SYMMETRY®

# Beware of Yielding to the Temptation to Chase Income

*Presented by:*


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# Agenda

- Interest Rate Environment
- Income Replacement Strategies
- The Holistic Financial Planning Process
- Recommendation and Conclusion

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# Where Have All the Good Yields Gone?

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# Monetary Policy Through the Business Cycle

- The Federal Reserve’s objectives:
  - unemployment, inflation, and long-term interest rates*
- Federal Funds Rate directly impacts money supply.
- Quantitative Easing was commenced after FFR ≈ 0%.

* http://www.federalreserve.gov/faqs/money_12848.htm

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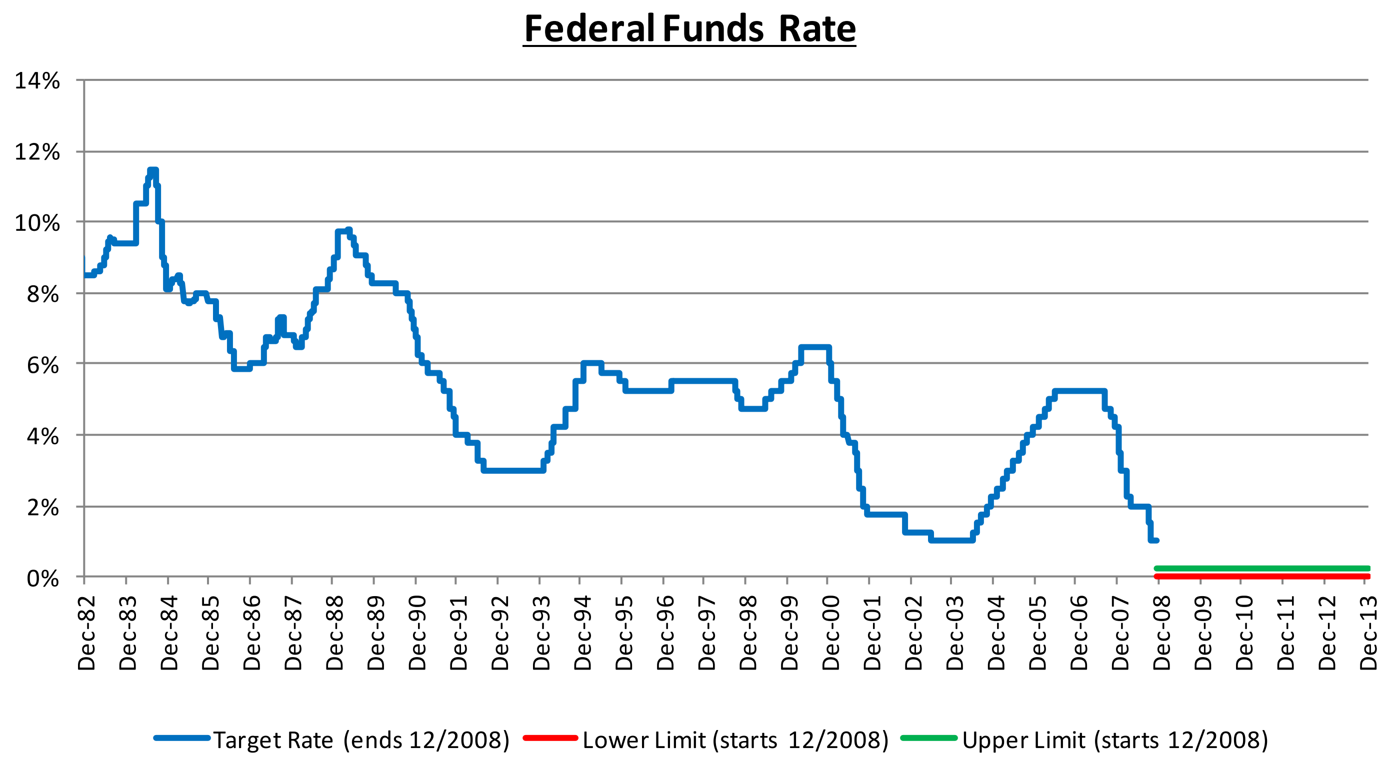
# Monetary Policy Through the Business Cycle

- The FOMC sets rates based on economic targets.




*Source: St. Louis Fed http://research.stlouisfed.org/ (Series DFEDTAR, DFEDTARL, DFEDTARU)*

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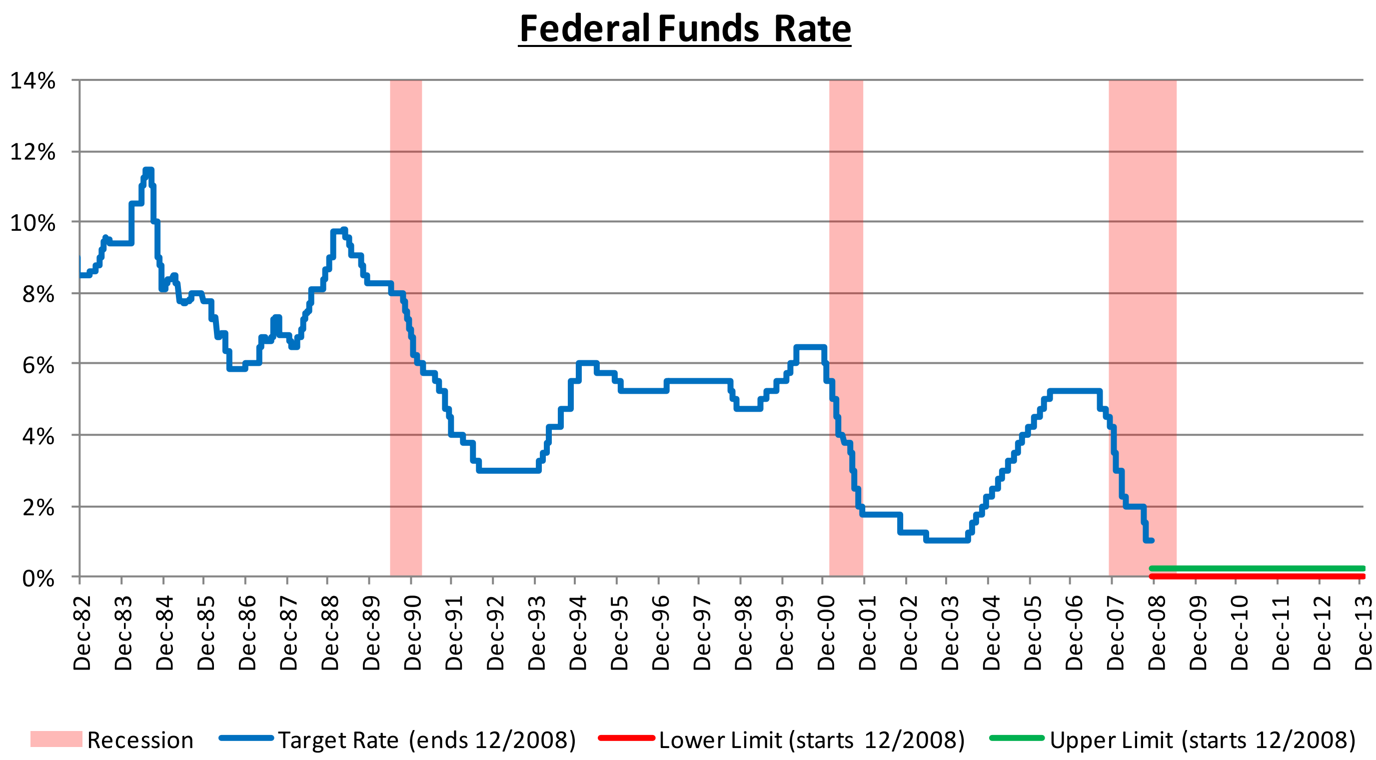


*Source: St. Louis Fed http://research.stlouisfed.org/ (Series DFEDTAR, DFEDTARL, DFEDTARU).*
*Recession dates from National Bureau of Economic Research http://www.nber.org.cycles.html.*

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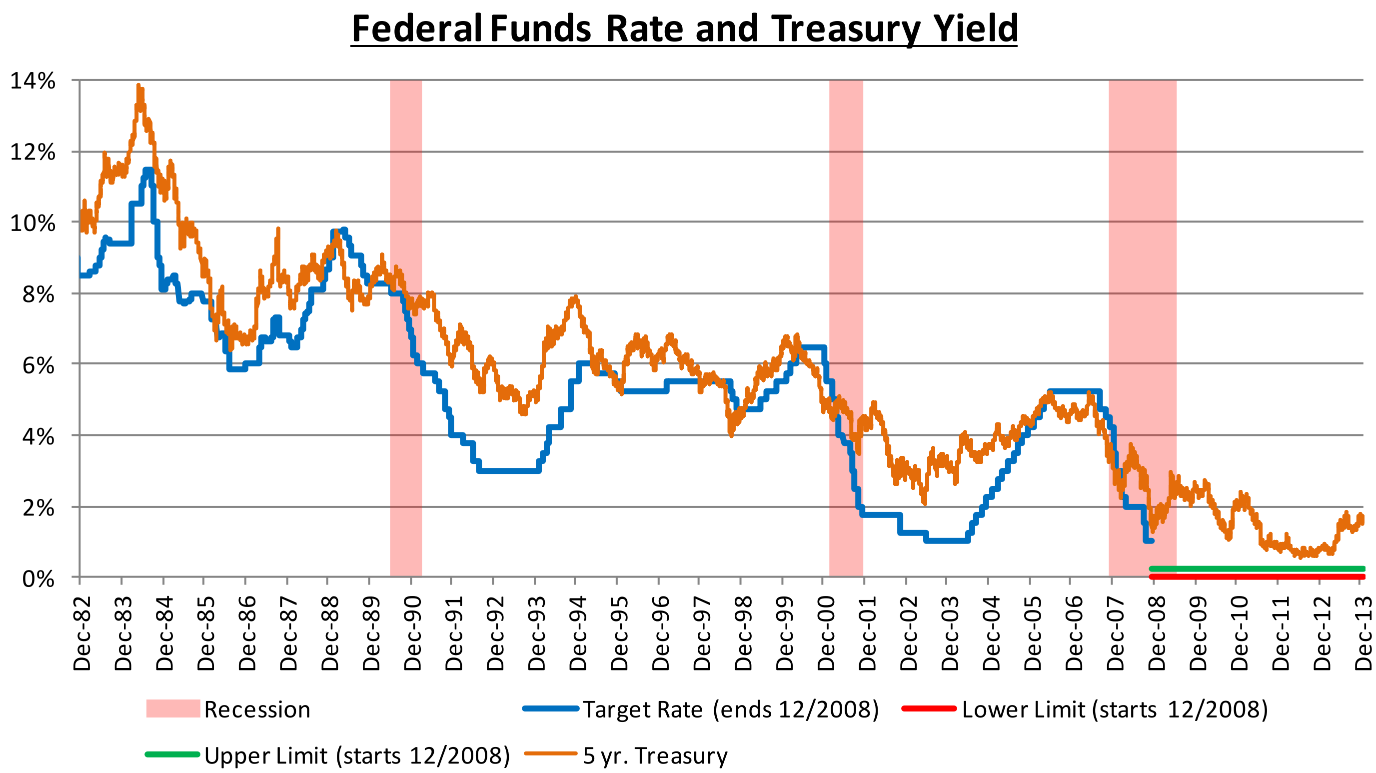


*Source: St. Louis Fed http://research.stlouisfed.org/ (Series DFEDTAR, DFEDTARL, DFEDTARU, DGS5).*
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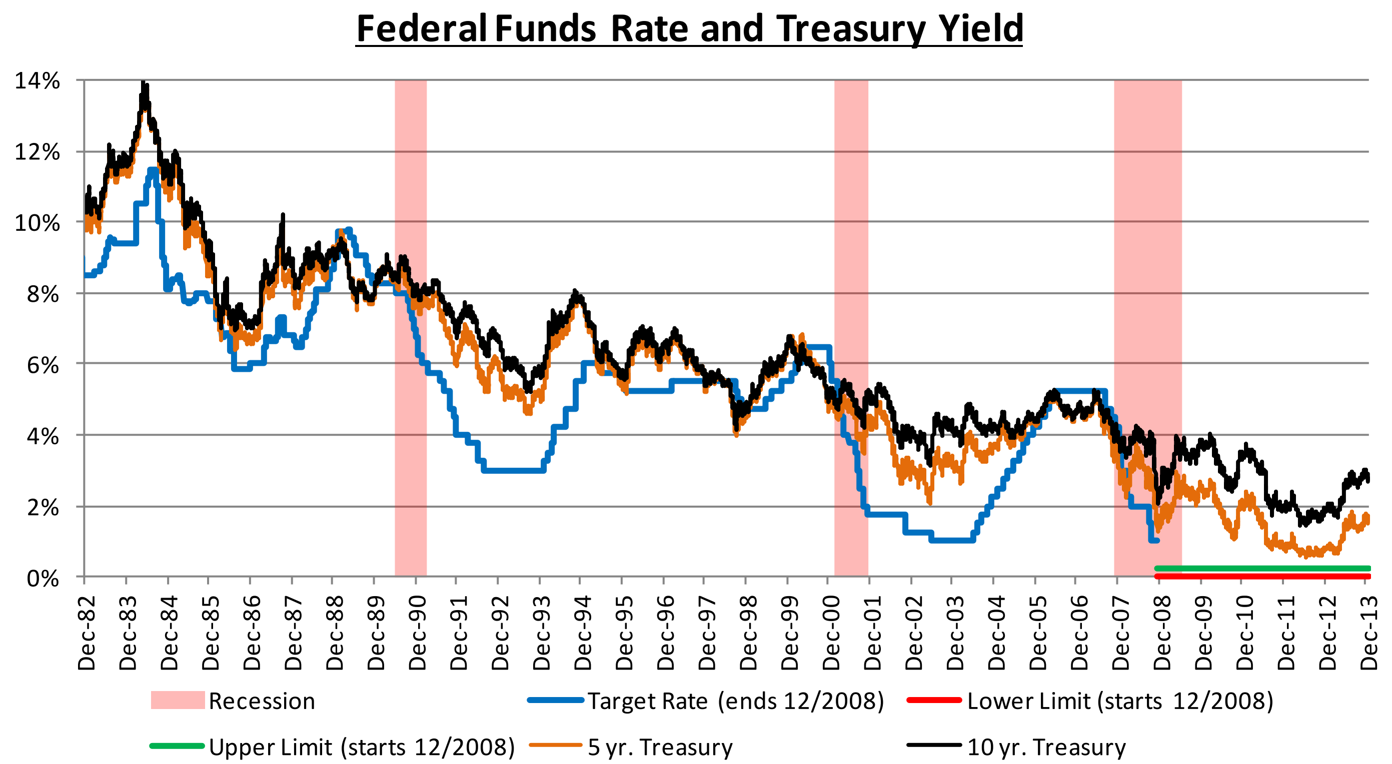


*Source: St. Louis Fed http://research.stlouisfed.org/ (Series DFEDTAR, DFEDTARL, DFEDTARU, DGS5, DGS10).*
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# Quantitative Easing Is an Insurmountable Wall

- **QE1** – March 2009-March 2010: $1.75 trillion of MBS, agency debt, and long-term Treasury securities.
- **QE2** – November 2010 – June 2011: $600 billion of long-term Treasury securities.
- **Operation Twist** had goal of reducing longer-term rates
- Fed was purchasing $85 billion per month, now tapering.

***Source:*** http://research.stlouisfed.org/pageone-economics/uploads/newsletter/2011/201104.pdf

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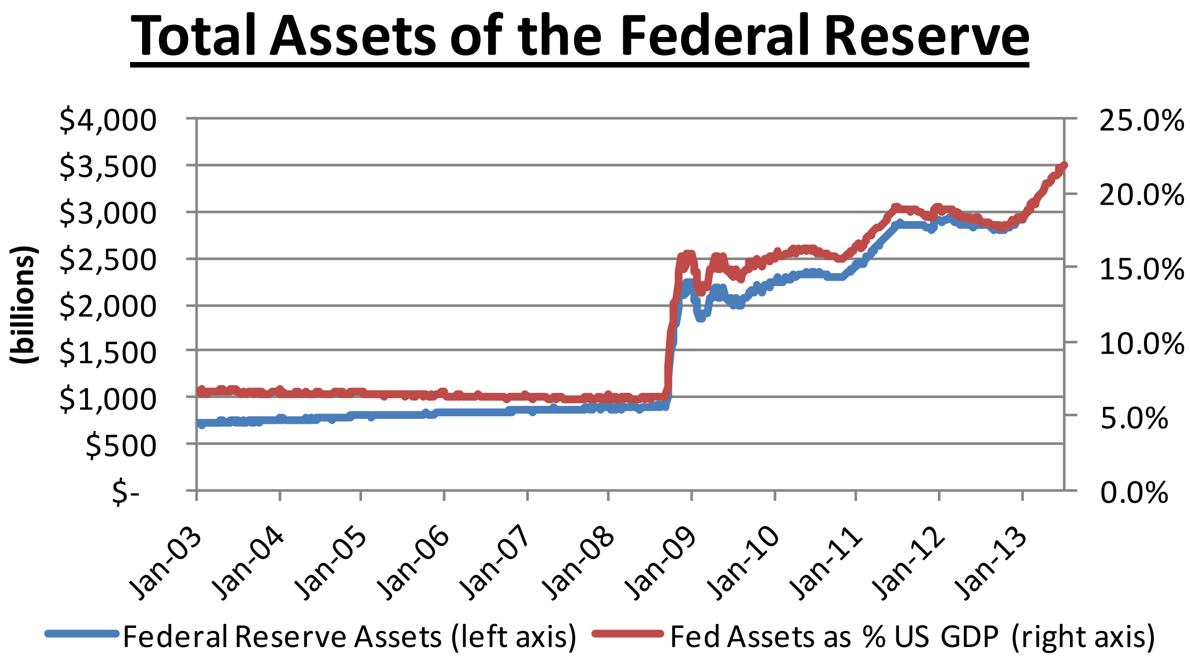
# Federal Reserve's Balance Sheet

- No market participant can counter the trillions of direct Fed purchases plus the FOMC Federal Funds Rate policy.
- Federal Reserve assets now 22% of U.S. GDP (from 7%).




***Source:*** http://research.stlouisfed.org/. Series WALCL, GDP.

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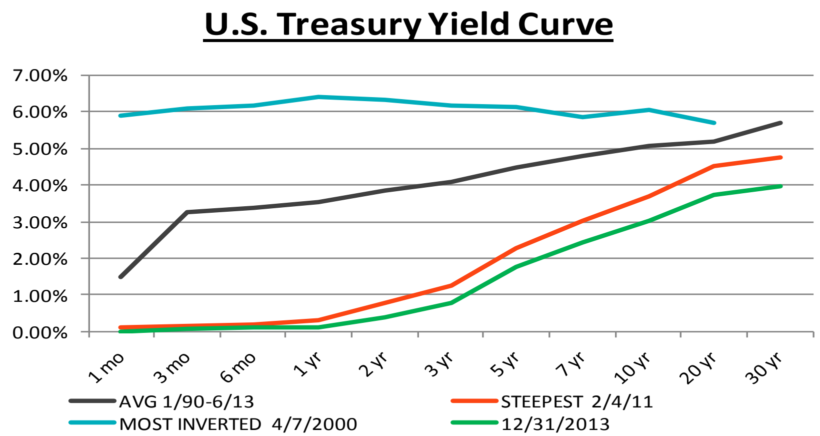
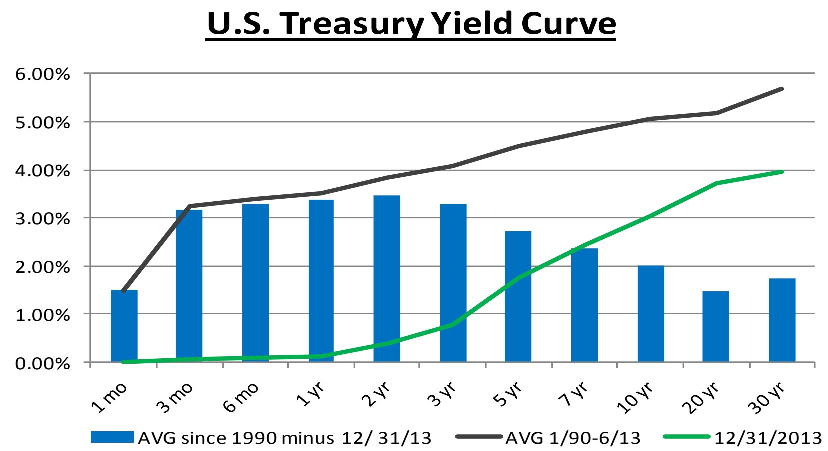
# Shape of Treasury Yield Curve

- Low rate environment:  zero risk begets zero return.
- The Treasury yield curve is relatively steep.
- ***Bond bubble*** narrative of ST return to average shape.
  - Possible capital loss IF lower-coupon bonds sold before maturity.




***Source:*** http://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yield

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# Yield is But a Piece of the Story

- Total return = capital gains + yield.
- Future portfolio values and ability to fund consumption depends on total return, regardless of composition.
- Different ways to communicate this idea to clients:
  - You spend dollars not percentages
  - LT capital gains rate is lower than the income rate
  - You (not board) control timing and magnitude of dividends

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# Income Replacement Strategies

# Risk and Return are Still Related

- Investors earn a return above the risk-free rate in compensation for taking on certain risks.
- If the risk-free rate ≈ 0%, yield is 100% due to risk.
- Several fixed income surrogates have come into favor:
  1. High yield fixed income (increase credit risk)
  2. Longer-term fixed income (increase term risk)
  3. Dividend paying stocks (equity risk and / or anti-diversifying)
  4. Exotic / other strategies (unknown host of risks)

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# RISKY:
# Allocating to High Yield = Increasing Credit Risk

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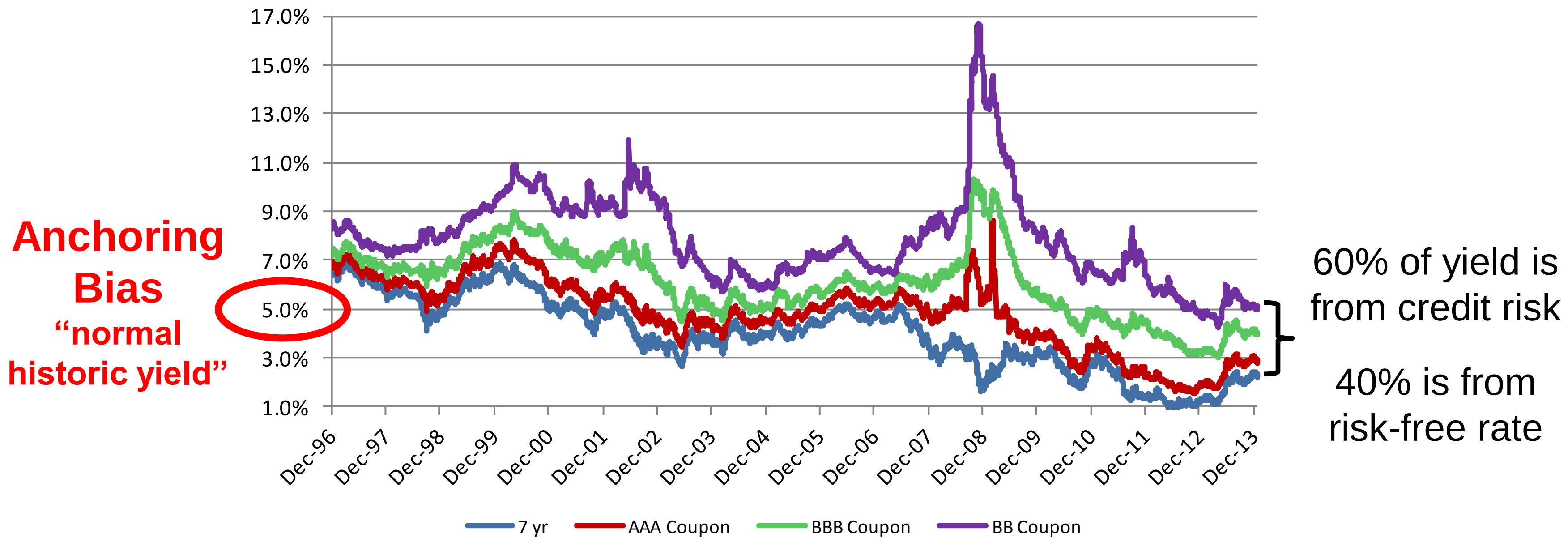
# Increasing Credit Exposure

- For bond yield at any horizon you must take on credit risk.
  - 5% yield implies BB risk; AAA risk is yielding 2%

**Treasury and Corporate Yield by Credit Quality**




***Source:*** http://research/stlouisfed.org/. Series: DGS7, BAMLC0A1CAAA, BAMLC0A4CBBB, BAMLH0A1HYBB.

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# Increasing Credit Exposure

- One-year default rates by rating are presented below
  - Default ≠ loss, recovery rates are usually > 0%.
- Credit loss could far exceed client's yield pickup over AA.
- Deep BIG (B / CCC) can be very risky, hence the yield.

**One-Year Global Corporate Default Rates (1981-2012)**

| | AAA | AA | A | BBB | BB | B | CCC/C |
|---|---|---|---|---|---|---|---|
| Minimum | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.25% | 0.00% |
| Maximum | 0.00% | 0.38% | 0.38% | 1.02% | 4.22% | 13.84% | 48.94% |
| Weighted long-term average | 0.00% | 0.02% | 0.07% | 0.22% | 0.86% | 4.28% | 26.85% |
| Median | 0.00% | 0.00% | 0.00% | 0.18% | 0.72% | 3.55% | 22.80% |
| 2008 default rates | 0.00% | 0.38% | 0.38% | 0.48% | 0.79% | 4.01% | 26.47% |
| Latest four quarters | 0.00% | 0.00% | 0.00% | 0.00% | 0.29% | 1.50% | 26.62% |

***Source:*** http://www.standardandpoors.com/ratings/articles/en/us/?articleType=HTML&assetID=1245348978068

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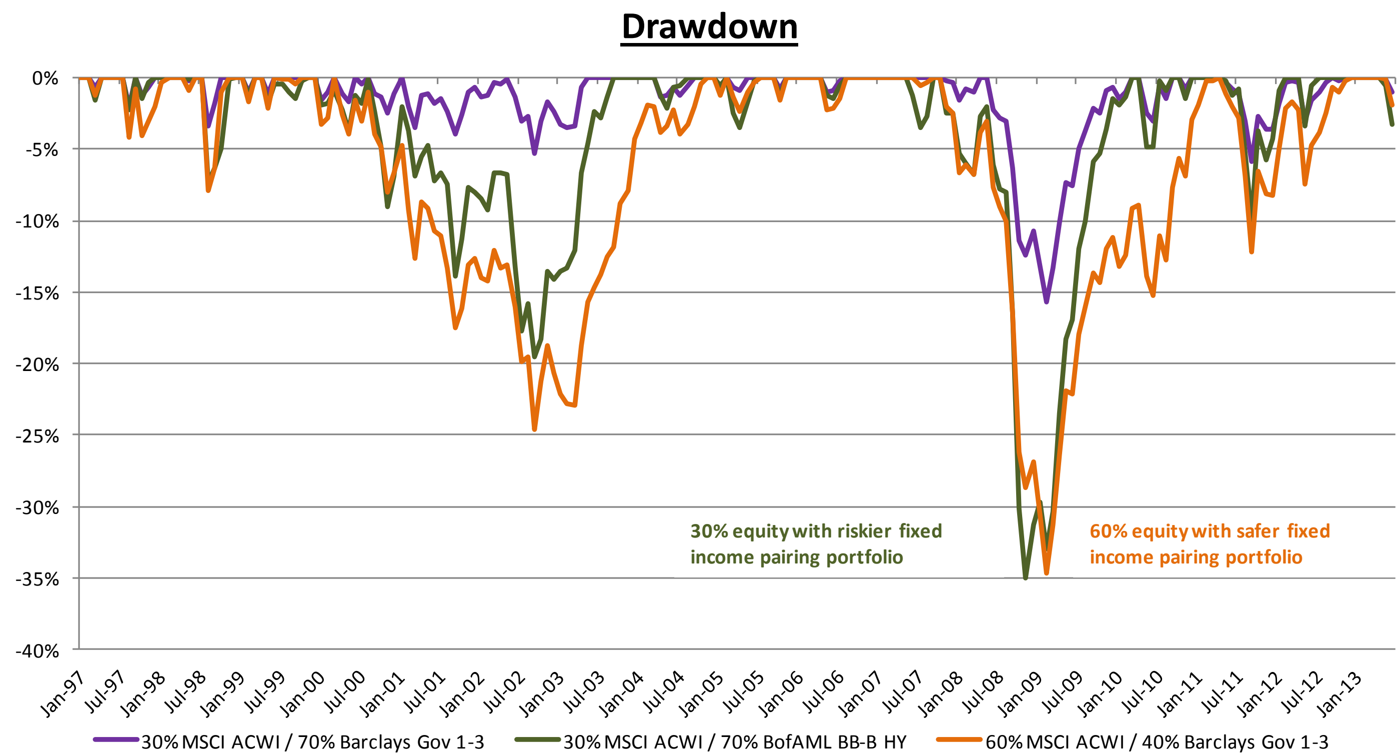
# The Profile of a 30/70…Or Is That a 60/40?

- Replacing low risk fixed income pairing portfolio with a BB/B corp. index increases portfolio risk to ≈ 60% equity.




***Source:*** Zephyr StyleADVISOR. The riskier portfolio has the BofA Merrill Lynch BB-B High Yield Index instead of the Barclay's Government 1-3 yr. Index.
**For additional information about index performance information please see disclosure in back labeled Index Disclosure.**

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# Credit Risk Changes the Portfolio

- Swapping a BB/B pairing would increase return AND the equity equivalent risk profile of the portfolio.
- A 30/70 portfolio with a lower-credit quality fixed income pairing resembles the risk of a 60/40 portfolio.

**Annualized Summary Statistics - January 1997 - December 2013**

| | Return (%) | Std Dev (%) | Beta | Sharpe Ratio | Max Drawdown |
|---|---|---|---|---|---|
| 30% MSCI ACWI / 70% Barclays Gov 1-3 | 5.08 | 4.81 | 0.28 | 0.52 | -15.7% |
| 30% MSCI ACWI / 70% BofAML BB-B HY | 7.02 | 9.98 | 0.52 | 0.45 | -35.0% |
| 60% MSCI ACWI / 40% Barclays Gov 1-3 | 5.91 | 9.81 | 0.58 | 0.34 | -34.7% |
| S&P 500 | 7.47 | 15.97 | 1.00 | 0.31 | -51.0% |

***Source:*** Zephyr StyleADVISOR.
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# RISKY:
# Extending Maturity = Increasing Term Risk

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# Extending Maturity

- What can you expect to achieve?
  - Historic term premium between 3-6 month T-bills and 7-10 year Treasury Notes ≈ 1.50%.
  - Historic difference in duration between these 2 segments is 0.4 years vs. 6 years, or 12x more sensitive to any $\Delta$ yield.
- Do you believe rates are increasing?
  - If so, extending duration is an illogical action to take.
- Remember that $\Delta MV \approx -duration * \Delta\ yield$.
  - A zero-coupon bond has duration = years to maturity
  - For every 1% ↑ yield, a bond with 10 yr duration ↓ 10% in MV.

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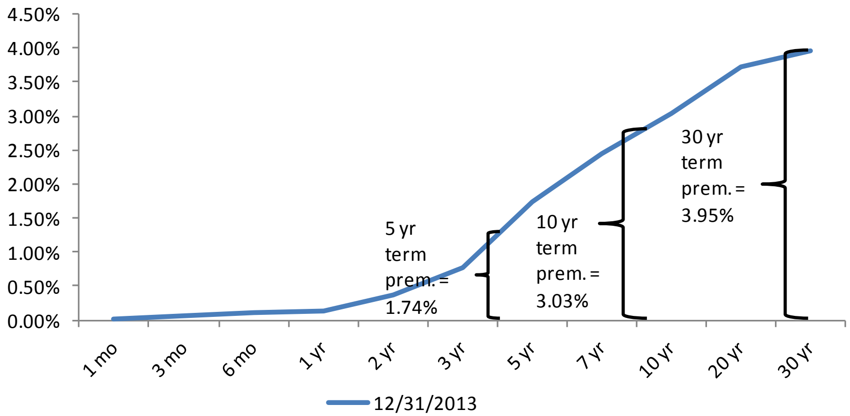
# Extending Maturity

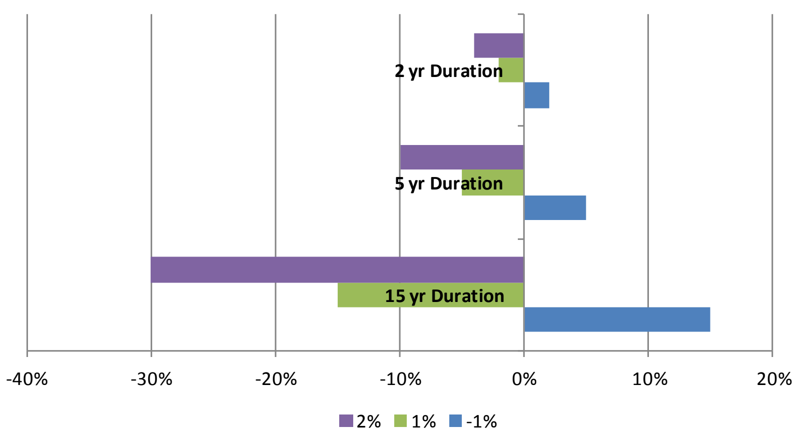
- Do a cost/benefit analysis of yield bump vs. duration jump.
  - Higher return : larger downside for every additional year.

**U.S. Treasury Yield Curve & Term Premium**




***Source:*** http://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yield

**Change in MV for Given Changes in Yield**




***Source:*** Estimates based on change in MV = - Duration * change in yield.

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**<u>RISKIER:</u>**
**Focusing on Dividends**

**= Reducing Diversification**
**= Increasing Equity Risk**

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# Concentration in Dividend Paying Stocks

- Board of directors decides if, when, how much to pay.
- Dividend funded by earnings; face same economic risks.
- Strategy consultants' negative connotation.
- Yield is a ratio; it will increase as price falls.
- Portfolio: increased equity beta, less diversification.
- Similar returns as non-payers.*
- Globally shrinking number of payers.*

***Source:*** Global Dividend Paying Stocks: A Recent History. Dimensional Fund Advisors. March 2013.

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# <u>RISKIEST:</u>
# Exotic Strategies = Dangerous Mix of Risks

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# Exotic Strategies

- Privately listed / non-traded securities.
  - Lack of liquidity is significant risk. Potential for concentration.
- Leveraged / inverse products.
  - Expensive, daily targets not achieved over long-term.
- So-called alternative strategies.
  - Do not simply trust the fund's name.
- Single security solutions.
  - Proceed at your own risk.  100% loss is possible.

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# Exotic Strategies: Non-Traded REITs

- Sold as an asset class with low correlation to equity markets and higher yield than publicly traded REITs.
- Low correlation due to very little liquidity.
- Higher yield due to higher risk.
- Area of FINRA focus, fines have been applied.

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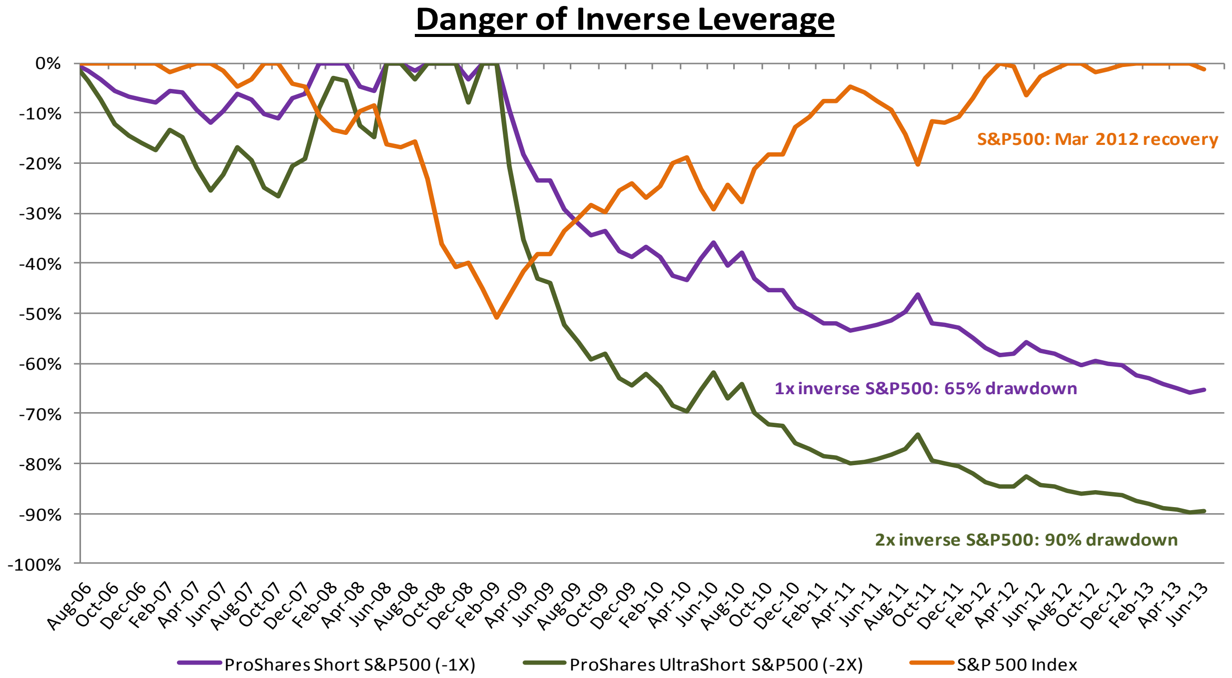
# Exotic Strategies: Inverse ETFs with Leverage

- Daily inverse ETFs have been adopted as LT hedges
- With volatility in the index and gearing (-2x, -3x), it is nearly impossible to achieve the daily goal over LT

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# Therefore, If A Client Asks You to Find Yield…

- That client's risk tolerance matters [most].
- Trading safety for yield should be carefully considered.
- Key question to ask is why a premium is being earned.
- Financial media interacts with product generation cycle that purports to meet investor needs. Does it?
  - Sometimes the best thing to do is…nothing.

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# The Process Remains Intact

# Financial Planning Process

- Be cognizant of the process no matter where you focus.

CLIENT A

- Objectives
  1. Return
  2. Risk
- Constraints
  1. Time Horizon
  2. Tax
  3. Liquidity
  4. Legal
  5. Unique

OPTIMAL PORTFOLIO – CLIENT A

Historic and Expected
Characteristics of
Client A's strategic
asset allocation.

Actual Performance
Monitor and review
performance vs.
expectations.

Progress to goals?

**Feedback loop, consider at annual review**

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# Maintain Holistic Perspective

- Focus on yield alone is too narrow for all investors.
- Wealth is more comprehensive than the investment portfolio, life balance sheet provides more detail.
- Total return (regardless of source) can fund distribution from investment portfolio.  In addition to pensions and SS.
- Segmenting income and cap gains is a behavioral bias.
  - Don’t enable poor decisions, educate and influence the client.

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# Maintain Holistic Perspective

- Frame possibilities for client in understandable manner

Less Risk----------------------------------------More Risk

| | Starting Plan | Save More | Live on Less | Work Longer | Distribute More |
|---|---|---|---|---|---|
| Income | $ 150,000 | $ 150,000 | $ 150,000 | $ 150,000 | $ 150,000 |
| Replacement Rate | 75% | 75% | 68% | 75% | 75% |
| Monthly Target | $ 9,375 | $ 9,375 | $ 8,500 | $ 9,375 | $ 9,375 |
| Portfolio Value | $ 1,000,000 | $ 1,262,500 | $ 1,000,000 | $ 1,000,000 | $ 1,000,000 |
| *Portfolio Distribution Rate* | *4.0%* | *4.0%* | *4.0%* | *4.0%* | *5.1%* |
| Portfolio Distribution | $ 3,333 | $ 4,208 | $ 3,333 | $ 3,333 | $ 4,208 |
| Social Security (MAX*2) | $ 5,167 | $ 5,167 | $ 5,167 | $ 6,026 | $ 5,167 |
| Monthly Income | $ 8,500 | $ 9,375 | $ 8,500 | $ 9,360 | $ 9,375 |
| Shortfall from Target | $ (875) | $ - | $ - | $ (15) | $ - |
| Portion met by SS | 55% | 55% | 61% | 64% | 55% |
| Portion met by portfolio | 36% | 45% | 39% | 36% | 45% |

***Source:*** Author calculations and For Retirees, a Million-Dollar Illusion, by Jeff Sommer. The New York Times. June 8, 2013. http://www.nytimes.com/2013/06/09/your-money/why-many-retirees-could-outlive-a-1-million-nest-egg.html?pagewanted=all&_r=0

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# Don’t Confuse Required and Desired Return

- Determination of risk tolerance & realistic return.

- *Required* from LT Plan
  - Assume risk tolerance and strategic allocation correct
  - Time horizon, savings, returns →end portfolio value
  - Sustainable withdrawal rate →retirement cash flow + SS
- Scenarios on previous slide allow small revisions
- Start planning early!

- *Desired* Based on Want
  - Randomly select large retirement spending need
  - This need equates with a return on current, future savings
  - This return leads to a portfolio likely to meet return needs
- Likelihood that risk and asset allocation mis-specified
- Stressful advisory / investing

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# Conclusion

# Engage Client Before Changing Portfolio

- Spend some time discerning client's true risk tolerance.
- Focus on role of fixed income in **that** client's portfolio.
- Client profile must drive any increase in portfolio risk.
- Keep things in perspective, think in terms of $R_f$ + *…*
- Discourage mental accounting bias of deconstructing portfolio to focus on fixed income yield, ignore risk mitigation.

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DIFFERENT TYPES OF INVESTMENTS AND/OR INVESTMENT STRATEGIES INVOLVE VARYING LEVELS OF RISK, AND THERE CAN BE NO ASSURANCE THAT ANY SPECIFIC INVESTMENT OR INVESTMENT STRATEGY WILL BE EITHER SUITABLE OR PROFITABLE FOR YOUR PORTFOLIO. Allocation models are not intended to represent investment advice that is appropriate for all investors. Each investor must take into account his/her financial resources, investment goals, risk tolerance, investing time horizon, tax situation and other relevant factors to determine if such portfolio is suitable. Model composition is subject to change. You and your advisor should carefully consider your suitability depending on your financial situation. As with any investment there may be tax consequences. The holdings comprising the strategies and the allocations to those holdings have changed over time and may change in the future. Symmetry tax-managed portfolios are designed with the goal of increasing the portfolio's overall tax efficiency. Changes to portfolio holdings which comprise the portfolio may have tax consequences. If you sell assets in a taxable account, you may have to pay tax on any gain. While Symmetry seeks to mitigate tax exposure when possible, it is likely that investors will incur a taxable event while being invested in the portfolio.

Higher potential return generally involves greater risk, short term volatility is not uncommon when investing in various types of funds including but not limited to: sector, emerging markets, small and mid-cap funds. International investing involves special risks such as currency fluctuation, lower liquidity, political and economic uncertainties, and differences in accounting standards. Risks of foreign investing are generally intensified for investments in emerging markets. Risks for emerging markets include risks relating to the relatively smaller size and lesser liquidity of these markets, high inflation rates and adverse political developments. Risks for investing in international equity include foreign currency risk, as well as, fluctuation due to economic or political actions of foreign governments and/or less regulated or liquid markets. Risks for smaller companies include business risks, significant stock price fluctuation and illiquidity. Investing in real estate entails certain risks, including changes in: the economy, supply and demand, laws, tenant turnover, interest rates (including periods of high interest rates), availability of mortgage funds, operating expenses and cost of insurance. Some real estate investments offer limited liquidity options. Investing in higher-yielding, lower-rated bonds has a greater risk of price fluctuation and loss of principal income than U.S. government securities, such as U.S. Treasury bonds and bills. Treasuries and government securities are guaranteed by the government for repayment of principal and interest if held to maturity. Investors should carefully assess the risks associated with an investment in the fund. Municipal bonds may subject investors to the Alternative Minimum Tax (AMT). Municipal bonds are usually exempt from state and local taxes, though discount bonds may be subject to capital gains tax. Like other Treasury notes and bonds, TIPS are exempt from state and local income taxes but interest payments are subject to federal income tax. In addition, gains from inflation adjustments to the value of the TIPS principal are taxable in the year they occur, even though you will not receive the cash until maturity. Investing in commodities is often through futures trading, where the risk of loss in these contracts can be substantial. You and your advisor should carefully consider whether such trading is suitable depending on your financial situation. The high degree of leverage that is often obtainable in commodity trading can work against you as well as for you. The use of leverage can lead to large losses as well as gains. In some cases, managed commodity accounts are subject to substantial charges for management and advisory fees.

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# Index Disclosure

**Index Disclosure:**
All indexes have certain limitations. Investors cannot invest directly in an index. Indexes have no fees. Historical performance results for investment indices and/or categories have been provided for general comparison purposes only, and generally do not reflect the deduction of transaction an d/or custodial charges or the deduction of an investment management fee, nor the impact of taxes, the incurrence of which would have the effect of decreasing historical performance results. Actual performance for client accounts may differ materially from the index portfolios. It should not be assumed that your account holdings correspond directly to any comparative indices.

**MSCI ACWI (All Country World Index):** A free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging market. The MSCI All Country World Index includes 48 markets. The index has been calculated since 1995.

**Barclays Capital 1-3 Year Government Bond Index:** This index consists of U.S. Treasury and U.S. Government agency bonds with maturities from one to three years.

**The BofA Merrill Lynch US High Yield Index (H0A4)** The BofA Merrill Lynch U.S. High Yield, BB-B Rated Index tracks the total return of BB-B Rated US Dollar-denominated corporate bonds publicly issued in the US domestic market.

**Standard & Poor's (S&P) 500 Index** represents the 500 leading U.S. companies, approximately 80% of the total U.S. market capitalization.

**ProShares Short Standard & Poor's (S&P) 500 ETF** This Short ProShares ETF seeks a return that is -1x the return of the Standard & Poor's (S&P) 500 Index (target) ***for a single day***, as measured from one NAV calculation to the next. Due to the compounding of daily returns, ProShares' returns over periods other than one day will likely differ in amount and possibly direction from the target return for the same period. These effects may be more pronounced in funds with larger or inverse multiples and in funds with volatile benchmarks.

**ProShares Ultra Short Standard & Poor's (S&P) 500 ETF** This Short ProShares ETF seeks a return that is -2x the return of the Standard & Poor's (S&P) 500 Index (target) ***for a single day***, as measured from one NAV calculation to the next. Due to the compounding of daily returns, ProShares' returns over periods other than one day will likely differ in amount and possibly direction from the target return for the same period. These effects may be more pronounced in funds with larger or inverse multiples and in funds with volatile benchmarks.

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