The Index Investor

Why Pay More for Less?

Our New Site is Here!

If you are reading this, you've seen our new site. The transfer to new servers over the past month has been a little bit more difficult than we had expected (hence the delay in publishing this month's newsletter), but we're finally up and running. We hope you like the new Index Investor as much as we do -- we've worked hard over the past year to incorporate most of your suggestions for how we could make it more useful. As you can see, we've launched new editions for readers whose functional currencies include Australian and Canadian Dollars, Euros, Yen, and Pounds. We've made it easy to download easily printable pdf versions of The Index Investor. We've also made it easy to find back issues. We've added links to the financial research that underlies many of our core beliefs. We've added a list of our favorite index products. We've moved to a much faster server. Finally, we've substantially expanded the free resources on our site, to enable more people to hear our message, which we believe is more relevant than ever following the collapse in tech and telecomm stocks, and the Enron bankruptcy.

But please don't think this means we don't want to hear any more suggestions -- we know as well as you do that there is always room for improvement. So please feel free to contact us at questions@indexinvestor.com. In the meantime, we hope you enjoy the new site and recommend it to your friends!

Model Portfolio Update

As you know, we have introduced some important changes to our model portfolios this year. First, we are introducing an additional set of set of heuristic (that is, rule of thumb) benchmark portfolios. Like our domestic benchmarks, they will be based on mixes of

80% equity and 20% bonds, 60% equity and 40% bonds, and 20% equity and 80% bonds. However, rather than using domestic equity and bond indexes, they will be based on global market indexes. In the case of equity, the United States accounts for about fifty percent of the global equity market. Given this, to form our global equity index we are using two funds in equal proportions: the Dow Jones Total U.S. Equity Market Exchange Traded Fund (ETF), which trades under the symbol IYY, and the Vanguard Total International Market Index Mutual Fund, which trades under VGTSX. The actual mix of these products in the global benchmark depends on its overall equity/bond mix. For example, in the 80% equity/20% bonds portfolio, each of these two products has a 40% weight (80% x 50%).

In the case of bonds, recent weightings used in the Salomon Brothers World Government Bond Index (which does not include emerging markets bonds) show that U.S. dollar denominated bonds account for twenty five percent of the overall index, and other bonds denominated in other currencies for seventy five percent. Therefore, to form our global bond index we used a mix of the Vanguard Total U.S. Bond Market Index Mutual Fund (VBMFX) with a weight of 25%, and the T. Rowe Price International Bond Mutual Fund (RPIBX) with a weight of 75%. While the latter is not, strictly speaking, an index fund, it tends to track the Salomon Brothers Non-U.S. Dollar 1 plus years maturity government bond index more closely than other funds we considered (note to product developers: there is a big need in the market for a retail product that explicitly tracks this index). These other funds included two global funds, the Goldman Sachs Global Income Fund (GGSIX) and the Pimco Global Bond Fund (still being listed, with no ticker available as of this writing), and two international (that is, non-U.S. dollar) bond funds, the Pimco Foreign Bond Fund (PFODX) and the Fidelity International Bond Fund (FGBDX). From our point of view, (that is, from the point of view of index investors) the problem with all these alternatives is that they take a very active approach to managing their currency exposure. When these funds get their bets right, investors benefit, and earn more than the index. But when they get them wrong, investors earn less. You know how we feel about active management -- over the long term, it isn't a game you can consistently win. So for that reason, we prefer the T. Rowe Price fund, which doesn't actively manage its currency exposures.

Consider the following year-to-date returns through the end of January. During this period, the J.P. Morgan Global Government Bond Index (which is very similar to the Salomon Index) returned (1.61%), in U.S. dollar terms. The Pimco Global Bond II Fund earned 0.5%, the Goldman Global Income Fund earned (0.1%), the Pimco Foreign (non-U.S. dollar) Bond Fund earned 0.4%, the Fidelity International (non-U.S. dollar) Bond Fund earned 0.6%, the T. Rowe Price International Bond Fund earned (2.5%), and the Vanguard Total U.S. Bond Market Index Fund earned 0.7%. Applying the appropriate capitalization weights to the Vanguard and T. Rowe Funds (respectively, 25% and 75%) gives a weighted return of (1.70%), which is about equal to the J.P. Morgan Global Government Bond Index return of (1.61%).

As in the case of equities, the actual mix of these two products in the global benchmark depends on its overall equity/bond mix. For example, in the 60% equity/40% bonds portfolio, the Vanguard Total U.S. Bond Market Index Fund has a 10% weight (25% x 40%), and the T. Rowe Price International Bond Fund has a 30% weight (75% x 40%).

So, now that you understand our new global benchmark indexes, let's look at how the model portfolios have performed so far this year.

The goal of the first set of model portfolios is to maximize annual return while matching their respective benchmark's risk (that is, having the same standard deviation of returns). In this case, the 80% equity/20% bonds benchmark portfolio (which is based on a purely domestic mix of equity and debt) has returned (1.5%) year-to-date in U.S. dollar terms, while the global 80/20 benchmark has returned (3.0%). In comparison, our model portfolio has returned (2.5%), as European equities and commodities have lagged behind U.S. equities, while U.S. REITs and Emerging Markets equities have done better so far this year.

Moving on to the 60% equity/40% bonds portfolios, the domestic benchmark has returned (1.0%) year-to-date, while the global benchmark has returned (2.7%). The two stories here are the relative underperformance of European equity markets relative to the United States, and the continued appreciation of the dollar against many other world currencies. In comparison, our model portfolio has returned (1.6%) so far this year.

In the case of the 20% equity/80% bonds portfolios, the domestic benchmark has returned 0.1% year-to-date, while the global benchmark is down (2.0%), and our model portfolio is down (0.3%).

The objective of our second set of model portfolios is to minimize risk while matching the annual return of their domestic benchmarks. In the case of the 80% equity/20% bonds portfolios, the domestic benchmark is down (1.5%) year-to-date, and the global benchmark is down (3.0%), and our model portfolio is down (2.3%).

In the case of the 60% equity/40% bonds portfolios, the domestic benchmark is down (1.0%) year-to-date, the global benchmark is down (2.7%), and our model portfolio is down (1.4%).

In the case of our 20% equity/80% bonds portfolios, the domestic benchmark is up 0.1% year-to-date, while the global benchmark is down (2.0%) and our model portfolio is down (0.3%).

Our final set of model portfolios has a different objective. Rather than aiming to deliver more returns with less risk, or the same returns with less risk in a given year, these portfolios aim to maximize the probability of earning compound returns of either 6%, 8%, 10%, or 12% over a ten year period, while taking on as little risk as possible. As you may recall from last November's newsletter, rather than using a mean variance optimizer to construct these portfolios, we have employed a dynamic programming model, which we believe does a much better job of capturing risk/return dynamics over a long term holding period. For example, mean variance optimizers tend to recommend higher equity allocations than does our dynamic programming model, because the latter does a better job of recognizing (statistically, if not emotionally) how hard it is to recover from a big fall in the value of one's portfolio, and the fact that such falls are more likely to be caused by equity investments than by bonds.

We call this set of portfolios our "target return" portfolios, because they aim to maximize the probability of achieving at least a specified minimum rate of return over a ten year period. Here is how they have fared so far this year: Our 12% target return portfolio is down (2.5%) year-to-date, our 10% target return portfolio is down (1.5%), our 8% target return portfolio is down (1.6%), and our 6% target return portfolio is up 0.4%.

Indexing Around the World

This month marks the launch of five new editions of The Index Investor, for subscribers whose functional currencies (i.e., the currency in which most of one's future liabilities are denominated) include Australian and Canadian dollars, Euros, Pounds, and Yen. It therefore seems an appropriate time to take a look at how the use of index products (known in some countries as "tracker funds") is growing around the world.

Australian dollar based subscribers have a growing line of index products to choose from. Two of the leading providers are TD Waterhouse (www.tdwaterhouse.com.au) and Vanguard (www.vanguard.com.au). The former offers index products that track the U.S. &P 500 as well as the "Extended Market" which covers the remaining 4,500 shares that are included in the broad Wilshire 5000 Index. It also offers an index fund that tracks the MSCI Europe Index, and one that tracks the Lehman Brothers Aggregate Bond Market Index in the U.S.

Vanguard (www.vanguard.com.au) also offers a number of interesting funds, including ones covering the Australian equity market (ASX 300), developed world equity markets ex-Australia, Australian property (real estate) companies, and a global bond fund that tracks a customized index of 50% Australian Bonds and 50% the Salomon Smith Barney World Government Bond Index ex-Australia.

Another large index product player is State Street Global Advisors (often referred to as SSgA). They have recently begun introducing exchange traded funds (ETFs) to Australia, and currently offer products that track the ASX 50, the ASX 200, and a subset of property trusts from the latter index. They can be found on the web at www.streettracks.com.au.

In Canada, indexing is quite popular, and a wide range of funds are available. CIBC (www.cibc.com) is one of the leaders in the field, and offers many no load index funds, covering Canadian and global bonds (the latter tracks the J.P. Morgan Global Government Bond Index ex Canada), as well as Canadian and international equities, including a Wilshire 5000 fund covering the U.S. market, and a Pacific ex Japan Fund. CIBC is also one of the few companies besides Vanguard to offer a product that tracks the MSCI Emerging Markets Free Index.

TD Waterhouse (www.tdwaterhouse.ca) also offers a wide range of index funds. However, while they offer a full range of Canadian bond and equity index products, their international offerings are more equity oriented. They also offer a "balanced" index fund, that tracks a customized index composed of 50% Canadian bonds, 32% Canadian equities, 9% U.S. equities, and 9% equities covered by the MSCI EAFE Index. Finally, TD Asset Management has launched some interesting new Exchange Traded Funds, including ones that track Canadian large cap growth and value indexes (the tickers for these funds are TAG and TAV).

Barclay's Global Investors has also entered the Canadian ETF market, with a wide range of offerings under the iUnits label (www.iunits.com). These products track not only large cap Canadian equities, but also midcaps and some Canadian industry sectors (including energy, financials, and information technology). They also offer products that track Canadian government bonds with five and ten year maturities, and ones that track the

S&P 500 in the U.S. and the MSCI EAFE index. Finally, Altamira offers the only Canadian index fund that tracks the U.S. S&P Midcap 400 index.

In Japan, indexing is quickly growing in popularity. Daiwa, Nikko, and Nomura all offer a range of index mutual funds. So too does Morgan Stanley, with funds whose returns track the MSCI Europe Index, and the MSCI World ex-Japan Index (also known as the Kokusai). Barclays Global Investors has recently begun to introduce exchange traded index funds (ETFs) to Japan, with products tracking the TOPIX index, as well as the TOPIX 150 and the Nikkei 225. The ETF market in Japan is expected to expand rapidly, as the TSE has recently partnered with the American Stock Exchange to promote its growth.

Investors whose functional currency is Euros have no shortage of index products from which to choose. By far the company with the broadest line of product offerings is State Street Global Advisors, which offers both Balzac index mutual funds (www.statestreetfrance.com), as well as ETFs (www.streettracks.net). The former track an extremely wide range of indexes, including most MSCI country indexes, regional indexes for Euroland and the developed world, world industry sector indexes, and a world bond market index (the Salomon Smith Barney World Government Bond Index). Thus far, the ETFs cover a smaller but still impressive range of indexes, including the AEX Index (Amsterdam), the MSCI UK, the MSCI Pan Euro (a more liquid version of the MSCI Europe Index), and the MSCI range of European industry sector indexes.

Vanguard is also active in Europe, offering mutual funds that track the U.S. S&P 500, the MSCI World Equity Market Index (which covers all developed country equity markets, but leaves out emerging markets), the MSCI Europe equity index, and indexes that track both European and Global Government Bonds (the latter tracks the SSB World Government Bond Index).

Finally, on the ETF front, Germany has taken the lead with the launch of the XTF market (www.xtf.de), which lists a growing number of index products. These include ETFs that track the DJ Stoxx regional and industry sector indexes, the DAX, the FTSE 100, and a full range of global industry sector indexes.

In the U.K., investors can choose from a wide range of index mutual fund products. Two of the larger ranges are offered by Legal and General (www.legal-and-general.co.uk), and HBSC (www.banking.hbsc.co.uk). L+G's products include funds the track the following indexes: FTSE U.K. equity market, Europe ex the U.K., the FTSE USA index, Asia Pacific ex-Japan, Japan, and the U.K. gilt (government bond) market. In contrast, HBSC offers index products which track the U.S. S&P 500, Europe, the Pacific ex-Japan, Japan, and the FTSE 100, 250, and All Share.

ETFs have taken off more slowly in the U.K. than elsewhere, although they now appear to be gaining momentum. Thus far, Barclays Global Investors (www.ishares.net) has been the main product sponsor, having launched ETFs which track the FTSE, the Euro 100, the Eurotop 100, and the Bloomber industry sector indexes.

As you can see, the popularity of indexing is growing around the world, and is stimulating the creation of a wider range of products that will enable many more investors to devise and implement more effective asset allocation strategies in the years ahead.

Active Management: How Important is Luck?

This month, as part of our never ending quest to expose the numerous myths, legends and fallacies that surround active investment management, we have set our sites on a simple question: What role does luck play in successful active investment management? Common sense tells most people that luck's role is far from insignificant: think of your reaction the last time your cousin Ralph loudly regaled party guests with tales of his latest stock market conquest. If you are like most people, you were probably quietly mumbling "lucky bastard" or some similar compliment as you headed off in search of another (stronger) drink.

Well, we have good news -- you were right. And we have the numbers to prove it.

Before we start, ask yourself this apparently simple question. Consider a situation in which there are ten active investment managers, and one of them (Manager A) has been ranked number one in terms of cumulative performance after one year. What are the chances that he or she will still be ranked number one after three, five, or ten years? If you are like most of us, you probably said ten percent. If someone told you that Manager A had been ranked number one or two in terms of cumulative performance (that is, compound annual returns) after ten years, you would probably conclude that this showed that he or she had some real investment management skills. You might even consider paying him or her a fee well in excess of what you would pay an index fund manager, in the expectation of earning superior returns on your investment.

Unfortunately, you could be making a big mistake.

Here is the experiment we ran. We constructed a world in which there were ten investment managers. To establish a baseline situation, we assumed that none of them had any active management skill -- that is, the returns each manager earned in any given year were randomly drawn from the historical distribution of returns for the Wilshire 5000 Index between 1971 and 2000 (average return of 14.5%, with a standard deviation of 18.0%). In other words, each manager's performance was solely due to luck. The question we asked was a simple one: what was the probability that a manager who ranked number one in terms of returns after one year would still rank number one in returns after three, five, and ten years? To answer this question, we ran 25,000 simulations. In each simulation, we randomly generated 100 returns (10 managers times ten annual returns for each), and calculated the compound annual returns and rankings after one, three, five and ten years.

The results shocked us.

After three years, the probability that the manager who was ranked number one (out of ten) after one year would still be number one was 33.0%. The probability that he or she would be ranked number one or two was 51.7%. The probability of being in the top five was 82.5%.

The probability that this manager would still be ranked number one (based on compound annual rate of return) after five years was 25.5%. The probability of being ranked number one or number two after five years was 42.6%, while the probability of being in the top five was 75.4%.

After ten years, the probability of being ranked number one was still 19.7%, the probability of being ranked number one or number two was 34.8%, and the probability of being in the top five was 68.0%.

In short, investment management appears to be a non-linear phenomenon, in which the power of compounding causes long term performance ranking to display a very high sensitivity to initial conditions.

What are we to make of this?

First and foremost, these data seem to suggest that pure luck plays a much bigger role in active investment management success than anybody wants to acknowledge. And of course, given the amount of fees paid to active investment managers, nobody is in any rush to admit this. But these numbers suggest that luck alone plays a very big role in determining which mutual fund ranks at the top of the "best returns after one, three, five and ten years" league tables.

The second point is perhaps more shocking than the first. Consider the accumulated research findings (some of which are available in the Investment Research section of this site) with respect to what is called the "persistence" of mutual fund returns, or the likelihood that this year's top performing fund will be next year's top performing fund.

Most of the academic research that has been done in this area has found that persistence is either minimal or non-existent. As an August 2000 research study done for the U.K.'s Financial Services Authority put it, "the conclusion from an examination of the literature is that repeat performance (if there is any), is both small in the size of the effect and short lived." And yet blind luck alone suggests that we should find strong evidence of it. What is going on? In light of the academic research findings and our experimental data, one is forced to conclude that many active managers are delivering worse performance than one would expect if they were simply picking stocks at random. That is, not only do the great majority of active managers fail to add value in excess of the fees they charge, but many actually appear to be destroying it in substantial amounts.

The final conclusion flows from the first two: in a world in which most active managers appear to be doing worse than luck alone would predict, while charging high fees, the case for low cost index investing is clearly very strong indeed.