## Minutes from the Diehards VI Reunion <br> Alexandria, VA <br> 11-12 June 2007

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## 1 Day-1

### 1.1 Mr. Bogle's Introduction

Jack Bogle (JB): I will first answer the two main questions, i.e.,

1. Asset allocation
2. International allocation

A recent New York book review covered Mr. Bogle’s book, The Battle for the Soul of Capitalism, published in November 2005. Among other things the reviewer said, "Bogle retired to full-time hell raising." Jack stated that this reminds him of Harry Truman who said "I'm not giving them hell. I'm simply telling them the truth, and they think it's hell."

Mr. Bogle has an eBlog (which is an anagram of "Bogle"). The blog contains links to speeches that Mr. Bogle has given at various universities, including Princeton, West Point, Georgetown ("Enough"), and others. You can find Mr. Bogle’s eBlog at http://johncbogle.com/wordpress/

The biggest industry in the U.S. is the financial system. Unlike other industries, it subtracts value from society and gives it to brokers, analysts, etc.

The U.S. financial industry is larger than the energy and health industries put together.
Mr. Bogle targets his message to young people, because they provide the best hope for changing the way the financial industry works. In the past couple of weeks, Mr. Bogle
was encouraged by his encounters with young people. Specifically, he met some very bright people during a recent visit to Princeton, where 16 people study on a scholarship funded by Mr. Bogle.

Then Mr. Bogle reminded us how Vanguard was begun with a Fortune Magazine article. The following quote from another Mr. Bogle's speech represents the essence of what he shared with Diehards at the reunion:
"Fifty-three years ago, I was seated in the reading room of Princeton's then brand-new Firestone Library and turned to page 116 of the December 1949 issue of Fortune magazine. There I read an article on a business I'd never even heard of: Mutual funds. Describing the industry as "tiny but contentious," the story inspired me to choose this field as the subject of my senior thesis. In my thesis, I baldly asserted that "the prime responsibility of mutual funds must always be to their shareholders," and to demand that funds must serve-"serve both individual and institutional investors."

### 1.2 Asset allocation

Mr. Bogle follows his own advice, i.e., "Don’t peek." Mr. Bogle does not change his asset allocation. He is not a "secret swinger." A recent issue of the publication Bottom Line misrepresented Mr. Bogle’s asset allocation and confused people.

Mr. Bogle moved 6\% of his Intermediate bond into Inflation-Protected bonds (TIPS), because of possibility of inflation. Mr. Bogle's allocation is:

60\% bonds / 40\% equities <overall
The allocations are different between personal and retirement accounts, something like:
$40 \%$ bonds $/ 60 \%$ equities $\leftarrow$ personal $80 \%$ bonds $/ 20 \%$ equities $\leftarrow$ retirement

Mr. Bogle's retirement account is greater than his personal account. At Vanguard, if one continues to work past age 70, there is no need to take money out for mandatory distributions, and it helps accumulating assets.

### 1.3 International investments

Mr. Bogle has bought European index, a relatively small percentage. U.S. corporations conduct ever more business abroad. Foreign markets fluctuate a little differently from the U.S. market, but not enough to warrant substantial investment. Prices of international stocks benefit from a weak dollar.

One sensible argument is to buy large foreign companies, e.g., pharmaceuticals that do business in the U.S. If one looks at the performance of international stocks over time,
they did better than U.S. stocks in the 1980's and in early 2000's, but the reverse was true in the 1990's. No one can tell what will happen in the next decade.

### 1.4 Questions submitted for Mr. Bogle

Mel Lindauer asked questions that had been submitted online ("Q"), and Mr. Bogle responded to them. Occasionally, somebody from the audience had clarifying or followup questions. "A" corresponds to Mr. Bogle's answers.
Q. Do you still read our forum?
A. Yes, about once a week. I do not read every post. I am sometimes curious when some topic generates 300 responses.
Q. Do you read the original Diehards forum or the new one?
A. I learned how to go to the main page and pick up the "favorites." I also learned how to do attachments.
Q. Any comments on what you enjoy reading on our forum?
A. People say they don't know what to do and others help them. Occasionally, somebody says something rude, and everybody gets exercised. People go for too much precision. Kevin Laughlin sometimes points me to interesting threads. Kevin is my right hand for Diehards. But I don't want people to assume that I am reading the Forum all the time.
Q. How to make a choice between "staying the course" and "irrational exuberance", i.e., should one change asset allocation in order to preserve capital?
A. Sometimes, markets are ridiculously cheap, and sometimes they are ridiculously expensive, but that does not happen often, perhaps six times in one's life. And for middle-aged people, fewer than six of such occasions are left. During extreme times, P/E points in the right direction, e.g., when $\mathrm{P} / \mathrm{E}$ is $30-32$, that is way too high. However, Mr . Bogle does not get out of the market even then. It is difficult, if not impossible, to time major asset allocation moves. He stated emphatically that there is never a right time to abandon the equity market.

- In March 2000, many people were optimistic and poured money into the market.
- In August 2003, many people were pessimistic and took money out. They lost on both occasions.

On the long run, business will bail out markets from their worst mistakes. Today, the P/E is about 18, and that does not warrant any changes. "Capital preservation" should make one more conservative and not touch it. A 7\% return would double money over the next 10 years.
Q. Valuation and market timing: If somebody has money is it preferable to invest now or wait for a crash?
A. No matter when you do it, it always seems difficult to invest "now." The stock market is a giant distraction from the business of investing.

I recommend increasing the bond allocation as one gets older for the following reasons:

1. Investors have less time to make up for the losses.
2. Investors have more money at stake.
$70 \%$ allocation to equities is not out of the question; $80-90 \%$ is excessive.
However, we need to deal with the investor's psychology. Let's say one inherited $\$ 100,000$ and wants to put $50 \%$ of this money into equities. A psychologically safe way would be to put $20 \%$ on day one, another $10 \%$ in six months, and continue with $10 \%$ investments every six months until done. Economists will say "Put all your equity money into market now, because markets grow." But gradually moving money into stocks is easier psychologically in case the stock market drops.

The other $50 \%$ is slated to go into bonds. These should be short or intermediate bonds.
Q. How about actively-managed Vanguard funds?
A. Explorer is just a small cap/growth index fund. Windsor II is also like a large value index fund. Other Vanguard active funds also act like index funds.

Mr. Bogle previously picked Vanguard managers to run active funds. Some were good; others were not. On average, Vanguard manager picks are better than those of other companies. Vanguard's strategy is to add another manager as a fund gets too big. However, if a chance to pick a good single manager is $50 \%$, a chance to pick two good managers is $25 \%$, a chance to pick three good managers is $12.5 \%$, etc.

The reason Vanguard has a $1.5 \%$ per year advantage over other fund companies is not the manager selection but keeping costs down, i.e., no loads, no excessive trading costs, etc. The bottom line is that it is not easy to pick managers.
Q. Are international funds a necessary component of one's portfolio?
A. They are not "necessary" per se, but there is nothing wrong with them, either. Just don't plunge money into international funds just because they did well recently.
Q. We normally discuss diversification as a choice between the Total Stock Market (TSM) and Total Bond Market (TBM). But if somebody had additional money, would they be advised to put this money into REIT or International?
A. I have not the foggiest notion whether REITs or International will do better. REIT is bursting right now. In early 1990’s, when REITs were getting popular, they had 7.5\% returns, managers took $1.5 \%$, and the profit was $6 \%$. Bonds could produce the same returns if you buy them and hold to maturity, e.g., for 10 years. With bonds, one could lock into an attractive opportunity.

With REITs, returns now are 2-2.5\%. The market place has driven REITs prices up, and future returns will not be high. Ultimately, do what you want, but do it in small amounts, whether it is REITs or International.
Q. Which are the best bond funds?
A. There is no simple answer. You have to be bloody logical and consider, for example, taxable accounts vs. tax-exempt accounts, especially in high-tax scenarios. For example, a tax-exempt account may be divided as follows:

1/3-limited
1/3 - short-term
1/3-intermediate
Government securities (the Treasuries) and corporate bonds have long durations, more so than the municipal bonds. Go for intermediate durations.

I don’t believe in Money Market funds. Short-term bonds provide better returns. They have more fluctuation, but the end result is better.

Non-muni bond funds should be in retirement accounts.
Q. Should one hold TIPS in their bond portion?
A. It is a good idea. However, I disagree with David Swensen. He suggests holding mostly TIPS, and I would also want some corporate bonds. $50 \%$ TIPS is good, and the other $50 \%$ should be corporate.
Q. Do you recommend TIPS in early accumulation stage, when one is in his 20 's or 30 's? A. I want to take emotion out of investing, e.g., using one's age as a guide to one's percentage in bonds. Somebody in his 20's could have $20 \%$ in bonds, and these bonds could include TIPS. However, be realistic. If somebody in his 20 's has just $\$ 300$ to invest, it is not worth it putting $20 \%$ of this $\$ 300$ into bonds.

Mr. Bogle expects rising inflation, and therefore TIPS are a really good idea for one's portfolio. However, understand that these predictions may never materialize.
Q. A young person has a large human capital. He will work, and hopefully his wages will increase with inflation. Why bother with TIPS?
A. We cannot talk about absolutes. The key is to have a prudent approach.
Q. How about small value premium?
A. "It's not there now." From 1928 onward, small value did well, and people figured it out. The only reason people keep asking about small value is that it has done well.
Q. Very few Americans do indexing. Do you want to convert people to indexing? A. I just don't want to be troubled any longer with the argument that "indexes do not work." They do work, and we proved it many times over. Brokers just don't want to sell
them. It is disappointing that index funds are not growing. But indexing, in general, is growing thanks to ETFs. ETFs are super-indexes. ETFs are "attractive," because people can trade them all day long. But why would prudent investors want to trade all day? There is no financial reason, except of the efforts of the financial industry. They are trying to make investing "more exciting." Economists call this asymmetry of information, i.e., buyers do not know the truth, whereas the sellers do. When I think of ETFs, I think "What have you done to my song?"
Q. How about sector funds at Vanguard?
A. Energy sector fund was a bum. Investors have received high return from the Healthcare fund. However, even though the Healthcare fund has done well, it does not mean that sector funds are preferable to index funds. Vanguard used to have a technology sector fund that was actively managed by Wellington. The fund was started in mid-1980s, did not do well, and was terminated. And that was a good thing, because if it had survived, in the late 1990s it would have generated a lot of money, investors would have poured in, and then they would have lost a lot during technology downturn.

In 1992, S\&P split the 500 Index into Growth and Value parts, and Vanguard started offering corresponding index funds. It made theoretical sense, young people could go with the Growth part of the index and later move into Value. The results were as follows:

- Growth: $9 \%$ fund performance $-0 \%$ what the investors received
- Value: $11 \%$ fund performance $-9 \%$ what the investors received

The reason for such poor returns to investors is that they came in too late. Looking back, Mr. Bogle would not use sector funds, Healthcare success non-withstanding.

### 1.5 Questions from the floor

Q. What have you gained from your mistakes?
A. I made my biggest mistake in mid-1960s. There was an idea that it was a new era and good managers could be identified. Peter Lynch did a good job. But his main success happened when he ran a relatively small fund, and nobody was looking over his shoulder. In fact, Lynch left when the fund was just starting reverting to the mean.

I made many other mistakes, too.
Q. When people have any financial issues at all, they are sent to see financial advisors. However, it's not uncommon for financial advisers to steer people away from index funds into horrible loaded, expensive, inappropriate, etc., investments. It is as if physicians gave patients strong medicines making them even more ill, so that the doctors could stay in business.
A. First, there are some good advisors. But I agree that this is a great problem, and that is the main reason why index funds are not growing despite all economic the reasons. The compensation system for advisors has to change. People need to get educated. Some people try to learn more about investing, but there is just too much noise. People should
stand up for their own rights. The press should expose the most egregious cases. People must understand that index funds are not "safe," but they are the most prudent overall choices. In the end, the only thing that matters is the difference in dollars between the amount of money put into a fund and the amount taken out.

I agree that in most cases, when you have a problem you go to an expert, but that does not work with the financial industry. Warren Buffet knows that.

### 1.6 Mr. Bogle about Vanquard today

Vanguard has undergone great growth in recent years. It holds the first place in several categories, and it has been a success for Vanguard investors. It is interesting that with all Vanguard's success, now, 33 years after Vanguard started, there are no followers.

Not only have Vanguard's shareholders done well, but they also have tremendous loyalty, much more than other fund families. People were polled and responded on the scale from 1 to 10 , where 1 -to- 3 represented a negative opinion, 8 -to- 10 was positive, and the rest in the middle. Vanguard's overall score was $44 \%$, the runner up was Dodge and Cox with $29 \%$, T. Rowe Price had 21\%, Fidelity had 12\%, Putnam had -54\% (negative!).

Vanguard emphasizes index funds. Many Vanguard's active funds behave like indexes. For example, Wellington is basically an index fund, because it tracks the value portion.

Vanguard was built on two types of values:

- Financial values
- Human values

Mr. Bogle started Vanguard with 28 people and he knew the names of most people for a long time. When Mr. Bogle left Vanguard in 1996, it had 6,000 people; now it has 12,000.

The last chapter of Mr. Bogle's investment book, Common Sense on Mutual Funds, is dedicated to "Human Beings." The chapter is titled "On Human Beings." How come that an investment book talks about human beings? A better question is: How could an investment book not be about human beings?!

The current Vanguard management is dedicated to keeping costs down for its investors. Cost is everything. Vanguard is the lowest producer in a business where cost is everything, and nobody wants to compete on cost.

The current Vanguard strategy is to be more like its peers, e.g., to do more marketing, to get into ETFs. Even though Vanguard is now a market company that offers ETFs, it still upholds its key strengths:

- Low cost
- Diversification

Vanguard was born with a missionary strategy. Businessmen would not do that; they would not be missionaries. However, the missionary strategy may have turned out to be the best business strategy.

### 1.7 Discussion during dinner

Mr. Bogle: We live during the time of extraordinary risks, including:

- Global competition
- Skewed tax system
- Growing gap between rich and poor
- A war, where most of the population does not feel any pain, and only those participating in the war do feel the pain
- Record-high deficits.

Usually, times of low-risk premiums are followed by hard times.
Dr. Bernstein: To expand on the list, China challenges the U.S. There are some important developments related to naval power balance. China uses straits for oil transportation and does not like it that the U.S. controls them. Even Canada, our closest friend, is upset about the U.S. control of the straits.

During the past 30 years, real wages of the average American male have not risen; they have remained the same on an inflation-adjusted basis. The rich are doing much better. People in this room are doing much better. The gap between rich and poor is growing. The top $1 \%$ of the American people doubled their real returns. This situation may end badly.

Consider northern Europeans. If a Dane sees a homeless person on the street, for him he is another Dane. In the U.S., citizens do not associate with other citizens. During World War II, Danes did not see Jews, they saw other Danes.

In the U.S., the expected real return on equities is about 3.5\%. Today (11 June 2007), TIPS closed at about $2.7 \%$. There is not much risk premium for stocks in comparison to TIPS.

Mr. Bogle: There is an issue of private equity. Internal rates of return in private markets are higher than in public markets, because public markets focus only on the next quarter.

Dr. Bernstein: Consider an example. Let us assume that we had a society on a subsistence level, where everybody is poor, and there is no extra money available for investing, because all money is used for basic needs. However, even such a society would need capital, and a person with an extra shekel can basically name his price. He may request $20-30 \%$ return and somebody would pay it.

Now, consider a wealthy society where everybody has plenty of extra money (left over after satisfying basic needs). Now, everybody can become a lender, and this results in a lower rate of return.

Some people are incredulous that they cannot count on a return above a few percent. Some older people do not realize that they could get, e.g., $6 \%$ real return by buying an immediate annuity. The immediate annuity, e.g., for 73-74 year olds has the advantage of annuitizing longevity, i.e., removing a concern of how long one will live.

Mr. Bogle talked for an hour and a half with David Swensen, the manager of the Yale's funds, and Andy Golden, who manages the Princeton funds. They both produce consistent $15 \%$ returns and claim that they will continue getting these high returns in foreseeable future. Why? Because there are just so many stupid people. This is similar to what Warren Buffet said, i.e., at a poker table, if you don't know who the patsy is, it is you.

Dr. Bernstein: Swensen will continue getting his returns, because he does it for the sake of his craft and for the sake of the students. He is only paid $\$ 1.3 \mathrm{M}$. This is an order of magnitude lower than what his peers earn on Wall Street.

If you think what people really want, the fundamental needs are:

- Connectedness
- Competence
- Autonomy.

To get higher performance, enterprise should maximize internal rewards related to the human needs listed above, rather than focusing purely on money.

Cliff Asness is very introspective and smart. He set up a hedge fund, but he did it at exactly the wrong time and was losing money. His wife made an observation that he went into business to make money because other people were stupid. He lost money because it turned out that they were too stupid.

Consider that marketing is at least partly responsible for the obesity epidemic in the U.S. One of the culprits is processed food. Companies cannot grow the market, because there is only so much food people could eat. And so companies are advertising to children. Other countries do not allow this, but in the U.S., we have a commercial free speech. In Dr. Bernstein's opinion, some products should not be advertised.

Mr. Bogle: Politicians cave to money. They fail to deal with the Social Security system.
We have a good competitive economy. It is great for consumers and producers seem to do well, too. Our greatest hope is our young people.

After I had heart surgery, some people say that I am the only person on Wall Street who certifiably has a heart. I admire Bill Bernstein.

The Bogleheads should do what is right for themselves and for society. We need to realize that there is the miracle of compounding returns, but also the tyranny of compounding costs.

Taylor Larimore: I live in a house built by Jack Bogle. Who else lives in a house built by Mr. Bogle? [Over half the Bogleheads raised their hands.]

Steve Dunn said that he and his father were among the initial Vanguard investors. Prior to that, they read that index funds were the most prudent investment strategy, but they actually had to wait until Vanguard started offering index funds in order to invest.

## 2 Day-2 - Panel Q\&A

Rick Ferri: Rebalancing in taxable accounts is expensive. Sometimes, rebalancing does not pay off. Even if you rebalance on the dips, you could gain only about $1 / 4 \%$.
Q. How many classes should one have for proper diversification?
A. Dr. Bernstein: Go for simplicity. You will get 70-80\% of diversification just by using the following assets:

- Total stock market
- Total international market
- short bond fund

If you want more diversification, add REITs.
Q. Please comment on the human capital.
A. Dr. Bernstein: The main reason for moving to bonds as one gets older is that one's human capital decreases and the person cannot take much risk, cannot make up for losses.
A. Ed Tower: In retirement accounts, I like funds. However, for the taxable investments I buy individual stocks. Stocks can be sold on the dips. Heirs can get a stepped-up basis.
A. Rick Ferri: I recommend ETFs instead of individual stocks.
Q. Please talk about index funds.
A. Rick Ferri: I wrote a book on them.
A. Laura: Read Rick’s book.
A. Comment: it is probably not necessary to promote index funds to this group.
Q. What are tax considerations in setting asset allocation? IRA withdrawals are at the marginal tax bracket. Roth IRA makes it even more difficult. You may think that you have a $70 \%-30 \%$ split, whereas in fact you have $60 \%-40 \%$ split.
A. Dr. Bernstein: We talked about this last night. This topic was forced on me, but I found the arguments convincing. Today, I showed my calculations to some people. In short, put your best performing assets into Roth, and you will get a better return than if these assets were placed in Traditional IRA. However, in real life, the allocation between the two does not matter. You have to guess which asset classes will have better returns, and you just don't know that. Consider the expectations of low equity returns. There is no guarantee that during the next 20 years, stocks will outperform bonds. In fact, the opposite is quite likely to be true. Furthermore, most people are not choosing between Roth and Traditional IRAs, but between taxable and tax-deferred accounts. In the typical case, people put equities into taxable accounts and bonds into tax-deferred accounts.

Getting back to the original question, if you want a quick answer, put:

- Stocks into Roth
- Bonds into traditional IRA.

If you have 401(k) or 401(k)-Roth, treat them similar to IRAs.
Q. How do you account for defined benefit pensions in the asset allocation?
A. Sue Stevens: You can price an annuity and calculate the equivalent lump sum that would produce this income. You could then consider this lump sum as a part of your bond allocation and change your overall allocation accordingly. However, this may push you in mainly equity investments and that may not be comfortable. In that case, you just reduce your stock holding to a comfortable level and add bonds.
A. Laura: I will have a pension, and I do not consider it a bond. I consider it as a reduction in my cash needs.
Q. I am in the accumulation stage and in high tax bracket. Assuming that there is a value premium, can I hold small value in a taxable account?
A. Dr. Bernstein: Whatever small value premium existed seven years ago, there is none now. In fact, going forward, small value premium may even be negative. TSM is a better way to go, even before you start considering taxes.
A. Rick Ferri: Small value has never been as high as it is now, in comparison to large growth. If you want small value, consider ETFs, because they allow you to send capital gains to institutional investors instead of sending them to retail investors.
A. Ed Tower: Whenever possible, use broadly based index funds.
Q. U.S. companies are conducting business about half in the U.S. and half internationally. What is the case for investing in international funds if one can get international exposure by investing in U.S. companies?
A. Rick Ferri: You do it for currency diversification and rebalancing.
A. Dr. Bernstein: Company's domicile matters. If you want to get a real currency benefit, buy foreign small value, e.g., a small brewery in Belgium that does not provide any other exposure to U.S. investors. In general, there are not many reasons for foreign diversification.
A. Rick Ferri: I also must add that by investing in international funds you get a small percent of commodity investment.

Question to the entire panel: What percent of foreign funds do you recommend and in which fund, FTSE (Financial Times Stock Exchange) or TISM (Total International Stock Market)?
A. Laura: 30\% of equities, FTSE taxable, TISM tax-deferred.
A. Rick Ferri: 30\% of equities, neither FTSE nor TISM. I buy 40\% Europe, 40\% Pacific, and $20 \%$ Emerging markets, and then I rebalance. If I had to chose, I would go for FTSE, because of the tax treatment.
A. Sue Stevens: 5\% of the total portfolio.
A. Dr. Bernstein: 35\% foreign, overweight in value, get tax-managed international for a taxable account.
A. Michael LeBoeuf: <20\% of equities, total international; keep it simple, because nobody knows future.
A. Ed Tower: overweight in international stocks with higher yields. Prediction of negative returns for international which will be worse for small stocks.
A. Mel Lindauer: 20\%, TISM.

Question to the entire panel: What percent of REITs do you recommend?
A. Laura: I don't really know, perhaps $10 \%$.
A. Rick Ferri: I don't believe that REITs are overvalued. Consider that Real Estate is $15 \%$ of the U.S. economy, whereas REITs are only $2 \%$ of the U.S. stock market. This is because many Real Estate companies are not public. Thus, Real Estate is underrepresented in the indexes, and I would put 10\% into REITs directly.
A. Mel Lindauer: 5-10\% of equities.
A. Sue Stevens: $<5 \%$ of the portfolio.
A. Dr. Bernstein: From a little less to a lot less than one had seven years ago.
A. Michael LeBoeuf: 10\%.

Dr. Bernstein: In general all financial predictions are like astrology, which is an insult to astrologists. Jeremy Siegel is an exception because he considers mean reversion.
Q. Why bother with U.S. TSM and international index, if one could just hold the Global index?
A. Taylor Larimore: There is no difference.
A. Laura: Split.
A. Rick Ferri: Agree with Laura.
A. Dr. Bernstein: There is no Global index fund. However, some 401(k) plans offer DFA that splits money about $60 \%-40 \%$, and that is fine.
A. Ed Rager: 50 largest global funds beat Vanguard's index funds before expenses. Once expenses are considered, Vanguard index funds win.
Q. What is the best advice for rebalancing?
A. Mel Lindauer: Target Retirement Funds take care of it automatically. I personally use $5 \%$ expansion bands for my portfolio.
A. Laura: I like to keep it simple so that my husband could do it (he is very intelligent but he is not interested in investing).
A. Rick Ferri: I would use bands. Look into the overall stock/bond mix and rebalance only if it is more than $5 \%$ off. Once you've identified the need to rebalance, only then look into the portfolio composition. However, changes within portfolio should not drive rebalancing unless the stock/bond ratio changed significantly. If you look at your portfolio a lot you will see ghosts. Rebalance once a year. If you are prone to ignore your portfolio, it is ok not to rebalance every year. Still you should rebalance every 5-10 years. Whatever you do, do not rebalance emotionally.
A. Laura: Use new money to rebalance.
A. Sue Stevens: Retired people take money out of their portfolio, and for them rebalancing has a different meaning. They have to consider cash effects, for example, matching gains and losses at the end of the year.
A. Mel Lindauer: In the withdrawal stage, one could withdraw appreciated assets from their taxable account and benefit from the 15\% LTCG (Long Term Capital Gains) tax rate.
A. Dr. Bernstein: Rebalancing every 3-5 years is optimal because of the mean reversion. If you find that you have bands and rebalance a lot, you most likely have bands that are too narrow.
A. Michael LeBoeuf: Start with $60 \%$ stocks $-40 \%$ bonds, and maintain it as long as you do not have more than $\$ 1 \mathrm{M}$ in equity. Consider:
\$1.0M total - \$600k equity - \$400k bonds (60\% - 40\%)
\$1.5M total - \$900k equity - \$600k bonds ( $60 \%$ - 40\%)
\$2.0M total - \$1.0M equity - \$1M bonds (50\% - 50\%)
\$3.0M total - \$1.0M equity - \$2M bonds (33\% - 67\%)
In other words, you start reducing your stock percentage as you get richer (in contrast to getting older) so that you focus on the capital preservation.
Q. Please comment on controlling risk.
A. Ed Tower: distrust most risk adjustment techniques.
A. Rick Ferri: Look at rolling 10-year standard deviation between asset classes. Treasuries have the lowest risk and lowest returns. Three years do not help much; consider 10-year periods. Performance changes but comparison between rolling standard deviation does not change.
A. Dr. Bernstein: You can lose money in stocks. You can lose 5\% in a day in REITs. You can lose your shirt in Emerging Markets.
A. Ed Tower: Never use standard deviation of nominal returns. Use real standard deviations.
Q. Please comment on the Gordon equation, i.e., dividend discount model.
A. Dr. Bernstein: It is still a good idea, i.e., valuing S\&P based on the earning growth.
A. Ed Tower: Go to Robert Shiller's web page and you will find S\&P, CPI, earnings, etc. The site has publicly downloadable spreadsheets. Get these spreadsheets and play with them. You need an extremely long period of time to look at dividend growth rate.
A. Dr. Bernstein: Cliff Asness has conducted unbelievably interesting research just by using publicly available data from Shiller's site.
A. Dr. Bernstein: When companies are paying a large percent (e.g., 80\%) of their profits as dividends, that indicates higher growth of dividends. This is not intuitive.
Q. Please comment on ride smoothing and correlation.
A. Dr. Bernstein: Markets are becoming less segmented, and you cannot do much about that. Diversification fails just when you need it the most. However, diversification is still very useful during the recovery stage. Thus, in 2000-2001 everything dropped. In 2002, S\&P still did not do well, but other classes recovered.
Q. Please comment on safe withdrawal rates and whether they should be lowered from $4 \%$.
A. Sue Stevens: Bill Bengen wrote a book on withdrawal rates. It is not $6.5 \%$, it is $4 \%$, but it is affected by market performance. If you need more than that, consider fixed immediate annuity.
A. Dr. Bernstein:

- $2 \%$ is bullet-proof
- $3 \%$ is probably safe
- $4 \%$ is risky
- $5 \%$ may mean that you will starve.

If you need 5-6\% real return, annuitize.
Also, note that the withdrawal rates are age dependent. At age 80, $3 \%$ or $3.5 \%$ will be bullet proof.
A. Mel Lindauer: 4\% is a good starting point. Just as we've done throughout our life, we make adjustments when/if required. If you notice that adjustments are required in spending or withdrawal rates, then make them.
A. Taylor Larimore: I retired 30 years ago. Recently we bought a joint immediate annuity.
A. Sue Stevens: Go to the Vanguard site, go to the annuity section, look for the calculator. It allows you to enter a lump sum in and see exactly how much you will get in annuity. If you want you could try inflation-adjusted annuity.
Audience Member: search for "Annuity:tool" and that will get you to the right page.
Audience Member: Go to immediateannuity.com, sometimes they have even better rates than Vanguard.
A. Mel Lindauer: Check with your state to find out what kind of guarantee they provide on annuities. If they only guarantee $\$ 100,000$, and you plan to invest more than that in immediate annuities, then buy several annuities of $\$ 100,000$, each from different companies, rather than one large one.
A. Dr. Bernstein: Layer your annuities in time and space. For example, buy an annuity every year between years of 70 and 75 , use different companies.
A. Ed Tower: I have a spreadsheet that shows how much to spend based on various entries, such as assets, date of death, etc. tower@econ.duke.edu
A. Dr. Bernstein: If you are planning to retire at the age of 43, inflation adjustment will not be good enough.
A. Rick Ferri: People usually spend less in their 80s than in their 60s and 70s.

Question: Can one use delayed Social Security as an immediate annuity?
A. Dr. Bernstein: That is a given. You want to wait with Social Security until the age of 70. Spend your retirement funds, but wait until 70, unless you know that you have a disease. Social Security is the best immediate annuity.
Q. Rick, why do you think that REITs are undervalued?
A. Rick Ferri: NAV of real estate is higher than that of REITs. Based on private market transactions, REITs are not overvalued.
Q. How do you value income real estate?
A. Rick Ferri: You may not want to have income-producing RE and REITs. You can buy ETFs that are specializing in:

- Industrial
- Apartment (residential)
- Retail

If you own apartments, do not buy an apartment REIT. Rather, buy the other types.
Q. How about international REIT?
A. Dr. Bernstein: There are not many of them. One? Two?
A. Rick Ferri: There are two of them and DFA. Note that international companies do not own Real Estate, they only operate it. Consider them if costs come down to about 50 basis points.
A. Dr. Bernstein: DFA does not do historical time series. In general, I do not like buying hot funds.
A. Rick Ferri: I was a broker for 11 years. I learned to be suspicious when all of a sudden everybody is coming with new funds, all of which have the same composition.
Q. Do Emerging Markets provide diversification?
A. Dr. Bernstein: They do provide some currency play, but not as much as developed markets, because many of them are pegged to the dollar.
Q. Why do you recommend short and intermediate bonds if long-term bonds provide better returns?
A. Dr. Bernstein: The only reason you saw high returns is that the interest rates were falling.
Q. If one does not own real estate and is seeking additional inflation protection, is it preferable to use REITs or TIPS?
A. Dr. Bernstein: People from unstable countries love to leave money to their children. Americans have more confidence in their children's prosperity and invest for their own consumption. People from really unstable countries invest in gold.
A. Mel Lindauer: Do not equate home ownership with investments.

Audience Member: REITs are commercial real estate; keep them.
Q. Are you against holding gold?
A. Dr. Bernstein: Yes, I am against it.
Q. Why do you recommend Treasuries vs. corporate bonds?
A. Dr. Bernstein: The price of safety is very small. Sometimes it is even negative.

Corporates do not pay you enough to take risks. Treasuries are a better deal, both TIPS and other treasuries.
A. Ed Tower: Another reason why corporate bonds are not a good deal is that corporations can issue calls.
Q. What bond/TIPS split do you recommend?
A. Dr. Bernstein: This is one of the imponderables. Right now, 20-year bond with $2.7 \%$ yield is not bad at all. If you can live your life on $2.7 \%$ real, you don't need anything else.
A. Rick Ferri: TIPS used to yield 4\% real. Everybody jumped in, and they dropped to 1.7\%. Rick and Larry go back and forth on TIPS. Currently, Rick believes that Vanguard TIPS fund works well.
A. Mel Lindauer: I-bonds used to yield over 3\%. That was a great deal for up to 30 years.
A. Laura: Yes, rub it in :)
Q. How about international bonds?
A. Dr. Bernstein: If you want to take currency risk, do it with stocks. Buy bonds hedged. They will provide some diversification.
A. Rick Ferri: All international bonds are expensive.

Audience Member: We discovered TIPS in Swensen's book. We looked at the real return and figured out that it was greater than what we needed for our retirement. It was a no-brainer for us so we loaded up on TIPS.
Q. For those who live in high-tax states does it make sense to load up on state-specific funds?
A. Dr. Bernstein: Yes.
Q. When to take reverse mortgage? I don't want to leave inheritance. :)
A. Sue Stevens: There is increased interest in reverse mortgages, but I am not a fan. Recently more and better products have appeared. I don't like using house as capital.
A. Mel Lindauer: Consider selling your house and renting.
A. Ed Tower: Sell your house to your children and then rent from them. They will have an investment. You will pay them rent.
A. Mel Lindauer: Reverse mortgages are normally considered to be the final straw for people who do not have enough money to live on.

Audience Member: Do you foresee a change in tax policies and how do we prepare for them? Will $15 \%$ tax on dividends disappear in 2010? Will that cause an adverse impact on high-yielding stocks? Why didn't the reduction in the dividend tax rate cause highyielding stocks to move much higher?
A. Sue Stevens: Tax rates will go up. Do the Roth IRA conversion when you can. Currently, capital gains rates are low and they will go up.
A. Mel Lindauer: I agree. I expect that the rates will go up.
A. Rick Ferri: There will be innovations in financial markets to reflect what is happening in Washington. There are, for example, ETN, or Exchange Traded Notes. They guarantee market return, including dividends, but they do not distribute dividends; you only pay capital gains when you sell. Depending on what the Congress does, different vehicles will be more attractive. If dividends get taxed higher, people will be buying more ETNs. In fact, there will be different results, depending on whether capital gains or dividends (or both) will be taxed higher.
A. Dr. Bernstein: Roth conversion is one of the most painful and most useful things to do.
A. Taylor Larimore: A good time to convert to Roth is during the low-tax period after one retires and before one starts collecting Social Security or receiving Required Minimum Distributions (RMD).
A. Mel Lindauer: I retired early and have been converting from Traditional IRA to Roth for a number of years. I cannot say that I am in the lowest tax bracket, but at the age of 70.5, when my mandatory distributions start, my tax bracket will be even higher.
A. Laura: In 2008, there will be a special window where those in a low tax bracket (15\%) will not be paying taxes on capital gains. One could sell equities, wait for 30 days and buy them right back. It is also a good way to get out of bad investments.
Q. If one is interested in TIPS, is it better to buy the Vanguard fund or to buy them individually?
A. Rick Ferri: The Vanguard fund is well structured. Soon, Vanguard will have an ETF for TIPS.
A. Dr. Bernstein: With a fund there is no reinvestment problem, but when you buy TIPS at auctions you have $\$ 0$ cost. True Diehards should buy individual TIPS because expenses matter.
A. Mel Lindauer: The dollar amount involved matters, too. The larger the dollar amount, the more it favors individual TIPS. I buy at auction because of the large amounts involved, and, as we all know, fees matter.
A. Rick Ferri: Buying at auctions is the best. Deflation may cause you lose some value if you buy in the secondary market, but not if you buy at an initial auction.
Q. How do you place the value on the ability to rebalance easily in a tax-deferred account. Let's say that a 401(k) plan does not have good funds. Should one still use the 401(k) just to be able to rebalance?
A. Mel Lindauer: Always get the match.
A. Dr. Bernstein: If you have no match and a lousy plan, a taxable account is better. Q. How do you define a "lousy plan"?
A. Dr. Bernstein: Something very different from Vanguard.
Q. How about gold as inflation protection?
A. Dr. Bernstein: Gold coins are as bad as putting money under a mattress, unless you are planning to flee the country.
Q. With bonds, one should not get beyond intermediate duration. But can one use municipal bonds with longer durations?
A. Rick Ferri: There is slight yield advantage of municipal bonds. But bonds are callable, and you have the duration risk. If interest rates drop, you will not be compensated, because the bonds will be called. NY state has a long-term Vanguard fund.

