

## Table of Contents

Asset Allocation AlternativesTab 1Projected OutcomesTab 2Investment Environment ..... Tab 3


## Tab 1

Asset Allocation Alternatives

Fourth Street Performance Partners

## Investment Allocation Alternatives

|  | Conservative | Moderate <br> (Pooled Trusts) | Growth \& Income | Growth |
| :---: | :---: | :---: | :---: | :---: |
| Target allocation | 20\% stocks/80\% bonds | 50\% stocks/50\% bonds | 60\% stocks/40\% bonds | 80\% stocks/20\% bonds |
| Large Cap Equity | 5.0\% | 10.0\% | 10.0\% | 25.0\% |
| Defensive Equity | 10.0\% | 20.0\% | 20.0\% | 10.0\% |
| Small Cap Equity | 0.0\% | 0.0\% | 5.0\% | 15.0\% |
| International Equity | 5.0\% | 10.0\% | 15.0\% | 20.0\% |
| Commodities | 0.0\% | 5.0\% | 5.0\% | 5.0\% |
| Real Estate | 0.0\% | 5.0\% | 5.0\% | 5.0\% |
| Core Fixed Income | 45.0\% | 20.0\% | 18.0\% | 9.0\% |
| High Yield Bonds | 12.5\% | 10.0\% | 9.0\% | 4.0\% |
| Emerging Mkt. Debt | 12.5\% | 10.0\% | 9.0\% | 4.0\% |
| Cash \& Equivalents | 10.0\% | 10.0\% | 4.0\% | 3.0\% |
| Total Portfolio | 100\% | 100\% | 100\% | 100\% |

## Projected Returns (next 10 years)

| Portfolio |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Component | Conservative (20/80) | Moderate (50/50) | Growth \& Income (60/40) | Growth (80/20) |
| Large Cap | $5.0 \%$ | $10.0 \%$ | $10.0 \%$ | $25.0 \%$ |
| Defensive Equity | $10.0 \%$ | $20.0 \%$ | $20.0 \%$ | $10.0 \%$ |
| Small/Mid Cap | $0.0 \%$ | $0.0 \%$ | $5.0 \%$ | $15.0 \%$ |
| International Equity | $5.0 \%$ | $10.0 \%$ | $15.0 \%$ | $20.0 \%$ |
| Commodities | $0.0 \%$ | $5.0 \%$ | $5.0 \%$ | $5.0 \%$ |
| Real Estate | $0.0 \%$ | $5.0 \%$ | $5.0 \%$ | $9.0 \%$ |
| Domestic Fixed | $45.0 \%$ | $20.0 \%$ | $18.0 \%$ | $9.0 \%$ |
| High Yield | $12.5 \%$ | $10.0 \%$ | $9.0 \%$ | $4.0 \%$ |
| Non US Fixed | $12.5 \%$ | $10.0 \%$ | $9.0 \%$ | $3.0 \%$ |
| Cash Equivalents | $10.0 \%$ | $10.0 \%$ | $100 \%$ | $100.0 \%$ |
| Totals | $100.0 \%$ |  | $100.0 \%$ | $6.96 \%$ |
| 10 Yr. Geometric Mean Return | $4.32 \%$ | $5.51 \%$ | $6.09 \%$ | $13.44 \%$ |
| Projected Standard Deviation | $4.56 \%$ | $7.26 \%$ | $9.07 \%$ | $0.42 \%$ |
| Projected Sharpe Ratio | $0.51 \%$ |  | $0.48 \%$ |  |

[^0]
## Market Assumptions (next 10 Years)

|  | Projected <br> Arithmetic <br> Return |
| :--- | ---: |
| Asset Class | $8.90 \%$ |
| Large Cap | $7.75 \%$ |
| Defensive Equity | $10.15 \%$ |
| Small/Mid Cap | $9.25 \%$ |
| International Equity | $4.65 \%$ |
| Commodities | $7.35 \%$ |
| Real Estate | $3.05 \%$ |
| Domestic Fixed | $5.60 \%$ |
| High Yield | $3.15 \%$ |
| Non US Fixed | $2.00 \%$ |


| Projected <br> Standard <br> Deviation | Projected Yield |
| :---: | :---: |
| $18.30 \%$ | $2.20 \%$ |
| $9.50 \%$ | $2.75 \%$ |
| $22.95 \%$ | $1.40 \%$ |
| $20.20 \%$ | $3.00 \%$ |
| $18.25 \%$ | $2.00 \%$ |
| $16.50 \%$ | $5.00 \%$ |
| $3.75 \%$ | $4.00 \%$ |
| $11.45 \%$ | $7.00 \%$ |
| $9.40 \%$ | $3.80 \%$ |
| $0.90 \%$ | $2.00 \%$ |


| Projected <br> Sharpe Ratio | 10 Yr. <br> Geometric Mean <br> Return |
| :---: | :---: |
| $0.38 \%$ | $7.49 \%$ |
| $0.61 \%$ | $7.52 \%$ |
| $0.36 \%$ | $7.83 \%$ |
| $0.36 \%$ | $7.48 \%$ |
| $0.15 \%$ | $3.06 \%$ |
| $0.32 \%$ | $6.17 \%$ |
| $0.28 \%$ | $3.02 \%$ |
| $0.31 \%$ | $5.06 \%$ |
| $0.12 \%$ | $2.75 \%$ |
| $0.00 \%$ | $2.01 \%$ |



Past performance is no guarantee of future results.


Fourth Street Performance Partners


## Tab 2

Projected Outcomes



## Potential Losses In Any Given Year

## Performance Partners



[^1]Fourth Street Performance Partners

## Potential Losses in Any Given Year (\$100,000 starting portfolio value)*



| 3rd Percentile | $\$ 113,487.51$ | $\$ 120,523.68$ | $\$ 125,185.33$ | $\$ 136,429.31$ |
| :--- | ---: | ---: | ---: | ---: |
| 33rd Percentile | $\$ 106,449.91$ | $\$ 108,973.01$ | $\$ 110,477.02$ | $\$ 113,693.86$ |
| Median | $\$ 104,386.96$ | $\$ 105,643.97$ | $\$ 106,261.56$ | $\$ 107,278.96$ |
| 66th Percentile | $\$ 102,500.96$ | $\$ 102,622.55$ | $\$ 102,500.27$ | $\$ 101,724.37$ |
| 97th Percentile | $\$ 95,489.52$ | $\$ 91,656.15$ | $\$ 88,913.40$ | $\$ 82,225.47$ |

[^2]Fourth Street Performance Partners


## Tab 3

Current Investment Environment

## Investment Environment - Next 10 Years

## Inflation

> Currently low
$>$ Deflationary expectations remain in effect but then give way to monetary re-flation and inflationary fears toward the end of 10 year period
$\square$ Interest Rates
> Investment grade bond returns over the next 10 years will follow today's low current yields
$\square$ Equities
> Stocks are not cheap on an absolute basis. Thus, below average expected returns
$>$ Stocks are attractive relative to bonds with equity risk premium near average level

## 10 Yr Return Expectations

| Asset ClasS | Comp. Return |  | Stand. Dev. |
| :--- | :---: | :---: | :---: |
| Inflation |  | $2.50 \%$ | $\mathrm{~N} / \mathrm{A}$ |
| Cash Returns | $2.00 \%$ | $0.90 \%$ |  |
| Developed Market Int'l Bonds | $2.75 \%$ |  | $6.25 \%$ |
| U.S. Investment Grade Bonds | $3.00 \%$ | $3.75 \%$ |  |
| Emerging Mkt. Bonds | $4.90 \%$ | $10.50 \%$ |  |
| High Yield Bonds | $5.00 \%$ | $11.45 \%$ |  |
| Hedge Funds | $5.50 \%$ | $10.00 \%$ |  |
| Real Estate | $6.25 \%$ | $16.50 \%$ |  |
| U.S. Large-Cap Equity | $7.50 \%$ | $18.30 \%$ |  |
| Developed Int'l Equity | $7.50 \%$ | $20.10 \%$ |  |
| U.S. Small/Mid Cap Equity | $7.85 \%$ | $22.90 \%$ |  |
| Emerging Int'l Equity | $8.00 \%$ | $27.75 \%$ |  |

Fourth Street Performance Partners

## Bond Market: 10 Year Expectations Returns Follow Yield



Yielding 2.40\% as of 3/31/14
Yield @ 3/31/04 = 3.80\%
10 Year Return @ 3/31/14= 4.46\%

## Bond Market:

Fourth Street Performance Partners

## 5 \& 10 Year Expectations

|  | $\underline{2014}$ | $\underline{2015}$ | 2016 | $\underline{2017}$ | 2018 | $\begin{aligned} & \frac{2019-}{2023} \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beg. Of Yr. Net Yield | 2.85\% | 3.85\% | 4.85\% | 4.85\% | 4.85\% | 5.35\% |
| Duration (Years) | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 |
| Interest Rate Change | +1.0\% | +1.0\% | 0\% | +0\% | +0.5\% | 0\% |
| Income Return | 2.85\% | 3.85\% | 4.85\% | 4.85\% | 4.85\% | 5.35 |
| Principal Return | -5.00\% | -5.00\% | 0.00\% | 0.00\% | -2.50\% | 0.00\% |
| Total Return | -2.15\% | -1.15\% | 4.85\% | 4.85\% | 2.35\% | 5.35\% |

Compounded returns from your investment grade bond portfolio over the next 5 years are approximately $1.7 \%$ annualized in this scenario. Compounded returns for the $\mathbf{1 0}$ years are $\mathbf{3 . 5 \%}$ annualized.

## Equity Market Expectations - 5-7\%

|  | Historical Annualized Return | Annual Std Dev | Methodology | Expected Return |
| :---: | :---: | :---: | :---: | :---: |
| Dividend Yield | 4.6\% | 2.0\% | Current Dividend Yield of S\&P 500 Index $(3 / 31 / 2014)$ | 2.1\% |
| Expected Inflation | 2.1\% | 6.0\% | 10-Year Breakeven Inflation (3/31/2014) (10-yr Treasury - 10 -yr TIPS) | 2.1\% |
| Real EPS Growth | 1.7\% | 33.0\% | Historical Average of Real Earnings Growth (Shiller) | 1.7\% |
| Valuation Multiple Expansion | 0.3\% | 34.0\% | Shiller 10-Year Cyclically-Adjusted P/E (CAPE or PE 10) Ratio | ?? (-) |
| Historical Return $(1870-2010)$ | 8.9\% | 19.0\% | Nominal Expected Return | 5.9\% |

Dividend yield and inflation are largest and most stable components of return. Real EPS growth is very volatile but mean reverting. P/E expansion provides modest return and also is very volatile.

## Statement of Disclosure

The previous statistical analysis was prepared by Fourth Street Performance Partners Inc. with data provided by Callan Associates, Inc. (CAI) and © 2014 Morningstar Inc. All Rights Reserved. The information contained herein: (1) is proprietary to CAI and Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither CAI, Morningstar, nor its content providers are responsible for any damages or losses arising from any use of this information. Past performance is no guarantee of future results. Fourth Street Performance Partners compiles the information either from utilizing secondary data from statements provided by the plan trustee and/or custodian, CAI computer software and selected information in CAI's and Morningstar's databases. This report may also contain returns and valuations from outside sources as directed by the client. Fourth Street Performance Partners assumes no responsibility for the accuracy of these valuations or return methodologies. Reasonable care has been taken to assure the accuracy of the CAI computer software and database.


[^0]:    Past performance is no guarantee of future results.

[^1]:    Past performance is no guarantee of future results.

[^2]:    *Assuming no contributions or withdrawals.

