



A Useful Perspective on Performance:

Understanding (α) Alpha

Anthony Brooks, Equity Portfolio Manager

www.saw-grass.com

Are you looking at performance the right way?

- ▶ Excess Returns
- ▶ Risk Adjusted Returns
- ▶ Assessing Risk Adjusted Returns:
 - ▶ **Alpha**



Excess Returns vs Alpha

- ▶ Excess Returns measure **difference** between portfolio and market returns.
- ▶ Alpha measures the excess return due to **NON-market** factors.
 - ▶ In other words, **Risk Adjusted Returns**.
- ▶ Why do we adjust for risk?...

Excess Return Example

- ▶ Fund Manager at 1.2 Beta
- ▶ Market is up 10%
- ▶ Fund earns 12%
- ▶ Excess Return: 2% (12-10)



Alpha: What is it?

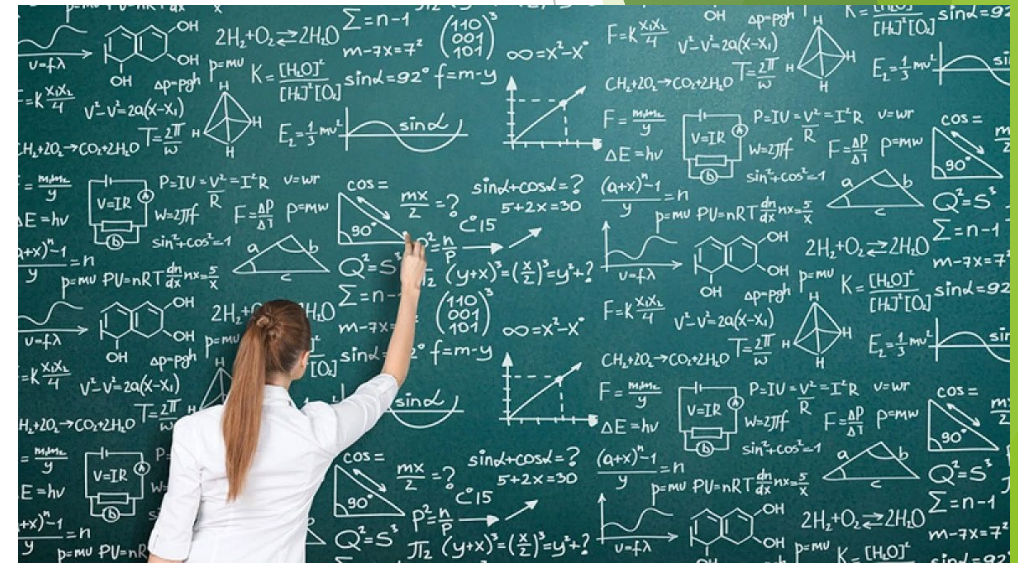
- ▶ Excess return adjusted for **risk taken**.
- ▶ Formula: $R_p - R_f - \text{Beta}(R_m - R_f)$
- ▶ Don't memorize this ↑!
 - ▶ Just remember: Return relative to Beta.
 - ▶ But what is **Beta**?

Beta – A risk measure...

- ▶ Beta measures **volatility** relative to the market.
- ▶ Beta: 1.0 – matches market
 - ▶ Market goes up 10%, expect 10% return
- ▶ Beta 1.2 – Market +/-10%, expect +/-12%
- ▶ Beta 0.8 – Market +/-10%, expect +/-8%

Which fund performed better?

- ▶ Market return: 10%
- ▶ Fund A earns 12%
 - ▶ **Excess Return 12%-10% = 2%**
- ▶ Fund B earns 11%
 - ▶ **Excess Return 11%-10% = 1%**



Which fund performed better?

- ▶ Market return: 10% >> both outperformed
- ▶ Fund A earns 12% **with a beta of 1.4**
 - ▶ Outperformed with more risk, lower α^*
- ▶ Fund B earns 11% **with a beta of 0.9**
 - ▶ Outperformed with less risk, higher α^*

**Assuming risk-free return of 3%, Fund A alpha = 0.6, Fund B alpha = 1.7*

Why does Alpha matter?



- ▶ Returns are random.
- ▶ Excess returns are fleeting (especially 1-, 3-, and 5-year returns).
- ▶ Professional investors manage risk, not returns.

Why does **Alpha** matter?

- ▶ Alpha measures Risk-Adjusted Returns.
- ▶ Professional investors manage risk.
- ▶ More reliable measure of investor skill.
 - ▶ In the short term.
- ▶ Long-term, good risk management can lead to good excess returns.

Limitations of Alpha

- ▶ Can be misleading if risk is too low.
- ▶ Have to take enough risk to outperform
 - ▶ Market Return: 10%, Fund Return: 8%
 - ▶ Fund Beta: 0.6
 - ▶ Alpha is high, **but ability to earn excess return is low.**

Limitations of Alpha

- ▶ Can be misleading if using wrong bench.
- ▶ Compare to appropriate benchmark
 - ▶ Value Index Return: 10%
 - ▶ Growth Fund Return: 12%
 - ▶ Growth Fund Beta: 1.1 >> Alpha 1.3*
 - ▶ Alpha is high, **but benchmark is inappropriate.**

**Assuming risk-free return of 3%*

How to use Alpha

- ▶ **1. Analyze investment manager skill.**
 - ▶ Helps filter out market noise.
- ▶ **2. Asset allocation decisions.**
 - ▶ Allocate more to higher alpha managers.
- ▶ **3. Measure fee-efficiency.**
 - ▶ Higher alpha can justify higher fees.

Other Risk Metrics



Other Risk Metrics



- ▶ Also: Upside capture, Downside capture, Min/Max drawdown, Treynor ratio, R-squared, etc...

Summary

HOMEWORK

- ▶ Consider the **role of risk** in your performance analysis.
- ▶ Excess Returns are good...
 - ▶ But they don't tell the whole picture.
- ▶ Alpha can help you determine the **efficiency** of Excess Returns.