

## Principle 6: Use Index Funds When Possible

[Applause]

**Rick Ferri:** Which brings us to number six. How am I doing? Good? Thanks. Number six. Use index funds when possible. Why when possible? Because it's not always possible. I mean there are people I'm sure in this room who belong to a 403-b plan of some sort and it's a horrendous plan. And all they have is actively managed funds and you can't get an index fund. Or maybe there's just one index fund available and it's an S&P 500 fund perhaps. So when possible though, use index funds. And I'm going to explain why.

First, before I do that, I have to explain what an index fund is. So all right, this is how I like to explain, again I'm using pictures, okay. On the left side you have companies, Exxon, Apple, Home Depot, Google, whatever hundreds of them. In fact there are 4,200 companies in the United States, but these companies are publicly traded. They're publicly traded on a stock market daily. Google trades, Apple trades. You know all these stocks are trading on a daily basis.

Well there are companies such as Standard and Poors who keep track of all this trading, keep track of all these prices and the big companies will weigh more in their index than the smaller companies, or the tiny companies. So indexes are what's called capitalization weighted, the big companies have a much more weight, bigger weighting, and then the smaller companies have a much smaller weighting. So you get this tier down here.

So obviously Apple, Home Depot, Google and so these are big weightings in in the S&P 500 but they keep track of that because this is the capitalization weight of the stock market. So it is the investable universe. If you had money to invest in the market and you were looking for stocks to invest in you'd go to the S&P 500, to go to the Total Stock Market which has 4, 200, and it's the investable universe by market capitalization.

Now what companies like Vanguard did, and Vanguard did this. Jack Bogle did this back in 1976. He, they, went to Standard and Poors and they said we want to license your index and Standard & Poors David Blitzer, who just happened to be the head of the index committee at the time remembered the conversation. In fact I did a podcast with David and he remembered this conversation. He said why would you want

to do that? You want to create an index fund. And they, Vanguard, Jack Bogle, I said yes how much would you charge us to create an S&P 500 Index Fund. And S&P didn't know what the answer was. So they agreed on \$25,000 was the fit.

Well little do they know what would happen next, right. Vanguard creates the Vanguard 500. At the time it wasn't called the Vanguard 500, but they created that index fund and they launched it out. Now it took 10 years before that fund got a billion dollars in it but as it grew and as S&P realized that this is really something, indexing. That they went back to Vanguard and they renegotiated the contract, and a few years later Vanguard actually left S&P and went to MSC, and now they're at CRSP, because S&P was charging too much money.

There's nobody here from S&P but I can say that. So I know the inside start anyway. So the big competitive market out there for these indexes. But this is an index so you ended up with an S&P 500 which tracks those 500 stocks, which are tracking the big stocks on the stock exchange. Which those companies actually exist and that's how they capitalize themselves. So that's an index, the S&P 500 is just an example. Total Market would be all 4,200.

Then there were international stocks, same thing 6,500 or so stocks traded outside the U.S. Indexes created the same way. And there are bonds, bond indices, treasury bonds, corporate bonds, mortgages, all put together into Bloomberg Aggregate Corporate Bond index. And I did a podcast with the people who run the index, and also the people at Vanguard who run that fund, and it's really interesting to talk to the two.

So those old indexes out there all over the place covering all kinds of asset classes and you have a choice now--you didn't have it 45 years ago--but you have it now. You can either buy an index fund that tracks those indices, and it's at a very low fee. Or you can do the kind of the traditional thing 50 years ago, 40 years ago, which is to try to pick a money manager or a mutual fund that is actively managed that's going to beat that index. So a large cap U.S stock manager who's going to go out and try to beat the S&P 500, right.

So you can either that's active management, and you can do this on International stocks, bonds, and so forth. Now here's the kicker. What has happened since Jack Bogle and Vanguard created the first index fund and index funds have proliferated into all these other asset classes. I did my very first podcast with Jack Bogle and we talked about this. By 1996 Vanguard had a total stock market index fund, a total International

stock index fund, a total bond market index fund. And I had a Reit Index Fund-- Real Estate Investment Trust--it pretty much had the four core four type portfolio of index funds, all available at Vanguard, all low cost.

And how have those funds performed relative to the actively managed funds that were trying to beat those indices. Well let's take a look. This is what's called the SPIVA. Now my last podcast I just did was with Craig Lazarra from Standard and Poors indices, Standard & Poors Dow Jones indices because they merged. And what this shows, this is just looking at one segment, this is the S&P 500 Index versus the managers who are trying to outperform the index. Those numbers, Large Cap Fund up on top and then Mid Cap Fund, which is a mid cap indices, and the bottom which is an S&P Small Cap.

After one year 55%-- let's read in the top line and skip year to date and just go to one year-- 55% of the active managers underperformed the S&P 500. If we go out further and we look at five years, and these are the managers who survive because so many actively managed funds just go under, they go out of business. The mutual fund companies won't tell you this when you look at the mutual fund advertising. They're going to advertise all the funds that survived and actually did well. They're not going to show you the other half that all went out of business. They're not going to show you those

So over a five year period of time of the funds that actually made it five years 84% underperformed the S&P 500. if you go out 20 years 95% of all actively managed large cap mutual funds that were trying to beat the market underperformed the S&P 500.

And if we go to the mid cap, which is smaller companies but not small cap, tiny companies, we go to the right and look at that 94% over a 20-year period of time of the active managers in the mid cap sector of the market underperformed the mid cap index.

And let's go a little further to the small cap funds which are the small companies, and we'll use the S&P 600 small cap index 94% of the active managers who attempted to outperform the small cap index underperformed.

All right, now what am I going to spend my money trying to pick the five percent. No I can be in the top 95 percentile over a 20-year period of time just by buying an index fund and I know that there are going to be a few active managers out there and all these asset classes across the globe there's going to be a few that do outperform, but we

don't know who they are today. And is it worth going after these managers, and the answer is no it isn't.

If we look at why this occurs the answer is very simple and Alan Roth is going to get to this in more detail in the next session. It has to do with fees, almost 100% having to do with fees. And then it has to do with managers turnover, and has to do when funds get too much money and they can't invest the way they used to invest. Not a few other things, but I think Alan, when you see his presentation, he's going to talk a lot more about fees.

So you know index funds have very low fees. Active managers cost money. They have all these research analysts and everybody else they have to hire. It's more money so generally the low cost of the index funds is the reason over the very long term that the index funds float to the top and get into the top 90 - 95 percentile.

And this not only happens in the United States, it happens internationally ,it happens in bonds, it pretty much happens everywhere. And I don't want to get into the details too much, but if you look at the SPIVA scorecard or the Vanguard studies that they do every year, Morningstar studies on this every single year. The proliferation of the studies--that there's a lot of them out there, right--now 20 years ago they weren't out there. You had to dig it up when Jack Bogle first created the index fund. In 1976 he had to by hand, go back and pull out all the performance of each of the individual index and actively managed funds and put together his own database because there was no Morningstar out there. At that time nobody was collecting this data.

This data really wasn't prevalent until around 1997 when Mark Carhart from the University of Chicago actually put together the first comprehensive survivorship bias free database and then now we see that hey, most active managers don't outperform the market. Okay, most will underperform.

So what do you do? Do what I do believe. Okay I did a study 10 years ago. Now that was published. I said if all you did was buy index funds in every asset class, however in many asset classes you want. This is the three-fund portfolio which is a total stock market US, the total international stock market and just a total bond fund. If this is all you did, just bought a few good low-cost index funds in the asset classes that you want. You will be in the 90th percentile of all investors. You're going to be at the top 10%.

Will you be number one? No. I don't have to be number one. I mean I'm a good pickleball player. Really I think I am, but am I number one? No. That's okay. I could be in the 95th percentile. I'll be happy with that. And I think the same way with our portfolios. We try to outperform odds, are high, high chance you're going to underperform. It's going to cost you more money. And we're not even getting into the taxes of the turnover. Or going from this fund to that fund to this fund.

So this is why we say at the Bogleheads use index funds when they're available. Use them in every single asset class. Don't worry about anything else. Just invest in a few good index funds. And that's it for me.