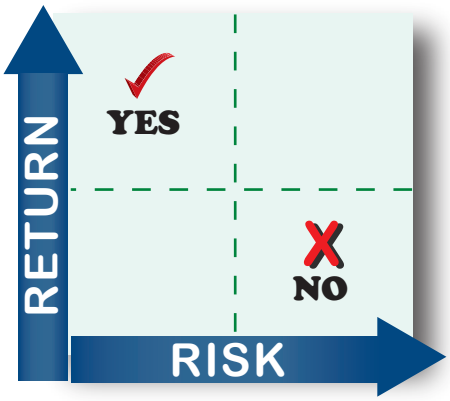
DAP
A lifelong retirement plan

# Heads Up

Directed Account Plan Quarterly Review April 2014

## Capturing the Benefits of Risk-Adjusted Return

In the previous issue of "Heads Up," we mentioned the three ways – service, fees, better performance – investors have when it comes to improving their investment accounts. Also in that issue, we explained how fees are usually quoted and what type of fees investors can expect for different types of investment accounts. Feedback from our participants indicated they enjoyed the article.




We also indicated that in this issue of "Heads Up" we would tackle risk-adjusted returns. Everyone should know that when it comes to investing, Risk and Return are related. For that reason, when someone tells you they think they can get better returns on your investments than you are currently experiencing, your question to them should be, "What amount of risk will I be taking to get those better returns?"

In the investment world of bonds and equities, given the choice of two portfolios with identical returns (net of fees), one should always prefer the one with the lowest amount of risk. The word "risk" is used to describe the volatility of returns, which are quantified using standard deviation. The higher the standard deviation, the more volatile (risky) the investment is expected to be. One could also say that a higher standard deviation means there is more uncertainty in the expected return.

In the DAP, when creating the Model Portfolios, Joe Montanaro and the founding Board Members used Modern Portfolio Theory (MPT) to maximize returns for the amount of risk taken. Briefly, MPT says one can equivalently minimize risk for a given level of expected return by carefully choosing the proportions of various assets. For a more detailed definition of MPT – including the mathematical model – one can Google "MPT." Joe and the Board used percentages of each of the DAP's Core Options to create Models that had different risk levels so that participants could choose a Model suited to their individual risk tolerance. The other key ingredient for minimizing the risk in these Models is rebalancing of the investments within the Models. Once again, Joe and the Board wanted to keep risk low in the Models so they gave the investments low maximum variance levels of +/- 3.00% before rebalancing must take place. In practice, the investments within the Models are rebalanced any time they approach a 1.00% variance to the target allocation. One can look to the DAP website ***www.dapretirement.com*** under the Resource & Planning tab at the top and then the Risk Return Chart to see how 20-plus years of returns for the Models plot on the Risk/Return Chart.

Since Joe and the founding Board knew they could minimize risk in the Model Portfolios by carefully choosing proportions of the underlying Core Options, the natural next step was to minimize the risk in each of the Core Options that represented each asset class they were adding to the Models. One way to do this was to add more than one manager for each asset class. By doing this, they minimized the risk of having all of one's eggs in one basket. For that reason, when you look at, say, the Growth Stock Option, you will see two large cap growth managers (Marsico Focus & T. Rowe Price Growth Stock) in that Option. In addition, in both the Growth Stock Option and the Value Stock Option, you will see both large cap managers and mid cap managers. To diversify the International Stock Option, the Board has selected growth and value managers as well as large and small cap international managers. In addition, in the International Stock Option the Board knows emerging market stocks tend to be more volatile than developed market stocks, so the Board closely monitors the total percentage of emerging market stocks in the option and then takes into account how adding a new manager to the option will affect the emerging market allocation. In the Diversified Small Co. Stock Option, the Board has once again selected growth and value managers and managers that select stocks from $50 million to $2 billion in market capitalization. Once again this diversification helps reduce the risk of investing in this asset class.

Remember this article was about risk-adjusted returns and being compensated in return for taking on additional risk. One tool the Board uses for an apples to apples comparison of a manager's returns versus standard deviation (risk) is a formula called the Sharpe Ratio. Once again, you can Google "Sharpe Ratio" to see the formula. It allows the Board to compare among different managers the amount of additional return per unit of risk a manager is providing. The higher the Sharpe Ratio, the better the risk/return tradeoff. This is useful because one portfolio may be able to achieve higher returns, but it is only a good investment if the higher returns don't come with too much additional risk.

**- continued on page two**

If two funds have identical average annual returns (net of fees) but one has a lower standard deviation, then the one with the lower standard deviation will always have a higher Sharpe Ratio and is the best selection. The challenge comes when comparing two funds with very different average annual returns and very different standard deviations. In the example below, there is a difference of 7% in the average annual return between the two funds and a difference of 6% in their standard deviations. However, if you look at their Sharpe Ratios, you can see that Fund A is giving you a better return for unit of risk taken and everything else being equal is a better choice.

$$\text{Sharpe Ratio} = \frac{\text{Average Annual Return - Risk-Free Rate of Return (usually the 3 month treasury)}}{\text{Standard Deviation}}$$

| | Average Annual Return (net of fees) | Standard Deviation | Sharpe Ratio |
|---|---|---|---|
| Fund A | 15% | 10% | 1.4 |
| Fund B | 22% | 16% | 1.3 |

One thing Joe Montanaro and the Board understood at the outset of creating the Investment Options for this Plan was that everyone's personal risk tolerance is different. This is the main reason there are investments options across all the risk spectrums. To help you see this in graphic form, we've included a risk/return chart on page 3 of this newsletter. It will show how the DAP's Models, Options and several Fidelity Funds offered in the DAP, plot along the Risk/Return Axes.

From Stable Value to a Brokerage Window, the DAP allows participants to accomplish investment returns that are within their individual risk tolerances. The hard part for participants is knowing their individual tolerance for investment risk. A lot of investors thought they knew their tolerance for investment risk until 2008 and 2009 came along. Calls to the DAP office during that time from participants about wanting a Model with less risk than the Conservative Model resulted in the Board creating the Retirement Model. Every investor's goal, whether investing in this Plan or outside of this Plan, should be to have a portfolio with an amount of risk that generates sufficient profit, but still allows you to sleep at night. ***- Marty Zygmund, Investment Officer - The Directed Account Plan***

## DAP PLAN NEWS

### New Leadership Roles at the DAP

Captain Marty Zygmund and Michelle Silberberg have transitioned into new roles at the Directed Account Plan. They have worked together to divide the Executive Director Job responsibilities into two pieces – Investment Management and Administrative Management.

Marty is the new Investment Officer for the DAP expanding upon his current investment management duties. Marty comes into this position with 18 years of experience at the DAP – as a participant DAP Board Member, Chairman of the DAP Board and Executive Director. With a B.S.B.A degree in Finance and Accounting from Southern Illinois University – Edwardsville (SIUE) and over 24 years as a licensed financial consultant, Marty has the background and experience to contribute to this new role. Captain Zygmund has also been employed by Ozark Airline, TWA and American Airlines as a pilot.

Michelle Silberberg is the new Executive Director with responsibilities of assisting participants, managing the DAP participant communications and managing the DAP Plan Office. Michelle was promoted from the Communications Director position. She had also served as the Assistant Executive Director. With a B.S.B.A degree in Finance from the University of Missouri – Columbia, M.B.A from Maryville University and 17 years as a DAP employee, Michelle is prepared to build upon the success of the previous Executive Director's, Joe and Marty. Michelle had come to the DAP from Citicorp Mortgage Inc. where she was a Senior Financial Analyst in the treasury division.

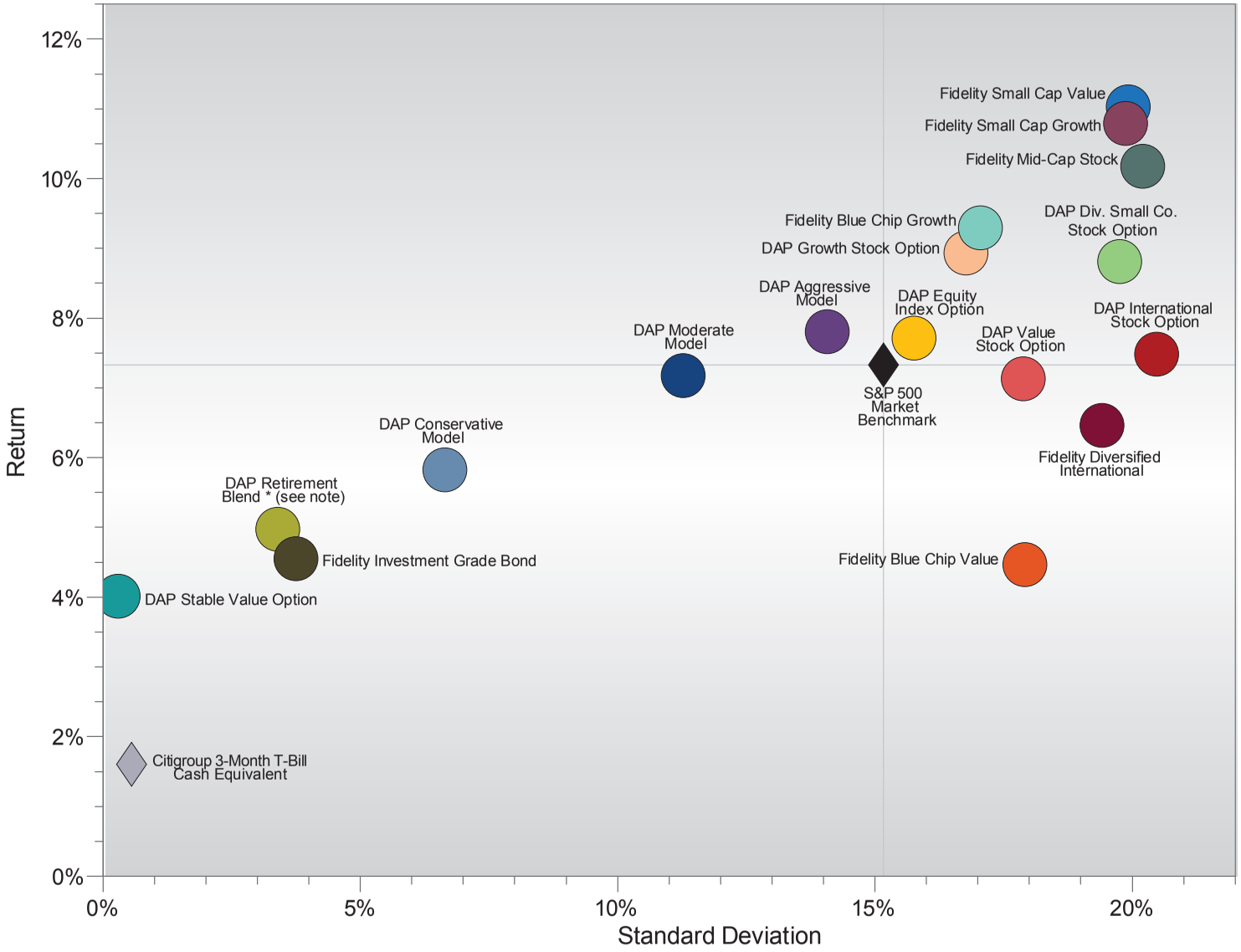
Our focus is on maintaining a state of the art retirement savings plan for our participants allowing them to enjoy their retirement years.

### DAP Board of Directors Welcomes Jim Rich, Former Chief Investment Strategist - IBM Retirement Funds

The Directed Account Plan Board of Directors is made up of three outside board members, two plan sponsor board members and two participant board members. One of the outside board member seats had been vacant and after conducting an extensive search, we are happy to announce that Jim Rich has been appointed to this position. Mr. Rich has recently retired from a career at IBM spanning over 24 years. Mr. Rich served as IBM Retirement Fund's Chief Investment Strategist for over 19 years leading in the development of the strategic and tactical asset allocation for a $55 billion defined benefit plan and consulting on the defined benefit and defined contribution stragies of the plan's $40 billion overseas retirement plans. Mr. Rich will make a strong contribution to the DAP Board with his high level investment management background and his keen interest in serving the Directed Account Plan's participants.

# Risk / Return

December 2004 - February 2014 (Single Computation)




note: Since the inception of the Retirement Model was May 2010, a simulated Retirement Blend was created with a target allocation of the Retirement Model (80% Stable value, 5% Value Stock, 10% Equity Index, 5% International Stock) from December 2004 to February 2014.

This chart depicts the approximate risk and return characteristics over the 10 year period ended 2/28/14. Return is measured along the verical axis in terms of annualized return. Risk is measured along the horizontal axis in terms of annualized standard deviation. Historical returns may not be indicative of future performance.

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# Performance

**Directed Account Plan Quarterly Review** — **April 2014**

## DAP Options/Models Performance

as of March 31, 2014 (in percentages) - net of all fees

| Options & Models | 2009 | 2010 | 2011 | 2012 | 2013 | Ytd 2014 | 3 yr. Annlzd. | 5 yr. Annlzd. | 10 yr. Annlzd. | 20 yr. Annlzd. |
|---|---|---|---|---|---|---|---|---|---|---|
| **Stable Value Fund** | 3.02 | 3.88 | 3.63 | 3.07 | 2.49 | 0.53 | 2.93 | 3.19 | 4.06 | 5.09 |
| BC 1-3 Yr Gvt/Treas | 1.41 | 2.40 | 1.56 | 0.51 | 0.37 | 0.14 | 0.84 | 1.21 | 2.57 | 4.22 |
| **Value Stock Fund** | 33.41 | 16.85 | -8.33 | 17.54 | 33.87 | 3.09 | 12.29 | 21.33 | 7.44 | 9.87 |
| Russell 1000 Value Index | 19.69 | 15.51 | 0.39 | 17.51 | 32.53 | 3.02 | 14.80 | 21.75 | 7.58 | 10.07 |
| **Equity Index Fund** | 28.29 | 16.92 | 0.86 | 16.27 | 33.33 | 1.92 | 14.45 | 21.78 | 7.77 | 9.36 |
| Russell 3000 Index | 28.34 | 16.93 | 1.03 | 16.42 | 33.55 | 1.97 | 14.61 | 21.93 | 7.86 | 9.64 |
| **Growth Stock Fund** | 37.93 | 19.77 | -3.31 | 14.99 | 37.47 | 0.95 | 13.11 | 21.70 | 8.60 | 8.67 |
| Russell 1000 Growth Index | 37.21 | 16.71 | 2.64 | 15.26 | 33.48 | 1.12 | 14.62 | 21.68 | 7.86 | 8.82 |
| **International Stock Fund** | 48.16 | 17.18 | -16.36 | 16.54 | 17.64 | 0.17 | 3.80 | 17.03 | 7.54 | 7.27 |
| MSCI EAFE Net Dividend | 31.78 | 7.75 | -12.14 | 17.32 | 22.78 | 0.66 | 7.21 | 16.02 | 6.53 | 5.54 |
| MSCI ACWI Ex-US IMI Net | 43.60 | 12.73 | -14.31 | 17.04 | 15.82 | 0.88 | 4.32 | 16.16 | 7.39 | n/a |
| **Div. Small Co. Stock Fund** | 35.51 | 26.60 | -5.13 | 19.27 | 43.42 | 0.00 | 14.72 | 26.19 | 8.75 | 10.67 |
| Russell 2000 Index | 27.17 | 26.85 | -4.18 | 16.35 | 38.82 | 1.12 | 13.18 | 24.31 | 8.53 | 9.48 |
| **Retirement Portfolio** | n/a | 3.93 | 1.87 | 5.85 | 7.50 | 0.78 | 4.71 | n/a | n/a | n/a |
| Retirement Composite Index | n/a | 4.77 | 0.77 | 3.79 | 6.07 | 0.50 | 3.09 | 5.06 | 3.59 | 5.12 |
| **Conservative Portfolio** | 14.30 | 9.46 | 0.99 | 8.59 | 14.09 | 1.34 | 7.24 | 10.52 | 5.89 | 7.24 |
| Conservative Composite Index | 10.45 | 7.93 | 1.22 | 7.09 | 13.44 | 1.08 | 6.39 | 9.46 | 4.63 | 6.47 |
| **Moderate Portfolio** | 24.52 | 14.15 | -2.33 | 12.12 | 21.83 | 1.14 | 9.06 | 15.27 | 7.16 | 8.35 |
| Moderate Composite Index | 19.18 | 11.67 | -0.48 | 10.92 | 20.53 | 1.16 | 8.65 | 14.27 | 5.99 | 7.26 |
| **Aggressive Portfolio** | 30.20 | 16.93 | -4.33 | 14.48 | 26.88 | 1.05 | 10.25 | 18.28 | 7.78 | 8.98 |
| Aggressive Composite Index | 23.27 | 14.38 | -1.73 | 13.35 | 25.15 | 1.30 | 10.06 | 17.33 | 6.82 | 7.85 |

## More Information & Plan Contacts

To get daily NAVs, account balance information, or to make transfers, you may call the DAP Service Center telephone voice response system, available 24 hours a day. Customer service representatives are available 8:30 a.m. to midnight Eastern time Monday through Friday (excluding New York Stock Exchange holidays). Call 1-877-4TWADAP (1-877-489-2327) or dial the AT&T direct country code and 877-833-9900 (call collect) outside the U.S. Use your Social Security number and PIN to access your account.

Directed Account Plan
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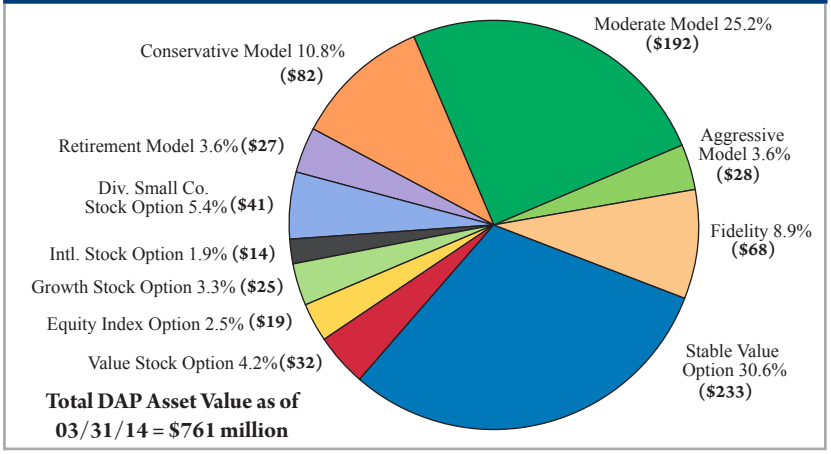
## DAP Options and Models Asset Allocation Chart

as of March 31, 2014
Participant Asset Allocation - in percentages
Market Value of Options and Models - in ($ millions)




**Total DAP Asset Value as of 03/31/14 = $761 million**

Informational Web Site:
***www.dapretirement.com***

Interactive Web Site:
***www.401k.com***

The intent of this communication is to provide useful information, not investment advice. Each participant in the Directed Account Plan is ultimately responsible to make his or her own investment decisions.

*Information was provided by the Directed Account Plan. Fidelity Investments is not responsible for its content.*

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## DAP Option and Model Target Allocations

as of March 31, 2014

**Retirement Model**
- 80% Stable Value
- 5% Value Stock
- 10% Equity Index
- 5% International Stock

**Conservative Model**
- 60% Stable Value
- 20% Value Stock
- 20% Equity Index

**Moderate Model**
- 35% Stable Value
- 15% Value Stock
- 15% Equity Index
- 15% Growth Stock
- 10% International Stock
- 10% Diversified Small Co. Stock

**Aggressive Model**
- 20% Stable Value
- 15% Value Stock
- 15% Equity Index
- 15% Growth Stock
- 15% International Stock
- 20% Diversified Small Co. Stock

**Stable Value Option**
- 46% Invesco Interest Income
- 40% Wellington Core Bond
- 10% BlackRock Instl. Money Market
- 4% CDs

**Value Stock Option**
- 20% Neuberger Berman Large Cap Value
- 20% T. Rowe Price Value
- 15% JP Morgan Equity Income
- 15% Goldman Sachs Mid Cap Value Instl.
- 10% Sequoia
- 20% BlackRock Value Index

**Equity Index Option**
- BlackRock US Equity Index

**Growth Stock Option**
- 20% Marsico Focus
- 20% T. Rowe Price Growth Stock
- 20% Primecap Odyssey Growth
- 10% Wellington Mid Cap Opportunities
- 10% Broad Run Mid Cap Growth
- 20% BlackRock Growth Index

**International Stock Option**
- 12% Templeton Instl.Foreign Equity
- 12% Thornburg International Value
- 10% American Century Intl. Growth
- 10% MFS International Value
- 8% Dimensional Emerging Markets Value
- 8% TCW International Small Cap
- 6% Brandes Intl. Small Cap Equity
- 34% BlackRock ACWI Ex-US IMI Index

**Diversified Small Co. Stock**
- 15% Dimensional US Micro Cap Portfolio
- 15% Royce Opportunity
- 15% Brown Capital Mgmt. Small Co. Instl.
- 10% Buffalo Small Cap
- 10% Deutsche Small Cap Value
- 10% Mutual of America Disciplined Small Cap Value
- 5% Walthausen Small Cap Value
- 20% BlackRock Small Co. Index