Asset Allocation

Benchmark indexes: They don't always tell the whole story

By Michael Chu, Investment Advisor

Let's say a friend tells you her portfolio is up 4% in the last year. She asks if that is good or bad. How would you answer? You might think the 4% sounds good, considering interest rates are only around 1%. But then your friend says her portfolio is 100% in stocks. You've heard that the market is up 15% over the same period. Would you still think she's had a good return?

Whenever you judge returns – how good or bad they are – you need to compare them to something. That something is called a *benchmark*.

If your portfolio is 100% stocks, it makes sense to select a stock market index as a benchmark. If the portfolio is 40% in Canadian stocks and 60% in U.S. stocks, we should make a benchmark that averages Canada and U.S. indexes with a 40:60 split. If your portfolio has some cash, bonds and international stocks, we would need to include some of these indexes in your benchmark. You get the picture: The benchmark should select a mix of indexes that reflects how you are invested to make sure you are comparing apples to apples.

So that's the first step. The second step is to select the specific indexes for each of these. Here's where it gets tricky.

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How are indexes constructed? To start, the index creator decides which companies to include. The criteria could be geography, company size, industry, etc. Then the creator has to decide how to calculate the index: Do they take an average of each stock, or weight them by company size? There are various methods, each with its advantages and drawbacks.

A *market-cap-weighted index* is the most common. This means each company is weighted by the total market value of the stock. Say there are only two companies. If company A has a total market value of $100 billion and company B has a value of $10 billion, then the index will have 10 times more in the first company. The index will be about 91% company A and 9% company B. As you can see, larger companies will have larger weightings and smaller companies fewer. This will make the return numbers the same as if you owned 100% of each company.

Not quite apples-to-apples

You can probably see potential problems with this method. What if

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company A is down 5% and company B is up 50%? The performance of the market-cap-weighted index will be about 0%. But in the real world, if you owned equal amounts of each company, then you would be up 22%! Investors rarely own stocks the same way an index does. Therefore, when the biggest companies' returns are far different from average company returns, the indexes don't do a good job at showing how the average company is doing. *In times like this, the market-cap-weighted indexes fail in providing the apples-to-apples comparison you were wanting for your benchmark.*

Despite such a major flaw, why is this method of constructing indexes still the most popular? First, from an academic perspective, it does represent the whole market, as if you owned 100% of every company. And it does approximate the total market return. Second, from a practical perspective, it's easy for a company to make a fund that copies this type of index. Once the company has purchased the right proportion of each stock, the weighting of each in the fund adjusts automatically with price changes. As the price of each company rises or falls, the weight in the fund and in the index rises and falls the same.

There are problems with this method, too, though they're rarely talked about. The first is that, as a stock's price increases, its weight in the index will also automatically increase. But a higher price usually means a stock is more expensive. From a commonsense investing perspective, companies should be less attractive as their price goes up – yet this weighting method goes counter to that. The second problem is that, by definition, the index will own more of big companies than of small companies.

Over time cheaper stocks *(value stocks)* and smaller-sized companies, which are underweighted in these indexes, tend to do better than market-cap-weighted indexes. The automatic overweighting of higher-priced and larger companies is one reason this creates opportunities for astute investors to invest differently than the index.

HOWEVER (and this *is* a big however), though the above two problems cause market-cap-weighted indexes to underperform the median/average stock and to underperform value stocks over time, this tendency ebbs and flows like the tides. Sometimes the biggest, priciest stocks have their day in the sun, which produces temporary distortions.

Right now is one of those times when the indexes are not very representative. The S&P 500 is up about 7% so far this year, but it is clearly being carried by the largest companies. In fact, the largest five companies are up an average of 54% this year; these same five companies have a 23% weight in the index. In contrast, the smallest 50 stocks are down an average of 15%.

We can view this discrepancy another way by looking at the equal-

weight version of the S&P 500. This index consists of the same companies, but they are all equally weighted. The equal-weight index is down 4% compared to up 7% for the standard market-cap-weighted version. That's a big gap, again telling us that the average stock is not doing as well as the index shows.

Today, the biggest, heaviest-weight companies are doing really well, with an extreme upward influence on the index. As a result, the S&P 500 isn't so representative of the overall market – and it's not doing a good job in providing the apples-to-apples comparison we look for in a benchmark index.

In summary, indexes are still useful, but it's sometimes important to look beyond one number. Headline facts don't always tell the whole story. ■

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