

# The Value-Creation Pricing Factor

Presented by Willem Geul

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# Structure of Presentation

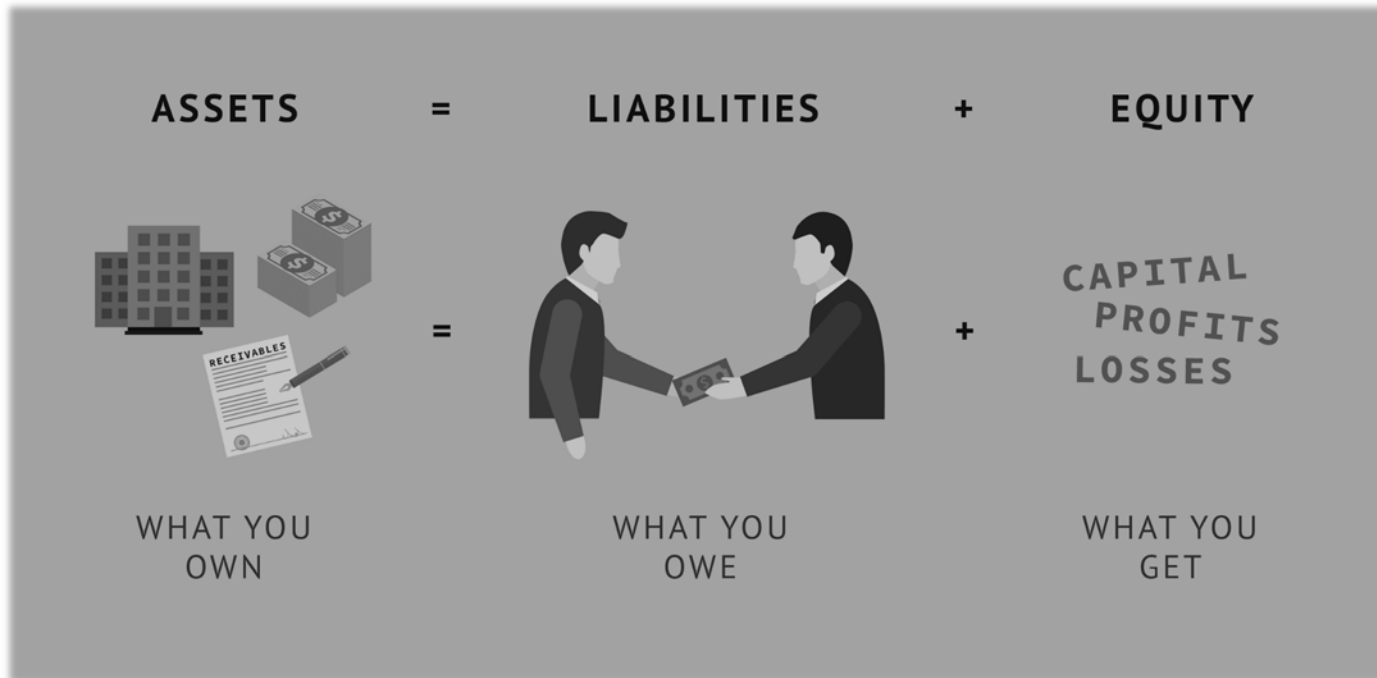
## The Value-Creation Pricing Factor

1. Origin of 'Value'
2. Factors: Returns & Their Explanations
3. From 'Value' to 'Value-Creation'
4. Results & Implications



# The Origin of “Value”

## Equity: What’s The Business Worth?



# Measuring Value

## Equity Value : Two Perspectives

1. The Accountant (Book): Backward-looking
2. The Market: Forward-looking

**Book Equity**  

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**Market Equity**



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# Value Stocks & Growth Stocks

## Value Stocks:

- High Book-To-Market
- Low Stock Price
- Market: We Expect Less

## Growth Stocks:

- Low Book-To-Market
- High Stock Price
- Market: We Expect More

**Cheap Relative To Book Value**

**Why?**

**Risky?**

**Expensive Relative To Book Value**

**Safe?**

**What If Growth Slows Down?**

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# Factors

## Stock Returns: How Do We Explain Them?

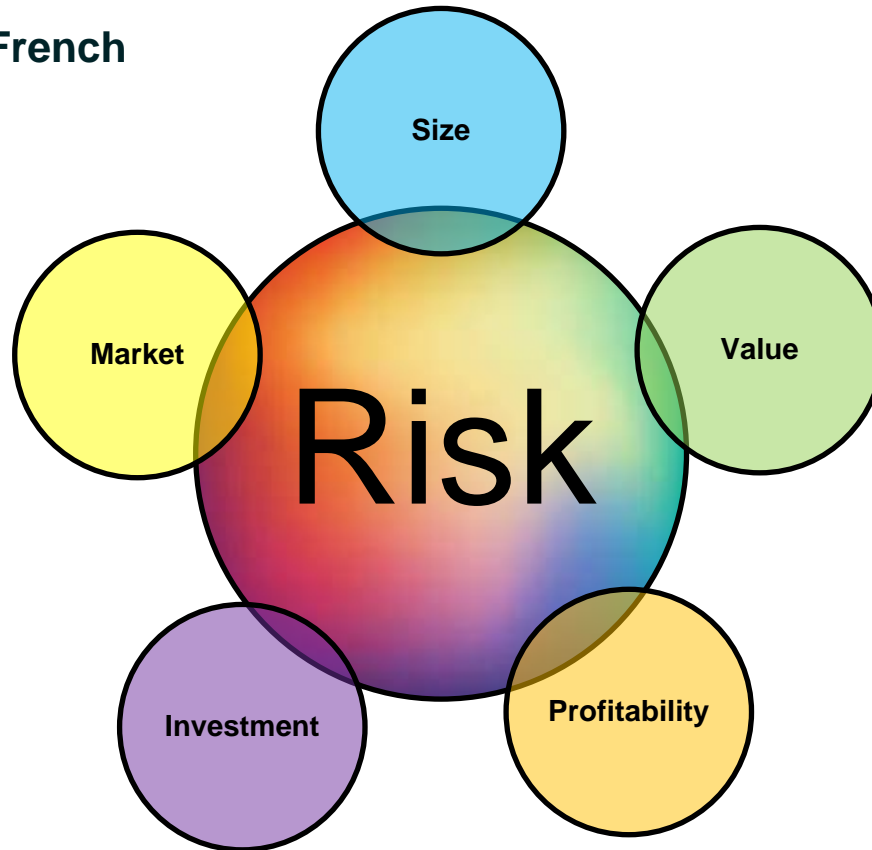
- Returns = Compensation For Risk
- Efficient Market Hypothesis
- Anomalies: “Return Patterns”
- Factors: Risk Premium

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# The Five Factor Model

## Most Recent Asset Pricing Model

- Fama & French



*Ezafms*

# Factor Risk Premium

## How Do We Measure A Risk Premium?

1. Sort Stocks On (Risk) Characteristic
2. Create Portfolios At Extremes Of The Range
3. Create “Factor-Mimicking Portfolio”

### Example for Value

1. Sort Stocks On (Risk) Characteristic: **Book-To-Market**
2. Create Portfolios At Extremes Of The Range: **Value (High BTM) & Growth (Low BTM)**
3. Create “Factor-Mimicking Portfolio”: **Value-Minus-Growth (High-Minus-Low)**

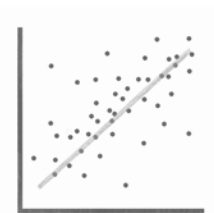
A stylized, handwritten-style logo for Erasmus, featuring a large, flowing 'E' followed by the word 'Erasmus' in a cursive script.



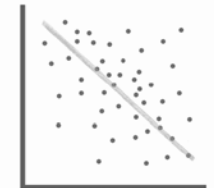
# Factor Exposure

## Betas or Sensitivities

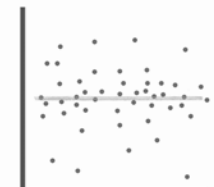
- Regress Returns on Factor Portfolio(s)
- E.g. Growth Stocks: Negative Beta On Value
- Alpha = Non-Systematic Risk (Risk Unrelated to Factors)
  
- Industry Professionals: Capturing Alpha = Skill
- Academics: Alpha = Insufficient Risk Factors (Incomplete Model)



Positive Correlation



Negative Correlation



No Correlation

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# Factor Redundancy

## Recent Academic Insight: Value Redundant

- **No Reduction Of Alpha When Adding Value To Four-Factor Model:**
  - Market, Size, Investment, and Profitability Factors
- **Investment and Profitability Absorb Value Effect**

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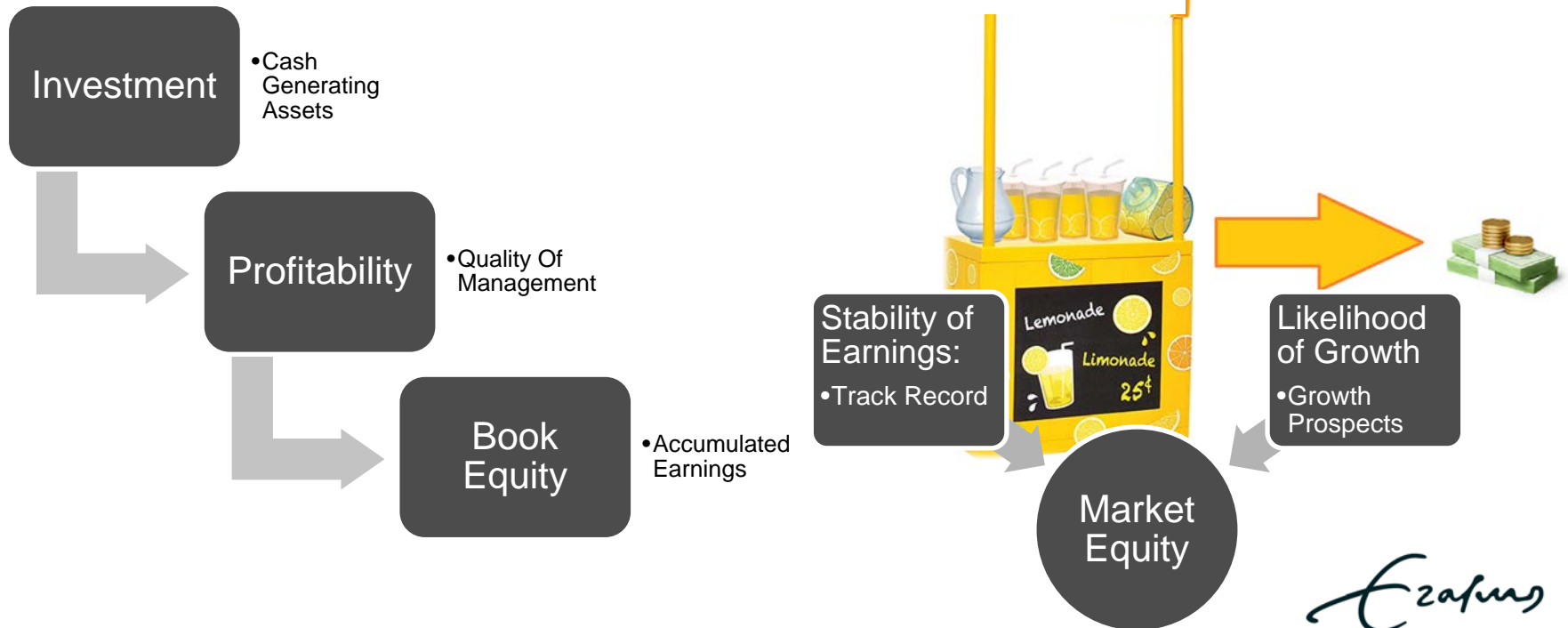
# From Value to Value-Creation

## Drivers of Value

- **Recall: Book-To-Market**

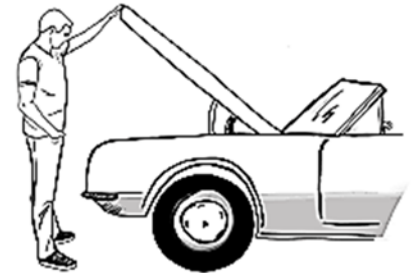
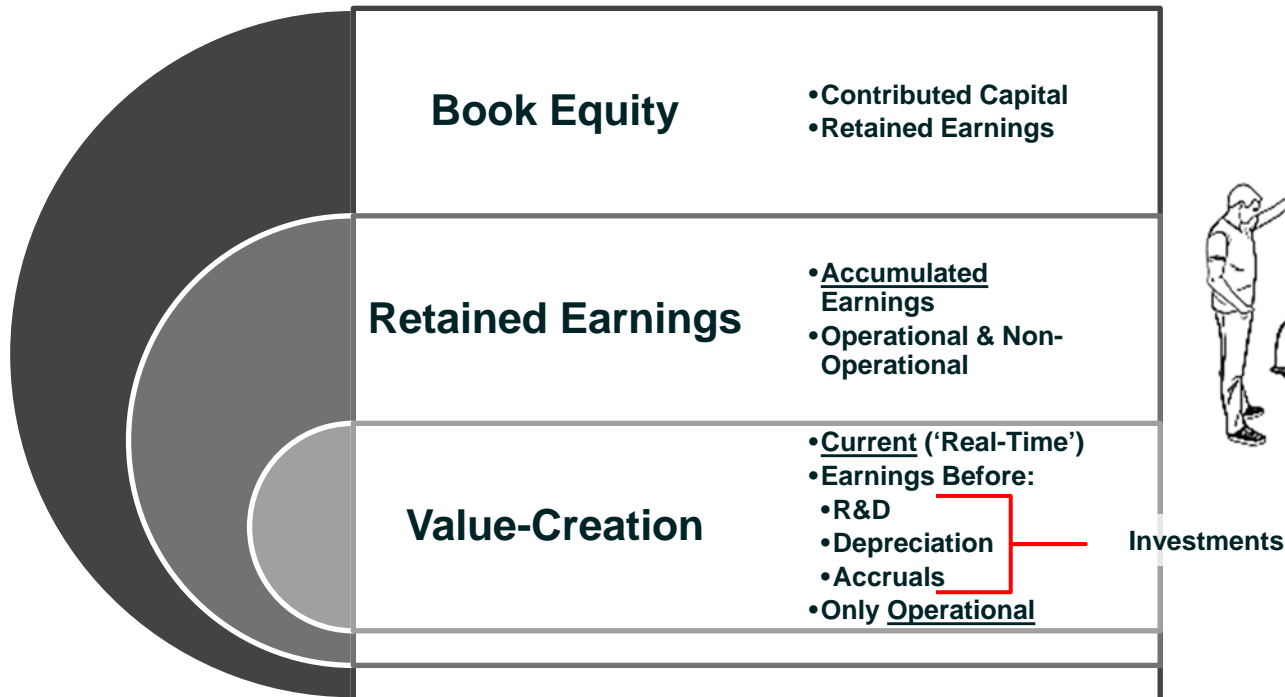
- How Profitable Have The Lemonade Stands been?
- How Far Back In Time Can We Check?

- How Many New Stands Planned For Future?
- Other Investment Plans To Grow?



# From Value to Value-Creation

Book Equity → Retained Earnings → Value-Creation



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# From Value to Value-Creation

## Productivity And Expectations

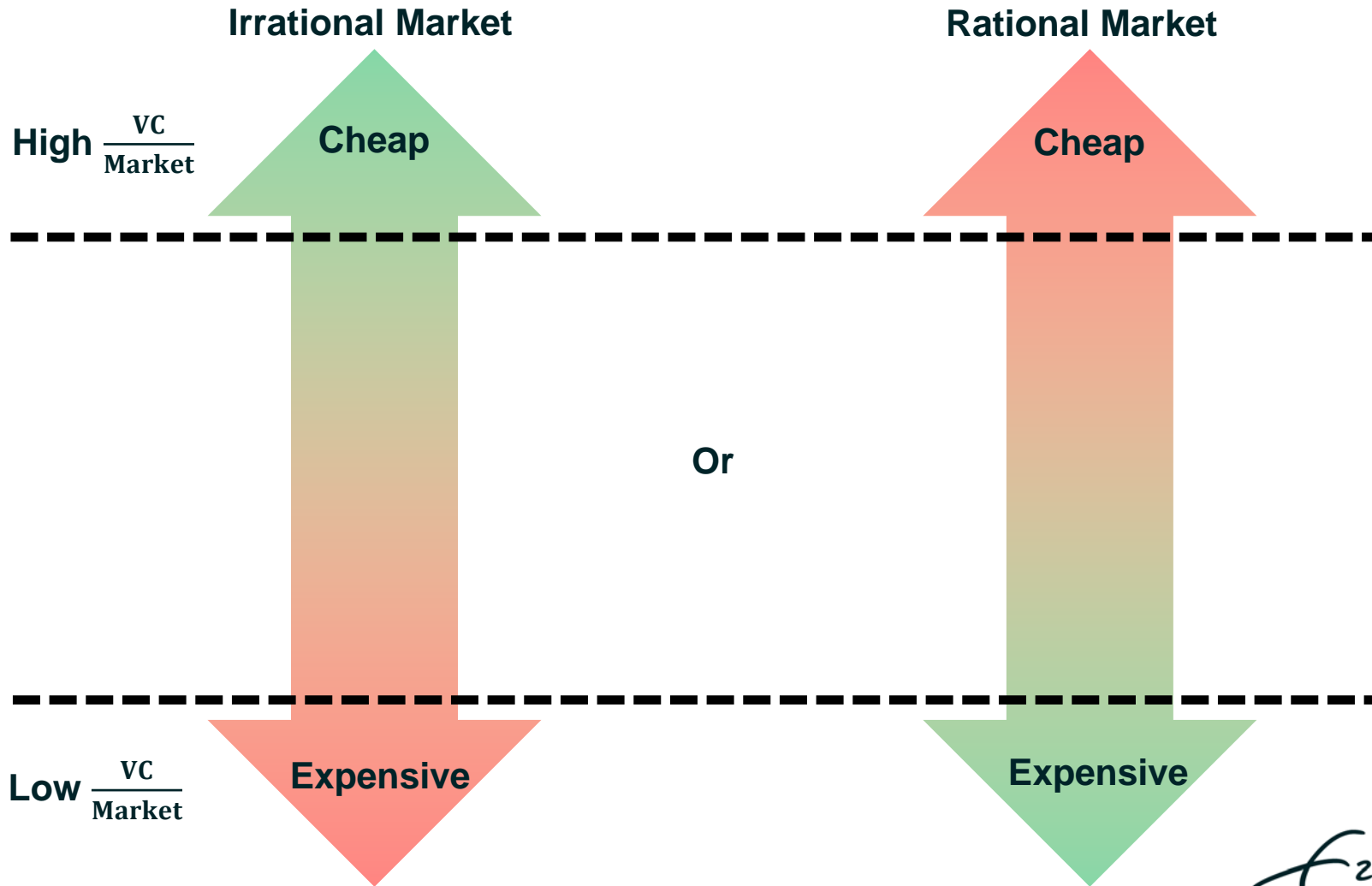
- Productivity: Backward Looking Fact
- E.g., Lemonade Stand: 100\$ Asset ; Earns 10\$ per Year
- Productivity:  $10\$/100\$ = \underline{10\%}$
- Financing Lemonade Stand
  - Loan? Owner's Money?
- What Else Could Have Been Financed? Opportunity Costs / Cost of Capital



$$\text{Value-Creation} = (\text{Productivity} - \text{Cost of Capital})$$

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# Value-Creation-To-Market

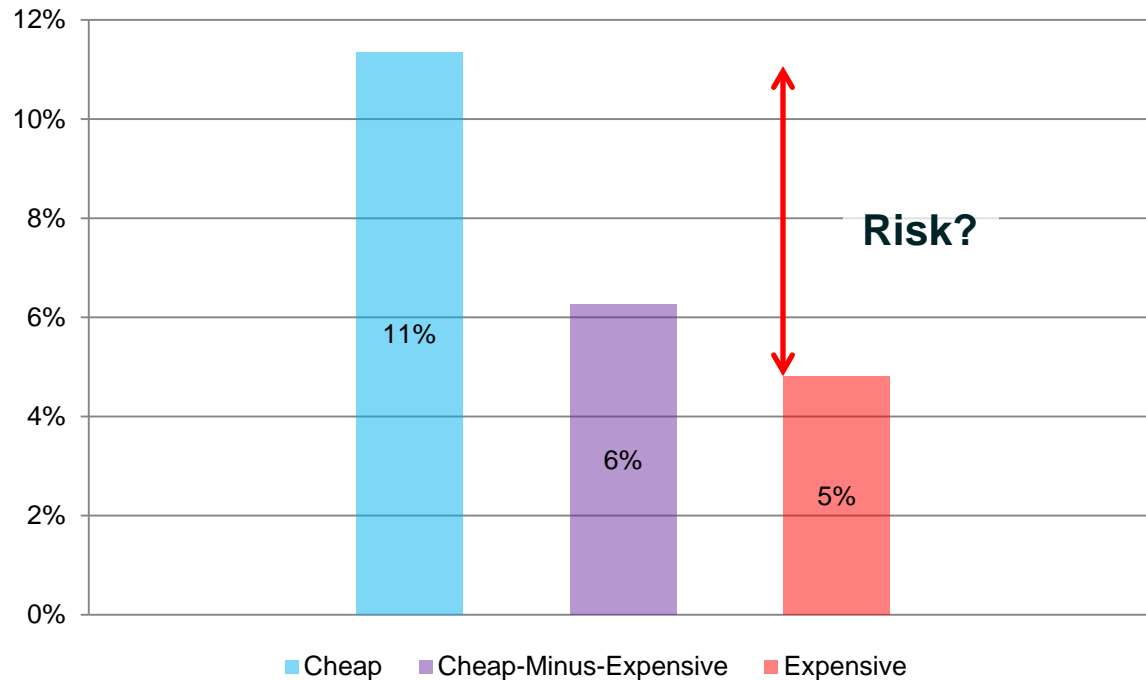


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# Results & Implications

## The Value-Creation Pricing Factor

- Sort On: Value-Creation-To-Market
- Value-Creation Pricing Effect: Cheap-Minus-Expensive



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# Results & Implications

## The Value-Creation Pricing Factor

- **Significant Reduction Of Alpha When Adding Value-Creation-To-Market To Four-Factor Model:**
  - Market, Size, Investment, and Profitability Factors
- **Investment And Profitability Don't Absorb Value-Creation Pricing Effect**
  
- **Model Improves Description Of Returns Associated With**
  - 'Investment Effect': Size & Investment
  - Combined 'Investment And Profitability Effect': Size, Investment, and Profitability
  
- **No Improvement For 'Profitability Effect' Alone**

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Thank you!  
Comments?  
Questions?