The Best Questions You're Not Asking An ETF Strategist

Andrew Gogerty
Vice President, Investment Strategies

Newfound Research LLC
425 Boylston St.
3rd Floor
Boston, MA 02116

617-531-9773

thinknewfound.com
info@thinknewfound.com

The growing popularity of ETF investing has led to a rapid expansion of ETF managed portfolio strategies available to the advisor and intermediary marketplace. Morningstar's first ETF Managed Portfolio Landscape Report, released in January 2011, contained just 370 strategies. In just over three years that number has exploded to nearly 650 offerings as of the Q4 2013 Report.

Platforms have been playing catch-up as these asset managers have come to market with multiple flavors of portfolios, including wide-ranging tactical offerings and one-stop solutions. Advisors and intermediaries are beginning to ask better questions with regards to track record, investment process and internal resources, but are still not getting to the heart of separating strategies on underlying merit.

What's The (*Origin of The*) Story?

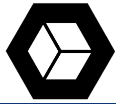
The responses to qualitative questions around a firm's culture and inception confirm its appeal or raise immediate red flags. Many know this already, but better questions could be asked.

Simply put, the focus should be on the "Why" questions. Is there an organic story to the firm's creation, or is it simply a me-too situation? The increasing breadth and depth of the ETF market and data availability on ETFs have led to a rebirth in back-tested quantitative strategies (more on this in a minute). Is there a unique story, or is there a knock-off or copycat nature bleeding into the conversation?

Other questions that will quickly cut to heart of one of these investment philosophies include:

- Why was the firm started? What was the "Aha!" moment?
- Outline the firm's investment philosophy without discussing the model inputs. What is at the core of the firm?
- What research supports the inclusion of a strategy's variables?
- What confidence does the firm have that these variables will continue to be a value-add in your strategy?

Any question that is not answered both directly and confidently is an immediate red flag as to where the core existence of a firm originated.



Newfound
FINANCIAL INNOVATORS

Separating The Model From The Strategy

In a recent blog post we looked at the subtle but material distinction between the words "complex" and "complicated" when discussing quantitative investment models. And while "model" and "strategy" aren't as twin-like, the labels have become nearly interchangeable in the ETF managed portfolio industry. In fact, it has become so pervasive that the industry is actually spending more time talking about the "model", when it's the "strategy" that actually highlights the investment ethos of the firm.

MODEL: *An algorithm or other program that delivers a raw data output decision or outcome for one or more individual asset classes.*

STRATEGY: *A comprehensive set of rules, decision-steps, or other criteria that INDEPENDENTLY determine how a portfolio of ETFs or other securities are included in a portfolio.*

Quantitative investment products such as those offered by Newfound and many of our peers can be broken down into two ***independent, yet complementary,*** parts; an algorithm (the model) and the portfolio rules (the strategy). If a firm offers more than one investment product, it is a red flag if they cannot speak in-depth on each part independent of the other. A model is simply raw output, and the best models should be simple to understand, yet complex enough that it can be transparently explained without being replicable. A robust model should have broad applicability. At most, this part of the investment process should consume 10-15% of the conversation. Any more than that, and the red flags should fly, either from an overly complex model (butterfly effect problems), lack of uniqueness (copy-cats), or outright lack of true understanding of the philosophy underpinning the model.

Enter the portfolio rules (the strategy). A seemingly infinite number of strategies can be created from a simple, yet robust model. The rules of the portfolio construction are what matter, and 85%-90% of the conversation should be devoted to understanding how they bind the model output to fulfill an investment objective. The takeaway is to understand what problem the strategy is trying to solve and potential uses in a portfolio. Two GTAA strategies can use the same exact model output for global asset classes, yet have dramatically different risk/reward profiles. If an asset class is "off" in a model, what do you do with the allocation? Re-weight to other asset classes? Raise cash? Pool the allocation into a low-volatility version of the portfolio? Port the allocation (or "waterfall") to the next major asset class? These questions can lead to 4 different investment portfolios from the same model. Taking an even further step back, consider the universe of ETFs for inclusion in the portfolio. That is a strategy decision, not a model decision.

Why go through this exercise? It forces the asset manager to highlight the value proposition of the strategy, not just an awesome model. Questions we believe are paramount include:

- What is unique about the model?
- What was the "Aha!" moment that led to the model's design? What were the influencing factors in the design?
- Can the portfolio decisions be simply and confidently explained?

- Do you understand the outcome and expectation of the portfolio rules as well as the model/algorithm?
- What is the solution the model, portfolio rules, and overall strategy are trying to solve?
- How do those rules move capital towards that solution?

The concept of simplicity is well summarized in a few aphorisms from The Zen of Python (http://www.python.org/dev/peps/pep-0020/), which is outside of the field of finance but directly on point for a quantitative discussion:

- Explicit is better than implicit.
- Simple is better than complex.
- Complex is better than complicated.
- Special cases aren't special enough to break the rules.
- If the implementation is hard to explain, it's a bad idea.

The Evolution of Research

A firm you understand? Check. A model and strategy you have confidence in and know how to use? Check. At this point, traditional managed account research moves to attribution and analysis around the firm's operations and associated due diligence. There was no need to question who was picking the stocks or generating inputs into a strategy; it was assumed to be the people at the firm.

But data and technology have evolved in creating and delivering strategies to advisors and other intermediaries – so then must the inquiries in reviewing them. Don't assume that a firm's data inputs or calculations are being done in-house. Advisors should ask and be confident as to any and all sources of the intellectual capital and inputs that contribute to the final product. Getting at the core inputs of a model will confirm a firm's organic story or shed light on a potential knock-off or me-too situation. Asking more-direct, blatant questions about the model and strategy will also highlight the conviction a firm has not only in what is in the portfolio, but more importantly what is not included – and the justification for the decisions.

As a point of example, in 2008, Newfound began describing the key inputs to its dynamic, volatility-adjusted momentum model as "momentum, volatility, and the volatility-of-volatility." In recent years we have been witness to a large proliferation of models that make the same claims. However, when pressed as to *why* these factors were selected in model design, few of these firms are able to provide resolute answers: a clear case of *me-tooism*.

The gut-check reaction is to simply make due diligence questionnaires and RFIs longer and add additional rounds to the review process. But answers to standardized and/or quantitative questions can be massaged or even

sidestepped with clever wording. Research needs to focus not only on the data, but also on the expectation of the strategy. Direct question examples are below as well as areas of focus:

- What is the source of all inputs and data for the model?
- Are any signals, data, or other inputs utilized provided by a third-party?
- What is the value-add in each step of the process from data input, to model output, to portfolio rules?
- Why were these factors included but not others?
- What common factors or ETFs are not being used? Why?
- How do these factors deliver the stated value-proposition?
- There is no "holy grail". When will the strategy not work?
- What is the source of the potential underperformance? The model or rules?
- Why will it not work in those circumstances?
- Why was the model and strategy built with that potential for underperformance?
- What is the worst-case market scenario for the model and strategy?
- What's the end goal? (It better not hint of anything close to "outperformance all the time.")

The Back Test – It's not good or bad. It Just Is.

The growing availability of ETF and underlying index data have brought the concept of back-tested results back into the spotlight for quantitative strategies. But keep in mind that a back test is just like any other tool: it is only useful when used properly. Consider a scalpel: in the right hands, it can be used to perform precise surgery and save a life; in the wrong hands, someone is likely to lose a finger. What you do with a back-test (in this case how you present and disclose it) is what matters. In a similar fashion, don't lessen your scrutiny when looking at an "index" of a strategy. An index is nothing more than a back-test calculated by someone other than the asset manager, but without necessarily accounting for fees, expenses or taxes. Does the likelihood of an error diminish? Sure. That said, the "garbage in, garbage out" concept still applies.

The review of a back-test should focus on the assumptions used to generate the return stream. It should not be used to claim good performance, but rather to set expectations for the risk/reward characteristics. A back-test can be a meaningful way to demonstrate behavior of both the model and the strategy rules working together. In other words, a return stream that goes up and to the right doesn't really tell anyone anything. Look for periods of under performance, and examine that behavior to understand the strategy's characteristics. Remember, there is no "holy grail". Back-tested or index performance also should be devoid of any changes to the rules, assumptions, or input data into the model or strategy rules. Changes in the underlying

Newfound
FINANCIAL INNOVATORS

models or rules are, in our opinion, tantamount to a manager change and should appropriately be disclosed as such.

It can't really be argued that back-test best practices include clear, transparent, and easy to read disclosures. Key questions to ask both the firm and review in the disclosures include:

- What is being disclosed? Hypothetical performance or live-dollar/actual-traded returns?
- When was the back-test first calculated? Who calculated the returns?
- Have the same rules, input data, and assumptions been used from that date going forward?
- Have there been any enhancements?
- If yes, what is the return stream of the original back-test and the enhanced strategy?
- Why does the back-test start when it does? What is significant about that start date? Can you calculate the back-test farther back in time?
- Have any of the return disclosures; start dates, or monthly returns changed over time? If so, when, how, and why?
- When are allocation decisions made and when are they acted upon? Is this a realistic assumption? (For example, at Newfound, we assume allocation decisions are made after market close and executed at next market open; many firms assume decisions are made and executed upon at close, which is unrealistic in our opinion)
- Are performance results gross or net of fees, expenses, taxes and do they reflect the reinvestment of interest or dividends?

Most importantly, a back-test should never combine hypothetical and actual (live dollar) returns streams. The back-test, or model performance, should be just that.

Remember to pause and take step back when reviewing performance. Are ETF managed portfolios one of the hottest areas of the managed account universe right now? Yes, without a doubt. But any strategy worth its long-term salt is still going to be available tomorrow.

The Track Record

Investment products showing just a real-money, live-traded track record (or composite) is certainly a step closer to reality than a back-test, but still requires a depth of scrutiny. A live track record is NOT validation that a strategy has long-term merit. It is simply the output of a series of model inputs, strategy outputs, and trade execution.

- What is the historical monthly dispersion between the model performance and the composite?

- When does the composite trade compared with the assumptions in the model to calculate performance?
- If the strategy is available on an overlay platform (where the platform, not the asset manager, is responsible for trading) what is the composite performance on that platform? How does it compare to the model and the manager's own discretionary trading?
- How has slippage (model-composite returns) changed over time as assets have increased or declined?
- What was the initial asset base used to start the composite? How does that compare with current asset levels?
- What were the asset levels during standout periods (positive or negative) of performance compared to current asset levels?
- Is the performance composite GIPS verified (not just at the firm level, but also at the composite level)?

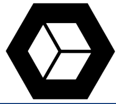
Conclusion

Current market perception is a humming chant of "More Due Diligence! More Due Diligence!" No one likes to admit they accepted weak due diligence answers and did not ask the initial necessary follow-up questions. Better research isn't the outcome of longer due diligence questionnaires and requests for information. Better research is the result of asking better questions from the onset. Without a doubt, some or most of these questions are likely being asked in one form or another right now. But the market is not coalescing the responses into a holistic and transparent view on the asset manager or strategy under consideration. That evolution will allow decision makers greater confidence in not only their selection of managers, but also individual strategies for a portfolio solution.

Andrew Gogerty
Vice President, Investment Strategies

At Newfound, Andrew focuses on industry leading thought leadership in the tactical ETF managed portfolio space. His position works with the investment and sales teams and focuses on investment research, product development, and education around the firm's tactical ETF-based investment strategies.

Prior to joining Newfound, Andrew was the ETF Managed Portfolio Strategist at Morningstar, Inc., where he established the industry's preeminent research framework and thought leadership for the ETF manage portfolio industry. He provided market and performance commentary on the ETF managed portfolio universe, identified industry-wide best practices, and outlined due-diligence steps for strategy selection. In this role he consulted large institutions, platforms, and advisors to provide insights into the evolution of the industry.



For more information about Newfound Research LLC call us at +1-617-531-9773, visit us at www.thinknewfound.com or e-mail us at info@thinknewfound.com

Past performance is no guarantee of future returns.

• IMPORTANT: The projections or other information generated by Newfound Research LLC regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results.

• All investing is subject to risk, including the possible loss of the money you invest. Diversification does not ensure a profit or protect against a loss. There is no guarantee that any particular asset allocation or mix of funds will meet your investment objectives or provide you with a given level of income.

• These materials represent an assessment of the market environment at specific points in time and are intended neither to be a guarantee of future events nor as a primary basis for investment decisions. The performance results should not be construed as advice meeting the particular needs of any investor. Neither the information presented nor any opinion expressed herein constitutes a solicitation for the purchase or sale of any security. Past performance is not indicative of future performance and investments in equity securities do present risk of loss. Newfound Research LLC's results are historical and their ability to repeat could be affected by material market or economic conditions, among other things.