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Compared to what?

A thoughtful approach to measuring relative portfolio performance – Part 1

INTRODUCTION

How did I do? It's a simple and important question when it comes to evaluating investment portfolio performance. There are two ways to think about the question. First, in absolute terms, was my performance sufficient to cover my spending and other distribution needs? Did I make enough to pay for taxes, fees, distributions, charitable contributions, etc.? That's the easy question - just a matter of subtraction!

The harder but equally important question is: did I generate a return equal to or greater than what I reasonably expected? **We believe the best way to answer this is by defining rigorous and relevant benchmarks.**

Our goal in this whitepaper – the first of two – is to explain which benchmarks we find most useful and how they can be used to answer critically important questions like "how much value was added or detracted from all the investment decisions made in my portfolio?" Being able to understand how and why a portfolio's performance differs from benchmarks can be a catalyst for improved investment decision-making and potentially better long-term results.

Before we dive into a discussion of benchmarking, a quick note: you can't judge relative performance without having reliable and accurate data about actual performance. While this may seem obvious, in portfolios with public and private market investments calculating timely and accurate returns can be a formidable task. It is beyond the scope of this white paper to address the mechanics of performance calculation methodologies, but we do note when there are relevant considerations.

WHAT GOES INTO A GOOD BENCHMARK

Good benchmarks must be clearly defined, consistent, and measurable. A benchmark should be specified prior to the beginning of an evaluation period and should be calculated accurately

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in a timely manner. If a portfolio is expected to be rebalanced monthly, then benchmarks should be similarly reweighted. If performance is measured daily, then benchmark inputs should also be measured and compounded each day.[1]

We strongly believe that benchmarks should be defined by the assets that comprise a portfolio (or parts of a portfolio) and comport with how a portfolio is intended to be managed. Benchmarks are mirrors that should simultaneously reflect the goals and objectives of a portfolio *and* the real-world options faced by investors. **Accordingly, benchmarks should be as investable as possible.**

Let's consider an example of why choosing investable benchmarks is important. During the great financial crisis (GFC) of 2007-2008, investors saw stunning success achieved by some hedge funds. Predictably, many investors rushed into these investments and benchmarked their new holdings against synthetic indices that sought to reflect how representative samples of hedge funds were performing, like the HFRI Hedge Fund Index.

But the HFRI index is not a real investment option – its composition changes over time in ways that don't reflect real-world investment options, and it doesn't accurately reflect the opportunity cost of investing in most kinds of hedge funds. While it's arguably useful for answering the question "how did my hedge fund do vs. other hedge funds" it's not something you can actually buy or sell, and it says nothing about how an investor should expect his or her hedge fund holdings to behave.

What many post-GFC investors commonly held in their new hedge funds were arbitrage-oriented, lower volatility strategies. We think the proper benchmark for these kinds of strategies is a mix of different kinds of bonds that you can actually buy, as this reflects a true competition for capital. In other words, if investors didn't buy a "low-vol distressed debt fund," they could have bought cheap, liquid, equally low volatility, high-grade bonds as a reasonable competitor for the capital.

Relying on benchmark ingredients that are untethered from real-world investing options can

[1] Most portfolios hold assets that are marked daily (stocks and bonds ETFs and mutual funds), monthly (hedge funds), and quarterly (private markets). Not all data is available at the same time but benchmarks should align with the performance marking realities utilized in performance reporting systems to the greatest extent possible.

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lead to spurious conclusions. For example, if we just looked at the HFRI index, we might conclude that a hypothetical hedge fund investment fund that produced a low-single-digit return did okay given the middling HFRI index return of 3.7% from 2007 to 2015. But really, this was bond-like risk – annual volatility of the index in that time frame was 8.2%[2], close to what an investor should reasonably expect prospectively from bonds. And during this period bonds posted a competitive return of 5.0%[3] as interest rates came down and stayed low during the period of quantitative easing. Beating the HFRI would have been a pyrrhic victory – because the real competition for capital was bonds, which were far cheaper, more liquid and generally more tax efficient.

Cost of capital – a way to express opportunity cost - is at the heart of our preferred approach to benchmarking. Cost of capital asks: "if not for the proposed investment, what other kind of asset would generate a similar level of expected return, risk, correlation and liquidity?" Identifying a suitable alternative is not always a simple proposition – it requires careful consideration of how a manager, strategy, or asset class is supposed to benefit a portfolio. We have to think deeply about the role of a given investment before picking its benchmark.

DEFINING PREFERRED BENCHMARKS

The portfolio-level benchmarks we find most useful are ones that ascertain the performance of three critical portfolio characteristics:

1. The risk an investor expects for a given portfolio design
2. The design utilized to achieve expected risk/return
3. The implementation of the design

When we talk about a portfolio's "design" we are talking about the concept of long-term (strategic) asset allocation targets for a portfolio. For example, a simple portfolio design might be 70% global public equities and 30% municipal bonds. More frequently, portfolio designs encompass many kinds of asset classes – US and international public equities; credit and bond investments; diversifiers, including certain hedge funds; and private equity and real estate.

[2] Source: Zephyr, HFRI
[3] Source: Bloomberg

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1. Risk-adjusted Benchmark

A foundational choice an investor makes in establishing a portfolio design is "What level of risk can I tolerate?" There are other important kinds of risk, but for these purposes we mean volatility, or the amount of up-and-down variation in periodic performance. An investor who designs a portfolio with a 100% long-term target allocation to Nasdaq technology stocks should expect a very different amount of volatility than an investor who designs an all-cash portfolio. By mixing differing amounts of two simple ingredients – public stocks and bonds - benchmark portfolios can be built expressing differing levels of expected future volatility at almost zero cost using highly diversified ETFs. We call the simple mix of bonds and equities exhibiting the same forecasted risk as that which an investor can tolerate from his portfolio design the Risk-Adjusted Benchmark.[4]

The Risk-Adjusted Benchmark answers the critical question, "How would I have fared if I held a portfolio with the same amount of risk that I expected from my portfolio's design, but paid next to nothing in fees and held only two simple and highly liquid ETFs?" **Comparing actual performance to the Risk-Adjusted Benchmark answers the question, "How much value was added (or not) as a result of all choices made,"** including the design of the portfolio, the degree to which implementation choices deviated from the design, and what managers and strategies were chosen.

An important caveat: we're talking here about *expected future risk* associated with a portfolio. It can and does happen that stocks and/or bonds have volatility that's different than what we predict. But absent time travel, we can't know what kinds of risks any asset class will definitively present in the future. That is why the risk-adjusted benchmark is defined by anticipated future risk. This makes sense insofar as benchmarks should reflect real-world choices faced by investors – when establishing a portfolio design, investors have to have an informed view of what kinds of prospective risks you're taking.

[4] Some investors term this a "naïve" benchmark but we think that's a misnomer. There's nothing naïve about keeping things simple and cheap – it's a powerful way to understand how a portfolio is performing.

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2. Strategic Benchmark

In practice, when building a portfolio a set of asset classes broader than a simple mix of capitalization-weighted global stocks and bonds is usually contemplated by an investor since greater diversification can help drive better portfolio outcomes. The mix and proportions of asset classes in a design is heavily influenced by client-specific factors, including volatility tolerance, tax characteristics, liquidity appetite and distribution needs.

The Strategic Benchmark reflects the specific mix of asset classes in an investor's portfolio design. For example, in a portfolio with a 15% long-term target to international developed market stocks, the strategic benchmark should have a 15% weight to a benchmark like the MSCI EAFE, for which there are many very-low-cost ETFs that seek to replicate the index's performance. Certain asset classes, however, require judgment when defining a strategic benchmark that accurately reflects expected liquidity and risk characteristics. For example, private equity buyouts might be best benchmarked against public stocks plus a "margin" of excess required return to adequately reflect the illiquidity associated with the asset class. In this way, we can utilize a real-world, investable benchmark plus an expected margin (rather than, say, the Cambridge Associates index of private funds, which is not investable).

The Strategic Benchmark answers the question "How would I have done if I were invested precisely at my portfolio design's long-term targets, utilizing only passive index funds or ETFs?" It's a **useful benchmark because it removes the noise of intentional or required deviations from long-term targets and the impact of selecting and sizing specific managers.** Comparing a portfolio's actual performance to the performance of the Strategic Benchmark highlights the combined impact decisions made regarding the sizing and selection of asset class and managers.

3. Tactical Benchmark

Many portfolios will vary their exposure over time to asset classes specified by the strategic portfolio design. Sometimes, these differences are intentional and discretionary. If, for example, investors are especially bullish on a broad asset class, they might overweight it for a time relative to others, ideally while respecting pre-established guardrails for ranges around long-term targets. Or an investor might need to vary from his long-term targets when deploying a large amount of capital into private equity asset classes following a sale of a closely-held business,

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since there is usually no sensible way to rush exposure into long-term private funds having commit-and-call structures.

A Tactical Benchmark reflects the performance of a portfolio of investable asset class passive benchmarks held at their *actual* weights present over a given time period. For example, if a portfolio has a 15% long-term target to developed international stocks but held that exposure only at 10% over a quarter, then the Tactical Benchmark would reflect the actual weight. As with the Strategic Benchmark, the Tactical Benchmark relies on mostly passive indices in its composition.

Comparing actual portfolio performance to the performance of the Tactical Benchmark essentially isolates the impact of manager selection decisions.

UP NEXT

Part II of this whitepaper will explain how to use benchmarks in concert with one another to draw important conclusions about why a portfolio is performing in a certain manner. We can answer questions such as: “What’s the real value of the overall advice I’m paying for?” and “How much of my relative performance is coming from portfolio design, tactical decision-making, and selecting/sizing managers?” The answers to these questions are useful in determining where opportunities might lie for improving the efficiency or impact of portfolios and form a fair basis for holistically answering the question “How am I doing.”

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