

# The Journal Interview

## **John C. Bogle**

*is Founder of The Vanguard Group, Inc., and President of the Bogle Financial Markets Research Center. He created Vanguard in 1974 and served as Chairman and Chief Executive Officer until 1996 and Senior Chairman until 2000. He had been associated with a predecessor company since 1951, immediately following his graduation from Princeton University, magna cum laude in Economics. He is a graduate of Blair Academy, Class of 1947. Vanguard is the largest mutual fund organization in the world. Headquartered in Malvern, Pennsylvania, Vanguard comprises approximately 170 mutual funds with current assets totaling more than \$4 trillion. Vanguard 500 Index Fund, the largest fund in the group, was founded by Mr. Bogle in 1975. It was the first index mutual fund.*

*The story of his life and career is told in John Bogle and the Vanguard Experiment: One Man's Quest to Transform the Mutual Fund Industry, by Robert Slater (1996), The House That Jack Built, by Lewis Braham (2011), and The Man in the Arena, by Knut Rostad (2013). In 2004, TIME magazine named Mr. Bogle as one of the world's 100 most powerful and influential people, and Institutional Investor presented him with its Lifetime Achievement Award. In 1999, Fortune designated him as one of the investment industry's four "Giants of the 20<sup>th</sup> Century." In the same year, he received the Woodrow Wilson Award from Princeton University for "distinguished achievement in the Nation's service." In 1997, he was named one of the "Financial Leaders of the 20<sup>th</sup> Century" in Leadership in Financial Services (Macmillan Press Ltd., 1997). In 1998, Mr. Bogle was presented the Award for Professional Excellence from the Association for Investment Management and Research (now the CFA Institute), and in 1999 he was inducted into the Hall of Fame of the Fixed Income Analysts Society, Inc.*

*Mr. Bogle is a best-selling author, beginning with Bogle on Mutual Funds: New Perspectives for the Intelligent Investor (1993); Common Sense on Mutual Funds: New Imperatives for the Intelligent Investor (1999); John Bogle on Investing: The First 50 Years (2000); Character Counts: The Creation and Building of The Vanguard Group (2002); Battle for the Soul of Capitalism (2005); The Little Book of Common Sense Investing (2007); Enough: True Measures of Money, Business, and Life (2008); Common Sense on Mutual Funds, Fully Updated 10<sup>th</sup> Anniversary Edition (2009); and Don't Count On It! Reflections on Investment Illusions, Capitalism, "Mutual" Funds, Indexing, Entrepreneurship, Idealism, and Heroes (2010). His tenth book, Clash of the Cultures, was released in August of 2012.*

*Mr. Bogle served as Chairman of the Board of Governors of the Investment Company Institute in 1969-1970, and as a member of the Board in 1969-1974. In 1997, he was appointed by then-U.S. Securities and Exchange Commission Chairman Arthur Levitt to serve on the Independence Standards Board. In 2000, he was named by the Commonwealth's Chamber of Commerce as Pennsylvania's Business Leader of the Year. November 19, 2015, he received Gold Medal of the National Institute of Social Sciences for Distinguished Service to Humanity. On November 16, he was honored into the Philadelphia Inquirer Hall of Fame. On December 10, 2016, he received the Gold Medal of the Pennsylvania Society for Distinguished Achievement. He served as Chairman of the Board of the National Constitution Center from September 1999 through January 2007 and was a member of The Conference Board's Commission on Public Trust and Private Enterprise, and is a Fellow of the American Philosophical Society, and the American Academy of Arts and Sciences. A Trustee of Blair Academy, he served as Chairman in 1986-2001.*

*He has received honorary doctorate degrees from the University of Delaware, University of Rochester, New School University, Susquehanna University, Eastern University, Widener University, Albright College, Pennsylvania State University, Drexel University, Immaculata University, Princeton University, Georgetown University, Trinity College, and Villanova University. Mr. Bogle was born in Montclair, New Jersey, on May 8, 1929. He now resides in Bryn Mawr, Pennsylvania, with his wife, Eve. They are the parents of six children, the grandparents of twelve, and the great-grandparents of four.*

**David Spaulding:** I'm curious, before we get started officially, why the nautical theme in your offices, and why Admiral Nelson? What's the background on that?

**Jack Bogle:** Well, it's vaguely interesting. For a whole lot of reasons that were really not very credible, the board of directors, most of whose members were money managers of a firm with which we had merged, destroyed Wellington Management Company. They had more votes on the board. I was never very political, and they fired me basically for their sins. That doesn't sound right and it wasn't right, but it was done so I had to figure out what to do to keep my career going. It's not fun to be fired, and it's certainly not fun to be fired under those circumstances. Nothing I did warranted being fired, although they claim to be collective and I'm pretty much individual. That's a reasonable complaint, but I thought that's what people were supposed to do when they lead.

In any event, my choice finally turned out to be, instead of going to another company, or trying to start another company, that I would come back here from Wellington and persuade the board of directors of the funds to declare their independence from Wellington Management Company. This had never happened in the industry's history before. The management company fired me, and I told the directors of the funds that they should not be in a position where somebody else can fire their chief. (I was chief of both.) This split has never before happened in the industry. Basically, the funds are captives of the management company. So I laid out a plan for them to create a new company which would do all the operations and be owned and controlled by the funds, which have their own functioning officers and directors. That's not the way the industry has ever worked before. That would be mutual. We'd operate at cost.

My wonderful mentor, Walter Morgan, had founded and named the Wellington Fund in 1929, and I was still the chairman of the fund's board. An antique dealer came into my office, and offered to sell me some prints of the Battles of the Duke of Wellington. They were very popular during that era. I bought them and he said, "I have some naval prints of the same era, Napoleonic War era." I said, "Sure, let's take a look at them." I've always loved the sea and the mystery and the tides and the winds. The rough waters and the calm waters. I sail a little bit myself. I bought half a dozen or whatever he

had left. They all came in a book.

He said, "This is a good day for me," so he left me the book that these prints had been pulled out of, from 1820. It's actually right here and was reproduced later on. So I went through the book and looked at these short write-ups, lots of prints, and I got to the Battle of the Nile. The most complete naval victory to this day in history. Most complete, meaning that the British lost barely a ship and the entire French fleet was wiped out right near the Nile. I got to the end of one, from Lord Nelson and his flowery terms, and he saluted the crew and the bravery and character, and all these things that are important to me. It was signed by Horatio Nelson, on the deck of HMS Vanguard. You can't make this stuff up.

**David Spaulding:** I like your artillery piece there, too. I was actually in the artillery.

**Jack Bogle:** I was in London many years ago. I bought it there and threw it on the plane and brought it home. It's kind of a doorstopper, which I don't really need, but it's an antique thing. Hanging over there are two of the prints of the Battle of the Nile that I got from the book. Those are the prints that came into my possession in 1974.

**David Spaulding:** Interesting. How did you come up with the idea of having an index fund?

**Jack Bogle:** That has a long genesis. I'm a very contrarian thinker, also known as a royal pain in the dufflebag, and didn't like to accept anything at face value. I wanted to write my thesis at Princeton University on a subject that no one else had written a Princeton thesis on before. I didn't know what that would be, but I was reading Fortune Magazine in the newly opened Firestone Library there. I opened to page 116, and there was an article titled "Big Money in Boston." It told me about Massachusetts Investors Trust, the oldest and for a long time largest mutual fund. It described the industry as "tiny but contentious." So I wrote about the industry. I studied it at great length. I looked at a bunch of funds. We didn't have the kind of industry data that we have today by a long, long shot. But as I looked at the records of these funds relative to the Standard & Poors 500, while it was just anecdotal evidence, it was pretty apparent that the pattern repeated over and over again: The S&P 500 was a very difficult standard for them to beat.



So I put a sentence in my thesis saying, “Investment companies [mutual funds] may make no claim to superiority over the market averages.” The germ of an idea, way back in 1951. Then I started to have investment experience, and I worked my way up through Wellington Management Company. I was on the investment committee for Wellington Fund, and I was also deeply involved with our wholesaling unit. They had a lot of trust in me even though I was just a kid. They kept saying, “Why can’t we do better?” At the end of the year you say, “Okay, we’re going to do better next year.” How do you do that? I mean, there’s no easy way. There’s no rule. Working harder doesn’t do it. Working harder may make it worse. Changing the portfolio may make it better, but it may make it worse. I found this is a tough business to win at because there are a lot of roughly equally credentialed, equally qualified money managers, and it was not an exciting business in those days. Everybody was kind of middle-of-the-road. We offered one of the rare balanced funds. We would compare ourselves with

a few other balanced funds, but the industry at that time was mostly a stock fund business.

So I could see from personal experience sitting around that investment committee table evaluating performance and trying to make it better that this is a tough business. Then, the balanced fund fell on very hard times. Its share of industry cash flow dropped to 1% from 30%, and basically all we had was one balanced fund. It was the “Go-Go” era, and the more conservative a fund was, the harder it was to sell; and the more aggressive—including in the lunatic fringe—the easier it was to sell. So as I tried to explain to people, if you’re running a nice little bagel shop, and six donut shops open around the neighborhood and all the customers are buying donuts, the bagel shop owner has no choice but to start selling donuts whether he likes them or not.

So I knew I had to do a merger and diversify Wellington Management beyond the balanced fund business. I ultimately did the merger with a very aggressive group of funds that we were in the mainstream of this idiotic era. I tried to merge with four different partners, and only one worked out. They had the best record in the fund industry for two or three years, and then about two more after the merger. But then it was over. Their fund collapsed. They had started two other funds, one called Technivest Fund, using point and figure charts, and the other called Trustees’ Equity Fund, which was one of the great misnomers in mutual fund history. All these funds plummeted in value. The market went down about 50%, these funds probably went down 65%. There’s a lesson in the value of investment management—the negative value of poor active management, and the correlative to that is the positive value of no management in indexing. Active management is a bad bet if it comes and goes. This is a very important point here, and that is that the best way to run a mutual fund is to have it in the middle, because if your performance is way up here one, year you’re probably going to be average over the rest of the decade. But if you’re way up, the money comes in, and then your performance goes way down because reversion of the mean is everywhere in this business, and the money goes out. So if a fund has a 10% annual return, the average investor has something less than that, say an 8% return.

So now we’re looking at a market with a 12% return. Mutual funds cost about 2% so the average mutual fund

will give you 10%, yet investors end up with only 8% because jumping in and out of funds at the wrong time. That's 8% instead of 12%. It makes no sense, so you want something stable and in the middle. We called that, before I even started the index fund, relative predictability. My goal when I ran Vanguard was to offer funds with middle-of-the-road strategies at low cost, because Vanguard's mutual structure eliminates the advisor's profits, which is usually about a 50% profit margin. So if a fund carries a 1% cost to investors and has a 50% profit margin, a mutual firm could run it for 50 basis points. That's a managed fund, but an index fund takes much less than that. So here we are foreseeing that maybe indexing was a good idea going all the way back in 1951.

Having the experience in 1960-1965 of seeing the work that had to be done, how difficult it was to get the Wellington Fund ahead of its peer group in 1965-1968, having the whole balanced fund business fall apart in the face of this revolution in lunatic fringe investing, and seeing how good managers really were, which is no good at all in this case. So what else do you need? At that point, the new company starts and of course I was trying to think of ways we could differentiate ourselves as a mutual company. It occurred to me that everybody had the opportunity to start an index fund, but nobody else had both the opportunity and the motive. We were operating at cost. We didn't give a damn what the fees were. We didn't have to make a profit on it.

Vanguard was incorporated on September 24<sup>th</sup>, 1974. Around October 10<sup>th</sup>, I opened the first edition of the Journal of Portfolio Management. There was an article by Paul Samuelson, who would become my friend and mentor, the greatest economist of the 20<sup>th</sup> century. It was called "Challenge to Judgment." Paraphrasing his words, he said, "Show me the brute evidence that active managers can systematically beat the market index. There is none. So would somebody somewhere please start an index fund?" That article struck me like a bolt of lightning.

Within a year, September of 1975, I took the proposal to the board of directors. I offered a very unusual rationale when I presented. This new company was only responsible for fund administration, and nobody thought it would amount to anything. Everybody felt I would be bored. I bore easily, and administering shareholder

records, accounting, legal, and compliance didn't seem like enough of a challenge. I knew I would never be interested in a company like that, but I had to take what I could get at the beginning. I could not get into investment management and I could not get into distribution, in accordance with the agreement that the lawyers worked out to get the deal done on my part.

I started thinking about the index fund and I did a little statistical work, all by myself. I calculated the average performance record of the fund industry, which was basically an index-like industry then, mostly large-cap funds, and I compared it to the S&P 500. The S&P 500 won by 1.6% per year over 35 years, with a very high correlation, about 0.98. That's what you would expect of a large-cap fund industry and a large-cap index. I showed the directors the data, and I showed them Paul Samuelson's article with his endorsement of indexing, because I had no credibility with the board at all. They said, "It sounds interesting but you're not allowed to get into investment management." Then I said, "Please understand: this fund has no management." They bought that. It gets weirder and weirder.

It took a long time before the index fund caught on with investors. The board gave their approval in September of 1975. After scouring Wall Street—u sing up eight sets of shoe leather—I finally put together four underwriters. None of them wanted to be the lead underwriter, so I had to persuade Dean Witter to take the lead. I'm tempted to say they did a great job. The idea was for them to underwrite a \$250 million fund; they came up with just \$11 million. I said, "my God, we can't even buy all 500 stocks in round lots." They said, "Why don't we just pull the offering and give everybody their money back?" I said, "No, we have the world's first index fund. Let's see what we can do with it." Curiously enough, we celebrated the 40<sup>th</sup> anniversary of the underwriting not long ago. Some of the underwriters and their lawyers came down here and they take great pride in this failed underwriting.

One of them said it's really interesting that the worst underwriting in the history of Wall Street turned out to be the most innovative, productive, investor-friendly innovation in finance ever, and I think it did. What can I say? Then, it took until 1984 for the second index fund to start. A poster came out saying, "stamp out index funds, they are un-American." It was called Bogle's folly. The

fund's growth during its first decade was very uneven. It grew gradually until the early to mid-1990s, then it really started to gain traction. By that time we had started a bond index fund in 1986, and an extended market index—if you wanted to own the entire stock market you could buy the S&P 500 and the extended market which covered the mid- and small-cap stocks that comprise the rest of the U.S. stock market. Then in 1992, we started a total stock market index fund and a balanced index fund.

Also in 1992, we started growth and value index funds. These funds have retrospectively been labeled as “smart beta” funds, and they're still the two oldest and largest smart beta funds in the industry. Smart beta was not what we called them and that was not their purpose. I think smart beta is stupid, agreeing with Bill Sharpe, but there they are, and they've done just exactly what you'd expect. In the initial annual report of the growth and value index funds, I said that the odds are that they will do equally well over the long term. Those are the two separations in the fund over the long-term. Sure enough, 25 or so years later, both of them earned 9% annual returns, but the investors in both had earned closer to 6% per year.

That's what's the matter with deviating from the market. Investors put their money into growth after that had done well and they took it out when value outpaced the market ... that's the way the industry works. You want to be in the middle. I like the idea. The fact that it didn't work is too bad, I think. The idea was to have investors accumulate money in the growth fund, take a little more risk, because growth funds are riskier, have a little less income to be taxed, and then when they retire a slightly more conservative fund with a higher dividend yield. That was the idea. It didn't work—investors chased the hot returns. That was not my only failure. Although the funds themselves are not a failure. It's kind of a funny thing.

We did a lot also. We started specialized funds. Stupid. I'm trying to remember. We must have done something smart. We started PRIMECAP Fund. Brilliant. The same managers later took over the Capital Opportunity Fund and those are our two shining stars. In 1985, we started Windsor II because Windsor Fund had become the largest fund in the industry in those days, managing \$3.6 billion. We were worried that it was too big to manage,

so we started Windsor II. People said, “You shouldn't call it that. You're capitalizing on John Neff, long-time manager of Windsor Fund, and the original Windsor Fund's name and reputation. There's no way in the world that Windsor II can ever do as well as John Neff had.” Of course, if you go back in time to 1985, Windsor II did better than the original Windsor. Anytime somebody is certain that something won't happen, it will happen. That's the story.

**David Spaulding:** Very good. It's funny, you mentioned the comment about the suggestion the company wouldn't amount to anything. You recently crossed the \$4 trillion mark in assets, which is an amazing achievement. Congratulations. What does this mean for your success? How do you respond to that?

**Jack Bogle:** I think the response is pretty easy. I'm a small company guy. I loved the early years of struggle. The years of momentum do absolutely nothing for me. I ran the company for 21 years, roughly. I've never been enamored by size. I tell people that I never had any intention to build a colossus. That was not on my agenda at all, but I was too stupid to realize if you gave investors the best deal they've ever gotten in their lives, and the best deal they will ever get in their lives, you build a colossus inadvertently.

I'll give you one example about reaching the \$4 trillion milestone. When I got this \$4 trillion notice from our management, I was going to send a note titled, “What does the founder think about \$4 trillion?” I was reminded I used to give a speech to the crew with some frequency. Get everyone together and talk about where we're trying to go and what we're trying to do, and what kind of values we want to have and what kind of behavior we expected, and those kind of things.

One of the speeches I gave was called “Which Axiom?” This is what I was going to write to the crew, although I never got around to doing it. Axiom one is, “Nothing succeeds like success.” Axiom two is, “Nothing fails like success.” So I looked up the speech. I wrote a book called Character Counts with all of my speeches to the crew. I found the speech. I was bewailing the problems of size. I quoted, I believe, Carl Sandburg saying, “When an institution goes down or a society perishes, one condition may always be found: They forgot where they came from.” The speech said, “Let's be careful

about size.” This happened to be our \$8 billion celebration.

**David Spaulding:** You’ve come a long way. I’m sure you’re aware that Warren Buffett has entered into a million dollar bet where he suggested an S&P 500 index fund would outperform a collection of hedge funds. I understand there’s about a year to go on that bet, but where the S&P fund is up over 250%, the hedge funds are not doing very well. What do you think the message is here for investors?

**Jack Bogle:** I think the message is, “all that glitters isn’t gold.” There are fads in this business. The idea of the original Alfred Jones hedge fund in 1960 is not a stupid idea. It’s not easy to implement, but it was actually a hedge fund. He was 50% long and 50% short, so it was not exposed to market risk. Parenthetically, my son, John, also runs a hedge fund in Boston, around \$3 billion. He does very well and the fund does very well, but it’s actually hedged. He owns, say, 100 stocks long and 100 stocks short. If he’s long an auto stock, he’s going to be short an auto stock. It’s really low volatility. I think his beta is something like two or three out of a scale of 100.

But hedge funds then got a little bit big for their britches, and hedge funds became “alternative investments” that aren’t necessarily hedged. There are managers like Bill Ackman and John Paulson, they’re making big bets. Price discovery, as they call it, is a lot easier if you’re the only one doing it. When you get a whole industry of brilliant people ... I mean, they put me to shame with their brilliance. It’s amazing. Cliff Asness of AQR, I guess one of the biggest hedge fund managers, I don’t know why he pays any attention to me. We’ve become very good friends, but he’s intellectually sound. He’s an iconoclast. He is a great writer, and yet we have a great relationship.

As more and more people like Cliff and John Paulson and Bill Ackman pursue similar strategies, the undervalued stocks become harder and harder to find. This is common sense, so it’s really quite predictable. When an industry matures—hedge funds are around \$3 trillion, that’s about the amount of our index fund assets here at Vanguard—it just makes the game difficult. Then you get people who are a little arrogant. (I’m not talking about Cliff here at all.) So I wouldn’t say that their de-

mise is imminent, but their cache is gone, and they’re going to have a struggle whether good or bad. But what everybody realizes, coming back to reversion to the mean, is they’ve done well in the past. Don’t count on it being as good in the future.

The other big villain here is, when you do something with very small amounts of money, you’re not interfering with the marketplace very much. When you deal with large amounts the task becomes much more difficult to pull off. The task of selecting undervalued securities and beating your competitors and beating the market, and doing so with a large asset base, is quite difficult. So they’ve gone through a bad era. And when you’re taking 20% of the gain plus 2% of assets every year, that’s a battle that most hedge funds can’t win. In the mutual fund industry, even 2% annual costs means most funds won’t win. Not that they win anyway, but on average they lose to the market by the amount of their costs, some lose even more. Size is a big part of the problem.

**David Spaulding:** Related to that, what do you think is the maximum weight of market cap that can safely be held passively before market pricing efficiency starts to become adversely affected?

**Jack Bogle:** I use this example. Right now, indexing is, depending on who you talk to, about 22% of the U.S. stock market. Growing from 22% to 50% is going to take a long time just because the world is stubborn. Even at 50%, I don’t think the size of indexing is a problem. Then, think about this perspective. When I came into this business stocks were turning over at about 25% a year. Now stocks are turning over at around 250% a year. That means that if half the market were indexed in this abstract example, the turnover would drop all the way to 125%. Well, if it functioned at 25%, you’ve still got a long way to go.

Now, that said, nobody seems to realize the simplest proposition in the world, and that is if markets do become a little less efficient it will make it easier for good active managers to win. But for every active manager who wins, there will be another active manager who loses. If the index fund is a third of the total market, or a third of the mutual fund business in this case, the other two-thirds represents the rest of the market. Indexers own the market portfolio in aggregate, so active man-

agers also own the market portfolio in aggregate. The rest of the market's going to perform just the same way it does today, but it'll be a smaller share. If that return is 7% and I get 8%, someone else is going to have to get 6%, metaphorically speaking. I think we're a long, long way needing to worry about the growth of indexing. How long are active managers going to win? Will active management become a competitive threat to indexing? I don't see it.

**David Spaulding:** Do you have any thoughts on the role of big data, market sentiment indicators, and fintech in the asset management industry, and can it be used to create new, dynamic, passive funds?

**Jack Bogle:** Let me point out a distinction lost on the world. I started the first index fund, and that is in a category I call Traditional Index Funds (TIFs). They aren't traded every day. TIFs account for about \$2.5 trillion. One reason they don't get any attention is they don't have a group designation, so I'm trying to change that. The other half of the index fund business, also about \$2.5 trillion, is ETFs. They get all the attention, and they're trying everything. They're trading vehicles, by and large, largely banks trading with one another. The original ETF in the U.S., and still the largest, is the SPDR S&P 500 run by State Street. Then, you get into the fringe elements of the industry, so-called smart beta is the big thing today. Everybody thinks that's going to win. Factor investing, which is similar to smart beta. I don't see any rhyme or reason why they should do better than the market.

My first book was called [Bogle on Mutual Funds: New Perspectives for the Intelligent Investor](#). That was the first books that systematically evaluated the mutual fund industry. It was a pretty darn good book if I do say so myself. It was a huge bestseller. I've never done that well since, not a sign of progress.

When my eleventh book comes out, the 10<sup>th</sup> anniversary edition of [The Little Book of Common Sense Investing](#), I'll probably total about a million books in sales. The reality is that when my 1999 book [Common Sense on Mutual Funds: New Imperatives for the Intelligent Investor](#) was released, quantitative investing was just beginning. I concluded in the book that I don't see any reason that quantitative managers on average will do better than traditional stock picking on average, except that quantita-

tive managers can operate at a much lower cost and, therefore are much more likely to win, but not because they're smarter. Because you don't have to hire analysts and things of that nature, and that proved to be right. I think it's going to prove to be right again. Have you read the [New York Times](#) this morning? BlackRock is converting many of their traditional actively managed funds into quantitative funds. They're going to use big data and all the words you just used. I just read that today. Am I scared? No, but I no longer run this place.

**David Spaulding:** Are there certain submarkets within equities that you feel active management can be better than passive? For instance, small cap or emerging market equity active managers may beat their indices more frequently than would a U.S. domestic large cap equity manager beat, for example, the S&P 500.

**Jack Bogle:** There's not a scintilla of data that suggests that happens. Indeed, all the data out there suggests that it does not happen. If you want to take a look, Standard & Poors has a service called SPIVA, Standard & Poors Indices Versus Active. The study compares actively managed funds by category to the index. How did the emerging markets do against the emerging market index? How do small cap funds do? They divide them in three ways, small cap growth, value, and core. They evaluate the funds over multiple time frames, as long as 15 years, and they probably have a dozen segments. In no case does the index superiority look very different than every other case. For example, over the past 15 years, 95% of large-cap funds underperformed the S&P 500. Did small-cap managers do better? Well, 95% of small-cap core funds underperformed the small-cap index. How about emerging markets? 90% of emerging markets funds underperformed the index. The rules of simple arithmetic apply: for every purchase there's a sale, and one manager hates some little company and the other one loves it, so they trade places. The index doesn't care who's holding stock X. The stock doesn't know whether you own it or not, as I understand it.

**David Spaulding:** The same rules apply to every market.

**Jack Bogle:** Sure.

**David Spaulding:** David Swensen of Yale University's Endowment Fund wrote in one of his books something

to the effect that quantitative measures of risk have a lot to be desired. What does risk mean to you and how would you measure it?

**Jack Bogle:** Well, let me try it this way. Quantitative measures of risk are great at what they do but they don't really measure risk. The typical one is volatility, which can tell a lot. Typically higher performing funds have higher volatility. Then consider a balanced fund, maybe 60% is as volatile as the stock market. You would expect a balanced fund to fall much less than the stock market in the next market decline, holding other things equal. If the fund changes its mandate, that's something else.

Another measure of risk is beta, which we might call relative risk. The market beta is 1.00, and the beta of a fund is higher or lower depending on its relative volatility. Wellington Fund has a beta of about 0.60 because it's a balanced fund. A middle-of-the-road stock fund would have a beta of 1.00. You can be confident that the Wellington Fund is less risky than a stock fund with a beta of 1.00, but what does that mean? How many people can even calculate the numbers? I mean, they're easy but people aren't familiar with them. Risk to me is the chance that you're going to lose an awful lot of money, period. That's where it hits you in the pocket book. There's no way to measure it in advance. There are a lot of ways to measure relative risk.

If you tell me that the stock market is going to go down 50%, I'll tell you the Wellington Fund is going to go down 35%, and I'll tell you one of our growth funds is going to go down 55% because it's a little more volatile. That is a measurement of relative risk. But absolute risk the risk that you will lose a lot of money. I don't know any other way to look at it. David is also always right. He's become a good friend of mine like Cliff Asness.

**David Spaulding:** You're aware that a lot of people like to measure forward-looking risk, ex-ante, using perhaps value at risk or something like that. That seemed to have been criticized around the time of '08 because VAR didn't seem to help investors give any indication what was going to happen. On the other hand, we have somebody like Nassim Taleb who wrote the book on black swan who says one should not attempt to make any predictions. What are your thoughts on trying to predict risk?

**Jack Bogle:** Well, I have had, since 1990, a system for

establishing reasonable expectations for market returns over the coming decade. In the decades that transpired since the beginning of 1990, I guess there are 15 of them, my average reasonable expectation for stock market return was 8.6%, and the average return of the S&P 500 was 8.7%. That's pretty good on average, although there was one huge aberration and I'll explain it more easily by telling you what the system is. I have an article the [Journal of Portfolio Management](#) about this written with my pal, Mike Nolan. The reality is that stock market returns come from two sources: enterprise and speculation. Lord Keynes told us that the long-term return on stocks is driven by enterprise—the value created by businesses—and speculation, which is guessing what other investors would do.

Now, I just thought I'd put numbers to it. I don't think anybody else has. A few people that have read my stuff really like it, but it hasn't gotten broad academic acceptance because I don't have enough footnotes or something. I'm not bothered by that. A Spanish professor named Javier Estrada wrote an article called, "Investing in the 21<sup>st</sup> Century: With Occam's Razor and Bogle's Wit," which got some attention. No one's really argued with it. I define investment return as the initial dividend yield plus the subsequent earnings growth over the decade. I don't do anything shorter than a decade; there's too much noise in the short term. Speculation is the impact of the change in the price earnings multiple, upward or downward, annualized over that period.

To give you an example, today's dividend yield is about 2%. The long-term average dividend yield is around 4.8% on the S&P. That's a 2.8% deadweight loss on future returns relative to history. Earnings growth typically has been around 5% to 5.5%. Future earnings growth is which is closely tied to GDP. Many investment professionals don't see GDP as important for predicting stock returns. You tell me what the GDP is going to be 10 years from now and I will tell you what the earnings growth is going to be over the next 10 years, and I'll be within 1%. So we now have a known dividend yield and a rational expectation for earnings growth. The long-term average was roughly 5% a year, so I think over the next decade we'll be lucky to get about 4%. I always make clear that this is just my opinion. That's 6% investment return, two plus four.

The PE today is about 24 by my standards, and I use ac-



tual GAAP earnings over the previous 12 months. Many on Wall Street use projected operating earnings, which eliminate all the bad stuff from the reported earnings, over the coming 12 months. Wall Street is using about a 16 PE, and I'm using around a 24 PE. I don't think a PE of 24 is sustainable, so if it were to drop to 18, six points or 25%, that translates to around 2% a year negative returns over a decade. That takes the 6% investment return down to 4% total return, which is my reasonable expectation for stock returns over the coming decade. Some people on Wall Street think it's far too low. I saw a thing on the internet that said, "John Bogle is a mad man, we're never going to get to 4 percent." Never. It's too high. I don't know, but I think investors have a right to have some expectation. They shouldn't use it for timing. They should use it to help determine how much they have to save.

**David Spaulding:** In his new book Unshakeable, which you are cited in, Tony Robbins mentions that an investor would be wise not to sell when the market is falling, but rather to hold on to their investments with the expectation that it will surely turn around. That does seem to have been the case with 2008. What are your thoughts on this philosophy?

**Jack Bogle:** Tony is a good friend of mine. We just did a joint interview for Money magazine. A few years ago, I got a note from David Swensen asking if I would I talk to Tony Robbins, who David described as a "force of nature." He came in here for a half-hour interview, and we talked for three-and-a-half hours! We shared many of the same beliefs about investing.

I should add another thing about my expectation for future returns, if the market gives 4% and active mutual funds take 2% in costs, that's a net return of 2%. And if inflation averages 2%, that's a real net return of ... well, you do the math, I'm not going to say it.

Tony and I get along very, very well. I think I totally dominated his first book. I wrote the introduction to his second book. I thought the book was a little bit too bullish, and not conscious enough of the fact that bad things can happen. I don't predict bad things are going to happen. How would I know how to do that? But I am saying, don't think it's easy. Don't take anything for granted. If you're a little concerned you may want to have a bond position as well as a stock position. When

you're older, most certainly have a bond position. A common rule of thumb is to have a bond position that equals your age.

I am not 50 but I'm about 50/50 in bonds and stocks. This thing is not a formula, it's a rule of thumb. I'm afraid it's a bad rule of thumb because people forget to add Social Security to their bond position. The capitalized value of your Social Security when you retire, if you're right in the middle of the pack, is around \$300,000. So in theory, if you have a \$300,000 mutual fund portfolio and you want to be 50/50, you would have 100% of your mutual fund investments in stocks and 100% of your bond position in Social Security. It's not that easy but you cannot look at your retirement as solely depending on your investment position because you've got Social Security, and if you're lucky you may have a private pension. You may even have a private pension that's sound, unlike many state and local government pensions.

**David Spaulding:** I understand you have a role in The Institute for the Fiduciary Standard. Please explain briefly what the group is about and what you're doing with it, and also what advice would you give to President Trump on this topic?

**Jack Bogle:** I've known Knut Rostad for a long time, probably 10 years. Do you know him?

**David Spaulding:** I've spoken to him.

**Jack Bogle:** Knut has accomplished a lot in getting the Institute for the Fiduciary Standard started. It's basically focused on best practices for RIAs who are fiduciaries. I don't think many brokers have joined that thing because the broker is still teetering between a suitability standard and a fiduciary standard. The suitability standard is much weaker than the fiduciary standard. The people who will really be hurt by the DOL's new fiduciary requirements are insurance salesmen selling variable annuities, a product that probably should not exist. I would just say on the face of it, don't buy variable annuities. You might have to look at the small print, the complexities. Don't get any investment you don't fully understand and nobody could understand that kind of thing.

So Knut's organization, at the moment, is trying to de-

velop a set of fiduciary principles for registered investment advisors. He's working with the SEC on this. I participate in some of his phone calls with advisors and with the press. We're just trying to get the fiduciary standard from an amorphous kind of vague issue into something that's a little bit more structured. That itself is hard to do because the initial proposal from the Department of Labor has been weakened and changed in a way that better fits the industry. Still, some people are writing to the Department of Labor and to the president saying, "Let's examine the standard all over again."

I wrote an op-ed in the New York Times on this topic, did you see that by any chance?

**David Spaulding:** No.

**Jack Bogle:** They asked me to write an op-ed on the fiduciary standard. Raise the awareness of investors and the world about the need for their brokers and investment advisors and insurance salesmen to put the clients' interests first. My own view has been that the fiduciary standard is the genie that's out of the bottle. As I said in my Times op-ed, there's a reality here that the client is demanding to be served and it's getting stronger every day. If you're putting the client second and the client realizes it, the client is going to go to somebody else. As I said, "The arc of investing is long, but it bends towards fiduciary duty."

**David Spaulding:** I'm wondering, do you have any thoughts on the various ways to construct what you do or what you think about the variations of indexing whether equal weighting, free flow, do you have any thoughts? Since we're talking about passive, which is against an index, do you have any thoughts on the structure? Do you have one preference over another?

**Jack Bogle:** I have an absolute preference for S&P 500 or the total stock market. The S&P 500 is 85% of the stock market, so they're not much different. Warren Buffet likes the 500 better because he likes the large companies better than the small. That's a broad generalization. It's all about indexing today. That can be generalized without self-contradiction. Equal weighted cannot be. If you're going to have an equal-weighted portfolio, it's going to require a lot of activity to rebalance back to an equal weight, so it cannot be generalized. Not everybody can do that because it's not cap

weighted. There is a 10% cap stated in the Investment Company Act of 1940 on the amount of a stock a mutual fund can own. You get to 10% very quickly on some of the smaller stocks. I continue to believe the U.S. is the best place to invest and, therefore, I don't think you need to own non-U.S. stock.

**David Spaulding:** Of course the S&P now is free-float weighted as opposed to just straight asset weighted. Do you think that's an advantage?

**Jack Bogle:** Well, that's really a better measure of the stocks available to investors. We can't buy Bill Gates' stock. We can't buy the Walton family's stock. So the universe for investors is the stock that's actually floating in the market.

**David Spaulding:** Now, I don't think I'm giving any secrets away by mentioning that you're in your early-80s and still working.

**Jack Bogle:** Eighty-eight.

**David Spaulding:** Oh, wow. Okay. A little bit older than even I thought. It almost seems to be a universal goal to retire in our country where many seek to retire by 65. I guess I'm curious whether you have any plans to retire and do you have any broad views of philosophies on the subject of retirement?

**Jack Bogle:** I'm absolutely retiring. I have no idea when. I have no idea whether it will be my decision or the Lord's, so I just go through each day as if there's another day following it. I'm happy to be active, but my philosophy on the subject of retirement is if somebody wants to retire at 55 or 65 to play golf in Florida, that's fine, but it's just not me. If you're doing something useful for your community or your society or your industry, don't stop. Why would you want to stop? When work stops being fun, I suppose that would be a good time to retire. I haven't thought much about that because I enjoy myself a lot, even if I drive everybody around me crazy.

**David Spaulding:** Well, I share your views. My wife and I moved into a 55 and older community a little bit more than a year ago, and I don't know what the percentage is of people still working, but I am one of them and I have no plans to retire. I'm enjoying what I'm doing. Just to close out then, I'm curious if you have any

other thoughts in the area of performance and risk or investing, in general, that you would like to share.

**Jack Bogle:** I think one thing that's very clear is these are very risky times. There are all kinds of risk. As Donald Rumsfeld used to say, "There are the known unknowns and the unknown unknowns." I can't comment on the unknown unknowns, but they're always out there. Our society globally is carrying huge amounts of debt, the highest in history. Student debt is a huge portion of our U.S. debt now, which is something that's kind of out of the blue, there is no history on that going back very far. We have racial divisions in our society, which are not getting any better and they've got to get better pretty quickly in my opinion. We have a division of wealth, which cannot go on this way forever. To have immense riches on one hand and abject poverty on the other leads to social instability. The income gap is ultimately a serious, long-term social problem. We seem to be not so interested in international trade anymore. We seem to be withdrawing from the global view of the world. I think that's a huge risk in the long run. We always have the possibility of a pandemic. These are all things that could happen. There could be religious war, there could be nuclear war. They're all out there and nobody knows what's going to happen and any high school senior knows as much about the odds of one of those happening as I do. We just don't know.

But you can't not invest because if you never invest you will end up right to the last penny with nothing. I think it's cause for a little conservatism. As I mentioned earlier, I think we will be looking for returns on stocks of around 4% per year over the coming decade compared to about 12% that we've had since 1984 and essentially the beginning of Vanguard which is 1974. This is one of the great bull markets in stocks and a very good market in bonds because we had high interest rates at the beginning which have gradually come down over the decades, and that's what moves the bond market. I tell people I'm 50/50 stocks and bonds roughly. Half the time I'm worried about having quite so much in stock and the other half of the time I'm worried about having so little in stock, so I must be about right.

**David Spaulding:** Thank you so much for your time and sharing your thoughts with us.