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Seeking alpha in educational systems

Peter McDowell
Charles Darwin University

In Education

- Routine benchmarking of educational systems
- Widespread ‘peer referencing’ by participants
- Public discourse on relative progress (often **regression**)
- Generates substantial scrutiny, investment
- **Question**: are these efforts purposeful, productive?

In another domain (Finance)

- **Claim**: a comparable situation exists within the global financial sector — in **asset management**
- Manifold participants (like Education)
- Numerous permutations (like Education)
- Monetised (like Education) and therefore heavily invested and exploited
- An ongoing controversy about **underperformance**

How to proceed?

- Look at two main strategies used in **asset management**
- Analyse the performance controversy a little more
- Develop an analogy in the area of education
- **Purpose**: to better understand what’s happening in **educational systems,** to suggest some areas of focus

Asset Management

- The business of **professionally managing** other people's investments
- **Regulated activity**, with an emphasis on capability, viability, and transparency (*performance data*)
- Clients include institutions having special charters: e.g., governments, insurance companies, pension funds, schools and universities
- Trillions ($USD) worth of assets under management

The general process

- Establish a suitable legal entity: e.g., trust or company
- Decide on the investment strategy
- Invite the vesting of funds (e.g., via a prospectus)
- Place the funds (i.e., purchase assets)
- Manage the assets (generates many issues: handling further contributions, fulfilling redemptions, preserving capital, achieving adequate returns, …)

Two main approaches

- The variety of approaches to asset management are often categorised in the following way
- **Active** management: where the asset manager tries to beat the market
- **Passive** management: where the asset manager is happy to follow the market
- (What constitutes the market is not straightforward.)

Active management

- Decide which **benchmark** to beat (or assert neutrality)
- Research the components of the benchmark (or an ‘investment universe’ if you’re benchmark neutral)
- Hold more of the better performing assets (fewer of the less)
- An opportunity to charge on performance

(Dis)advantages (active)

- **Risk**: assets may perform better/worse than expected (market valuation)
- **Uncertainty**: the basis for decision-making is in flux (can read/misread the market better/worse that competitors)
- **Cost**: it takes considerable effort/know-how to properly research the market (barrier to entry)
- **Affective domain**: the ‘human’ element (variable impact on performance)

Passive management

- Decide which benchmark to follow (usually a specific index: e.g., S&P 500)
- Hold all the assets that comprise the index (in the appropriate proportions)
- Track the index (balance the holdings as you go)
- Charge a light commission

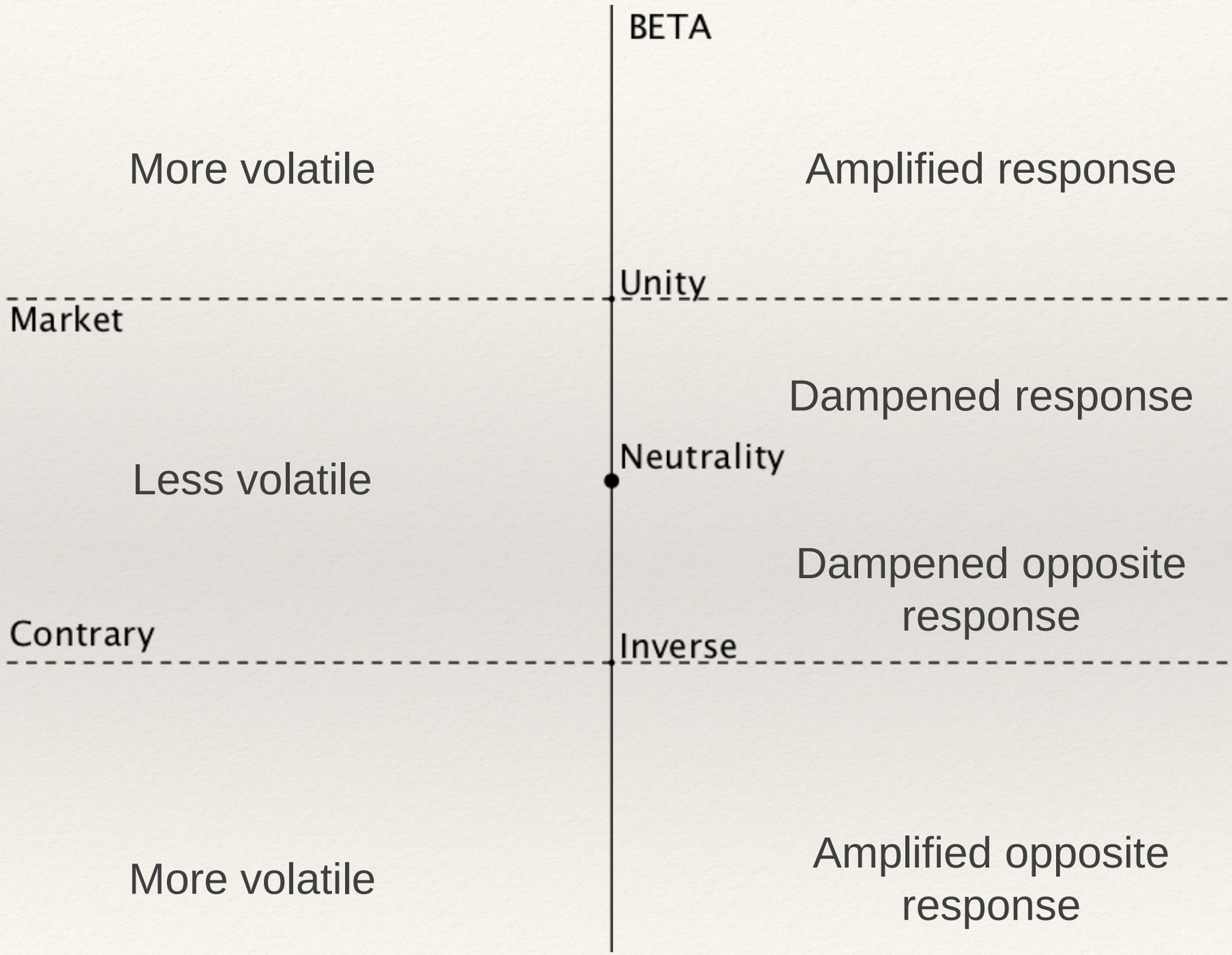
(Dis)advantages (Passive)

- **Risk**: accept the benchmark's performance (good/bad)
- **Uncertainty**: largely eliminated (transferred to the index provider)
- **Cost**: administrative
- **Affective domain**: largely eliminated (buy the index)

Modern portfolio theory

- Considers the interrelationship between the benchmark (index) and its components (individual assets)
- A combination of components = a **portfolio**
- Measure the statistical codependencies between components and the collective whole (the **Beta** variable)
- Look at the relative volatilities and their directionality (amplitude of peaks and troughs) (*risk/return*)

Beta (an interpretation)



Alpha (an interpretation)

- Portfolios bear some relation to the market (**Beta** = 1)
- We know the **potential performance** of a portfolio based on what we know about the codependencies of the assets comprising the market
- Actual performance of a portfolio might be different (the **Alpha** variable)
- Positive alpha => **excess** performance

Seeking Alpha

- **Question**: how can we achieve excess performance?
- *Answer 1*: through idiosyncratic interventions (e.g., proprietary methods of asset selection) that haven't been assimilated by the market
- *Answer 2*: as a statistical artefact (e.g., a random walk)

Contestation

- Mounting evidence that active management **underperforms** passive across all assets classes and timeframes (from the **passive** camp)
- Some evidence that active management **outperforms** passive in some asset classes in some market situations over certain timeframes (from the **active** camp)
- **Dispersion** is crucial: a tiny few asset managers consistently outperform

Dispersion

- Better performing managers are more likely to persist
- The likelihood of sustaining strong performance diminishes substantially over time (S&P reports <1% remain in upper quartile over 5 years)
- Poorly performing managers are unlikely to become competitive (breach the third quartile)
- Second tier managers are most likely to replace fallen performers

Observations

- There is a well-established market for consistent performance data (**alpha**, **beta**, and other variables)
- Index providers underpin the operation of the industry
- Benchmark construction is a very active area
- Different benchmarks suit different investment purposes (risk management, market cycles, ethical factors)
- Ongoing research into ‘hidden’ variables: e.g., client objectives, corporate culture

In Education

- There isn’t a comparable, **alpha**-oriented appreciation of the effectiveness of our educational systems
- Currently limited scope to calculate **beta** values (sparse data, low periodicity)
- Structural bias is an issue for some key rankings
- Evidence of both active and passive strategies
- Persistence is an ongoing issue for strong performers

Seeking alpha

- What is reasonable to expect of an educational system in relation to its peers? (how to measure its **beta** value?)
- How can we tell when an educational system is performing better than expected? (its **alpha** value?)
- To what can we attribute excess performance? (how to isolate the nature of the **idiosyncratic** intervention?)

Alternative beta

- Emerging evidence that elevated performance can be attained for significant periods through sectorial ‘tilts’: i.e., investing in assets having certain technical characteristics (in Education: e.g., curriculum, pedagogy, selectivity, pathway)
- Not **alpha** (as the tilts are systematic): alternate **beta**
- Combinations of sectors tend to increase the periodicity
- Flexibility is necessary (may not align with charters)

Teacher education

- Sustained outperformance is rare
- Sustained outperformance exists
- Sustained outperformance doesn’t arise from peer referencing (only)
- By systematising successful interventions, the outperformance will most likely by lost (absorbed into the reference group = **beta**)
- Stasis will almost guarantee relative decline

Looking ahead

- Further warranting needed for the analogy
- The active/passive controversy is still unfolding
- Active managers are restructuring their industry
- Passive managers (and regulators) are reevaluating the meta-systemic risk of ‘buying the market’
- Investment continues in improving educational rankings (TES, QS, PISA)

Questions and comments?

Thank you

Contact: peter.mcdowell@cdu.edu.au
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