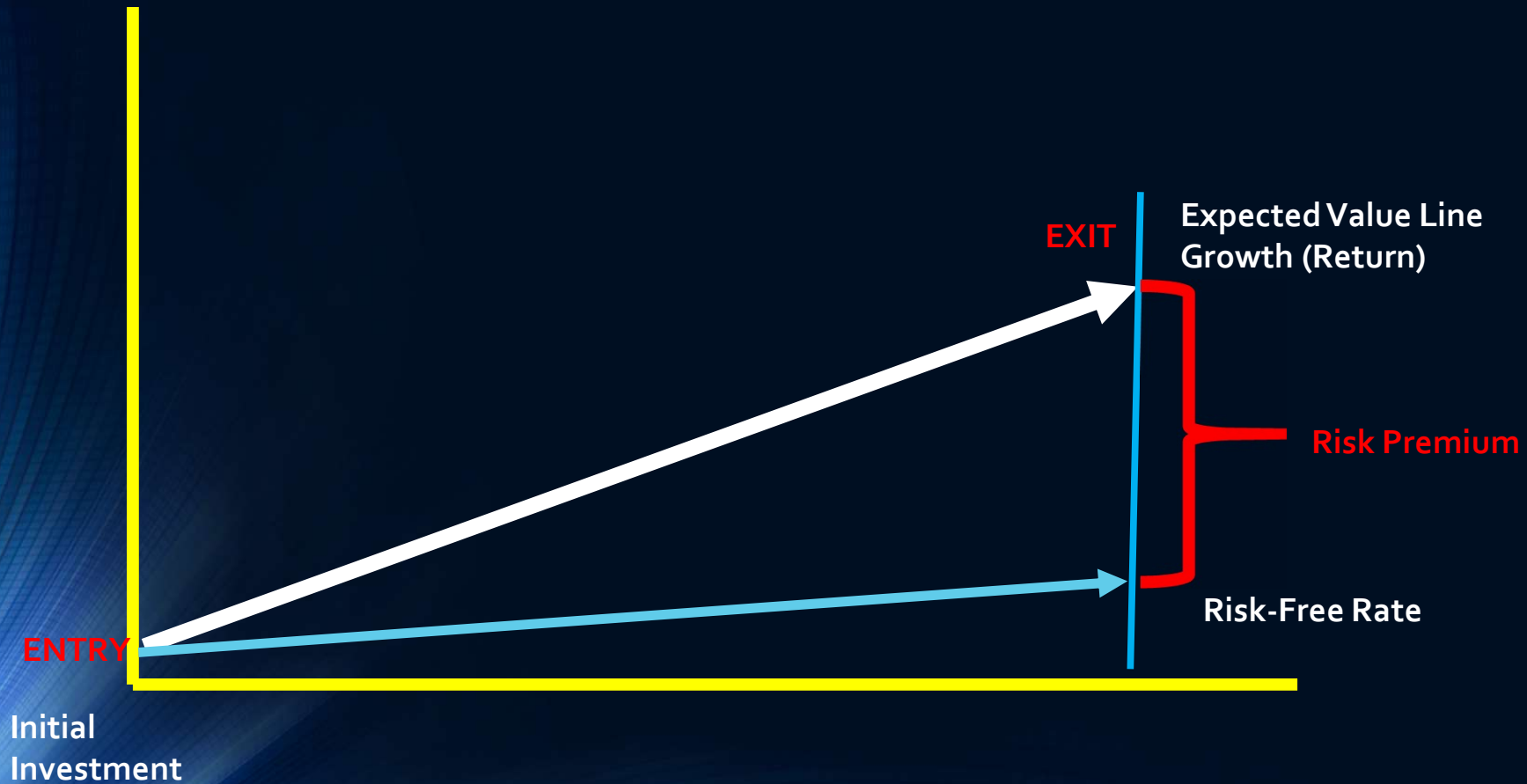


INVESTMENTS, FINANCE AND CREDIT OVERVIEW

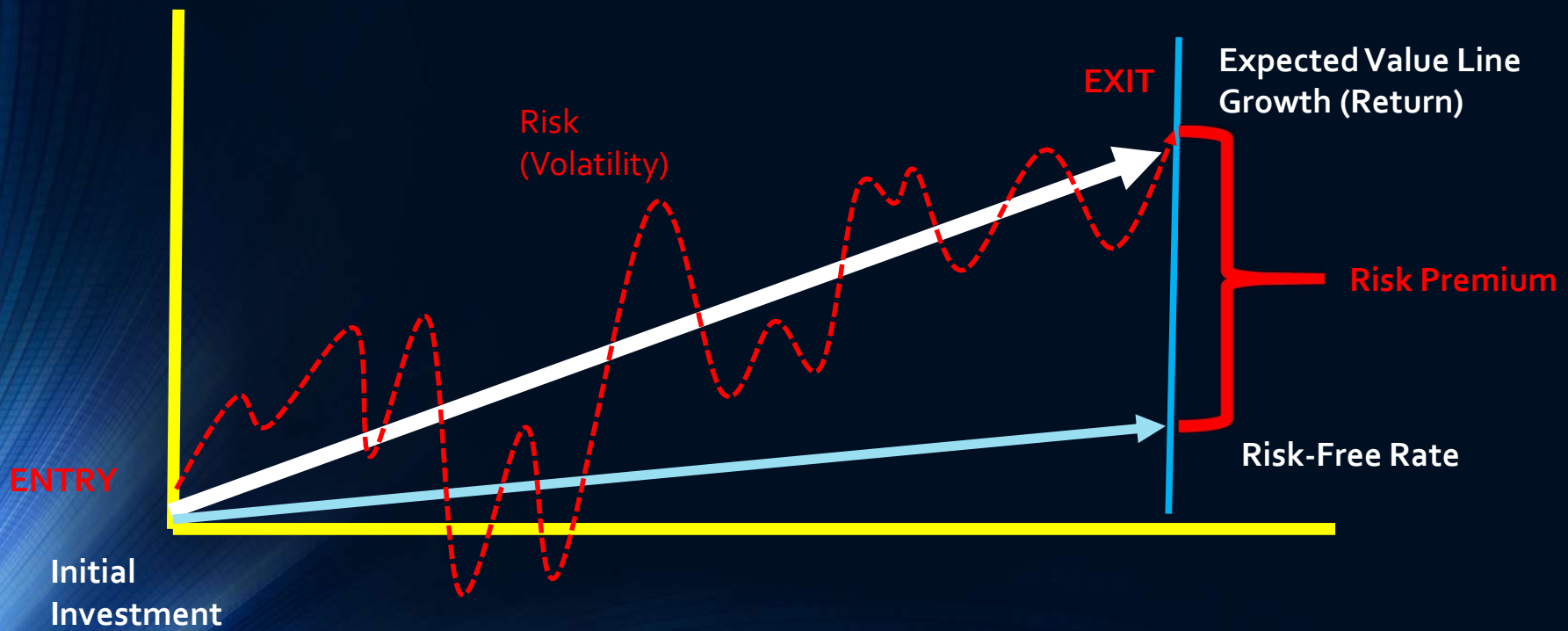
What's This? **EXPECTED VALUE LINE OF ANY INVESTMENT**



INVESTMENTS, FINANCE AND CREDIT OVERVIEW



INVESTMENTS, FINANCE AND CREDIT OVERVIEW



The Study of Finance

- 3 FACTORS BEFORE YOU INVEST →

- Measure Expected Return
- Quantify Risk
- Set Time (Exit)

- Buying Stocks / Buying Bonds
- Buying Assets / Equipment
- Starting a New Project
- Buying a Company
- Starting a new Company

- 1 more FACTOR BEFORE YOU INVEST (discuss in detail later)

- Allocation / Diversification

The Study of Finance

• 3 FACTORS BEFORE YOU INVEST

- Measure Expected Return
- Quantify Risk
- Set Time (Exit)



Game: Tossing a Coin to win \$6 (Payoff):

- Measure Expected Return: **\$6**
- Quantify Risk: **50/50 win/loss**
- Time: **in 2 seconds**
- How much to Invest?
 - \$3 - mathematically using probability theory is $(50\% \times \$6) + (50\% \times \$0) = \$3 + 0 = \3

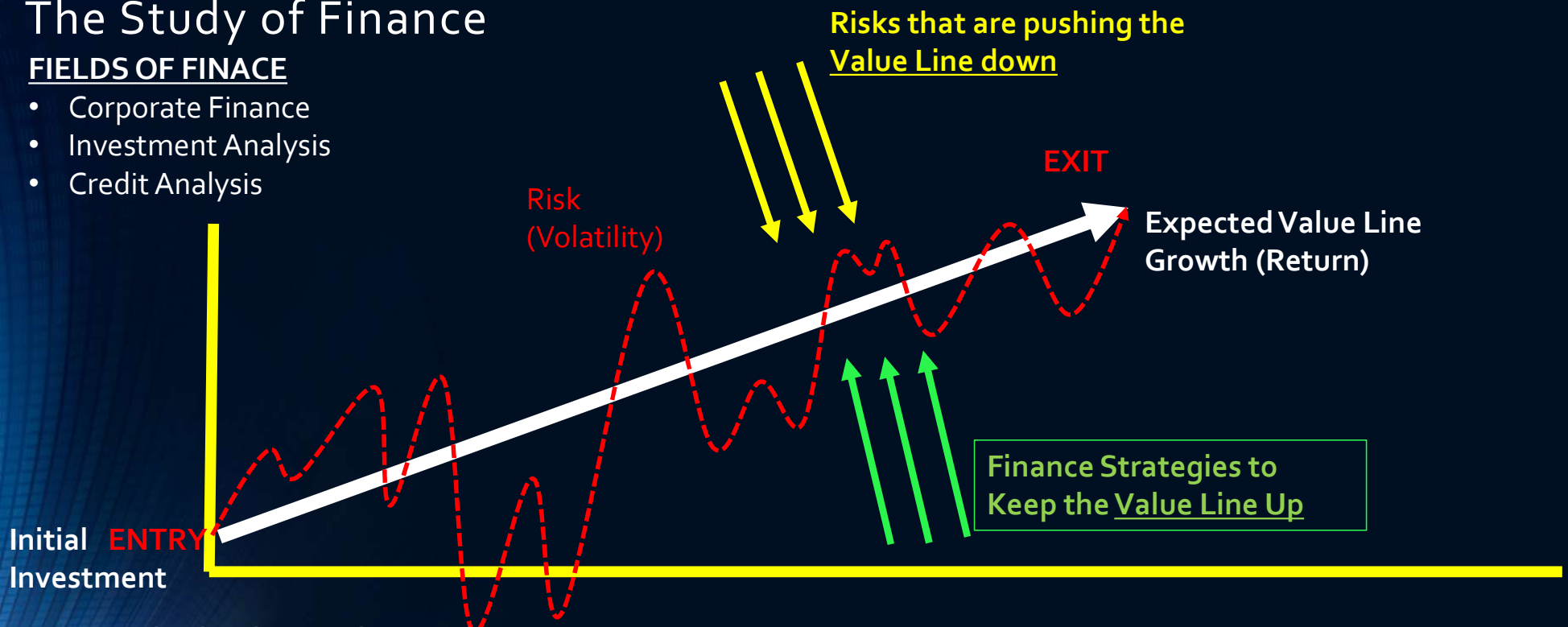
Game: Tossing one dice to win \$6 (Payoff):

- Measure Expected Return: **\$6**
- Quantify Risk: **1/6 to win, 5/6 to lose**
- Time: **in 2 seconds**
- How much to Invest?
 - \$1 - mathematically using probability theory is $(1/6 \times \$6) + (5/6 \times \$0) = \$1 + 0 = \1

The Study of Finance

FIELDS OF FINANCE

- Corporate Finance
- Investment Analysis
- Credit Analysis



• 3 FACTORS BEFORE YOU INVEST

- Measure Expected Return
- Quantify Risk
- Set Time (Exit)

The Study of Finance

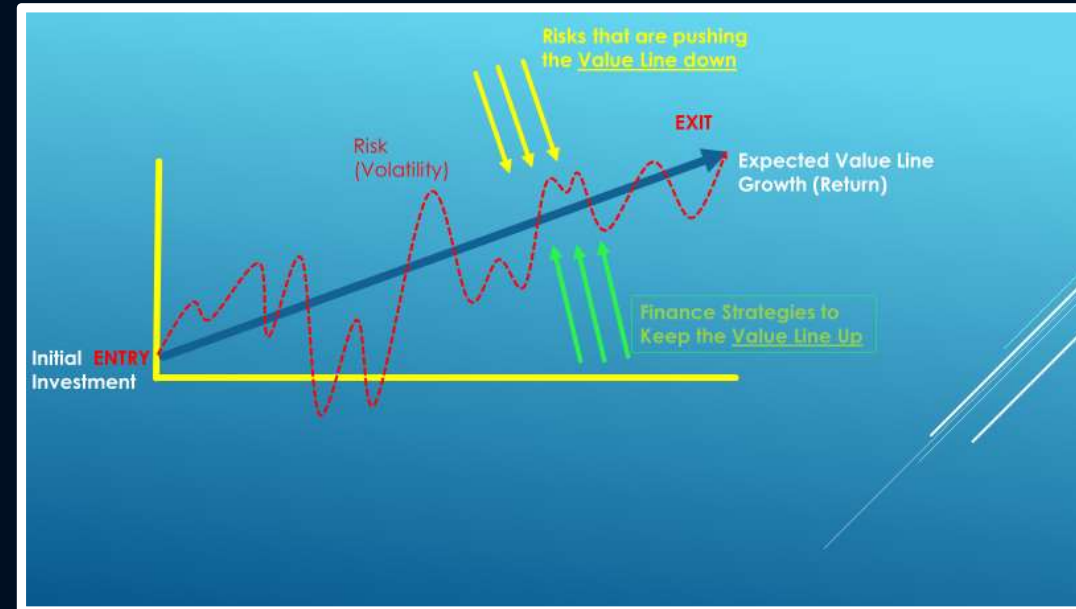
- **Corporate Finance**

- **Risks that are pushing the Value Line Down:**

- Economy
- Competition
- Government
- Disasters
- Other Systemic/Firm Specific Risks

- **Strategies to Keep the Value Line Up**

- Operating Strategies
- Transactional Strategies
- Financing Strategies
- Social Responsibility



The Study of Finance

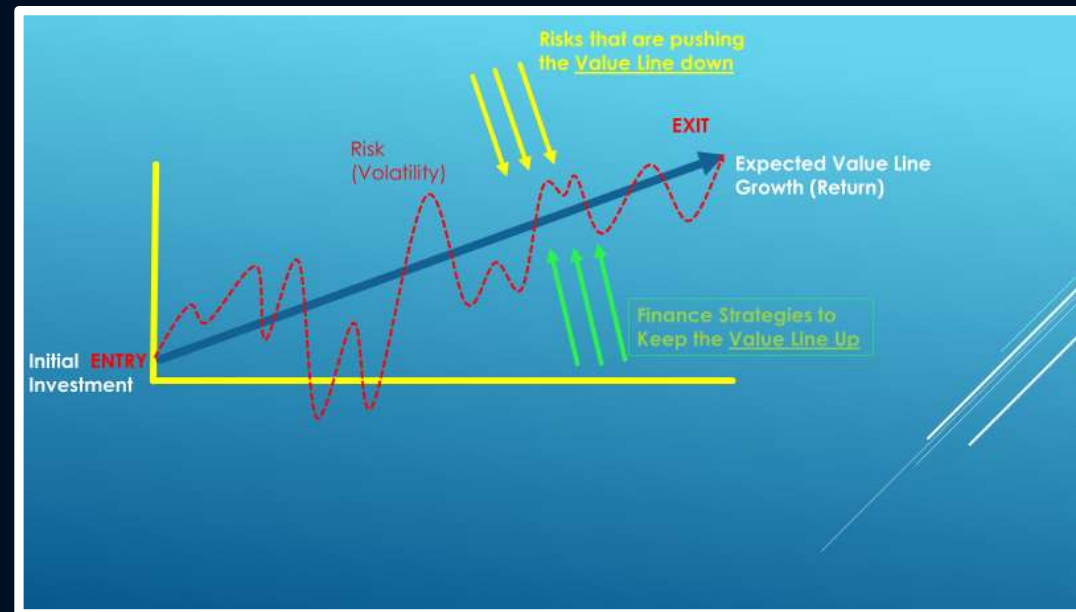
▶ Investments

▶ Risks that is pushing the Value Line Down:

- ▶ Economy and Markets
- ▶ Government & Regulation
- ▶ Liquidity
- ▶ Other Systemic/Firm and Asset Class Specific Risks

▶ Strategies to Keep the Value Line Up

- ▶ Allocation/Diversification Strategies
- ▶ Hedging Strategies (Using Derivatives)



The Study of Finance

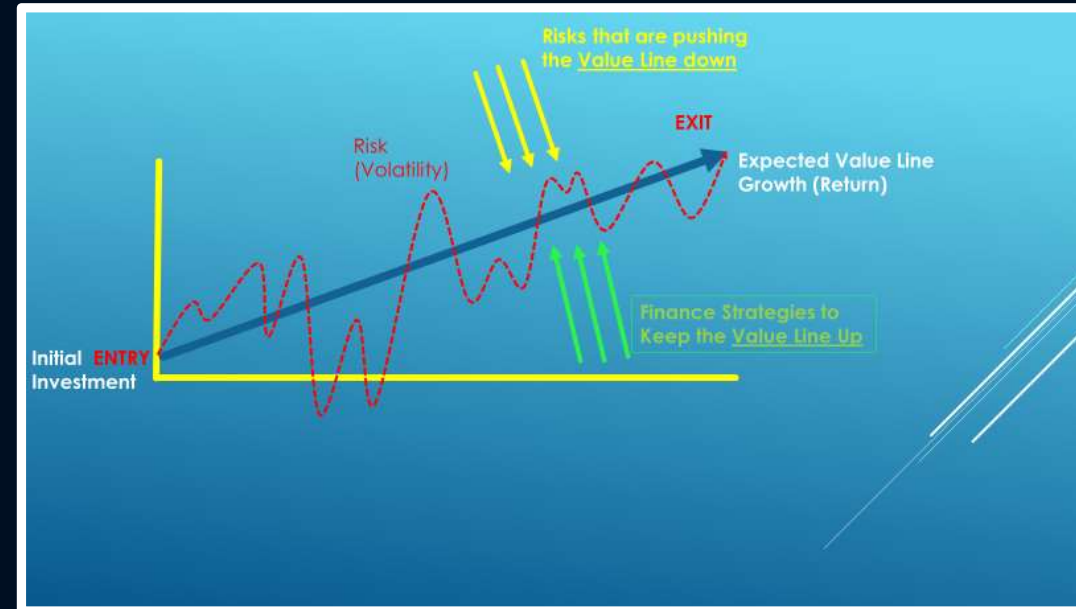
▶ Credit Analysis

▶ Risks that is pushing the Value Line Down:

- ▶ Economy
- ▶ Government
- ▶ Other Systemic/Firm and Asset Class Specific Risks

▶ Strategies to Keep the Value Line Up

- ▶ Loan / Bond Structure
- ▶ Debt Capacity Analysis



Chapter 1: Risk & Return Analysis

Risk & Return Analysis

- Before investing, the investor needs to consider the following four factors:
 1. Measurement of the expected return (E_r)
 2. Quantification of the risk (σ)
 3. How to allocate the investments to achieve efficiency and optimization (A for Allocation)
 4. Time to determine the exit strategy or realization of the investment (t)

Time Value of Money Concepts

- One-Time Investment
- Annuities or Even Annual Cash flows
- Uneven Annual Cash Flows