Philadelphia, PA
17-19 Oct 2012

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## 1 Introduction

The $11^{\text {th }}$ Bogleheads Reunion (BH-11) took place in Philadelphia PA on 17-19 October 2012. The Forum and the Reunions are named in honor of John Clifton "Jack" Bogle, the founder and former CEO of The Vanguard Group ${ }^{1}$ and President of the Bogle Financial Markets Research Center ${ }^{2}$.

## 2 Day-1-17 Oct 2012-Registration and Reception

The registration took place from 2:00pm to $4: 00 \mathrm{pm}$. It was followed by the Welcome Wine and Cheese Reception from 4:00pm to 6:00pm. Mr. Bogle came to the reception and welcomed the attendees, about half of whom were attending a reunion for the first time. After the reception, the Bogleheads had dinner on their own.

[^0]
## 3 Day-2-18 Oct 2012

### 3.1 Introductory remarks

Mel Lindauer started with a review of the schedule and special announcements. He then briefly reviewed the history of the reunions which started in 2000, when Taylor Larimore, one of the founders of the Morningstar (M*) Vanguard Diehards Forum, made a post on $\mathrm{M}^{*}$ thanking Jack Bogle for the "house that Jack built". Jack wrote to Taylor that he would be visiting Miami and asked if Taylor would like to meet with him. Taylor contacted Mel and they decided to hold the meeting at Taylor's home overlooking Biscayne Bay. Twenty one people attended the event. After the meeting, people started asking when the next event would take place. And so the tradition of the annual reunions was started. The history of the events is documented in the Bogleheads Wiki ${ }^{3}$.

Recently the organizers made a decision to hold the reunions in Philadelphia for Jack's convenience. The reunions have always sold-out, and in 2012, the organizers increased the number of seats from 160 to 200.

Mel asked those who were attending for the first time to rise; about $45 \%$ of the attendees did. Mel then asked those who were retired to rise; about $30 \%$ of people got up. Mel commented that the reunion attendees are as diverse as the Bogleheads Forum members, and that he is particularly pleased to see so many young participants.

Mel then reviewed the non-profit status of the Bogle Center for Financial Literacy, which was approved as a 501 (c)(3) public charity on 22 November 2010. The Forum leadership convinced the IRS that the Bogleheads' goal is to increase the financial literacy of all Americans. The leaders of the non-profit organization are:

- Mel Lindauer, President
- Taylor Larimore, Vice President
- Ed Rager, Secretary
- Paul Globerson, Treasurer.


### 3.2 Fireside Chat: Jack Bogle and Bill Bernstein

Bill Bernstein: Jack, everyone wants to know what Gus Sauter's retirement means for Vanguard investors.

Jack Bogle: Gus is a brilliant mathematician; he is matching the market. I would not spend thirty seconds worrying about what will happen next. An index fund is an index fund. You can invest for a lifetime without worrying about who is managing it. On average, managers change every 5 years. If you have a 25 -year lifespan and 4 funds, you will encounter 20 managers. What are the chances that twenty managers would beat an index fund? I was an architect of index funds, and Gus was a great builder.

Bill: Allan Roth made a study and came up with similar results.

[^1]Bill: Can you tell us about Vanguard changing the index composition?
Jack: This was a closely guarded secret at Vanguard; they did not tell me about it. I expect that the new indices will have the same returns.

Bill: It matters a little, a fraction of a basis point. I trust better-known indices.
Jack: There is a large-cap bias in the S\&P500, but as a broad generalization it holds. Hats off to Vanguard for doing this. I agree with Bill that we have to be careful.

Bill: Vanguard is a non-profit and is slowly gaining market share on the companies that should be guided by the invisible hand. I have also noticed that non-profit hospitals do better. Can you comment?

Jack: When comparing the mutual fund industry with other industries, note that the mutual fund industry has a strong relationship between the cost and the net return. Whoever has the lowest cost gets the highest return. However, the mutual fund industry is in the business for themselves, they are there to make money. Large conglomerates, such as Deutsche Bank, buy mutual fund companies to make a profit, and this creates a conflict of interest. In this business you can easily see the math, unlike luxury cars or diamonds. Indexing has a huge advantage, and high-cost mutual fund companies cannot compete.

Imagine if Ned Johnson met with Fidelity executives and asked them, "Vanguard is eating our lunch; what can we do?" The options are:
(1) keep the expenses down by keeping the profits down, e.g., by reducing managers' salaries,
(2) become more efficient in the administrative and investing processes, and
(3) eliminate marketing.

And if Fidelity had implemented all these options, they would get their cost down to 50 basis points (bp) vs. Vanguard's 10 bp -and they would still have a huge cost disadvantage. Ned Johnson does what he has to do; and we do what we should do.

Bill: Ned Johnson will do what's in Fidelity's best interest. He's looking after his heiress and heirs, but they are still better than publically held companies. People at Vanguard feel that they perform a useful public service, which is similar to people who serve in the military or in the diplomatic corps. People in large funds, on the other hand, are there for the buck. You can't have non-profit car companies.

Bill: David Swensen has run the Yale fund for many years very successfully. Can he sustain this performance?

Jack: The advantages of college funds are:
(1) infinite time horizon
(2) no conflict of interest
(3) no redemption
(4) no quarterly reporting.

College funds also have excellent researchers. Princeton has similar returns to Yale. In the past 15 years, Yale's return was $12.2 \%$ and Princeton's return was $12 \%$, only 20bp difference. Now everybody is copying them, but you cannot have everyone be above average. Private equity funds collect huge fees on top of this. Private equity funds and hedge companies are great vehicles for making their managers rich, such as the president of one such a company who is running for President.

Bill: John Rekenthaler says, "If the bozos know about it, it does not work anymore." And "bozos" now do the Yale model, i.e., stocks, bonds and private equity. People used to make money on timber; now they sell it to others. Guess where the information resides in these trades? It's the sellers who know. Swensen is now "common sense" investing.

Jack: Warren Buffett describes three stages of investing in fads:
(1) first the innovator,
(2) then the imitator,
(3) finally the idiot. Don't be the idiot!

Bill: David Swensen says that in "pioneering portfolio management;" the key word is pioneering. If the big firms can't make it, what chance does a lay investor has?

Bill: What is your four-year perspective on the 2008 crisis? Did we get out of it as well as we could? If you were Hank Paulson on 16 September 2008, what would you do differently?

Jack: The system was so out of whack that we should have clearly seen it. If I were watching mortgages and saw how people were selling mortgages in the West, I'd tell people, "Get out of it, NOW." People were getting \$200k mortgages for $\$ 150 \mathrm{k}$ houses with $\$ 30 \mathrm{k}$ salaries! The link between home owners (risk takers) and risk holders (those who were holding the mortgages) were greatly removed. The key was to see what was actually happening.

As for Paulson, I would do a more thorough job. Hank was a punching bag; it does not help when an investment banker is the Secretary of Treasury. The Troubled Asset Relief Program (TARP) was a misnomer-it never actually bought any troubled assets. I am a Keynesian now more than ever. I would do more stimulating, especially on the infrastructure side, to put people back to work. Ben Bernanke, a former Princeton professor, was very good, very smart. Without Bernanke, who knows how Paulson would have done.

Bernanke is trying to work with the monetary policy, but you also need the fiscal policy. The reason Europe blew up is that the monetary and fiscal policies were decoupled. In the U.S., the monetary policy cannot do it all. We are facing the "fiscal cliff." The
situation cannot be sustained, and the separation between the two political parties creates an impasse.

The "Jobs Act" is the worst possible legislation. It removed far too many rules that require adequate disclosure from companies seeking to raise capital. It will have to be repealed. There are a lot of swindlers out there, and so far they have not created "one" job. The Congress can't act. Sometimes, it's good, but not in this case.

Bill: Hyman Minsky is my favorite economist. He said that if your approach is monetary policy, you stimulate the financial industry, not other industries. We started with four banks that were "too big to fail." Now, we have three banks that are even bigger.

Jack: The Dodd-Frank Act is a good example of a Congressional failure. All they had to do was to bring back the Glass-Steagall Act.

Bill: What do you see as a long-term function of the Bogleheads 10-20 years from now?
Jack: This organization is remarkable, wonderful people, the backbone of America. And this group is very intelligent. Peter Lynch was great, but after he left, his fund [Fidelity Magellan Fund] dropped from $\$ 100 \mathrm{~B}$ to $\$ 20 \mathrm{~B}$. People are looking for unbiased advice, and the advice should be right; you cannot force a company to find a better manager. The Bogleheads are spreading like wildfire. Mike Nolan, my assistant, and some others at Vanguard read the Bogleheads Forum and sometimes step in. It's a body of people, selfeducated investors who've learned the right thing. Next year we should hold the Bogleheads convention at Madison Square Garden. ©

Bill: What's the web site traffic?

LadyGeek: Note that many people read the site without having an account; they just come in to read.

Bill: The greatest impact could be the web site itself.

Jack: Alexis de Tocqueville wrote in his Democracy in America that when a lot of Americans get together they do it right. The Bogleheads site is an example of that.

Bill: What about insurance? We don't know about inflating the money supply. Some buy gold coins as insurance.

Jack: We have a lot of uncertainty. Be my guest. If you manage to buy it [gold], hold it for a long while, and sell it at a price higher than you originally paid, it's great. $5 \%$ of your total asset allocation is not a bad planning number. But keep in mind, this is a supply and demand situation; gold is a commodity from times immemorial. Gold does not pay dividends or interest-it has no internal rate of return. I don't hold it myself, but there is a possibility of a Black-Swan event and gold might be an effective diversifier in that situation. However, when people come up with a "great diversifier" it usually
happens at the all-time high. As the gold price goes up, people call it a "diversifier" and keep watching the price go even higher.

Bill: Once you call a place a "paradise" you can kiss it good-bye. The same is true for gold.

### 3.3 Jack Bogle's Presentation

It's been a wonderful ride. There are 51 Bogleheads chapters, one of which is in Las Vegas, which I find peculiar © . I want to thank Taylor Larimore whose spirit keeps inspiring us. Taylor and I have struck up a relationship that has lasted since we first met in Florida. Regrettably, Taylor could not be at this reunion.

Thank you, Mel Lindauer, for arranging this great gathering. Yesterday, I was humbled by so many nice things people were saying about me. It's good my wife was not there, she gives me a reality check(). Tim Dempsey has attended all BH reunions. Kevin Laughlin was my assistant for 11 years; he was a huge help. Now, Kevin moved on, and he still says good things about me:-) I am a tough boss. Mike Nolan has been with Vanguard for 10 years and got this job about 15 months ago. Mike helps me with the slides and research for my books. I describe Mike in one word, an Irishman(-). Emily Snyder is my other assistant, steadfastly standing at my side for over 25 years. Now, let me start the presentation I have prepared for you.

## Bogleheads XI

## BogleMeets the Bogleheads-

The Rouser Meets the Rabble!

Philadelphia, PA
October 18, 2011

The title is based on this article:


The article says, "He's an iconoclast and rabble-rouser." There were 75 comments about the article on the Bogleheads site. The poster Sam I Am wrote that Jack would be comfortable with being called rabble-rouser; he's got it right! I was impressed what a mob you are $\odot$.


Dby hazlitt777 » Sat Sep 08, 2012 12:45 pm
Many dislike those who challenge the status quo. If their are right, they are important catalysts for change.
Dby sscritic * Sat Sep 08, 2012 9:29 am
What do you call someone who comes into an industry fixated on managed funds loaded with sales charges and high fees and creates a no-load index fund? A rabble-rouser.

Dby Sam I Am * Sat Sep 08, 2012 11:30 am
I don't know Mr Bogle personally; however, I believe he would be quite comfortable, perhaps even a bit proud, to be called a rabble-rouser.

Here's to our rabble-rouser!

Sam I Am

## Vanguard Asset Growth and Market Share



We had a great year. We grew from $\$ 1.4 \mathrm{~B}$ in 1974, when I started and reached almost $\$ 2 \mathrm{~T}$ in 2012. It's wonderful to see this while I am still alive; I live on borrowed time. On 21 February 2013, it will be 17 years since my heart transplant. I had my first heart attack in 1960; I have lived 52 extra years so far. One columnist wrote, "Bogle takes almost child-like delight in seeing it all happening." The one thing he got wrong was "almost!"

Note that American Funds/Capital Group and Dodge \& Cox are not in the money market business. When you become \#1, be careful, remember Shakespeare, "Uneasy lies the head that wears a crown." Be uneasy, do not get complacent. Vanguard now has 17\% market share. Columbia was at the 12-13\% level between 1955 and 1990. Fidelity was untouchable between 1990 and 2006, and has also topped at the $13 \%$ level. We are already above that. Being on top at $17 \%$ is unprecedented.

## Vanguard Cash Flow Annually, in Billions



Money markets were important after the 2008 market crash. Now they are experiencing negative cash flow, because of the low returns.

## Largest Fund Managers



These are the largest mutual fund managers, including money market funds. Note that for BlackRock, much of their assets are in ETFs. PIMCO does a great job in bond management. Bill Gross is a good man, has a great record, high integrity; but he can't keep it up forever, as history tells us, that reversion to the mean inevitably takes hold.

# Industry Assets (includes money market funds) 

|  | $\begin{gathered} 1989 \\ \$ \text { bil } \end{gathered}$ |  | $\begin{gathered} 1999 \\ \text { \$ bil } \end{gathered}$ |  | $\begin{array}{r} 2012 \\ \text { \$ bil } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Fidelity | \$97.1 | Fidelity | $\overline{\$ 795.4}$ | Vanguard | 1,925.3 |
| 2 BlackRock | 96.9 | Vanguard | 537.4 | Fidelity | 1,312.7 |
| 3 DWS Investments | 58.1 | American Funds | 333.4 | American Funds | 934.2 |
| 4 Franklin Templeton | 58.0 | BlackRock | 292.3 | BlackRock | 836.8 |
| 5 Vanguard | 47.6 | Invesco | 265.6 | PIMCO LLC | 548.5 |
| 6 Dreyfus | 47.0 | Putnam* | 250.7 | Franklin Templeton | 403.0 |
| 7 Invesco | 38.8 | Janus* | 183.0 | JPMorgan Funds | 399.7 |
| 8 Federated | 37.5 | Franklin Templeton | 173.1 | T Rowe Price | 341.3 |
| 9 Morgan Stanley Adv | 35.1 | Columbia Mgmt Invst | 155.7 | Federated | 288.5 |
| 10 Putnam | 32.2 | Legg Mason/Western | 154.9 | Dreyfus | 226.5 |
| 11 Prudential Finl | 31.9 | DWS Investments* | 150.9 | Wells Fargo | 207.5 |
| 12 Citigroup Ast Mgmt | 30.8 | JPMorgan Funds | 135.1 | Schwab | 201.9 |
| 13 Columbia MgmtInvst | 30.0 | Dreyfus | 127.4 | Invesco | 191.0 |
| 14 American Funds | 27.0 | Federated | 117.1 | Goldman Sachs | 190.0 |
| 15 MFS | 22.4 | T Rowe Price | 114.5 | State Street Glbl | 182.4 |
| 16 UBS Glbl AssetMgmt | 21.3 | Schwab | 106.8 | OppenheimerFunds | 163.1 |
| 17Legg Mason/Western | 21.3 | AllianceBernstein* | 104.7 | DFA | 162.8 |
| 18 T Rowe Price | 17.5 | American Century* | 104.5 | Columbia Mgmt Invst | 157.0 |
| 19 OppenheimerFunds | 14.2 | OppenheimerFunds | 103.8 | Legg Mason/Western | 120.9 |
| 20 American Century | 12.1 | Wells Fargo | 102.1 | Dodge \& Cox | 119.7 |
| Top 20 Total | \$777 | Top 20 Total | \$4,309 | Top 20 Total | \$8,913 |
| Percent of Industry | 73\% | Percent of Industry | 69\% | Percent of Industry | 71\% |

*No longer in Top 20. 2012 rank, respectively: Putnam 37, Janus 27, DWS 26, AllianceBernstein 34, American Century 25.

Vanguard is now the largest fund manager. I have mixed feelings about this growth. More and more people join us, but size is the enemy. Active management can't run $\$ 1.9 \mathrm{~T}$ capital; Vanguard can because of the indexing approach. Putnam was at $\$ 250 \mathrm{~B}$ in 1999, but by now it dropped out of the top-20. Putnam was sold for $\$ 4 \mathrm{~B}$ several years ago. I don't see a good outlook for that firm. John A. Hill was supposed to be the "independent" chairman of the board, but he was previously the CEO at Marsh \& McLennan Asset Management-a subsidiary of the financial conglomerate that owned Putnam. This is a competitive business, and the marketplace takes its toll.

# "Old Friends Are Good Friends" 

| Fund | Total Assets (bil) | Fund | YTD Net Cash Flow (bil) |
| :---: | :---: | :---: | :---: |
| 1 Vanguard 500 Index | \$235.5 | 1 Vanguard Total Bond Mkt Index | \$18.7 |
| 2 Vanguard Total Stock Mkt Index | 225.7 | 2 Vanguard Emrg Mkt Stock Index | 12.0 |
| 3 Vanguard Total Bond Mkt Index | 176.0 | 3 Vanguard Total Intl Stock Index | 10.3 |
| 4 Vanguard Prime Money Market | 115.9 | 4 Vanguard Total Stock Mkt Index | 9.1 |
| 5 Vanguard Total Intl Stock Index | 74.2 | 5 Vanguard 500 Index | 7.9 |
| 6 Vanguard Emrg Mkt Stock Index | 71.7 | 6 Vanguard REIT Index | 5.1 |
| 7 Vanguard Wellington Fund | 64.4 | 7 Vanguard Wellesley Income | 4.0 |
| 8 Vanguard Inflatn Protect Sec* | 44.3 | 8 Vanguard Short-Term Inv Grade | 3.6 |
| 9 Vanguard Short-Term Inv Grade | 42.0 | 9 Vanguard Interm Tax-Exempt | 3.1 |
| 10 Vanguard GNMA | 40.1 | 10 Vanguard Dividend Growth* | 2.9 |
| 11 Vanguard Windsor II | 37.7 | 11 Vanguard Inflatn Protect Sec | 2.8 |
| 12 Vanguard Interm Tax-Exempt | 37.2 | 12 Vanguard Extended Mkt Index | 2.4 |
| 13 Vanguard Wellesley Income | 32.5 | 13 Vanguard Tax Managed Intl* | 2.4 |
| 14 Vanguard Mid Cap Index* | 31.0 | 14 Vanguard Growth Index | 2.3 |
| 15 Vanguard PRIMECAP | 29.6 | 15 Vanguard Wellington Fund | 2.3 |
| 16 Vanguard REIT Index | 28.1 | 16 Vanguard Short-Term Bond Index | 2.3 |
| 17 Vanguard Growth Index | 27.1 | 17 Vanguard Dividend Apprec Index* | 2.2 |
| 18 Vanguard Small Cap Index | 26.8 | 18 Vanguard High Yield Corp Bond | 2.2 |
| 19 Vanguard Short-Term Bond Index | 26.1 | 19 Vanguard Interm Investment Grade | 2.2 |
| 20 Vanguard Health Care | 23.5 | 20 Vanguard Interm-Term Bond Index | 2.1 |
| 20 Largest Funds | \$1,389.6 | 20 Highest Cash Flow | \$100.0 |
| Vanguard Total | \$1,925.3 | Vanguard Total | \$113.6 |

*Formed after 1996. 4\% of Vanguard assets; 7\% of Vanguard cash flow.
Most of Vanguard's most successful funds, both in terms of assets and cash flow were started while I was still running the company. The first six funds are index funds and are dominating the cash flow. \#10 and \#17 get more income out of the funds.

## II.

## "We're All Indexers Now"

Everybody is indexing now. We are long way from the "Bogle folly" of 1976, when I had the $1^{\text {st }}$ index fund. They were "un-American" then; they are "American" now. Papers get it wrong. The business of indexing is not Exchange Traded Funds (ETF) but Traditional Index Funds (TIF), a term coined by Jack.

# "The Triumph of Indexing" 

Net Flows into U.S. Equity Funds Total -\$48B; Active -\$488B; Index +\$440B


The message of "The Triumph of Indexing" is that John Q. Public is about to join the Bogleheads. The ownership of equities is not over. People can't leave equities. How could it be otherwise? People are selling and no one buying? It's simply not possible! The equation is always the balance. In recent years, we've seen almost a $\$ 1$ trillion dollar swing from active funds to index funds.

Equity Index Fund Assets


As of 2010, there were 217 TIFs but 1,138 ETFs; ETFs became the dominant means of holding index funds. ETFs grew from 0 to 1,138 in 18 years, and there will be 50 more ETFs next year. ETFs are fine when held for the long term, but how are people actually using ETFs?

## 2011 Turnover-Selected ETFs

| iShares MSCI Emerging Markets Index | 2011 Average | 2011 Total Dollar |  |
| :---: | :---: | :---: | :---: |
|  | Total Assets (in millions) \$39,976 | Trading Volume (in millions) \$722,399 | 2011 Turnover 1807\% |
| iShares Russell 2000 Index | 15,880 | 1,298,192 | 8175 |
| ProShares Ultra S\&P500 | 1,622 | 194,674 | 12004 |
| SPDR Gold Shares | 60,768 | 670,638 | 1104 |
| SPDR S\&P 500 | 92,636 | 6,876,297 | 7423 |
| Vanguard Total Stock Market ETF | 18,726 | 38,765 | 207 |
| Vangaurd MSCI Emerging Markets ETF | 43,592 | 260,881 | 598 |

Note the $1,807 \%$ turnover of iShares MSCI Emerging Markets Index; while we don't have the data to measure these trends, we know that much of this activity involves institutional speculators who are getting in and out.

## "ETFs: For the Better or Bettor?"



Vanguard recently produced a study that suggests ETF investors are mostly using a longterm, buy-and-hold strategy. But as you can see, there are still significant differences in the behavior of ETF and TIF investors. When ETFs were first introduced, the marketing slogan was, "Now people can trade S\&P500 all day." My response was, "What fool would do it?" Vanguard's mistake is making intra-day liquidity appear to be an advantage of ETFs. But it's only an advantage for speculators. For long-term investors, the ability to buy at 10AM and sell at 2 pm is irrelevant. Vanguard is the gold standard with fewer speculators and more investors than its competitors.

## The Ascent of IndexingLargest Equity Funds: 1989-1999-2012

## Indexing Share of Top 20: 1989 0\%; 1999 15\%; 2012 40\%

|  | $\mathbf{1 9 8 9}$ <br> $\mathbf{\$ b i l}$ |
| :--- | ---: |
| 1 Fidelity Magellan Fund | $\$ 12.70$ |
| 2 Vanguard Windsor | 8.06 |
| 3 Investment Company of America | 5.38 |
| 4Fidelity Equity Income | 5.04 |
| 5 Templeton World | 4.71 |
| 6Washington Mutual | 4.48 |
| 7Pioneer Value | 4.38 |
| 8Lord Abbett Affiliated | 3.67 |
| 9Mutual Shares | 3.40 |
| 10American Mutual | 3.31 |
| 11 Am Cent Select | 2.86 |
| 12 Invesco Divdend Growth Sec | 2.78 |
| 13Dreyfus Fund | 2.72 |
| 14InvescoVKM Capital Growth | 2.48 |
| 15 Templeton Growth | 2.45 |
| 16BlackRock Basic Value | 2.43 |
| 17Prudential Jennison Util | 2.31 |
| 18 Vanguard Windsor II | 2.30 |
| 19Fidelity Capital Appreciation | 2.25 |
| 20DNP Select Income | 2.23 |
| Top 20 Total | $\$ 80$ |
| *Vanguard 500 Index | $\$ 1.80$ |


|  | $\mathbf{1 9 9 9}$ <br> Sbil |
| :--- | ---: |
| Vanguard 500 Index | $\$ 140.4$ |
| Fidelity Magellan Fund | 105.9 |
| Investment Company of America | 56.1 |
| Washington Mutual | 53.1 |
| Fidelity Growth \& Income | 48.5 |
| Fidelity Contrafund | 46.9 |
| American Century Ultra | 43.8 |
| Janus Fund | 42.4 |
| Putnam Voyager | 40.6 |
| Janus Twenty | 36.9 |
| Putnam Growth \& Income | 36.5 |
| Europacific Growth | 34.8 |
| Janus Worldwide | 34.0 |
| Putnam Multi Cap Growth | 32.3 |
| New Perspective | 32.2 |
| RVS New Dimensions | 28.7 |
| Fidelity Adv Growth Opp | 28.4 |
| AIM Premier Equity | 27.9 |
| Fidelity Blue Chip Growth | 27.9 |
| Growth Fund of America | 27.4 |
| Top 20 Total | $\$ 925$ |


|  | $\mathbf{2 0 1 2}$ <br> $\mathbf{\$ ~ b i l}$ |
| :--- | ---: |
| Vanguard 500 Index | $\$ 224.1$ |
| Vanguard Total Stock Mkt Index | 213.9 |
| Growth Fund of America | 113.9 |
| Europacific Growth | 96.1 |
| Fidelity Contrafund | 82.2 |
| Capital Income Builder | 77.9 |
| Income Fund of America | 72.9 |
| Vanguard Total Intl Stock Index | 69.5 |
| Capital World Growth \& Income | 68.1 |
| Vanguard Emrg Mkt Stock Index | 65.7 |
| Investment Company of America | 57.1 |
| Washington Mutual | 54.9 |
| BlackRock Global Allocation | 52.7 |
| Fundamental Investors | 50.0 |
| Fid Spartan 500 Index | 46.7 |
| Fidelity Growth Company | 41.8 |
| New Perspective | 41.6 |
| Dodge \& Cox Stock | 38.8 |
| Vanguard Windsor II | 36.4 |
| Dodge \& Cox Intl Stock | 36.2 |
| Top 20 Total | $\$ 1,540$ |

These are the largest equity funds in 1989, 1999, and 2012. In 1989, it was Fidelity Magellan at \$12.7B; in 1999 Magellan was \#2, having been replaced by the Vanguard 500 Index, with $\$ 140.4 \mathrm{~B}$; and now Magellan has only $\$ 10 \mathrm{~B}$ and is out of the top-20 list. For Fidelity, with all their marketing that focuses on star managers, indexing runs against their philosophy. With the Spartan funds, they are pricing their funds below cost, which is fine. I like competition - .

# Vanguard Dominates Indexing 

| Vanguard <br> Industry Total | Equity Index Funds (in bil 19 | Total Index Funds ions) <br> 2 |
| :---: | :---: | :---: |
|  | \$10 | \$11 |
|  | 15 | 17 |
| Vanguard Share | 62\% | 63\% |
|  | 2002 |  |
| Vanguard | \$163 | \$201 |
| Industry Total | 284 | 335 |
| Vanguard Share | 57\% | 60\% |
|  | 2012 |  |
| Vanguard | \$834 | \$1,080* |
| Industry Total | 1,559 | 2,042 |
| Vanguard Share | 53\% | 53\% |

*Vanguard bond index fund share $\mathbf{5 1 \%}$.

We all index now. The correlation between managed funds and indexing rises with time. With their high correlations to the index, managed funds are often closet indexers.

## Vanguard Fund Correlations

| Fund Name | Management <br> Strategy | R2 <br> (10 Years) | R2* <br> (3 Years) |
| :--- | :---: | :---: | :---: |
| 500 Index Fund | Index | 1.00 |  |
| Growth Index Fund | Index | 1.00 |  |
| Value Index Fund | Index | 1.00 |  |
| Total Stock Market Index | Index | 1.00 |  |
| Balanced Index Fund | Index | 1.00 |  |
| Small-Cap Index Fund | Index | 1.00 |  |
| Inter-Term Bond Index | Index | 1.00 |  |
| STAR Fund | Active | 0.99 | 1.00 |
| Explorer Fund | Active | 0.99 |  |
| Total Bond Market Index | Index | 0.99 |  |
| Total Intl Stock Ix | Index | 0.99 |  |
| Emerging Markets Stock Index | Index | 0.99 |  |
| Equity Income Fund | Active | 0.98 | 0.99 |
| Morgan Growth Fund | Active | 0.98 | 0.99 |
| Long-Term Tax-Exempt | Active | 0.98 |  |
| U.S. Value Fund | Active | 0.97 | 0.99 |
| Windsor II Fund | Active | 0.97 | 0.98 |
| Inter-Term Tax-Exempt | Active | 0.96 | 0.98 |
| U.S. Growth Fund | Active | 0.96 | 0.98 |
| Wellington Fund | Active | 0.96 | 0.98 |
| Windsor Fund | Active | 0.95 | 0.98 |
| Growth Equity Fund | Active | 0.95 | 0.97 |
| High-Yield Corp Fund | Active | 0.95 | 0.97 |
| Wellesley Income Fund | Active | 0.95 | 0.97 |
| PRIMECAP Fund | Active | 0.93 | 0.97 |
| Precious Metals \& Mining | Active | 0.89 | 0.95 |
| Market Neutral | Active | 0.04 |  |
|  |  |  |  |
| LifeStrategy Funds |  | 0.99 |  |
| Target Retirement Funds (5-Year) |  | 1.00 |  |
| Managed Payout Funds (3-Year) |  | 0.95 | 0.96 |
| Average All Vanguard Equity Funds |  | 1.00 | 1.00 |
| Average Vanguard Index Funds |  | 0.91 | 0.93 |
| Average Vanguard Active Funds |  |  |  |
|  |  | 0.83 |  |
| Average Industry Active Funds |  |  |  |
| If different than 10-year R2. |  |  |  |

The correlation is very high. Market Neutral Fund is the only one that is not correlated. All active funds are correlated at $\sim 0.9$. Industry-wide the correlation is $\sim 0.83$. But remember that when you are buying a managed fund you are paying something like $1 \%$ in fees, and the fund is often highly correlated to the index. Windsor went from 0.95 to 0.98 ; we are designing funds to match a market sector. Correlation is a mathematical term for what I like to call "relative predictability."

## Are There Too Many Index Funds?

The answer is "yes." Segmentation and growth in ETFs, etc., have created a large number of indexes resulting in the multiplication of the objectives of the index funds. People buy yesterday's winners; it is human nature. I have a speech "Did I help the world with index funds?" We created Growth and Value funds in 1993, by splitting S\&P500 into the growth half and the value half. I said that over time they would provide the same return. Growth is for capital appreciation; Value is for income, which is good for retirement. These were well-intentioned mistakes.

## Reversion to the MeanValue Index vs. Growth Index



Total Net Assets
Value: $\$ 190 \mathrm{mil}$
Growth: \$51 mil

Value: $\quad \$ 4$ bil
Growth: \$16 bil

Value: \$11 bil
Growth: \$13 bil

Value: $\quad \$ 18$ bil
Growth: \$27 bil

Over the long-term, the funds' returns were almost identical, but the assets were changing. First, Growth took over, and then Value did. The investors did much worse than the funds. That's the problem with creating so many index funds. With 1,300 ETFs, just throw a dart. ETFs are a great marketing innovation, but it remains to be seen if they are a great investment innovation.

## III.

## Let's Talk About the Stock Market (Hint: Don't Forget About Dividends!)



Since 1926, the S\&P 500 returned an annual rate of $9.9 \%$ with dividends reinvested versus only $5.6 \%$ without reinvestment. Over the very long-term, a $\$ 1,000$ initial investment in the stock market would have grown to $\$ 3.55 \mathrm{M}$ with dividends reinvested. Without reinvestment, that $\$ 1,000$ would grow to only $\$ 113,000$.

# Dividend Yields Have Accounted for Half of the Long-Term Returns on Stocks 



Over the long-term, equity returns are derived from two basic sources: investment return and speculative return. Investment return is the intrinsic value of the company-the dividends and earnings growth. Speculative return reflects the psychology of the market, as measured by the change in the price/earnings ratio. As investors become hopeful, they are willing to pay a higher price for each dollar of earnings; as they become fearful, the earnings multiple falls. Corporate earnings growth has been consistently positive over the long term. The 1930s were the only period when this did not hold. The $\mathrm{P} / \mathrm{E}$ change between 1940s and 1950s resulted in large negative return followed by large positive return. A similar pattern held from 1960s-1970s to 1980s. The 1990s were unprecedented, with two consecutive decades of strongly positive speculative return. But in the 2000s we see reversion to the mean with speculative return at $-3.2 \%$. The important point is: focus on the investment returns, ignore speculative returns. We know that going forward, equity returns will be lower than the $9.5 \%$ historical average. Dividend yield is currently $2.2 \%$, which is less than half of the long-term average. We know that when $\mathrm{P} / \mathrm{E}<12$, there is $90 \%$ chance that the $\mathrm{P} / \mathrm{E}$ will rise; and when $\mathrm{P} / \mathrm{E}>20$, the $\mathrm{P} / \mathrm{E}$ is likely to fall. Corporate earnings consistently grow as the country grows.

## Let's Not Forget: <br> Dividends Have Grown Steadily



Source: Robert Shiller

Let's not forget that dividends have grown steadily over the long term; but in 2010-2011, dividend yield dropped. We have to remember that due to low dividend yields returns will drop from their historic levels.

## Hard Times for the Investor Who Needs Income ${ }^{20}$ After 54 Years, Equity Yields Again Exceed Bond Yields



Source: Robert Shiller

Money market yield was 8 -10\% in 1980; now it's essentially nothing. These are tough times for savers. For the first time in decades, stocks are yielding more than bonds. What do you do to increase yield? First, get out of managed funds!

## The Obvious Choice: Low-Cost Index Funds

| STOCK FUNDS | Gross Yield | Expense Ratio | Net Yield | Percent of Yield Consumed by ER |
| :---: | :---: | :---: | :---: | :---: |
| Large Cap Stock Funds | 2.04\% | 1.17\% | 0.87\% | 57\% |
| Vanguard 500 Index Admiral | 2.24 | 0.05 | 2.19 | 2 |
| Vanguard Total Stock Market Index Admiral | 2.12 | 0.06 | 2.06 | 3 |
| BOND FUNDS |  |  |  |  |
| Intermediate-Term Government Funds | 2.23\% | 0.78\% | 1.45\% | 35\% |
| Vanguard GNMA Admiral | 2.58 | 0.11 | 2.47 | 4 |
| Intermediate-Term Corporate Funds | 3.29\% | 0.82\% | 2.47\% | 25\% |
| Vanguard Inter-Term Investment Grade Adm | 2.36 | 0.10 | 2.26 | 4 |
| Intermediate-Term Municipal Funds | 2.24\% | 0.67\% | 1.57\% | 30\% |
| Vanguard Inter-Term Tax Exempt Adm | 1.82 | 0.12 | 1.70 | 7 |
| Vanguard Inter-Term Bond Index Adm | 1.91\% | 0.11\% | 1.80\% | 6\% |
| Vanguard Total Bond Market Index Admiral (70\% U.S. Government, 30\% Corporate) | 1.80\% | 0.10\% | 1.70\% | 6\% |
| Vanguard Interm-Term Investment Grade Adm | 2.36\% | 0.10\% | 2.26\% | 4\% |
| Vanguard Interm-Term Treasury Admiral | 0.81 | 0.10 | 0.71 | 12 |
| Barclays Corporate Bond Index | 2.85\% | 0.10\% | 2.75\% | 4\% |
| Barclays Government Bond Index | 0.86 | 0.10 | 0.76 | 12 |
| Adjusted Total Bond Market Index (30\% U.S. Government, 70\% Corporate) | 2.25 | 0.10 | 2.15 | 4\% |

Why would anyone be fooling with actively managed funds? Look at the gross yield, subtract expense ratio, and the result is the net yield which is too low. $1 \%-1.5 \%$ is a "tiny number" for many people. When setting expectations for future returns, pension funds too often do not look at the sources of returns, rather they rely heavily on historical returns to develop their expectations. But that is the worst thing to do!

## Looking Ahead (But Not Looking Back!) Cumulative Return on Stocks 1900-2012



Even the very-long-term returns can change significantly when there are downturns in the market. For example, the average annual return since 1900 dropped by almost two percentage points between 1999 and 2012. Pay attention to history but focus on the sources of returns.

The Elusive 8\%
A Template for DB Plan Returns Over the Coming Decade

|  | 1. | 2. | 3. | $\begin{gathered} 4 . \\ (2+3) \end{gathered}$ | 5. | $\begin{gathered} 6 . \\ (2+3-5) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Asset Class | Allocation | Projected Annual Return | Value <br> Added by <br> Managers | Adjusted Annual Return | Less <br> Typical Investment Costs | Net Return |
| Traditional Policy Portfolio |  |  |  |  |  |  |
| Equities | 60\% | 7.0\% | 0.0\% | 7.0\% | -1.0\% | 6.0\% |
| Bonds | 40 | 3.0 | 0.0 | 3.0 | -0.5 | 2.5 |
| Total | 100\% | 5.4\% | 0.0\% | 5.4\% | -0.8\% | 4.6\% |
| Policy Portfolio with 30\% Allocated to Alternatives |  |  |  |  |  |  |
| Equities | 40\% | 7.0\% | +2.5\% | 9.5\% | -1.0\% | 8.5\% |
| Bonds | 30 | 3.0 | +1.0 | 4.0 | -0.5 | 3.5 |
| Venture Capital | 10 | 12.0 | +3.0 | 15.0 | -3.0 | 12.0 |
| Hedge Funds | 20 | 12.0 | +3.0 | 15.0 | -3.0 | 12.0 |
| Total | 100\% | 7.3\% | +2.2\% | 9.5\% | -1.5\% | 8.0\% |

It's inconceivable what local and state pension funds' assumptions are for fund returns. A realistic expectation based on the sources of returns is $4.5 \%$, not $8 \%$. And so to try and meet the $8 \%$ return expectation, which is their projection, they invest in the alternatives listed in the bottom part of the chart, i.e., $40 \%$ equities, $10 \%$ venture capital, $20 \%$ hedge funds--all with incredibly high management fees. The assumptions required to justify an $8 \%$ expected return are simply not credible. So, they are not going to get $8 \%$; it's simply not going to happen.

## IV. <br> Challenging the Bond Market

## Bond Index Returns



As a result of the economic turmoil of recent years, yields on all bonds have been much lower than the long-term averages. But the yields on government bonds have been particularly low, with the 10 -year Treasury below $2 \%$ for an extended period of time. By comparison, the yields on high quality corporate bonds, while still frustratingly low, are much more attractive.

# Challenging the Construction of the Total Bond Market Index 

|  | Yield To <br> Maturity | Duration | Government* <br> /Corporate | Investment <br> Quality | 12-Month <br> Return |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Barclays Total Bond <br> Market Index | $\mathbf{1 . 7 \%}$ | 5.1 | $70 / 30$ | AA1/AA2 | $\mathbf{6 . 0 \%}$ |
| Barclays Corporate <br> Bond Index | 2.9 | 7.2 | $0 / 100$ | A3/BAA1 | 12.7 |
|  | 2.3 | 6.2 | $35 / 65$ | AA3/A1 | 9.4 |
| $\mathbf{5 0 / 5 0}$ Mix | 2.5 | 6.6 | $20 / 80$ | A1/A2 | 10.7 |

*Governments include 15\% T-Bills; 67\% T-Notes; and 11\% T-Bonds
Barclays Total Bond Index yields $1.7 \%$, and the Corporate Bond Index yields $2.9 \%$. Vanguard should start a Corporate Bond Index Fund. Present yield is highly correlated with the future returns. Instead of the Total Bond fund, investors might want to consider $35 \%$ Treasury Bonds and $65 \%$ Corporate Bonds. I've heard a rumor that we may be starting a corporate bond index fund; exactly a year after I suggested it.

## Estimated Ownership of U.S. Treasury Securities

| Federal Reserve and Intragovernmental | (in billions) |  |
| :---: | :---: | :---: |
|  | 6,397.2 | 41\% |
| Foreign and International |  |  |
| China | 1,307.0 | 8\% |
| Japan | 882.0 | 6 |
| Other Foreign | 2,946.0 | 19 |
| Total Foreign | 5,135.0 | 33 \% |
| Depository Institutions | 307.2 | $2 \%$ |
| U.S. Savings Bonds | 184.8 | 1 |
| Pensions - Private | 595.9 | 4 |
| Pensions - State and Local | 188.6 | 1 |
| Insurance Companies | 254.1 | 2 |
| Mutual Funds | 854.0 | 5 |
| State and Local Governments | 436.0 | 3 |
| Other | 1,229.5 | 8 |
| Privately Held in U.S. | 4,050.1 | 26\% |
| Total Public U.S. Debt | 15,582.3 | 100 \% |

The reason the Treasuries dominate the total bond market is that they include public debt, social security and foreign debt. Should they be in the bond index? I think $\$ 15 \mathrm{~T}$ is too high, but some people disagree with me.


RESTORING INVESTOR TRUST IN FINANCIAL MARKETS: DOES JACK BOGLE OFFER A PRESCRIPTION?
Jack Bogle's legacy is rooted in the concept that investing should be conducted solely in the interest of shareholders and investors. Bogle's single mindedness on fiduciary stewardship finds its meaning in the company he founded, the (low cost and simple) product strategies and corporate governance reforms he champions, and the nine books he wrote.

This program explores whether Bogle offers a prescription that can help restore trust.


A forum in my honor was held at the Museum of American Finance on Wall Street this past January. Paul Volcker, Arthur Levitt, and others were there.


While "The Little Book of Common Sense Investing" still ranks as the \#1 mutual fund book on Amazon 5 years after its publication, "The Clash of the Cultures" is my newest book. It was fun writing this book. Some might read the book and think it's too much of a commercial for Vanguard, but there are some things in the book that Vanguard's current management does not agree with. For example, we were recently ranked \#26-last-in a study of effective corporate governance. And I still don't approve of the stealth increase in fees in Wellington Fund (see Vanguard's Annual Report).

## RTM!



RTM is Reversion to the Mean. If you squint, all these charts will look basically the same. Funds go up initially as they outperform the market and then down as the RTM inevitably occurs, and then return to where they have been; they all RTM. I am pleased with the public's reception of the new book. It won't be a big seller, but it provides some history, which we don't focus on nearly enough these days. The main theme of the book is how short-term speculators are crowding out long-term investors.

### 3.4 Q\&A with Jack

Mel read the questions to Jack that were submitted earlier.
Q. What can we little investors do to ensure that Vanguard will remain Vanguard, despite the risks from outside and from within?
A. Potential external threats are non-existent. Nobody can do it better than we do. Given our unique client-owned corporate structure, for us the mathematics works. The greatest danger is from within. Vanguard grew from 28 to 5,000 to 10,000 to 13,000 crew members. How do we keep that growth? I want to keep Vanguard a place where judgment has at least a fighting chance over process. In all large organizations, a certain amount of bureaucracy is necessary. If the CEO loves process, we'd have a high level of bureaucracy; and if the CEO hates process we'll have less; but there will always be some amount of it. Process, policies, and bureaucracy can complicate things and make the organization feel less personal. Vanguard has a lot of retirement parties and
anniversaries, and I try to attend as many as I can. I'm still trying to spread humanity in the organization, but that's increasingly difficult to do.

What can Bogleheads do? Ask for transparency. Find out how much the CEO makes. Vanguard does not disclose it for "competitive" reasons. If you are interested in transparency, ask for it.

Vanguard should not have increased the Wellington fee. We should do better than putting it on p. 11 of the Annual Report. We should be responsible corporate citizens. Our brand is \#1, and with that rank comes responsibility. We should be willing to lose an institutional account if we exercise our duties of corporate governance and vote against management. It is said there are two kinds of clients that institutional money managers do not want to offend: actual and potential. That's a lot of clients - .
Q. What do you recommend for 50-year old retirees?
A. One should always have at least $25 \%$ in stocks and at least $25 \%$ in bonds. There is always uncertainty about future. While I suspect the chances are slim, we may face an apocalyptic event. By having a balanced portfolio, you have insurance against some of the worst downturns. I am a very conservative person, and I look at investing differently than people who came from great wealth. You will get Social Security and with that, you will have fixed income, even if the Social Security is reduced. If you have an additional pension from your employer, think of that as another fixed income asset. And if your employer goes out of business, the Pension Benefit Guaranty Corporation (PBGC) covers delinquent companies.

There is such a thing as a "free lunch." I don't have to worry if the stock market goes up; I will be happy that I have stocks. And if it goes down I will be happy that I have bonds. I'm a Boglehead Anonymous; I read Bogleheads books().

Mel: Treating Social Security as bonds could put you into a large stock position.
Jack: That Social Security check will keep coming in. Also look at the income stocks generate, do not just look at the capital value. It they cut dividends, that would be a problem. Don't do something, just stand there-().
Q. What would you do differently at Vanguard?
 would I do differently? Anything I have done for marketing reasons. Creating separate Growth and Value indexes was unwise. I would not have Vanguard sector funds (energy, precious metals, etc.), except the Healthcare fund which is remarkable and has made a lot of real money for people. They wanted me to start aggressive funds (Vanguard Horizon Funds); these are long forgotten. I should not have created them; that was stupid, but I was persuaded by the Board.
Q. You criticized John Woerth, Vanguard Principal, who called you a "rabble-rouser." Please comment.
$\underline{\mathbf{A}}$. John and I are friends. He has to represent what his company wants him to represent. John is between a rock and a hard place, but I like to remind him who is the rock here and who is the hard place $\odot$. Nobody likes a good fight more than old Bogle ... just as long as I win().
Q. What do investors have to watch out for?
A. The biggest enemy of investors is themselves. We've met the enemy, and it's us. If you save nothing, you have nothing. If your investments make nothing, you'll get nothing. You have to accept the investing world for what it is, and then get $99 \%$ of what's available from the markets by minimizing your costs. Companies have a huge amount of capital, and I don't see it changing. Individual companies are risky. EastmanKodak, the bluest of the blue-chip companies, is in bankruptcy. IBM was down but then recovered. GM went through bankruptcy. Research In Motion did well until newer technology overtook it. $18 \%$ of the U.S. market is technology; for the rest of the world it is $7 \%$. We in the U.S. have the best economy for investing.

Some of you ask if you should hold international equities. I don't. You decide for yourselves. Look at the biggest countries in the developed international index. In the U.K. they have austerity measures, which are damaging their economy. Japan has been stagnant for a long time now, even before the tsunami. Continental Europe has its own problems. But international diversification is one place where I do not want you to simply take my advice. Decide for yourself; as like everyone else, I don't know what will happen. If emerging markets do $4 \%$ better than the U.S. and you hold $20 \%$ in emerging markets, you will have extra $0.8 \%$. You can save more than that by buying a cheap fund.

Mel: Thanked Jack and presented him a gift.
Jack: Thanked Mel and the Bogleheads for giving him the energy to carry on.

### 3.5 Visit to Vanguard and the Panel

On Thursday afternoon, the Bogleheads were invited to a reception and information Expo at Vanguard headquarters. The expo included booths on Advice Services Group, Exchange-Traded Funds, Retirement Income, Vanguard Charitable, and Education Savings. At each booth, visitors had the opportunity to talk with Vanguard crew and pick up information.

Then the Bogleheads came to a large auditorium for the Vanguard Panel discussion. Rebecca Katz, Principal, Participant Education, was the moderator, and she introduced the senior Vanguard staff panel:

- Gus Sauter, Chief Investment Officer, Managing Director
- John Ameriks, Principal, Investment Counseling and Research
- Greg Davis, Principal, Fixed Income Group
- Joel Dickson, Principal, Investment Strategy Group,
- Catherine Gordon, Principal, Institutional Advisory Services


### 3.5.1 Questions from Rebecca to the Panel

Q to Gus: Stocks responded to the Federal Reserve. Can the Fed make markets move? Gus: No, the Fed can't move the markets indefinitely via quantitative easing (QE). The markets pull back when events such as the U.S. debt crisis and the Japanese tsunami arise, and they recover when these events are mitigated. These events are more consequential than the QE. The markets discount the upcoming fiscal cliff.

Q to Greg: Please comment on bonds.
Greg: We have some headwind with bonds, but you still should diversify your portfolio.
Q to John: What about the total return and withdrawals in retirement? John: Investors in retirement look at more than just income figures. Some investors were surprised during the financial crisis. They relied on institutions that did not hold up. Generally, withdrawals/drawdown in retirement should be about $4 \%$ for a relatively young retiree, but it depends on one's tolerance to risk.

Q to Catherine: Global stocks are correlated; should we invest internationally? Catherine: Global markets move in tandem. From the point of view of a retirement portfolio, look at stocks, bonds and cash. Personal circumstances matter. The breakdown between the U.S. and international is a secondary consideration. Some international exposure is OK. Cost of international investing has come down. Risk is still there, especially in Emerging Markets. Look where the best technology, healthcare, finance, and services are.

Joel: It is also important that while high correlation does not significantly reduce risk, correlation is not the same as lack of diversification. It may be even more appropriate to diversify when you do not reduce risk. For example, in the U.S. small and large cap stocks are highly correlated, but if you only invest in large stocks you are making a concentrated bet.

John: Some people say that U.S. companies do business abroad and thus investing in the U.S. companies provides international diversification.

Q: Do you need international bonds?
Greg: You do it on the hedge basis, you don't need the currency risk, and so you hedge the currency risk. Japan and Europe move at different speeds from the U.S.

John: The biggest issue is the cost. The diversification benefit in terms of volatility reduction is modest, and thus cost matters.

Q to Gus: You are the indexing king. How do our funds stuck up against DFA?
Gus: We are indexers; DFA are passive managers. For example, they will give you exposure by focusing on small-cap/value (SV). They are not strictly tied to indexing; they follow the Fama-French model. SV had bursts of outperformance, but if you have not invested in them during these bursts, you have not captured it. DFA also has microcaps. Vanguard also offers SV. I don't accept the Fama-French claim that SV provides risk premium; they do have higher risk. Also, DFA offers help with behavioral finance.

Joel: I want to highlight Gus's point. There is difference between:

- What the investment does, and
- What the investor does.

Sometimes, an investment does well, but the investor moves in and out, and his portfolio underperforms.

Q to Catherine: Without being able to guarantee future returns by relying on the past data, what do you rely on?

Catherine: We deal with institutional investors. In the end, they are people too, with human biases. Our advice is: you cannot ignore the performance, especially in comparison with benchmarks, broad markets, and the like. We don't advertise performance, because it does not reflect what the clients are buying. But people still look at the numbers.

Rebecca: We saw stronger cash flow into bond funds.
Greg: Investors move from money market funds to short-term bond funds. Then they move to intermediate-term bonds, then to long-term. Their holding period may not match the long bond maturities; they may get slaughtered if they have to sell when bond prices drop.

Catherine: People look at the news such as economic growth, political news, etc., to make decisions. Uncertainty adds to uncertainty.

Gus: Is it market volatility? People project into the future but cannot handle volatility in the future. In 1999, the price to earnings ratio ( $\mathrm{P} / \mathrm{E}$ ) was $\sim 30$, and people were buying stocks. Now, P/E is reasonable but not cheap. With a 5-10 year horizon, you will get the historical returns.

Joel: Typically, you see the relationship between cash flow and the performance during the previous 12 months. But it has changed recently. Bond migration to longer maturities (chasing the yield) may have made portfolios less diversified, because long bonds are more correlated with stocks than short bonds.

Q to John: What do you recommend to young investors?
John: Young investors have seen a lot of volatility, but they do a lot of risky things any way.

Joel: We did risky things when we were young. Thank God there was no Facebook then. $\cdot$

John: People do not know how to make their 401(k) choices. They ask their secretary, they watch what's on television, etc. And once $401(\mathrm{k})$ investments are selected, people tend not to change it. Now retirement savings plans have target retirement plans that have plenty of stocks.

Gus: Mike Tyson said that everybody has a plan ... until you get a punch in the face.
Q to Gus: What would happen to the market efficiency if most investors invested in index funds?

Gus: If you have $30 \%$ active, they'll keep market efficient. Now we have only about $20 \%$ of stocks in indexes.

Q to Joel: What are the steps to launch a new mutual fund?
Joel: The process starts well before any public announcements. We start with the investment philosophy, if this investment will endure and if we can implement it efficiently. For example, in the 1990s, a NASDAQ fund did not pass these criteria. We start with large blocks and progressively refine them. If something gets approved we look into the implementation. Vanguard does not move fast.

Q to Greg: For the bond holdings, does one need only Total Bond Market fund, or some other deviations?

Greg: I also recommend the TIPS fund, especially for retirees, as a diversifier. It lowers the volatility of the portfolio.

John: The presence of TIPS is good. The difference between the Life Strategy Fund and the Target Retirement Income Fund is that the Target fund has TIPS for the inflation protection and diversification.
Q. What about International funds in Target funds?

Catherine: We are not constantly revising allocation of Target funds, but after conducting some research, we have added Emerging Markets exposure to them. It reflects our current thinking but we are not churning.

John: We are constantly looking into the funds. Investors change, investments change, e.g., TIPS did not exist until recently. We do research of the portfolio structure and of the investors. One of our issues was what kind of investors we wanted to attract. But we did not know how it would work until we started the fund. Then after some research we found that Target funds attracted cross-section of the population, i.e., not only conservative investors as we expected during the planning stage.

Q to Gus: Please provide us behind-the-scene look at the collaboration.
Gus: We have a Portfolio Review Board and cooperate across departments. We've got a small village working on all ideas. It's a three-story building, very flat. We are very close to each other, we talk to each other. It's a very collaborative environment.
Q. What is the best sequence for removing money from one's portfolio?

Joel: I have seen a lot of discussions about tinkering. By far the single best thing is to maximize your contributions to tax-deferred accounts. After that, consider other techniques. Take from your taxable accounts first, then tax-deferred, then tax-free. You can diversify your portfolio with respect to unexpected tax situations. Have both Traditional and Roth accounts to be prepared for various eventualities. If in retirement you may have excessive medical expenses, take money from tax deferred accounts to reduce taxes. You may later have regrets that you did it one way or the other, but the same is true with any investment decision, when you are looking back. Younger people should emphasize Roth contributions, because their taxes are likely to be higher in retirement. Older people may favor traditional accounts, because they have higher incomes.

Q to John: What do you think about annuitizing income in retirement?
John: My colleague Moshe Milevsky says that you have to clarify which annuity you mean. I will talk about Single Premium Immediate Annuities (SPIA) that provide guaranteed income in retirement and can cover the floor of one's expenses. The question is, "What do I need in the worst case scenario?" Prices of annuities vary, and they matter. First make decisions about the floor. Then answer the risk tolerance questions provided on the Vanguard site, e.g., how secure your other sources of income are.
Q. Are variable annuities always a dirty word?

Joel: Particularly variable annuities (asset pool behind contracts). I look at the total cost. Could I access the same resource including taxes outside the annuity wrapper? You convert equity income into income stream. With high-income bonds you can do the same; the difference is taxes.

John: Insurance features of annuities matter; most people cannot figure it out on their own. It's difficult even for me.
Q. (a) Does the large structure of the Life Strategy Fund make it difficult to manage? (b) Tilting.

Catherine: (a) Size does not matter. (b) Is a more interesting question. We found that we could not add any value by tilting, such as small/large, value/growth, US/international. We look at the glide path and the asset allocation.
Q. Instead of tilt, maybe allocation to an asset class such as gold?

Gus: We need to distinguish commodity funds from commodity futures funds. We think it should be a commodity fund rather than pure gold. In our managed payout funds we have a pure swap. It's a diversifier with reasonable rates of return.

Joel: We also talk about return on commodity (oil) vs. oil futures. Contango is the market condition wherein the price of a forward or futures contract is trading above the expected spot price at contract maturity. The futures reflect the future price between today's expectations and the expectations that existed when the fund was purchased.

John: Commodities and contango are for a different type of an investor than most of you. To invest in these one must read the prospectus and know what these terms mean.

Joel: Some of the best investments result from simplicity and broad diversification.
Rebecca: Vanguard used to have Real Estate funds, which were directly investing in property. Now we have a REIT fund.

Gus: We have the Fed, and we have M1, M2, broader aggregates. Revolving credit is a component of the money supply. The broader money supply did not grow too much, only $\sim 6 \%$ per year. We want it to grow with the economy. Currently, concerns of inflation are overblown. We have internal debates whether Real Estate is a class or a subset of a class. We use REIT as a diversifier in managed payout funds (but not necessarily as an inflation hedge).

Q to Greg: Your prospective on the Fed?
Greg: The Fed is buying bonds, fixed income drops, and people are trying to get yield. We see increased regulation and decreased leverage. The dealer community does not respond as quickly as they did in the past.
Q. Will it get better after we resolve the financial situation?

Greg: I don't think liquidity will improve. The challenges with corporate bonds will continue for a while.

### 3.5.2 Questions from the Bogleheads to the Panel

Q to Rebecca: How can one get a Vanguard mug?
Rebecca: Email me.
Joel: This is the most common question during our webinars $\odot$.
Q. How often do target retirement funds rebalance?

John: Asset allocation changes on the quarterly basis along the glide path. Every day we make small adjustments to the glide path with new cash. Targets change every quarter. In seven years we come down $20 \%$. We make adjustments every quarter, and so the $20 \%$ adjustment is spread along 28 instances, less than $1 \%$ per rebalancing.

Gus: It's important to have cash flow.
Q. Are you involved in corporate governance boards and voting on proxies?

Gus: We are active in corporate governance. We call CEOs, and we write to companies we own. We read proxies as they come out. If we have concerns, we negotiate with them; we may give them a one-year pass. If they don't change, we may vote against members of their boards or their proxies. You may not be able to see how their proxies change in response to our pressure.
Q. Is there transparency in the Emerging Markets?

Gus: There were tremendous improvements in the transparency in Asia, more fiscal discipline, more liquidity. However, they are still not up to the level of the developed country standards. Korea is moving from the emerging market group to the developed market group. They have satisfied 21 of the 25 criteria characterizing developed markets.
Q. Is currency diversification an objective?

Gus: Currency adds a lot of volatility but no benefits for long-term investors, especially on the bond side. In the short term, people speculate in currencies.

John: It makes sense to hedge bond funds against currency fluctuation; otherwise it is not a "bond" class.

Q to Catherine: Do you recommend a single international fund or multiple?
Catherine: With a single fund you have lower costs.

John: The hardest issue with individual investors is that they don't want Target Retirement or Life Strategy funds, but then they try to recreate them with their components but without disciplined rebalancing.

Joel: [To people in the room] Raise your hand if you hold Emerging Markets. [People did] Now, raise your hand if you hold Life Strategy fund. [Fewer people did]. You are recreating Life Strategy without the benefit of letting Vanguard do it for you.

Q to Joel: Competitor spoke against index funds.
Joel. I disagree. There is a conflict between the business value of high expenses and investor's interests. We are the largest investment maximizers, but our savings go to investors in the form of low fees.
Q. Proliferation of products?

Catherine: It depends on which products get sold. Product proliferation is a big concern; there is a tremendous marketing machine. We say 'no' to more things than we say 'yes' to.

Gus: Jack is always going after the massive proliferation of ETFs. Bruce Bond has sold power shares for $\$ 50 \mathrm{~m}$. People saw Bruce making a huge profit and started creating ETF in hope of similar profits.
Q. Does inflation precede high interest rates, or it is the other way around?

Greg: Inflation is the driver. Currently the Fed is trying to curtail it. The bond market will be proactive towards its expectation of inflation.

Gus: It's a process where the demand drives inflation.
Joel: The Fed is in a no-win situation. If they raise interest rates early enough, people will wonder why they did it in the absence of inflation. And there would be no inflation if the Fed had prevented it by raising the rates.
Q. When do you recommend ETFs vs. index funds?

Joel: ETFs and index funds are exactly the same investment portfolio at Vanguard. Both are "F" fund, but they have different features. ETFs are cheaper if you have $<\$ 10 \mathrm{k}$ to invest, but there are transaction fees for ETFs. With ETFs you have more control of the price you get, whereas with funds you get the 4 pm price only. In the long run, these distinctions should not matter for investors one iota. Regular investing is easier into funds; with ETFs you buy shares, with bonds you invest dollars.

Gus: Regulators also have confused the issue by requiring different names for ETFs and mutual funds. ETF is an open end investment strategy, a new way to distribute an old
fund. But the Fed does not allow us to call them "mutual funds." The fund does not even know where money comes from.

John: Early adapters of ETFs were people who wanted to do a lot of trading. But now at Vanguard the trading levels are similar; there is slightly more trading in ETFs.
Q. Please comment on the Fiscal Cliff. Is this a case of Thelma and Louise?

Gus: I think this will be near-miss. Political parties will not want to take the responsibility for it.

John: I am optimistic.
Catherine: It will be close enough to scare everyone but will not go over the cliff.
Joel: They'll kick us over the cliff with the lifeline attached. They'll raise taxes and then retroactively reduce them.
Q. What you think about children's investing?

Gus: I have a 23 -year old son. He's saving 27\% in 401(k) and other accounts.
John: My children are 6, 3, and 2.
Catherine: I have a 27 and 24 year old. They are fortunate to have their mother at Vanguard.

Greg: I have a 6 and a 4 year old. I teach them delayed gratification.
Joel: I have a 14 and 12 year olds. They will make mistakes. I set up a pool of money for them. I invest my half into Total World, and they invest their half whichever way they want.

Rebecca: I have an 8 year old. I reward her if she says she doesn't need a new dress for an occasion and will do with the old dress.

Q to Gus: You spent 25 years at Vanguard. What is your vision for the next 25 years?
Gus: There will be consolidation. Expense ratios will go down. Low cost investing is winning the argument. Money managers will have to respond to this. Our ownership structure serves investors extremely well. I will not work at Vanguard but I'll continue investing in Vanguard.

Rebecca: Gus really pushed index providers to work better. When Gus started 25 years ago, indexing was about $2 \%$ of this industry; now it is about $20 \%$. You also have to understand what a special person Gus is. He is a regular guy who understands regular
guys. I run into Gus at the local Chili's; he does not eat at Four Seasons. He's drinking a Budweiser, not a $\$ 100$ cognac. On Wall Street, you don't get regular guys like Gus who understands regular guys. Gus has cultivated a great atmosphere of respect at Vanguard, and people like working here.
[Standing ovation in Gus Sauter's honor.]

## 4 Day-3-19 Oct 2012

### 4.1 Presentation by Joseph Davis, Vanguard's Chief Economist

It is interesting for an economist to talk to the Bogleheads community. Most economists focus on short-term projections. My presentation is different. The populist movement is important for the economy. We need to look into the American future, growth and inflation not only for us but also for our children.

We look at economic concepts along two axes: growth (vertical axis) and inflation (horizontal axis). Today we are at a point of low inflation and low growth. The "blue dots" correspond to various decades since 1790. The goal is what I call "white light" of high growth with moderate inflation. When will the blue light of today move to the white light? Many economists say that the next decade will resemble this one due to the government debt, deleveraging, inflation and unemployment.

Vanguard's outlook is cautiously optimistic. The near-term outlook is cautious; the 5-10 year outlook is optimistic. The positive forces that will be able to offset the negative forces I have listed will be coming. My outlook on the economy is that the U.S. and other countries will recover gradually, with high unemployment. On the charts, I show positive forces as "green" bands and negative forces as "red" bands.

The first chart showed how it stood a few years ago. The 2012 chart showed slow improvement. The 2013 shows a likely modest recovery, but it is still a blue dot quite far from the white light. The limited amount of green is due to the uncertainty about government policies, not just in Washington, D.C., but around the world. The uncertainty in the government policy affects us all, and particularly, small businesses. This is the strongest factor rather than lack of demand, healthcare or other typical concerns.

The biggest source of uncertainty is the trajectory of our national debt. The issue of the national debt is not a contentious one; today's debt is $70 \%$ of GDP, which is a lot of money. Historically, countries have not run into serious problems until the debt-to-GDP ratio had far exceeded $100 \%$. Our national deficit of $>\$ 1 \mathrm{~T}$ is not a concern. This year, the government spent $24 \%$ of GDP and took in revenue of $15 \%$ of GDP; the spending exceeded the revenue by $9 \%$ of the GDP. I am not concerned; the bond market is not concerned.

The greatest concern, the real concern is that the deficits are now poised to continue indefinitely. If we do nothing to address this problem, by the year 2030 the debt-to-GDP ratio will exceed $100 \%$.

There are some bipartisan plans to solve it. We need to close the gap and balance the budget. My favorite goal is $20 / 20$ by the year 2020, i.e., $20 \%$ of the GDP spent and $20 \%$ of the GDP in revenues. Go from 24/9 to 20/20; split the difference in the middle. Another model is $21 / 21$ by year 2021, which is the essence of the Simpson and Bowles Commission recommendations. Still another option is $22 / 22$ by 2022. Why is this important? No country in history had a fiscal crisis with a balanced budget. By cooperating with policy makers we will win.

We need comprehensive health reform. Too much fiscal austerity too soon will damage the economy. We should not try to balance the budget in 2013/2014, but we should aim at a balanced budget.

I talked with policy makers in D.C. Some say that the government will take an easy way out by printing money and causing inflation. Sometimes it feels that inflation is everywhere except the inflation statistics $(\cdot)$.

I wrote a piece in the Vanguard blog, which has generated a lot of responses that perhaps Vanguard should reevaluate their standards for hiring economists. When inflation is rising strongly it could be very trying. The Federal Reserve is trying to keep interest rates low until 2015. QE becomes Q Eternity-:. I cannot mention Chairman Bernanke to my father without him starting to yell at me.

Inflation in the 1970s was different from today. In 1970, wages, home prices, bank lending were all increasing at high rates well before high gas prices hit in the 1970s. Today, it's very different. Wages, home prices, lending are all very low. Velocity of money today is extremely low. That explains why they do QE to ignite the economy and prevent these blue dots from falling even farther from the white light. But there are tradeoffs. Savers carry the greatest burden of these policies. They are the sacrificial lambs of this economy. The winners are consumers and borrowers. The QE policies are the healing aspect of the economy. Right now, housing could be slightly undervalued. It does not mean that housing prices will take off.

Where will the growth come from? What will move us from the blue dot of today to the white light? The answer is one single word, investment. This includes investment in technology, manufacturing, infrastructure, workforce. In fact, our economy has an investment deficit. Long-term investment turns into the economic sustainable force.

A curve illustrates how our nation and the world evolved for the past 200 years. The line is not straight, and its pieces take generations. Historians call it industrial revolution. The first one was when our Nation was founded. The second was after World War II. The third began recently and is far from being over. We, as the world, are in the midst of the $3^{\text {rd }}$ industrial revolution that is changing our economy. Industrial revolutions go
slowly. They begin with a spark and they last generations. They have humble beginnings because it takes time to appreciate a primitive invention.

The Watt's steam engine and the light bulb have enabled and empowered technologies for future innovations. Textile mills and steam could be located in cities, and it became unnecessary to set them by rivers to use hydropower. Locomotives, railroads, steel manufacturing, roads, bridges in cities-all required more investment. Electricity has enabled telephone, the beginning of the $2^{\text {nd }}$ industrial revolution.

Bubbles started forming in the markets and housing in the middle of the 1920s and then it all collapsed. People who lived through the Great Depression thought that the economy would be stuck there. My grandparents lost their jobs and thought that it would remain that way. The economy has recovered thanks to creative destruction. The cost of technologies has dropped and industry started adapting them. They started adapting new technology to build ships from steel instead of wood. Electricity came to the assembly lines and automobile production. These technologies have fundamentally changed our society. That's why our standard of living is much higher than those of our parents and grandparents.

The spark for the $3^{\text {rd }}$ industrial revolution was the microprocessor. Computer hardware and software are now everywhere and people communicate around the world. We can store six Exabytes of information. Digital technology and computer technology permeate our entire society.

So what are the sources of innovation? What's next? Consider materials such as digital glass. We can now have a remote surgery where a doctor in the U.S. operates on a patient in China using digital glass. Nanotechnology enhances thousands of consumer products. We can now export our services including legal, medical, logistical, and other services. A doctor in the previous example was exporting his services.

We will make new achievements in energy exploration and production. We see advances in manufacturing such as 3D printing which is now the basis for the prototype design in the automobile and airplane industries. The cost of labor is less important for these advances, which implies higher investment.

In healthcare, the mapping of the genome is greatly underappreciated. 3D printing is suitable for custom applications such as arm prosthesis for this little girl Emma. [fourminute video about Emma followed.]

Investment and innovation do not only change our economy, but they change our lives. The U.S. is an emerging economy. The bright future is ahead of us. It's only a matter of time.

### 4.2 BH Expert Panel O\&A

Mel Lindauer introduced the panel:

- Christine Benz ("Christine")
- Bill Bernstein ("BillB")
- Rick Ferri ("Rick")
- Mel Lindauer ("Mel")
- Mike Piper ("Mike")
- Allan Roth ("Allan")
- Bill Schultheis ("BillS").

Mel: I will start with questions we received from the Bogleheads prior to the meeting.
Q. What is the order of distributions in early retirement if you have Traditional and Roth IRAs and taxable accounts?

Allan: Investing is simple, tax strategies are not. Don't go to either extreme and don't get rid of your entire traditional IRA.

Mike: Prioritize traditional IRA distributions until the age of 70. At 70 with RMDs, actual rate becomes higher than the tax bracket. $50 \%$ or $85 \%$ of the Social Security becomes taxable. Thus it is advantageous to do conversions during early retirement.

Mel: Vanguard touched on it. For example, if income tax were replaced with a VAT, you would be paying taxes twice on your Roth withdrawals.
Q. Please comment on the glidepath instability and vulnerability of target-date approaches.

Christine: When we assess glidepath we look at their stability. There is huge disparity between target-date providers. For example, T. Rowe Price's glidepath is quite aggressive. During the financial crisis glidepaths became more conservative.

Mel: I am a big fan of target-date funds, with a caveat. Look under the hood, ignore the target date and look for your desired composition. The advantages of target-date funds are that they rebalance daily, provide a hands-free approach, and every year they become more conservative.

Rick: Note the difference between a "to fund" and a "through fund." With a to-fund, on the target date all money in your fund will become $100 \%$ cash. With a through-fund, on the target date you will have an $\mathrm{x} / \mathrm{y} / \mathrm{z} / \ldots$ allocation. Morningstar reviews through-funds.

Christine: Yesterday at Vanguard we saw the show of hands of those who do not use target funds. I recommend that you benchmark yourself to a relevant target-date fund and check how well you perform in comparison.

Allan: I generally do not recommend target-date funds because of the reduced tax efficiency. On the other hand, these funds deal well with the behavioral issues.

Q (audience): Daily rebalancing during the financial crisis could have created greater than $50 \%$ drop.

BillB: It is a great point. David Swensen retirement funds do rebalance daily. It takes over a year for daily rebalancing to come out ahead.

Mel: Target-date funds are great for young investors who are starting out. Taxes are not an issue within a $401(\mathrm{k})$.

Q (audience): If the market drops $1 \%$ every day for 50 days you lose $50 \%$, which means that you would do worse than the market.

BillB: It's not quite as bad, because they rebalance with new money. It takes them some time to catch up.
Q. Accounting for Social Security in asset allocation.

BillB: Let's assume that you need $\$ 70 \mathrm{k} / \mathrm{year}$. You get $\$ 30 \mathrm{k}$ from Social Security. Your remaining need is $\$ 40 \mathrm{k}$. You can do only one of the two things. (a) You can annuitize $\$ 300 \mathrm{k}$. (b) You can assume that you only need $\$ 40 \mathrm{k}$. You cannot do both.

Mel: Jack says "capitalize it," but the flip side is that you will end up with too much in equities.

Christine: Using Social Security as "bond allocation" is dangerous for behavioral reasons. The risk of the equity portfolio is too much for the investors to take.

Rick: The simplest way to do it is from the cash flow basis. The $\$ 70 \mathrm{k} / \mathrm{year}$ in Bill's example is the total liability; this is what you are spending. $\$ 40 \mathrm{k} / \mathrm{year}$ is the liability covered from your savings. It's not a bond allocation, it's a liability.
Q. Why are wide moats a flavor of the month?

Christine: Moats make companies sustainable, give them competitive advantage. The term comes from Warren Buffett; Morningstar uses "moat" for company assessment. Moats do better in down (bear) markets and over a full market cycle. This is more so for strong downside performance, and not so strong for the swings.

BillB: If I were picking stocks, I'd look into corporate governance. CEOs flying corporate jets for personal reasons, CEOs buying real estate in excess of $\$ 10 \mathrm{~m}$, and the like. I'd pick stocks with decrepit managers.

Allan: Random selection works better.
Q. Is Vanguard's short-term bond fund a good substitute for individual short-term bonds?

BillB: Only if you don't mind taking a $10 \%$ haircut when the bond rates rise.
Q (audience): what about non-exchange traded REITs?
Rick: There are risks of fraud, illiquidity, etc. Even if you do, use it only for a small part of the portfolio.

Allan: "Investment from hell: Non-traded REITs" is my recent article.
BillB: I read a magazine "Investment News." You will see a lot of them soon. Usually a picture of a guy in an expensive suit and no neck.

BillS: Is the potential yield worth the potential risk, when you don't know what's in the portfolio?
Q. What role do financial advisers play apart from portfolio management?

BillS: The need for financial advice is enormous. People are screaming for help. Vanguard puts a lot of energy into helping advisers and investors. When investors understand the benefits of embracing the passive philosophy, performance never becomes an issue. I talk to investors and point them to the Bogleheads site in the U.S. and to the Financial Webring Forum ${ }^{4}$ site in Canada. The real value of an adviser is helping people. I encourage all of you to continue helping people.

Mel: Each individual can make a difference. We have a woman here from Phoenix, AZ, who works with wealthy women to help them out.

Audience member: Investing is part of a bigger picture, which also includes taxes, estate planning, etc.

BillS: It's important to keep investing simple so that you can focus on other important matters. A couple came to me. In the beginning, the husband asked if they should buy some gold. As they were leaving the wife said "We should save more."

[^2]Rick: Investment is a part of the big picture and how you manage hiring someone to manage your portfolio. My recommendation is to unbundle different management elements.

BillS: I will offer an opposite view. We need to bundle various aspects, because they all are related. If a stock market crashes, should the person call a financial adviser or financial planner?

Christine: My answer is in-between. Some need more complex guidance, others need simpler guidance. Take a surgical approach.

BillS: The Bogleheads crew is unique. Very few investors have the capacity to understand key issues.

Mike: The greater the portfolio is the less I'm inclined to pay a percent for the portfolio for estate management.

Allan: The need to take risk is important. My "aha" moment came when I realized that those who worry live below their means, and those who are optimistic spend more than they get.
Q. [A list of 10 important principles including (5) don't time the market, (8) minimize taxes, (9) simplicity, (10) stay the course.] What else would you add?

Mel: My \#1 recommendation is to live below your means. If you don't do that, all of the other investing principles are meaningless since you won't have any money to invest.

Rick: Change "use index funds when possible" to "use index funds when feasible." For example, the municipal bond index fund is an actively managed fund with high fees. DFA funds are not index funds.

Allan: Change from "minimize taxes" to "maximize after-tax returns." For example, people should not take a housing mortgage with the only purpose being minimizing taxes.
Q. When will the next meltdown appear?

Rick: It will be in China.

BillB: It may be tomorrow, and may be in ten years. Considering the current instability, it will be sooner rather than later.

BillS: The Bogleheads philosophy and Jack's wisdom is for retired people to have age in bonds. For those who follow this wisdom, a meltdown will not be a complete disaster. We'll have bear markets every couple years.
Q. Please comment on the municipal debt and municipal bankruptcies and their impact on investments.

Rick: When the states calculate state pensions, they assume $7.5 \%$ annual earnings. Safe income pays $1.5 \%$. What do you need to get from the other side, i.e., from stocks, to have to total rate of $7.5 \%$ ? Where would the money come from? The states look at alternative investments. However, it's just not feasible for all municipalities, for all states to get such a high rate!

BillB: When you see widespread adoption of a particular style, hold on to your wallet. Alternative investments include hedge funds, private real estate, and private commodities. The real ticking time bomb is all that c--p people are chasing in their portfolios.

Christine: Fees go hand-in-hand with the credit quality. That's why I invest in Vanguard muni funds. Once you add non-rated municipal funds into the mix, the default rates are much higher. Junky municipal funds with high rates are risky.

BillB: The previous data may be less relevant when municipalities have such huge obligations.

Rick: There are defaults that the media does not call "defaults." For example, when a municipality cuts pensions or when the Federal government reduces Social Security or Medicare. It's a "default" even if it's not called so.

Mel: In my opinion there will be official and unofficial defaults.
Allan: I am even more pessimistic than both Bill and Rick. We have $\$ 2.3 \mathrm{~T}$ worth of pensions and healthcare liabilities expecting 7.5\% return. Munis are 7\% of the U.S. debt. If stocks do not do well, munis will become worse. No more than $10 \%$ of the bond portion should be munis. I keep $70 \%$ of my fixed income in CDs. I've just opened a $2.5 \%$ CD with a 120 -day withdrawal penalty. I'll be able to withdraw my CDs, pay the penalty and invest better, when better investments become possible.

Rick: Use a broadly diversified intermediate Vanguard muni fund.
Mel: Don't forget to put $\$ 10 \mathrm{k}$ into I Bonds per year per Social Security number. You will be able to redeem I Bonds if something better becomes available. I Bonds are free from state and local taxes. Later Mel clarified that $\$ 10 \mathrm{k}$ refers to the electronic I Bond purchase limit per person. It is also possible to get $\$ 5 \mathrm{k}$ in paper I Bonds by overpaying taxes. Overpayment can be done intentionally, for example, when filing estimated taxes. Then when filing tax returns, one must explicitly direct $\$ 5 \mathrm{k}$ of the tax refund into I Bonds.
Q. This question is to all panelists. What exciting is happening in your life?

Christine: I am not writing any books at this time. I am researching a "bucket" approach of matching a portfolio to intermediate, later, and much-later needs. I have interviewed people at Vanguard and at this conference. I will be taking a 6 -week sabbatical in Argentina starting next week.

BillB: I started doing electronic publishing like Mike Piper does. If you are at this conference you do not need to buy my book; you know it all already. I have my first grandchild.

Rick: I have beaten Bill in one thing; I already have a grandchild. I am writing a book.
Mike: I have just finished a book on Social Security (Kindle). I am working on my blog.
Mel: Mike made a very complicated subject (Social Security) very simple in his latest book.

Allan: I am writing for the AARP Magazine. Nobody needs advice more than the seniors. Stock market is great in teaching gaming and speculation, sponsored by Merrill Lynch.

BillS: Bill Falloon of John Wiley is a great proponent of the Bogleheads. I propagate the Bogleheads philosophy. People need to hear the same thing twenty times until they internalize it. "Keep it simple" must be articulated over and over.

BillS: I have a question for the panel. When you are working with folks, how do you define risk?

Rick: Not reaching your goals.
Mike: In the accumulation phase: probability of losing your assets. In the distribution phase: probability of running out of money.

Christine: Risk is framed as risk capacity, how much risk you can withstand without sacrificing your lifestyle.

Mel: Risk should be phrased in dollars, not in percentages. People don't understand percentages.

BillS: I agree with Mel. If you have $\$ 1 \mathrm{~m}$ invested $50 \%$ in stocks and $50 \%$ in bonds, and a market drops $50 \%$, it's a $\$ 250 \mathrm{k}$ loss. Charles Ellis in Winning the loser's game wrote, "Risk is not having money to pay a bill when it comes due."

BillB: We don't accept clients who don't understand standard deviation. But risk is not the standard deviation or volatility. Consider two pictures. In one the guy is squeezing a donut, but he is still wearing a $\$ 2,000$ suit and lunching at the Russian Tea Room. In the other, the guy is pushing a shopping card in rain under bridge.

Allan: I, too, try to make it emotional.
Rick: Real risk is not having a plan. Those who have a plan usually make it all right.

Q to Rick: In your blog you describe three pieces of the investing success:

- Philosophy
- Strategy
- Discipline

Please comment.

Rick: Philosophy is what we do here as a group and on the Bogleheads board. We do a lot of minutia. We all have the same philosophy and about 200 different strategies to implement that philosophy.

We won't know what's the best strategy until 20 years down the road. Strategy is the second level, that's what we argue about on the Board. But we are confusing new people; we should try to avoid confusing them.

The third part is discipline. We discuss how to maintain discipline. To put it all together one must maintain the discipline of the strategy that follows the philosophy. If discipline breaks, strategy breaks, and the philosophy becomes vulnerable.

Q to BillS: Recently small value has outperformed other quadrants. If it reverts how can we keep coffeehouse investments?

BillS: The simplest, the best approach is three funds: total domestic, total international and total bond. Paul Farrell put it on the "lazy portfolio." From 2000 to 2010, the small/value/international combination has outperformed large caps. Joel Dickson said yesterday that he does not want to be in an underperforming investment the next ten years. It is important to stay the course. Philosophy is what counts. The subtitle of my new books is "How to build wealth, ignore Wall Street and get on with your life." Molly, please rise. Molly ran her $1^{\text {st }}$ marathon at the age of 65 . Her portfolio is fine, she is focused on running and other important things in her life.

BillB: We can fill out ten rooms like this one with the enthusiasts of the Harry Browne portfolio. They are currently enjoying a pizza-and-beer market. I like Harry Browne portfolio, but it's not for me, and I worry about these people.

Mel: Taylor has his 3-fund portfolio:

- Total domestic stocks
- Total international stocks
- Total domestic bonds

Later, Taylor added TIPS.
Mike: TIPS offer real income after inflation. Retirees have more inflation risk than young investors, than people who are hedged against inflation by their earnings.

Rick: TIPS are a hedge against an anticipated jump in the inflation rate. Regular inflation is already incorporated in the prices.

Christine: I agree with Mike. In the Vanguard's glidepath presented by John Ameriks, TIPS do not start until the age 50. They are $20-25 \%$ of the bond portfolio. Right now TIPS are not particularly attractive. If you do want to buy TIPS, do it gradually.

BillB: Do "full Bodie." It's like "full Monty" except that instead of full absence of clothes you do full coverage for the retirement. Have TIPS maturing every year in retirement, but note that not every year is currently covered.

Allan: I am an active investor in TIPS. TIPS were great in 2008, not so now.
Mel: Negative real returns on TIPS could still be better than positive nominal returns on CDs. Again, I Bonds are not negative.

Q: Please address Vanguard's short TIPS fund.
Rick: It depends on why the interest rates go up. The risk is if inflation does not go up but the real rates go up.

BillB: There's also liquidity risk as we saw in 2008.
Rick: A short-term TIPS fund may help with that.
Mike: The new TIPS fund has maturity of 2.7 years, the old one has 8.5 years.
Q. Please address stable value funds in 401(k) plans.

Rick: Scott Simon said to look under the hood at what you are working with.
Allan: I have not written about them, but I agree about looking under the hood. I'd love to get a Federal government job for a day to gain access to the TSP G-fund.
Q. Does Invesco have a good reputation with stable value funds?

Christine: Stable yields have come down recently. Be mindful of anything that offers even moderately higher yield.

BillB: T. Rowe Price is pretty good; I looked under the hood. People who are paying for that are those stuck with their annuities.
Q. What is an allocation and dispersion strategy for a retiree without heirs?

Mel: SPIA
Allan: The SPIA must be inflation adjusted. But there is also a default risk.
Mel: It's a state guarantee program, varying by state. Don't get all your SPIA from the same insurance company.

Comment [audience]: One can also have a TIPS ladder for the first 10-15 years of retirement and then get an annuity.

Rick: Withdrawal strategy is different for the person who asked the question and for someone with four children. For the questioner SWR could be $6 \%$ with SPIA; for someone with four children it may be only $3 \%$.

BillB: Follow George Raft's strategy. He spent $\$ 10 \mathrm{~m}$ on women, booze and gambling; the rest he wasted.

BillS: Vast majority of people will end up spending it down. Healthcare is the biggest unknown.

Rick: For a single person without heirs, one possibility is a reverse mortgage.
Christine: Spread SPIAs out not only for diversification but also because the current rates are very low.

Mike: With SPIA not only state guarantee levels change by state, but also state rules differ. You may move from a state with $\$ 300 \mathrm{k}$ maximum protection to a state with \$100k.
Q. Do you recommend gold coins or gold ETF?

Rick: Gold coins. If the Armageddon comes, nobody will buy your GLD.

BillB: Despite Jack's comment, GLD is a great fund. If you are concerned about the breakdown of the society, you need gold, ammo, canned goods. Put them in Switzerland and New Zealand.
Q. Should we buy bond funds or individual bonds?

Rick: It depends on what the fund holds. Bonds are good to pay for the kids' college. When you are retired your duration and liabilities of bonds are the same.

BillB: Do not get out of bonds.
BillS: People must understand what may happen in a rising rate environment and stay the course. Do not get out when NAV drops and stay there to capture the upcoming gains.

BillB: All the people who say that $60 / 40$ and indexing do not work; they are the same people who say the same thing, "Hold on to your portfolio."

Rick: If you have individual bonds what do you do with the income? Does it just sit in a low interest account?
Q. Do you think it's reasonable to assume that nobody can predict how any asset will perform in the future?

BillB: You can't tell for the near future (10-15 years). Over longer time stocks purchased at $\mathrm{P} / \mathrm{E}$ of about 15 perform better than stocks purchased at $\mathrm{P} / \mathrm{E}$ of 30 .

BillS: You cannot predict, but for the planning process you have to assume what you know. For bonds the current yields are the predictors. For stocks the prediction is $6-8 \%$ based on the current valuations.

Rick: Short-term TIPS give low returns. You would not invest in equities if you were not expecting higher returns from equities than from TIPS on the long run.
[The meeting adjourned.]


[^0]:    ${ }^{1}$ http://www.vanguard.com/
    ${ }^{2}$ http://www.johncbogle.com and http://www.vanguard.com/bogle site/bogle home.html

[^1]:    ${ }^{3}$ http://www.bogleheads.org/wiki/Bogleheads\%C2\%AE Convention_Meetings

[^2]:    ${ }^{4}$ http://www.financialwebring.org/forum/index.php

