Competition Has Made Indexing a Winner's Game

An Interview With Charles Ellis

Article Highlights

- Much tougher competition, better access to and ability to analyze data, and increased trading volume has made it harder and harder to succeed at active investing.
- When management fees are viewed as a percent of the incremental return over what you can get from an index fund, it doesn't make sense to invest in actively managed funds.
- Rather than trying to figure out how to beat the market, investors would be better served by thinking carefully about what they are trying to accomplish with their portfolios.

Charles ("Charley") Ellis is an investing consultant to some of the world's largest pension, endowment and sovereign funds. He has also written 16 books. We spoke about his latest book, "The Index Revolution" (John Wiley & Sons, 2016), and how competition for ideas has changed investing.

—Charles Rotblut, CFA

Charles Rotblut (CR): *You wrote a famous essay, "The Loser's Game" (Financial Analysts Journal, July/August 1975) and a best-selling book based on it ("Winning the Loser's Game," sixth edition, McGraw-Hill Education, 2013). Could you contrast between a winner's game and a loser's game?*

Charles Ellis (CE): A winner's game is where the outcome is controlled by the winner. A loser's game is where the outcome is controlled by the loser. Let me give you an illustration using tennis.

The Williams sisters play a winner's game of tennis. Beautiful shots, one after another after another after another. They almost never make a mistake. Sometimes a ball lands slightly out of bounds, but almost every shot is to one baseline or another sideline. Hard hits every single time. Really playing at the top of their game and trying to force the other person to make a mistake. They win points.

If you count it up, you'll find that professional tennis players—one player or the other—win about 90% of their points. Once in a while somebody makes a mistake, but that is perhaps 10% of the total points that are scored. So the outcome is determined by the skills and behavior of the winner.

A loser's game is the kind of tennis you and I play. We have double faults. We hit the ball out of the court. We hit it into the net fairly often and, I hate to say it, every once in a while give a complete lay up to the other player, so they can't miss putting it away.

The reality is, the outcome of the game is not determined, in my kind of tennis, by my best shots. It's determined by my making too many poor shots. The person that wins in amateur tennis is the person who makes the fewest mistakes and loses the fewest points. Once you have that concept in mind you can apply it directly to investment management. The outcome is determined by the loser, by the player making the most investment mistakes.

CR: *Forty years ago, you described investing as having changed from being a winner's game, where skilled stock pickers could actually do well, to a loser's game. What changed and how has investing evolved?*

CE: There have been lots of changes, many of them big changes and continuing over many years. If you go back 40 or 50 years, individual investors were almost sure to be beaten relative to the market as well as by the leading professionals. What's happened in the last 40 years is that the same adverse trends have gone on and on to the point where 80% of professionals are losing relative to the market, particularly after fees.

Today all the competitors have access to all of the same information because any publicly traded company must distribute any information of investment value to all investors simultaneously. Forty years ago, getting more or better information—information other investors did not have—was the "secret sauce" of active investing. Back then, it was the key to success. Today, that key advantage is illegal.

Look at how many Bloomberg market data service machines there are. There are 320,000 Bloomberg machines. All kinds of data can be obtained from them anytime you want it—any correlation you want, any analysis you want, any history you want. Assume it takes three or four people to justify having a Bloomberg terminal, because they are expensive. If you have three per terminal and there are 320,000 terminals, you're talking about nearly a million people who make their day-to-day living being active investors.

When I got in the business more than 50 years ago, there were less than 5,000 people all over the world who actually made their living trying to judge stock prices, judge bond prices or judge market prices. Active investing was done by a tiny minority of people because it didn't pay very well relative to other professions, it wasn't very interesting and the tools available weren't very good. Now, you have a million people doing it with fabulous equipment, and that's a big change.

The second big change is that 50 years ago there were only three or four million shares a day traded on the New York Stock Exchange. Now, many billions of shares—billions, not millions—are traded daily. That, of course, is a huge increase.

Within that increased transaction volume, there has been another major change. Fifty-five years ago, 90% of the trading was done by individuals. On average, they made a trade every year or two because they got a bonus, the kids were going to college or they wanted to buy a house. They made decisions about buying or selling that had nothing to do with other stocks or the market. Their decisions were all outside the market.

Now, 99% of trading is institutional: machines or professionals. They transact only because of things inside the market. They comparison-shop all day, every day, in every possible direction. The market has changed from being dominated by amateurs to being dominated by experts. The experts have all kinds of research information through the internet. Everybody in the investment profession today has fabulous information.

When I was first in the business 60 years ago, we all had slide rules. Nobody uses a slide rule now. Everybody's got computing power that is really substantial with access to all kinds of databases.

There were no CFAs (Chartered Financial Analysts) 50 years ago. Now there are 120,000 of them, and there are 300,000 people queued up to become CFAs. That changes the professionalism. Harvard Business School didn't have a course on investment management 60 years ago; now it has half a dozen different courses, and so does every other business school.

Another change that's really important is compensation. Years ago, compensation for investment managers was rather small. Now, compensation is huge. It's the best-paid business in the world and in addition to paying well financially, it's fabulously interesting. It's almost addictive, it's so much fun to do. You're working with the most interesting and talented people you can imagine in the world on the most complicated problem-solving so, if you're really good, there's a tremendous non-financial incentive to be working at investing. It's exciting, and never stops being fun.

If you know anybody in the investment management world, you know they all work terribly hard. They're all very bright and they all have terrific equipment and lots of resources in the way of information. The only problem is, so does everybody else. Today, when you buy or sell a stock, whether you're a professional or amateur, you are buying and selling from professionals. Half the trading is done by the 50 largest, most aggressive and probably toughest professionals.

So it's a very changed field, making it harder and harder for anybody to think they or a manager that they choose could do better than the market after fees. They say, "Well, let's look at the data." Fine, let's look at the data, but let's also include the funds that got pushed out of the business in the last two years, four years, six years or eight years because they were not doing well enough. Bring those dead bodies back into the record and you'll see that in the last 10 years, about 85% percent of funds fell short of the target they chose. So, if you say, "Okay, I'll just find a way to choose the top 15%," there is no way of choosing the top 15% that has been proven to work. Therefore, you're back to the average and if the average is falling short of the market, that means that if you want to have an above-average performance, all you have to do is index and you'll have consistently superior returns every year.

CR: *In your view, has the market become more efficient because of the competition?*

CE: Exactly. The basic idea of active investing is that I'm going to be smart enough and I'm going to get a team of people who are smart enough and we're going to work hard enough so we can figure out when somebody has made an error in pricing a stock that will be big enough and will last long enough so we can capture it.

There may still be errors today, but the errors are smaller and they don't last as long. So it gets harder and harder to live off the errors of others. They just don't make them that often, or when they do, there are so many smart professionals on the lookout for them that they quickly disappear.

CR: *Another argument you make concerns costs. In your book "The Index Revolution," you give an example of how at an expected 7% rate of return, an active manager has to outperform the market by over 14% just to have the fund's shareholders break even. Could you walk through the math?*

CE: Sure. Start with, how do you charge fees? There are a lot of different ways you could charge fees for investment management. For example, in the 1920s, and before that, fees were charged by the hours spent by the manager. Then they said, "You know, it just isn't fair because we have large accounts and small accounts that we are supervising. We ought to be on some other basis. Why don't we charge on the basis of dividends? Well, we could do that or we could base fees on assets, or a blend of assets and dividends."

In the 1930s when the market value of assets dropped, organizations of high integrity switched over to just assets instead of both dividends and assets. People thought that was really nice, thoughtful and highly professional. Then, the rate increased and increased. Today, actively managed mutual funds charge typically 1.2% of assets.

Let's just assume for a minute that you didn't base fees on assets. You based them on the returns. Then that 1.2% of assets, when correctly calculated as a percent of returns, works out to be 17%. Nobody would call that low. Actually you might say, "I believe active manager fees should be based on the returns over and above the market because today I can have an index fund that will deliver a rate of return at the market level of risk at a fee of just 1/10th of 1%."

So, what you might say is, "Should active managers be paid for doing better than the plain-vanilla commodity product?" If you said that—which makes sense to me—then fees today are actually over 100% because the average active manager underperforms the market. We ought to be looking at fees as a percent of the incremental return over and above what you can get from the index. And there, the fee is basically infinite.

***CR:** Just to take it a step further, if you factor in the risk of not picking the right manager, the math would suggest that on a combined risk-adjusted and cost-adjusted basis, it's really not worth trying to do active management when you can simply index.*

CE: That's my view and that's the view that I hear more and more often from people who are professionals in the field and are really good investment managers. They say, "You know, for most investors, indexing is really what they ought to do—whether institutions or individuals."

This would include Warren Buffett, David Swenson, Burton Malkiel, Jack Bogle and virtually all the people who have taken a careful look at what's in the real interest of investors. They all come back to the same conclusion: Almost everybody should be indexing.

***CR:** What about the institutional investors you work with? Do you see them shifting more and more toward indexing?*

CE: Yes. Quietly more and more are moving into indexing. And I don't see anybody going the other way.

***CR:** What about the argument that indexing could become too popular?*

CE: I think if you believe in sociology and you look at what has happened in other situations where the objective evidence was really quite clear, you can ask: "Did people buy into it?" We still have people who don't believe climate change is real. We still have teenagers taking up smoking and we have grown-ups who continue smoking even though the data is clear that it substantially increases your risk of cancer and also reduces your quality of life in your later years.

We have to be realistic. As human beings we're not going to be totally rational in every part of our lives, and it would be very hard to give up hope. Do you want to give up hope? I don't. But hope has no place in investing.

What are the childhood lessons we learn? My mother read to me "The Little Engine That Could." I grew up knowing that if you did your homework, you get better grades in school. When I started working, I realized that if I put in more effort, I got better promotions and more

How a 1.2% Fee Turns Into a Significantly Larger Penalty

Charles Ellis makes the argument that a 1.2% fee for active management actually costs investors 17% or more. A look at the math explains how this possible.

First the key numbers:

7% = assumed rate of return for large-cap stocks
1.2% = management fee levied all on all dollars invested in an actively managed fund

$$1.2\% \div 7.0\% = 17\%$$

In other words, investors are giving up 17% of their returns to pay for active management. This fee is in addition to any taxable distributions from the fund, over which shareholders have no control. The fee also assumes the fund matches the return of the markets after its transaction costs are taken into account.

If the management fee is assessed on the basis of relative performance, the penalty is even higher. Just to have shareholders break even on fees, the fund has to outperform by the size of its fee. For example:

8.2% = annual return realized by the fund
7% = annual return for large-cap stocks
1.2% = management fee

$$(8.2\% - 1.2\%) - 7\% = 0\%$$

This is the benefit for taking the risk of the manager beating the market.

Merely matching the market's return is a very tough challenge for active managers after fees are considered. Beating it is an even greater challenge. During the 10-year period of 2006 through 2015, more than three-quarters of large-cap funds included in our top mutual funds guide (February 2016 *AAII Journal*) failed to beat the Vanguard S&P 500 Index fund (VFINX) by more than 1.2 percentage points on an annualized basis. Keep in mind that this number *excludes* all of the funds that were either closed, merged into another fund or saw their assets under management shrink to a small size during the 10-year period.

responsibility. Everything about our society and our experience says that if you try harder and work harder you'll do better. And that's often true, but it's not always true.

One of the places where it is not true is investment management. Because so many wonderfully talented people have come into the field and work so hard to figure out what the prices ought to be, it is not a very good use of anyone's time to try to be even better.

CR: *I'd like to shift to smart beta strategies. From the appendix in your book, it didn't sound like you are a big fan of them.*

CE: It depends on who's doing it. I believe that there are a very few skilled investment managers who have been working with factor investing for years, who know a lot about how factor investing can work, but they also know what it can't do. [Factor investing chooses securities based on attributes believed to influence returns.]

Let me give you an illustration. When you look at the Gulf Stream coming out of the Caribbean, it goes up through the Atlantic Ocean to England where it cools off and then tucks under itself and comes back under itself to the Caribbean. So you get a continuous flow that goes around and around like a fan belt.

In factor investing, you're picking up the small-cap phenomenon, the momentum phenomenon or the value phenomenon—any of those different factors that might influence returns. When they are moving positively, they must eventually stop and go back toward where they came from. It's a little bit like a baseball. If you toss the ball up in the air the only place it can go, sooner or later, is back down again. You could toss it up again, but it's going to come back down again. It's the same with factors in investing: the factors have to reverse, they have to go back.

If you're an expert in factor investing, I believe you will be able to see earlier than most other people when something is starting to develop momentum. You'll also have caution on how long can it continue and you will see the beginnings of a slowdown so you can move out of that factor. You get the benefit and then you step off, look for another factor, another time, and skillfully get the benefit. And you keep working with the ever-changing flows within the market.

I believe experienced experts can do that well. The rest of us, I'm afraid are going to be most convinced that a factor has real merit when it's already completed much of its rising. We'll come late to the party and we will be late leaving. So we won't have as much positive returns and we will have more negative returns than the experts. My fear is that many people who try factor investing are going to find that it's really hard to do well and requires considerable, sophisticated skill to do it well regularly.

One thing about factor investing that is really impressive is that there's seldom been a better branding than the term "smart beta." It makes everybody believe, "Gosh darn. I'm smart and I know how to do things. There's

Eight Suggestions for Getting Started With Index Investing

In his book, "The Index Revolution" (John Wiley & Sons, 2016), Charley Ellis offers the following suggestions for building a portfolio based on index funds.

1. Select a major firm that is a leading mutual fund or exchange-traded fund (ETF) provider. The biggest companies in this space are BlackRock, State Street Global and Vanguard.
2. You can buy index funds directly through your broker. You can also contact the fund providers to set up accounts with them.
3. Start by investing in a "plain-vanilla" index fund tracking the S&P 500 index (or similar index) or a total market index that includes smaller companies.
4. The next decision is to whether to add an international index fund to your portfolio. Since about half of the global stock market is U.S. "domestic" and half is "international," you could use a 50%/50% split for maximum diversification. Alternatively, you could just buy a global index fund. If you prefer less international diversification, you could limit your international weighting to whatever feels comfortable to you (e.g., 10%, 20%, 30%, etc.)
5. Be sure to make only those commitments you plan to stay with for the long term—10 years or longer. This is savvy self-discipline and helps you realize the long-term benefits of indexing.
6. Next, decide on the right percentage of stocks versus bonds. Consider the value of Social Security benefits, your house and the net present value of future earnings at work, since these will help you be less concerned about stock market fluctuations and allow you to allocate less to bonds.
7. A simple portfolio of one high-grade bond index fund and one index equity fund (either global or domestic) in the proportions that are right for you will provide a diversified, low-cost portfolio that will outperform most active funds.
8. If, after gaining experience with the basic index funds, you strongly suspect superior long-term prospects for a specific kind of investment (e.g., small-cap stocks) or nation/region of stocks (e.g., Japan or emerging markets), only "overweight" them if you are willing to stick with the investment for at least 10 years.

something there that I could capture and then I would be clever enough to do better than everybody else." It's the best naming in the financial world since that great Scottish conversation:

"Angus, we've got to change the name."

"Ian, why do we have to change the name?"

"Because we're not getting as many sales as we should. This is a very good product."

"Well, what name do you want to change to?"

"I want to change it from death insurance to life insurance."

If they hadn't changed the name to life insurance, that product would never have sold.

Smart beta sells well, but it's being sold rather than bought. And I think we're going to find 10 years from now that people will say, "That cost people a lot, just like guaranteed insurance contracts cost people a lot and portfolio insurance cost people a lot." There are many things that sound great and get sold to people who want to do better than average, but most just don't work out in the long run. They are going to underperform relative to what they could have had done by just plain vanilla indexing.

CR: *It sounds like you have concerns not only about how it's marketed, but also that people are going to pile in to a factor at the wrong time without understanding its strengths and weaknesses. Is that a fair statement?*

CE: Yes, that's a fair summary. I don't think people are going to get clobbered, but I do think people are going to get sunburned. Do you remember when you were 12 or 13 years old and you got the first really serious sunburn? It made you very uncomfortable for two or three days. It's a little bit like a toothache. It's not something you want on a regular basis.

CR: *In "The Index Revolution," you describe indexing as allowing investors to free up mental energy to really focus on the big decisions like investment policy and asset allocation.*

CE: I feel this very strongly because I've been in the business so darn long. It used to be that there were two big problems. One was, what are you trying to accomplish? See if you can define that. And the second was, how can you beat the market?

I believe most people get deeply involved with "how can we beat the market?" That part of investing has gone from being a really attractive opportunity and almost easy, to pretty attractive but hard to do, to really hard to do and not very attractive, to no longer attractive at all. So, I would index very comfortably and stop trying to beat the market. That was a winner's game in the fifties and sixties, but became a loser's game for individuals in the seventies and eighties and then, with all those changes we covered at the beginning of our conversation, it became a loser's game for more and more institutions.

The second part of investing is still important: answering the important questions about the investor. Each investor is unique and so the right investment program for each person is unique. Who are you? What are your financial resources? How much do you know about your future financial income? What are your aspirations as a person? What are you trying to accomplish? What are your family's responsibilities and needs? Are you planning to put your kids through college? Are you are planning to provide adequate retirement security for your family? How much time do you have?

Candidly, if you go back through this realistically, I believe you would say, "Every person has a really complex set of capabilities, time and resources and a package of things they're trying to accomplish that are unique to them and their capacities to solve those problems." If they would really think carefully about the problems they are trying to solve, they would be way ahead of the curve on designing the right investment program. They won't come up with perfect solutions, I understand that, but they would come up with so much better solutions if they think it through than they will if they just let it happen or leave it to others, particularly salespeople with thick commission incentives.

It's a great opportunity for every one of us to think through what problems each of us is trying to solve in investing and focus on those unique problems. Each of us can really make a difference when we're solving the right problem.

CR: *Is there anything I should have asked you that I haven't?*

CE: Let me add just one thing. Many people say, "You know Charley, indexing is having its day now, but active investing will come back. You wait and see." Well, it may be that there is an up-and-down fluctuation around the long-term trend, but the long-term trend is taking the markets absolutely to a place where the only sensible answer for almost all individuals and almost all institutions is to index their investment operations and concentrate on developing the right investment strategy for the goals they are really trying to accomplish. If we all focus on achieving the right goals with sensible long-term investment programs, we can all be winners in our investing.

Go to AAII.com to hear bonus audio of Charley explaining how to cope with market volatility and the biggest lesson he's learned over the course of his career. ➤

Charles Ellis, Ph.D., CFA, founded Greenwich Associates international strategy consulting firm in 1972. He now serves as an investing consultant to large institutional investors, government organizations and wealthy families. His latest book is "The Index Revolution" (John Wiley & Sons, 2016). Find out more at www.aaii.com/authors/charles-ellis.