Market Timing – Seeking Reasonable Returns while Reducing Risk

AAII – San Diego Chapter

Saturday, July 12, 2014

Disclaimer

This workshop is presented by Robert Bernstein for educational purposes only. The information presented is not intended to reflect any participants personal financial situation, goals or risk tolerance. Participants should consider the content in this workshop in context of their own personal financial situation.

Mr. Bernstein is affiliated with RGB Capital Group LLC, a registered investment advisor registered in the State of California. In his capacity in delivering investment educational workshops, Mr. Bernstein does not provide investment advice or make investment recommendations. Investment examples provided in the educational workshop are for illustration purposes only and not a recommendation to buy or sell a particular security. Investing involves risk that could result in a loss of principal.

Most charts presented are provided by Investors FastTrack. Investors FastTrack can be contacted by visiting www.fasttrack.net. Neither RGB Capital Group, LLC nor Robert Bernstein are affiliated with Investors FastTrack.

This document is provided for your personal use only and may not be copied or distributed to others.

Contact Information: Rob Bernstein
(858) 367-5200
rob@rgbcapitalgroup.com

Rob Bernstein

- President, RGB Capital Group LLC
- Licensed - Series 65
- Prior Work Experience
  a) Senior Manager, Deloitte & Touche
  b) Chief Information Officer – Newland Communities
- M.B.A., Finance and Accounting, William E. Simon School of Business, University of Rochester
- B.A., Quantitative Economics and Decision Sciences, University of California, San Diego
- President, AAII – San Diego Chapter

Today's Goals

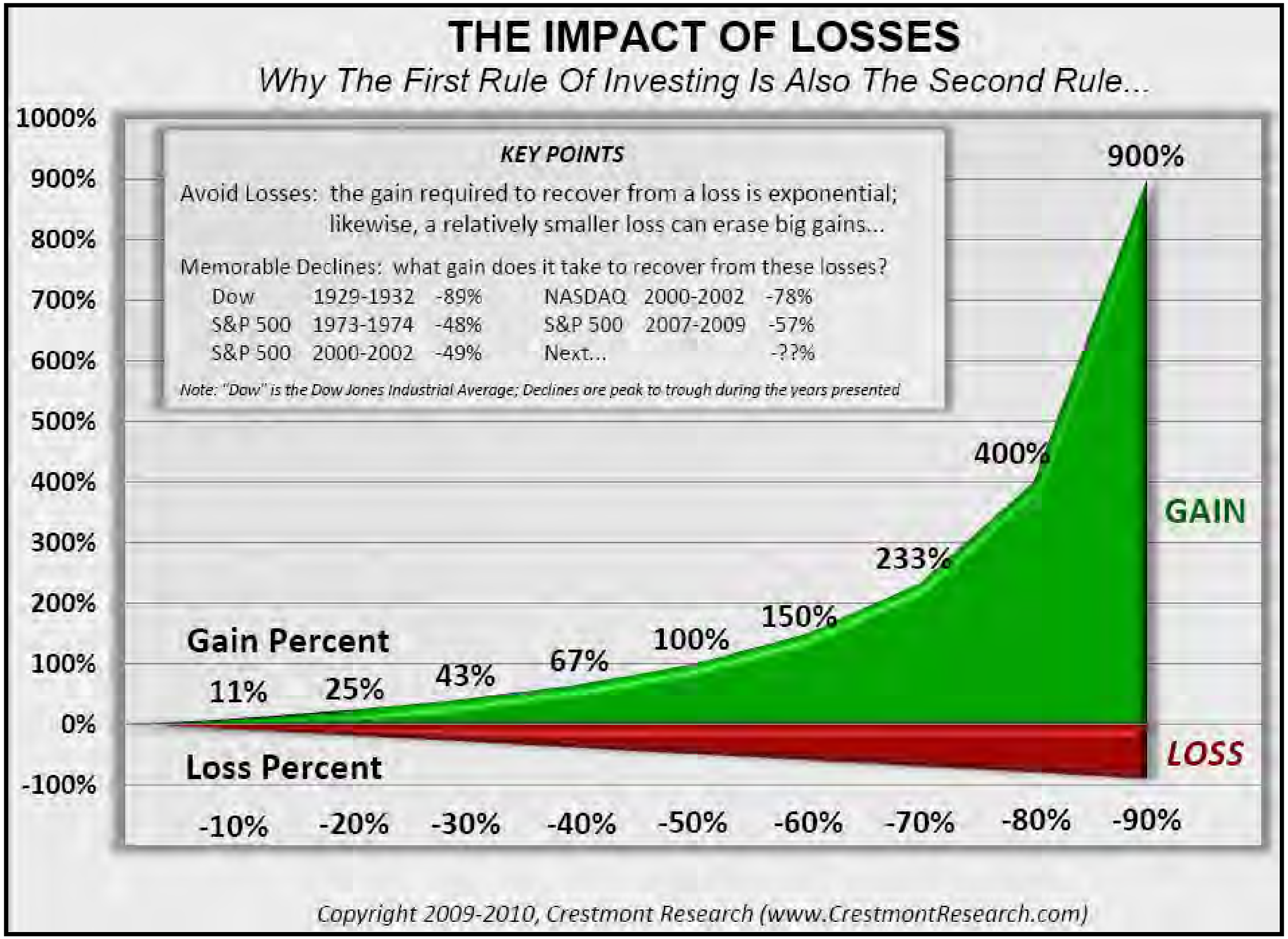
- Construct a low volatility portfolio that seeks above average returns.
- Set an exit strategy for your investments when the market turns down.
- Provide some comfort for investing money that is sitting on the sidelines while managing risk appropriately.
- Take appropriate action during the next bear market to protect your capital.

What Kind of Investor are You?

Know Your Tolerance for Risk

- What are your financial goals?
- What is your investing time horizon?
- How much time do you have to manage your investments?
- What type of loss can you sustain?

By understanding the type of investor you are, you can avoid unacceptable market declines and identify better risk-adjusted return opportunities.



- Recovering from a steep loss is difficult and usually takes a long time. Steep declines are detrimental to an investor's ability to create wealth.

Impact of Losses - Hypothetical Scenario

"Buy-and-Hope" Strategy Investing in SPY

Year	Beginning Balance	Investment Gain (%)	Investment Gain ($)	Withdrawal	Ending Balance
1999	1,000,000	20.76%	197,220	50,000	1,147,220
2000	1,147,220	-9.73%	(106,614)	51,500	989,106
2001	989,106	-11.75%	(109,987)	53,045	826,074
2002	826,074	-21.59%	(166,553)	54,636	604,884
2003	604,884	28.18%	154,598	56,275	703,207
2004	703,207	10.70%	69,041	57,964	714,284
2005	714,284			59,703	686,198
2006	686,198	15.85%	99,016	61,494	723,720
2007	723,720	5.14%	33,944	63,339	694,325
2008	694,325	-36.81%	(231,567)	65,239	397,520
2009	397,520	26.37%	87,106	67,196	417,430
2010	417,430	15.06%	52,442	69,212	400,660
2011	400,660	1.89%	6,225	71,288	335,597
2012	335,597	15.99%	41,921	73,427	304,092
2013	304,092	32.31%	73,816	75,629	302,279

70% Decline in Value

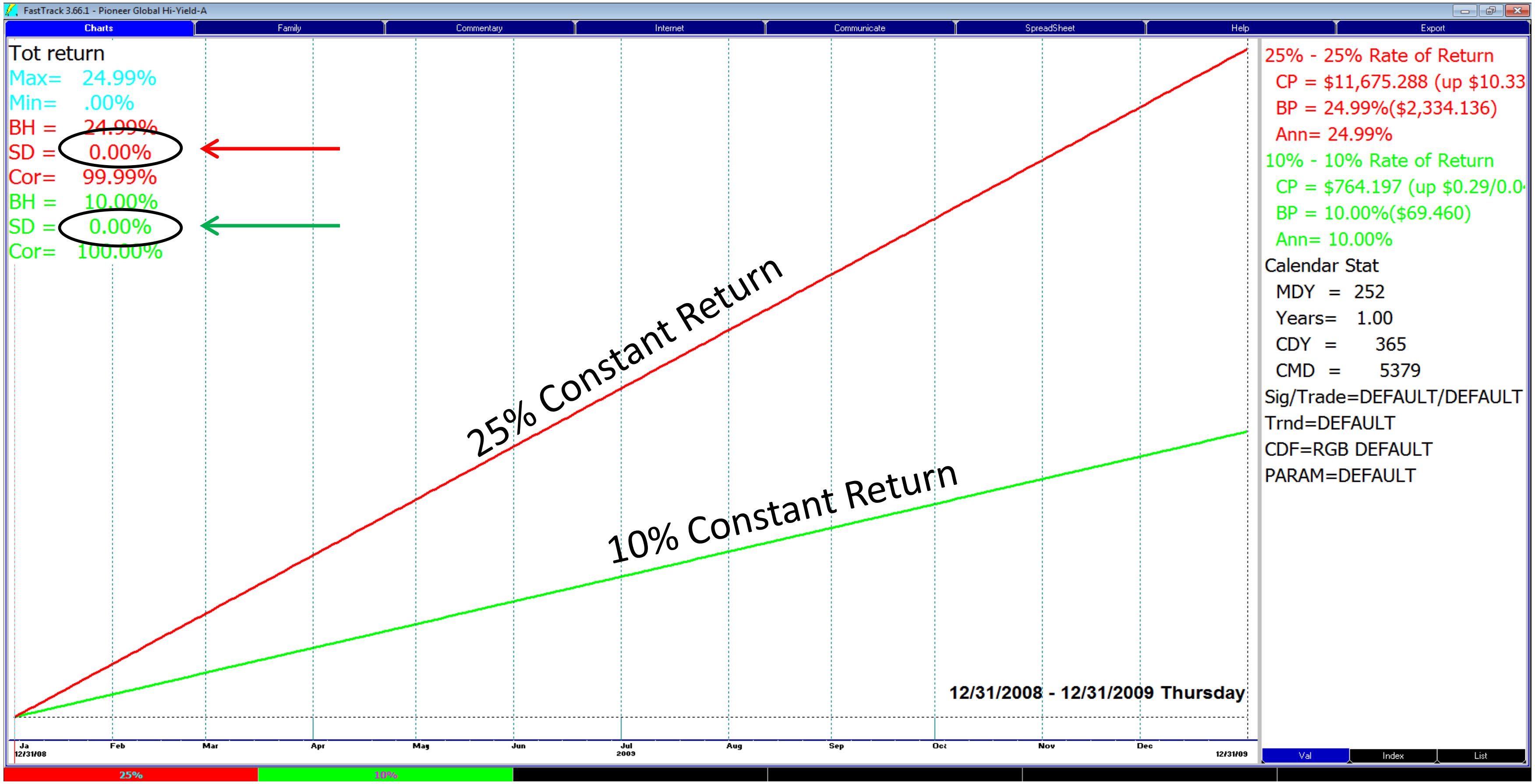
- Assumptions: Annual $50K withdrawal rate increased by 3% annually; investment gains are actual returns for SPY; withdrawals assumed taken out at the beginning of the year.
- Impact of large losses coupled with taking withdrawals can be devastating.

How Can We Measure Risk?

Standard Deviation

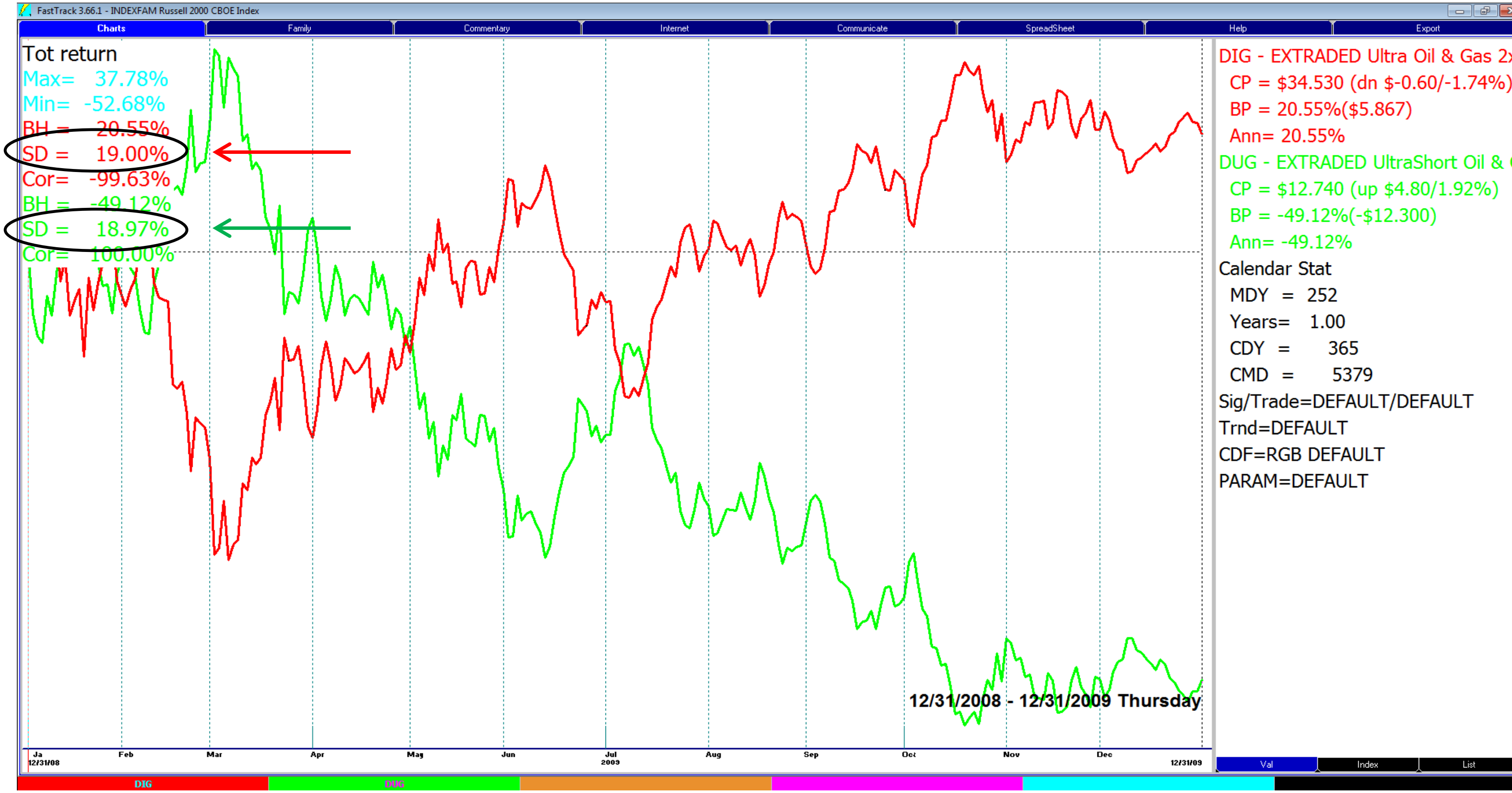
- Standard deviation is a measure of volatility; volatility implies risk.
- Assuming two investment choices that were expected to provide the same return but one has a fraction of the expected risk, which investment would you select?

Limitations of Standard Deviation



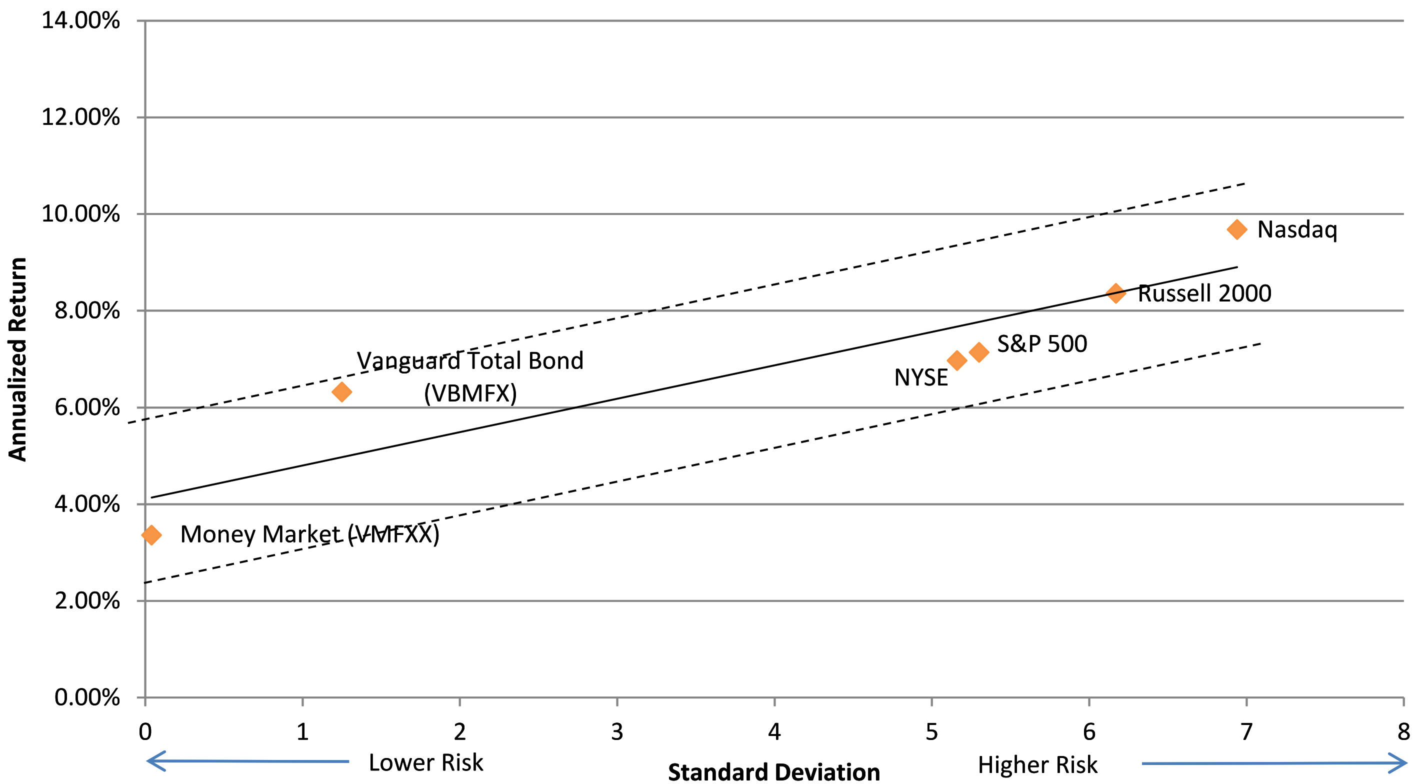
- A constant return line is shown as a straight line on a log chart.
- By definition, a constant return line has a standard deviation of 0%.
- Standard deviation does not account for the strength of a trend.

Limitations of Standard Deviation



- Standard deviation does not differentiate between upside and downside volatility.
- It is best to measure standard deviation in context of something else (i.e. return).

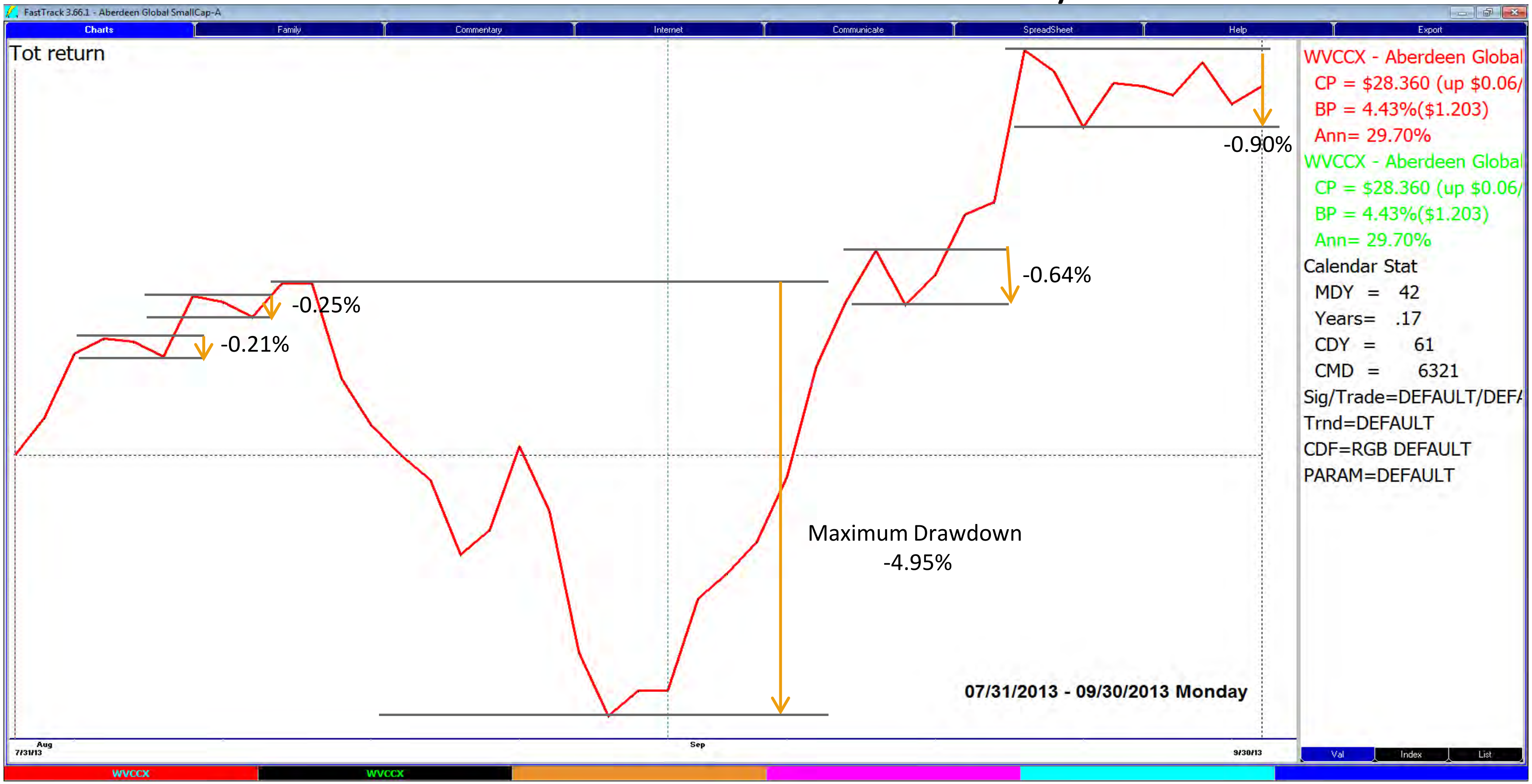
Risk vs. Reward
12/29/1989 – 12/31/2013



- Plotting standard deviation against annualized return provides investors the ability to visualize the trade-off between risk and return.
- Our goal as investors is to achieve returns outside the long-term, expected return channel.

Drawdown

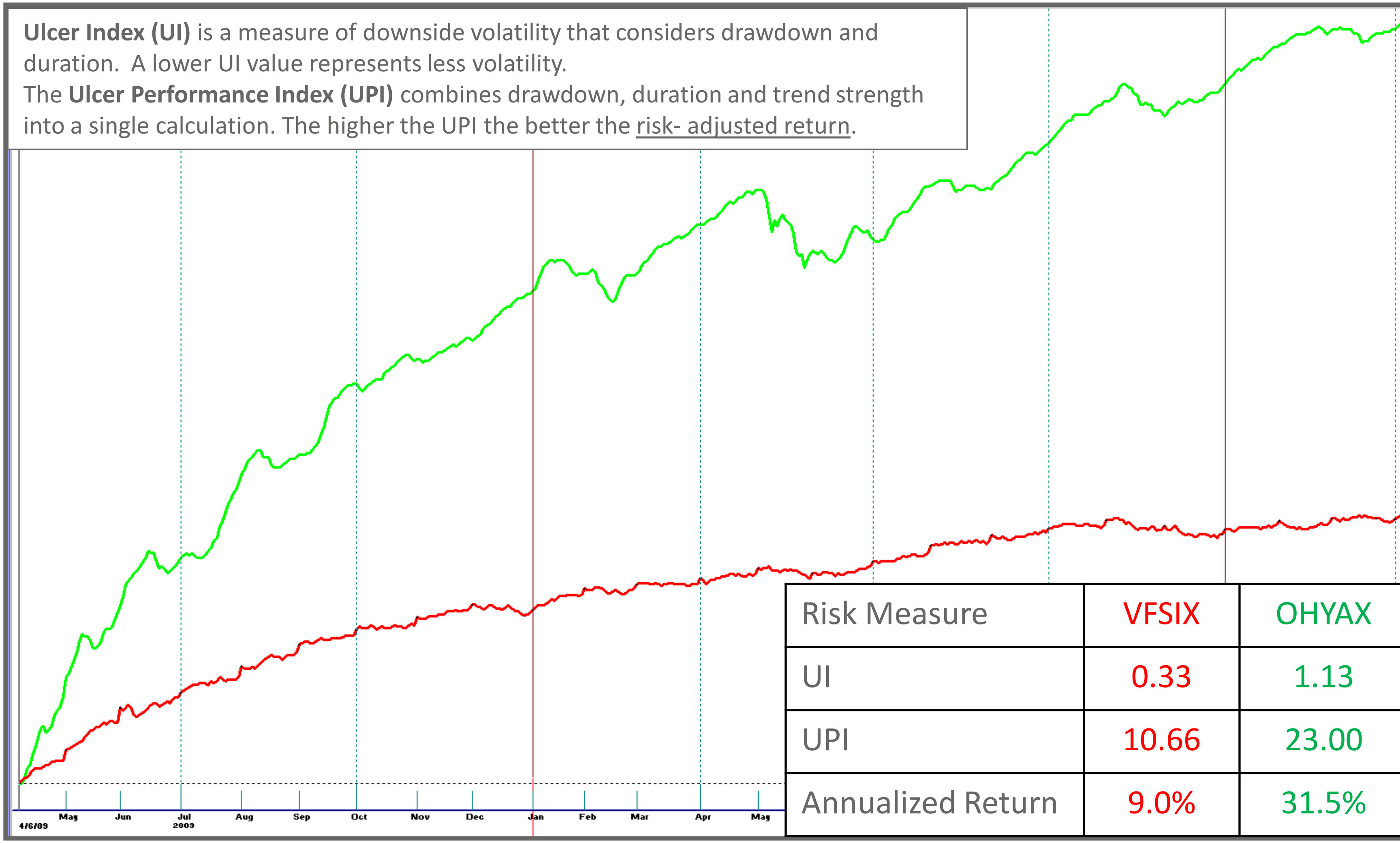
A Measure of Downside Volatility



- Most investors are concerned with downside volatility.
- Drawdown (or retracement) measures the % price decline from a peak to a trough. The maximum drawdown for WVCCX from 07/31/2013 – 09/30/2013 was 4.95%.
- Drawdown does not measure the duration of the decline.

Ulcer Index vs. Ulcer Performance Index

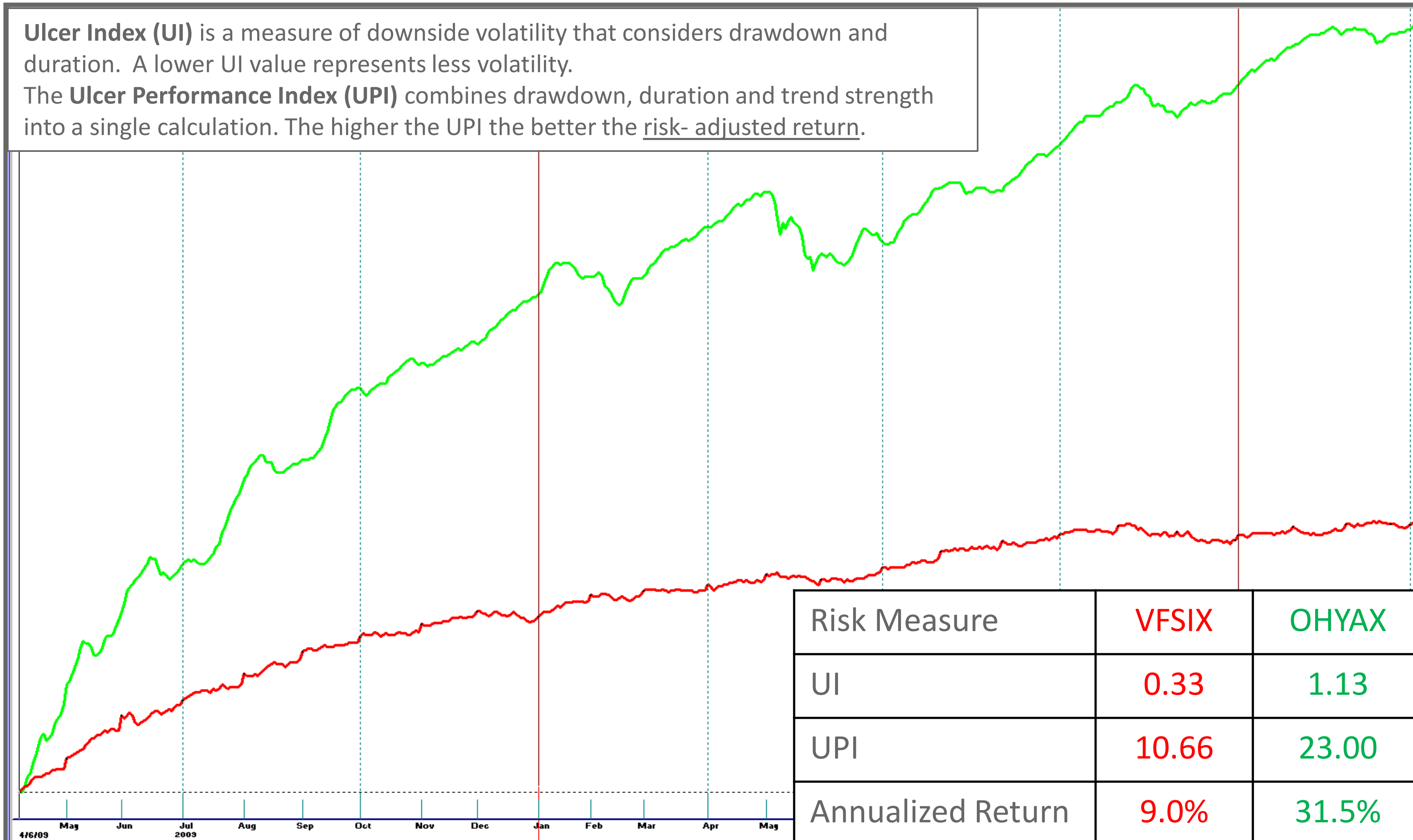
Ulcer Index (UI) is a measure of downside volatility that considers drawdown and duration. A lower UI value represents less volatility.
The **Ulcer Performance Index (UPI)** combines drawdown, duration and trend strength into a single calculation. The higher the UPI the better the risk- adjusted return.



Risk Measure	VFSIX	OHYAX
UI	0.33	1.13
UPI	10.66	23.00
Annualized Return	9.0%	31.5%

Ulcer Index vs. Ulcer Performance Index

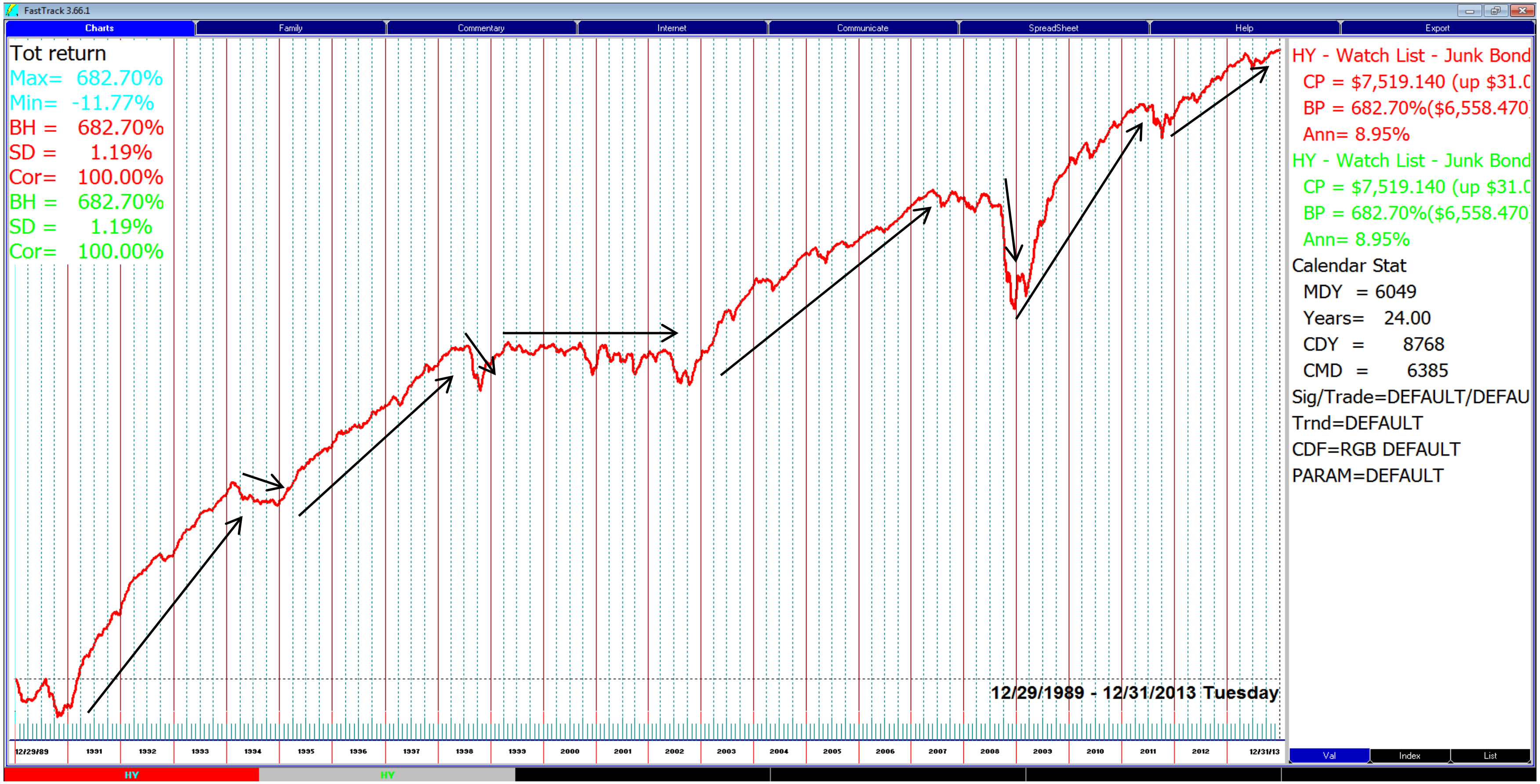
Ulcer Index (UI) is a measure of downside volatility that considers drawdown and duration. A lower UI value represents less volatility.
The **Ulcer Performance Index (UPI)** combines drawdown, duration and trend strength into a single calculation. The higher the UPI the better the risk- adjusted return.



Risk Measure	VFSIX	OHYAX
UI	0.33	1.13
UPI	10.66	23.00
Annualized Return	9.0%	31.5%

Junk Bonds

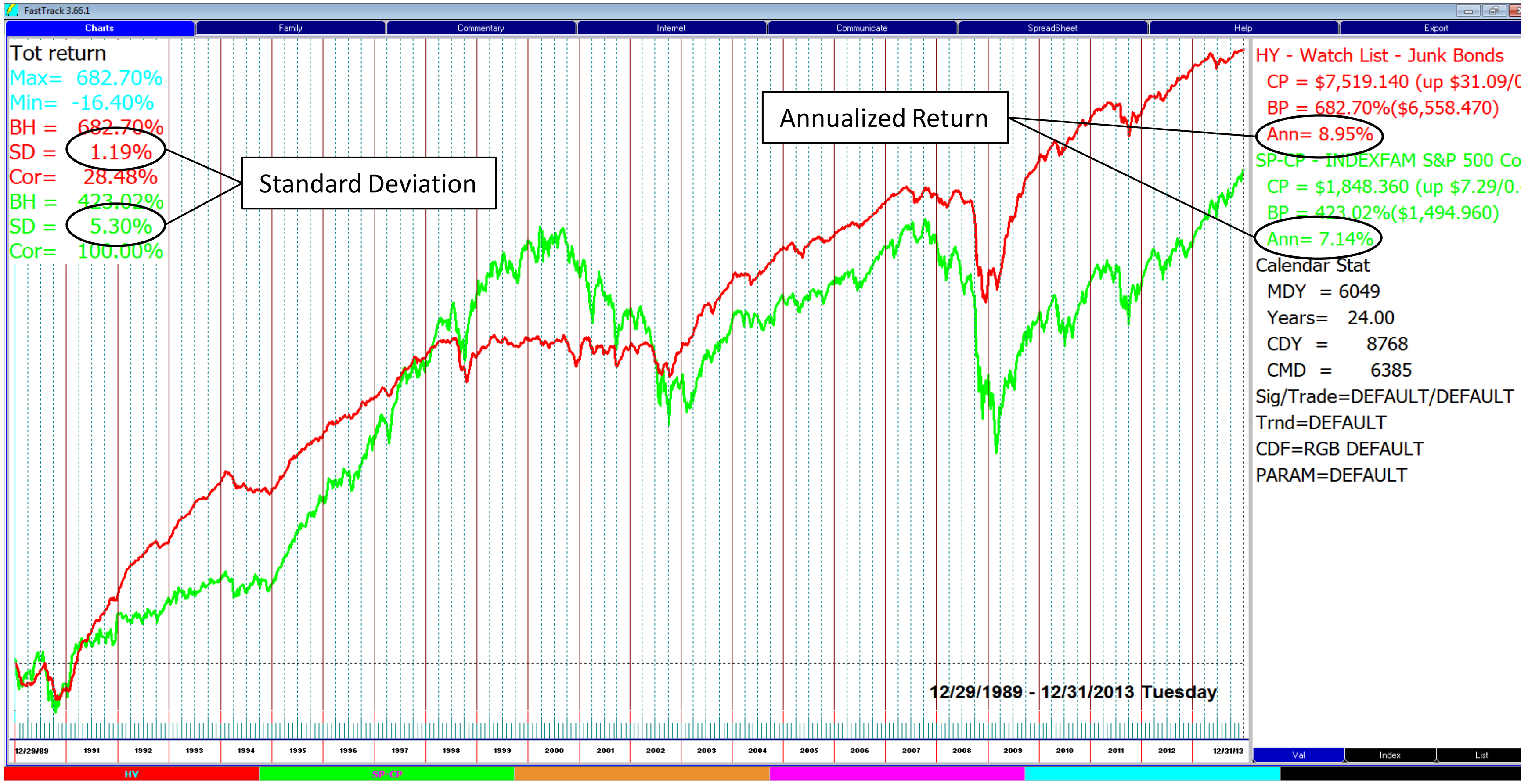
24 Years (1990 – 2013)



- Junk bonds have a high propensity to trend on low volatility in both up and down markets.
- Return of junk bond mutual funds is dependent on yield and price appreciation (or depreciation).

Junk Bonds

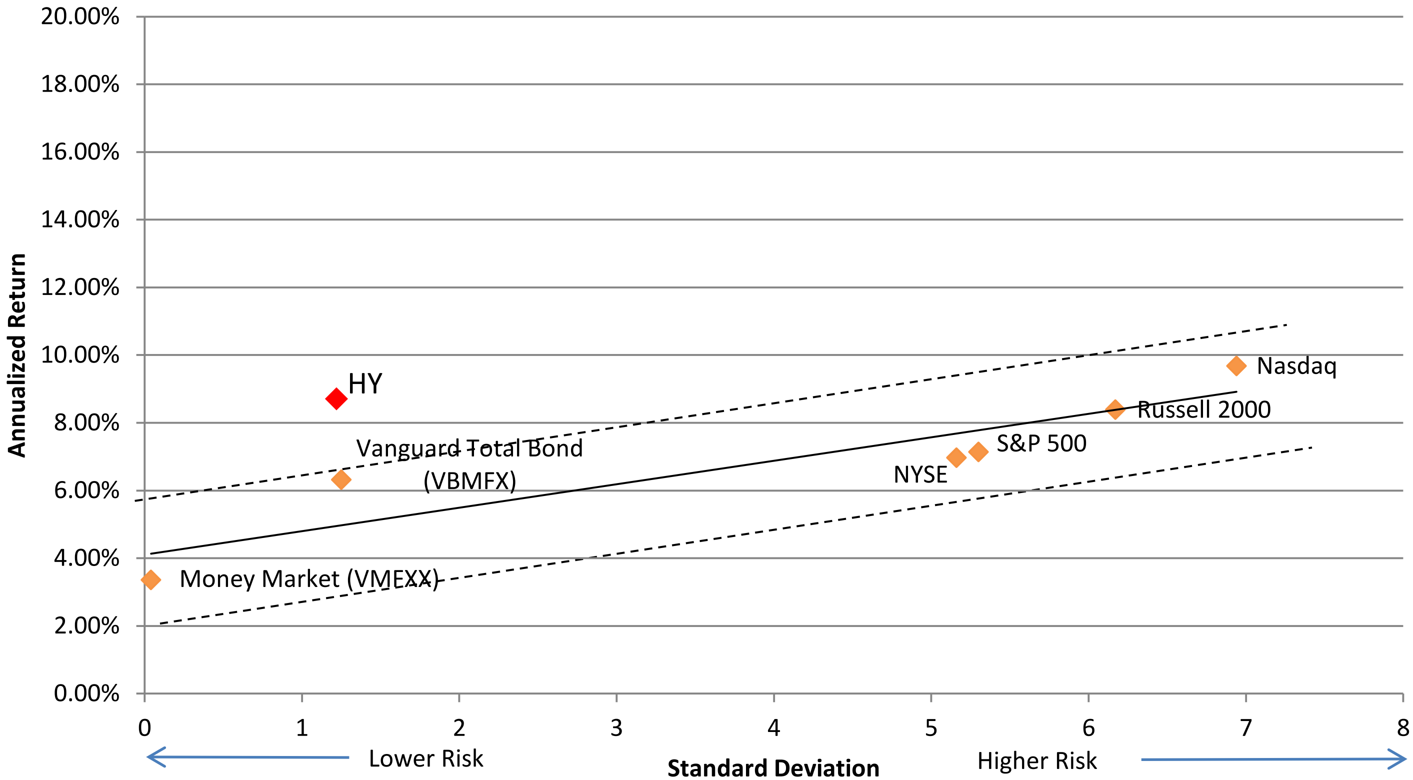
Lower Risk / Higher Returns



- Junk bonds <u>generally</u> follow the overall trend of the equity market, but on less volatility.
- A simple buy and hold strategy over the last 24 years would have provided better returns with a fraction of the volatility.

Junk Bonds

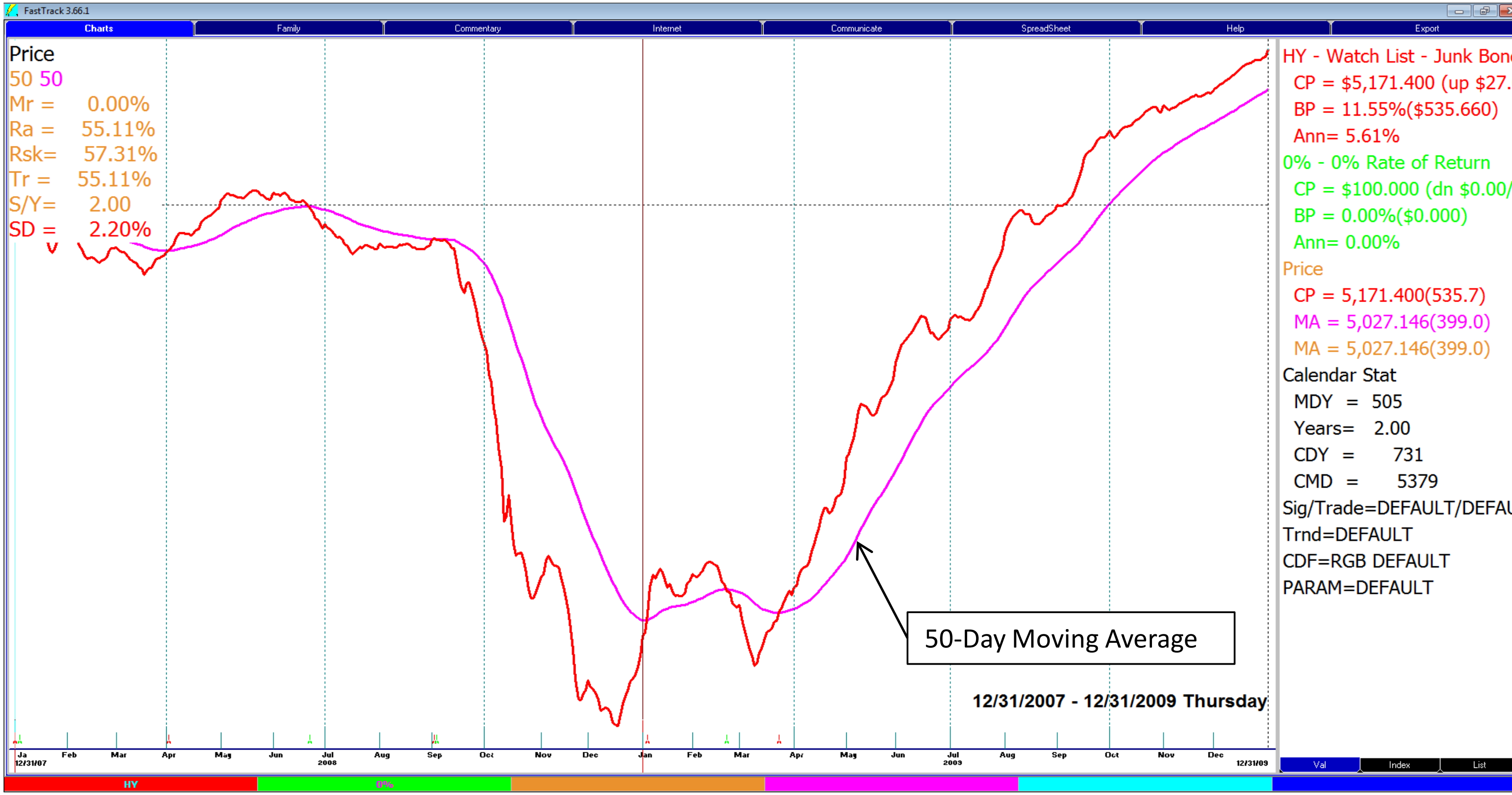
Risk vs. Reward (12/29/1989 – 12/31/2013)



- Owning junk bond mutual funds provides better risk-adjusted returns compared to many of the major market indices and provides investors a potential vehicle for moving outside the long-term expected return channel.
- Can we do better?

Timing Junk Bonds

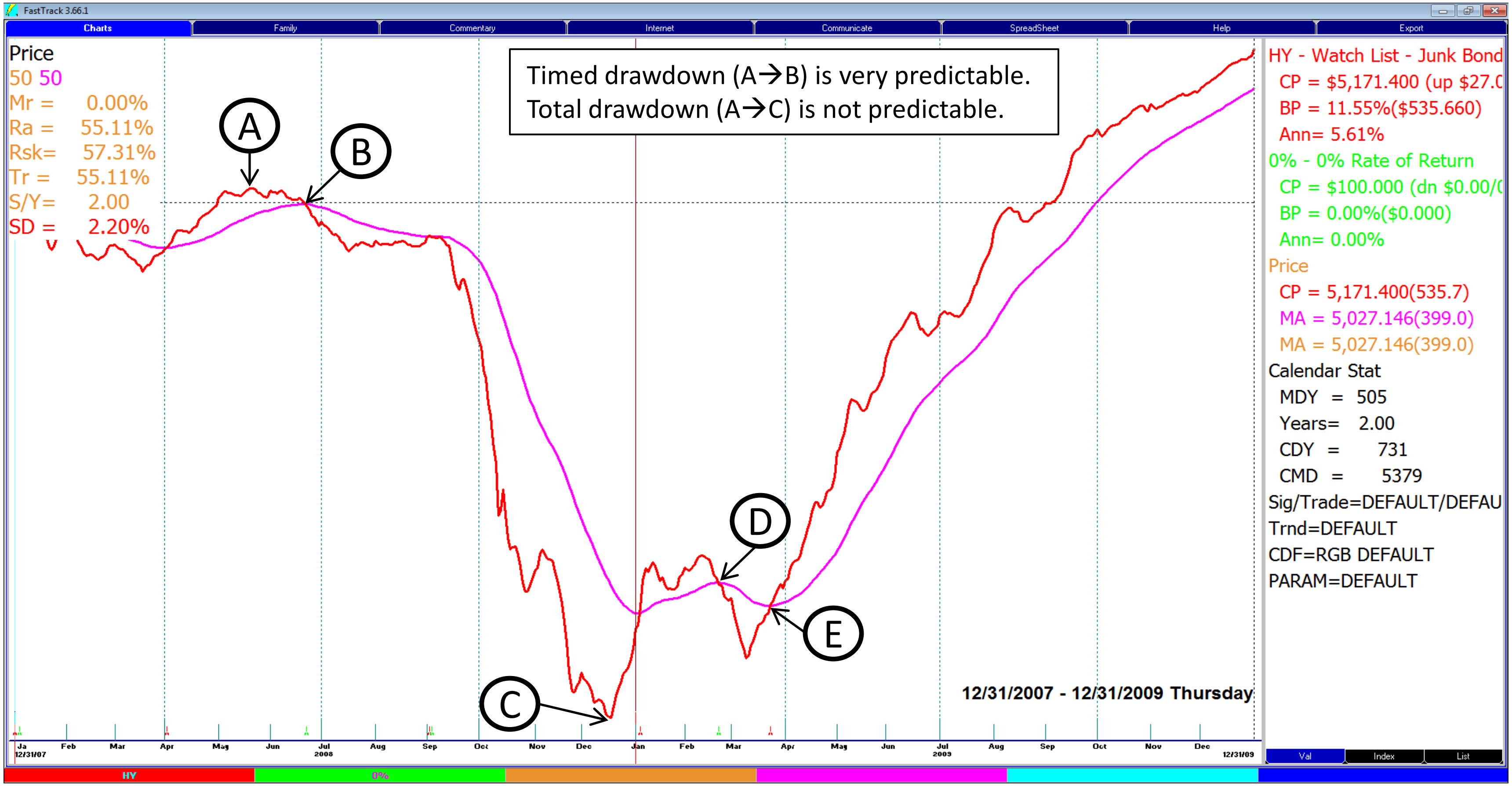
Moving Averages



- Moving averages provide a method for getting into and out of junk bond funds when the trend changes.
- Stay invested when trending above the moving average; move to cash when trending below the moving average.

Timing Junk Bonds

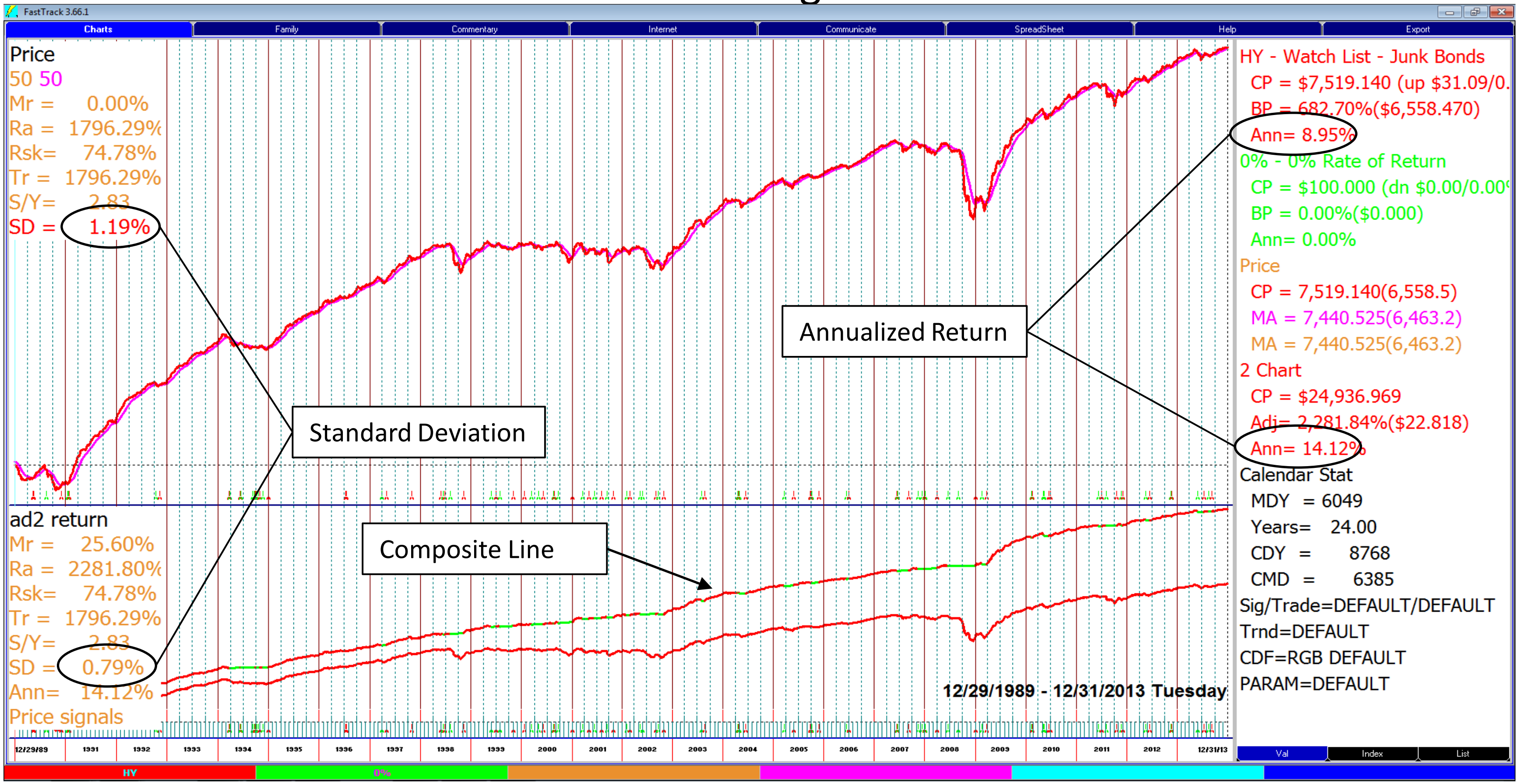
Moving Average Triggers



- Timed drawdown is the % decline from a peak to the point it crosses the moving average; total drawdown is the % decline from a peak to a trough prior to crossing above the moving average.
- Timed drawdown for HY (A → B) is 1.2%; a lot better than the total drawdown (A→C) of 31.4%.
- Timed drawdown for HY using a 50-day MA for the last 24 years is generally between 1%-3%.
- Whipsaws or unprofitable trades (i.e. D → E) are a cost of protecting capital.

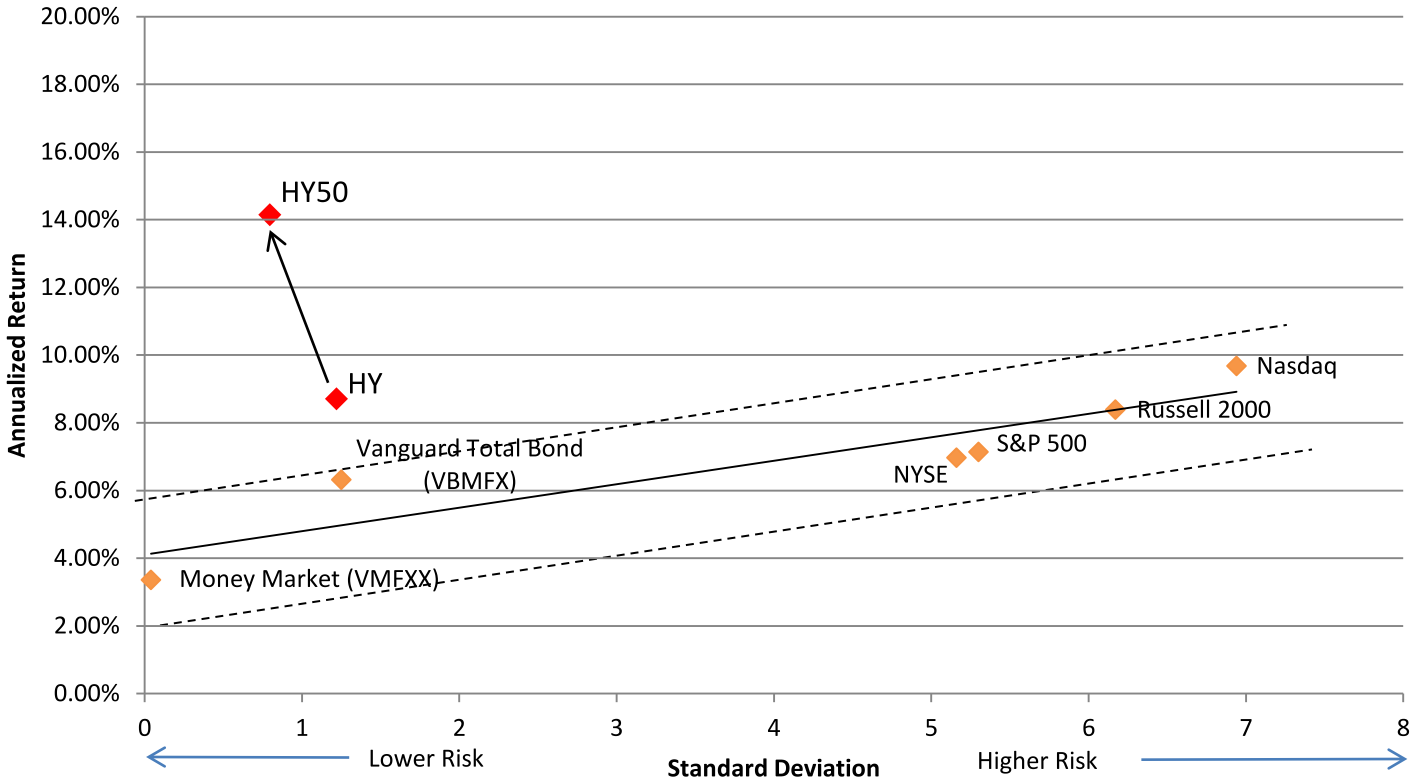
Timing Junk Bonds

Lower Risk and Higher Returns



- Using these timing concepts we can generate a line that represents a portfolio moving between the junk bond index and cash. We can call this composite line HY50.
- By using a moving average timing technique we can reduce risk (SD: 1.19% → 0.79%) and increase annualized return (8.95% → 12.12%).

Junk Bonds
Risk vs. Reward (12/29/1989 – 12/31/2013)

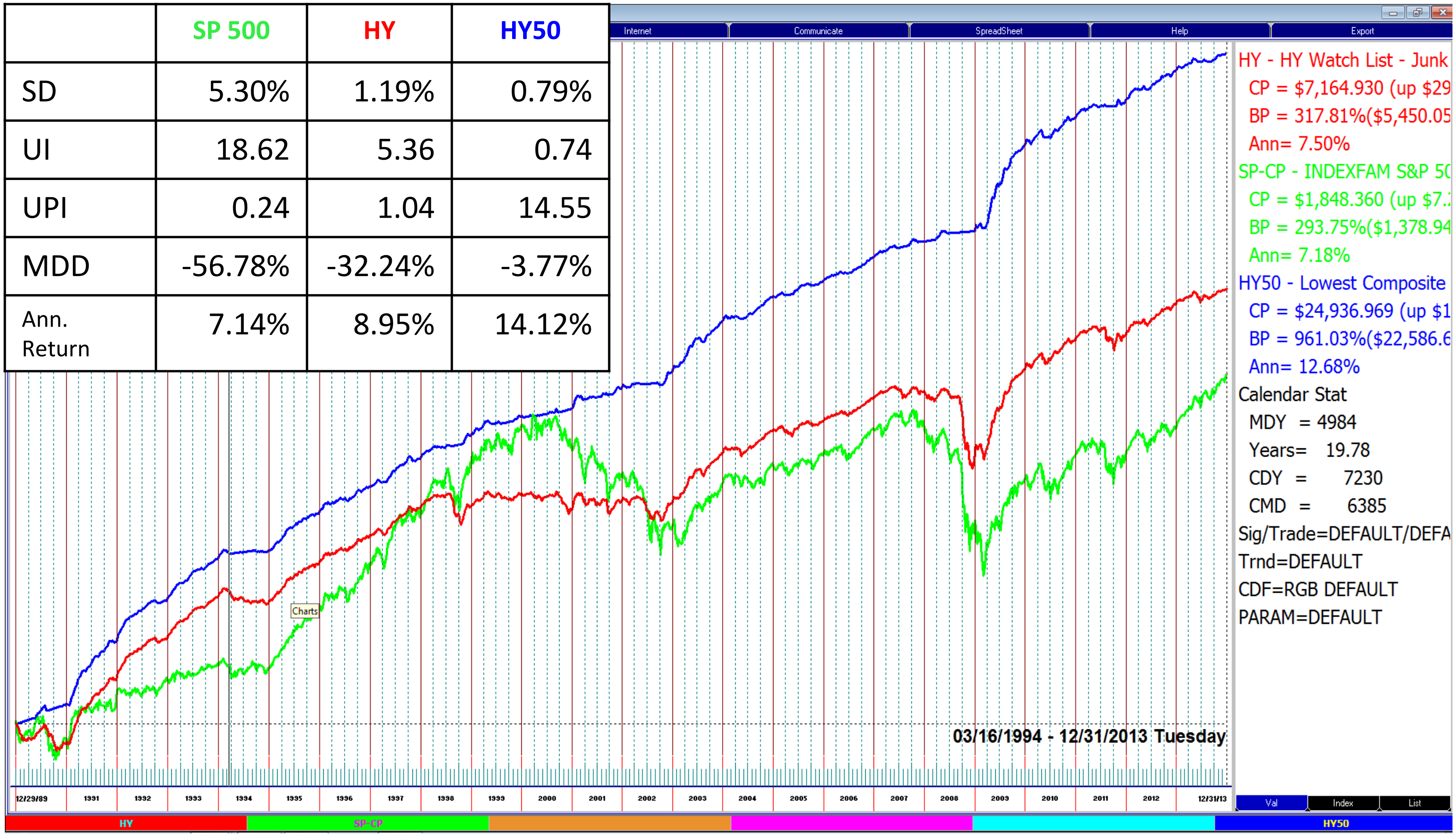


- Using a 50-day moving average to time entry into and exits from junk bond funds (HY50) produces better risk-adjusted returns. This technique is consistent with most investors' desire to strive for lower risk and higher returns.

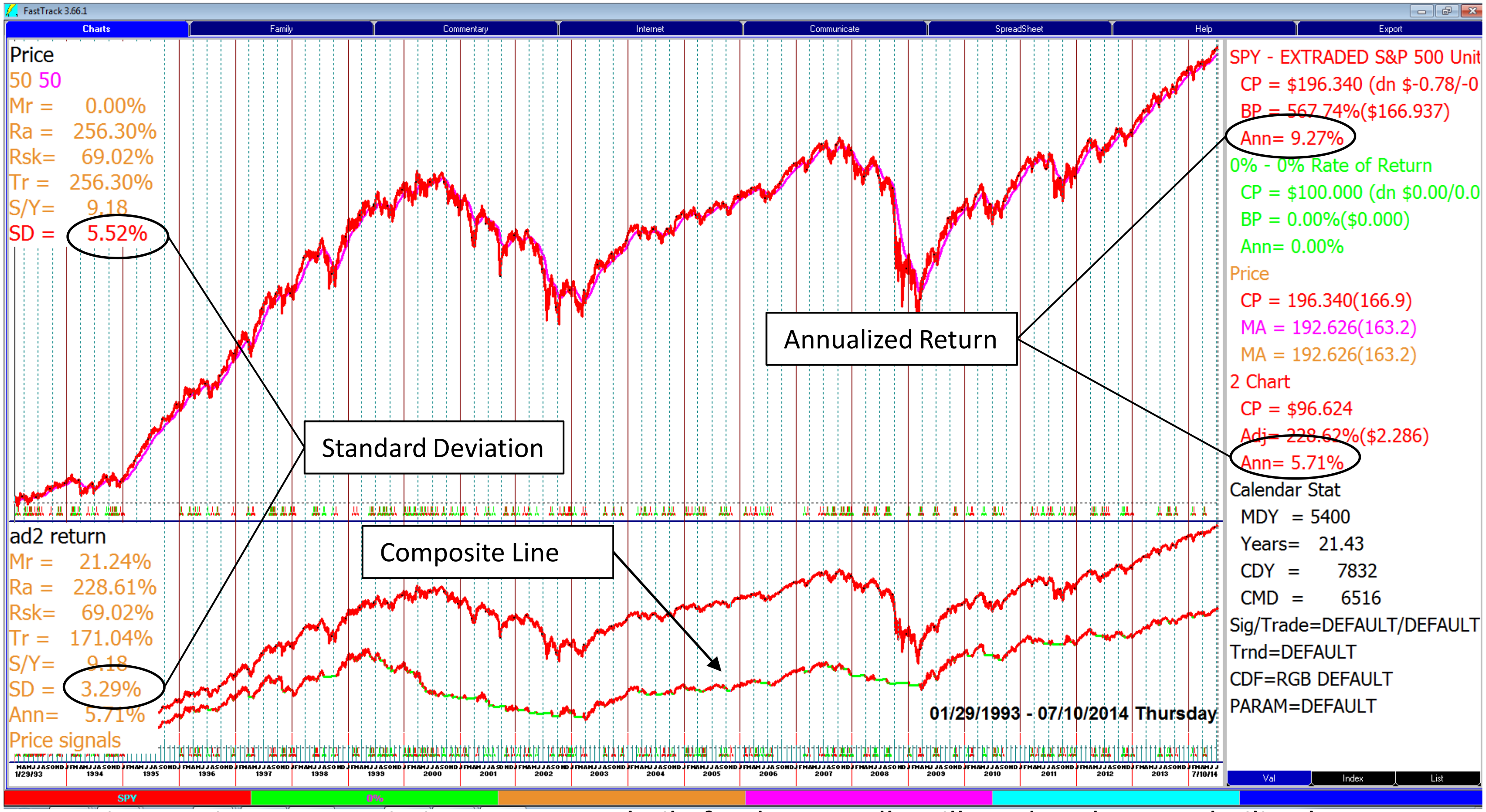
Timing Junk Bonds

Lower Risk and Higher Returns

	SP 500	HY	HY50
SD	5.30%	1.19%	0.79%
UI	18.62	5.36	0.74
UPI	0.24	1.04	14.55
MDD	-56.78%	-32.24%	-3.77%
Ann. Return	7.14%	8.95%	14.12%



Does Timing Work with Volatile Funds?



- Using moving average timing on more volatile funds generally will produce lower volatility, lower drawdowns and lower returns.
- Timing the SPY with a 50 day moving average reduced standard deviation from 5.52% → 3.29%; however, annualized return also dropped from 9.27% to 5.71%.

Hypothetical Scenario – Managed Risk Approach

Investing in High-Yield Timed with 50-day Moving Average

Year	Beginning Balance	Investment Gain (%)	Investment Gain ($)	Withdrawal	Ending Balance
1999	1,000,000	9.49%	90,155.00	50,000	1,040,155
2000	1,040,155	3.17%	31,340.36	51,500	1,019,995
2001	1,019,995	10.68%	103,270.30	53,045	1,070,221
2002	1,070,221	8.02%	81,449.86	54,636	1,097,034
2003	1,097,034	26.85%	279,443.72	56,275	1,320,202
2004	1,320,202	12.46%	157,274.95	57,964	1,419,514
2005	1,419,514	[illegible]	[illegible]	59,703	1,463,021
2006	1,463,021	11.99%	168,043.09	61,494	1,569,570
2007	1,569,570	7.48%	112,666.13	63,339	1,618,898
2008	1,618,898	4.81%	74,731.00	65,239	1,628,390
2009	1,628,390	51.05%	796,989.69	67,196	2,358,184
2010	2,358,184	13.84%	316,793.76	69,212	2,605,766
2011	2,605,766	7.88%	199,716.87	71,288	2,734,195
2012	2,734,195	15.42%	410,290.45	73,427	3,071,059
2013	3,071,059	8.32%	249,219.71	75,629	3,244,649

224% Increase in Value

- Assumptions: Annual $50K withdrawal rate increased by 3% annually; investment gains are actual returns for HY50 hypothetical model; withdrawals assumed taken out at the beginning of the year.
- Avoiding major declines is critical to successful investing.

Summary

- Set mental stops on all holdings. Managing volatility and downside risk will increase returns over the long term. Don't put your portfolio on auto-pilot.
- When the market turns down seek other low volatility trends or move to cash.
  a) If the downturn turns out to be a bear market, your capital is protected.
  b) If the downturn turns out to be short-term, reinvest when low volatility funds turn back up.
- In addition to junk bonds, look at real estate funds, small and micro-cap funds, preferred securities and strategic income funds that all tend to trend on low volatility.
- Mutual funds tend to be lower volatility investment options than exchange-traded funds, however mutual funds have more trading restrictions.
- If you have cash on the sidelines, start slowly. Sell when your stops are triggered.

Please Return Feedback Form

Presentation will be available at
www.rgbcapitalgroup.com/aaii-sd

RGB Capital Group Perspectives

Semi-monthly newsletter

Free

Fund and Market Analysis Course

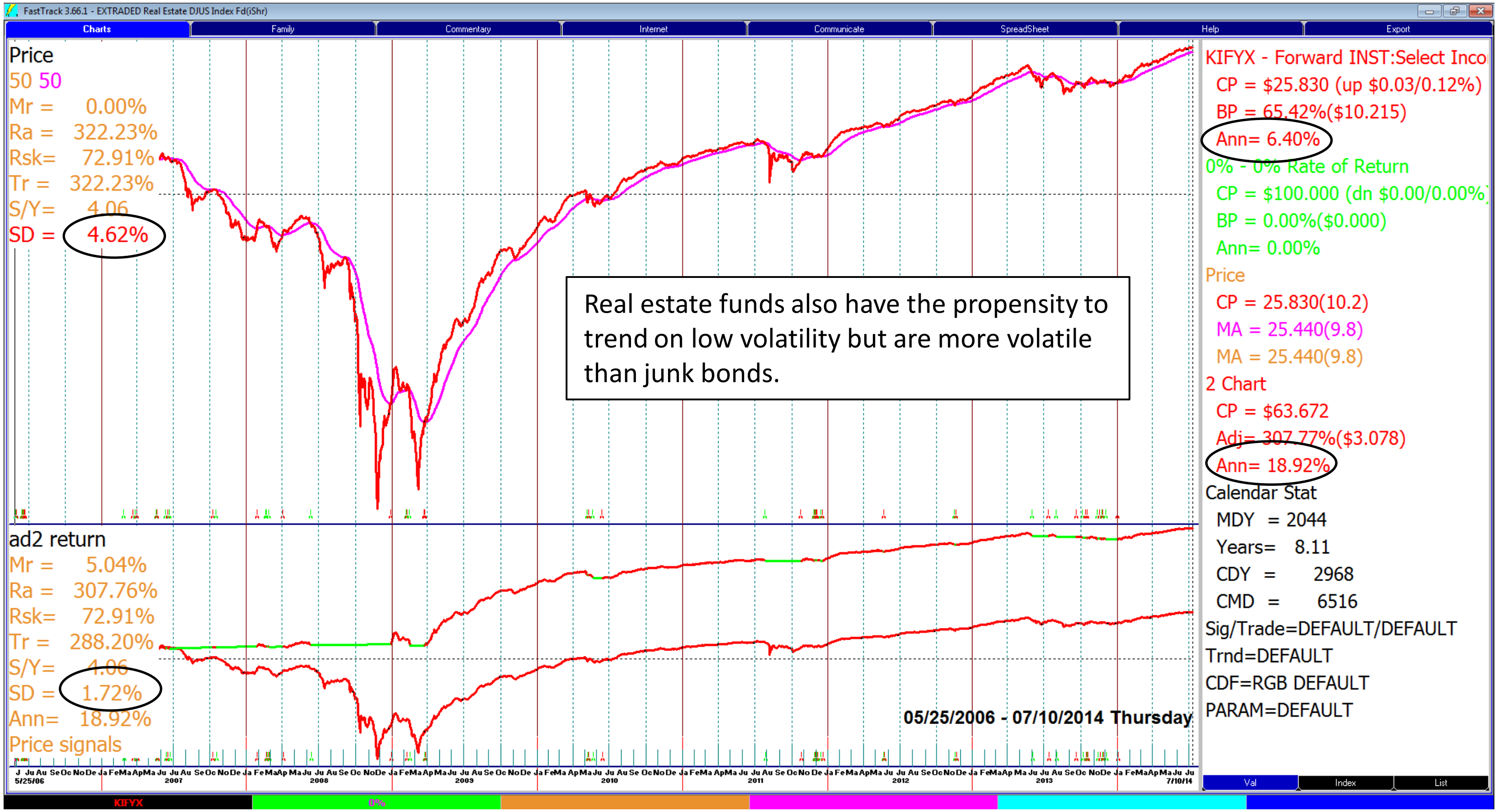
August 23 - 24, 2014

9am – 5 pm

Cost: TBD

Real Estate Funds

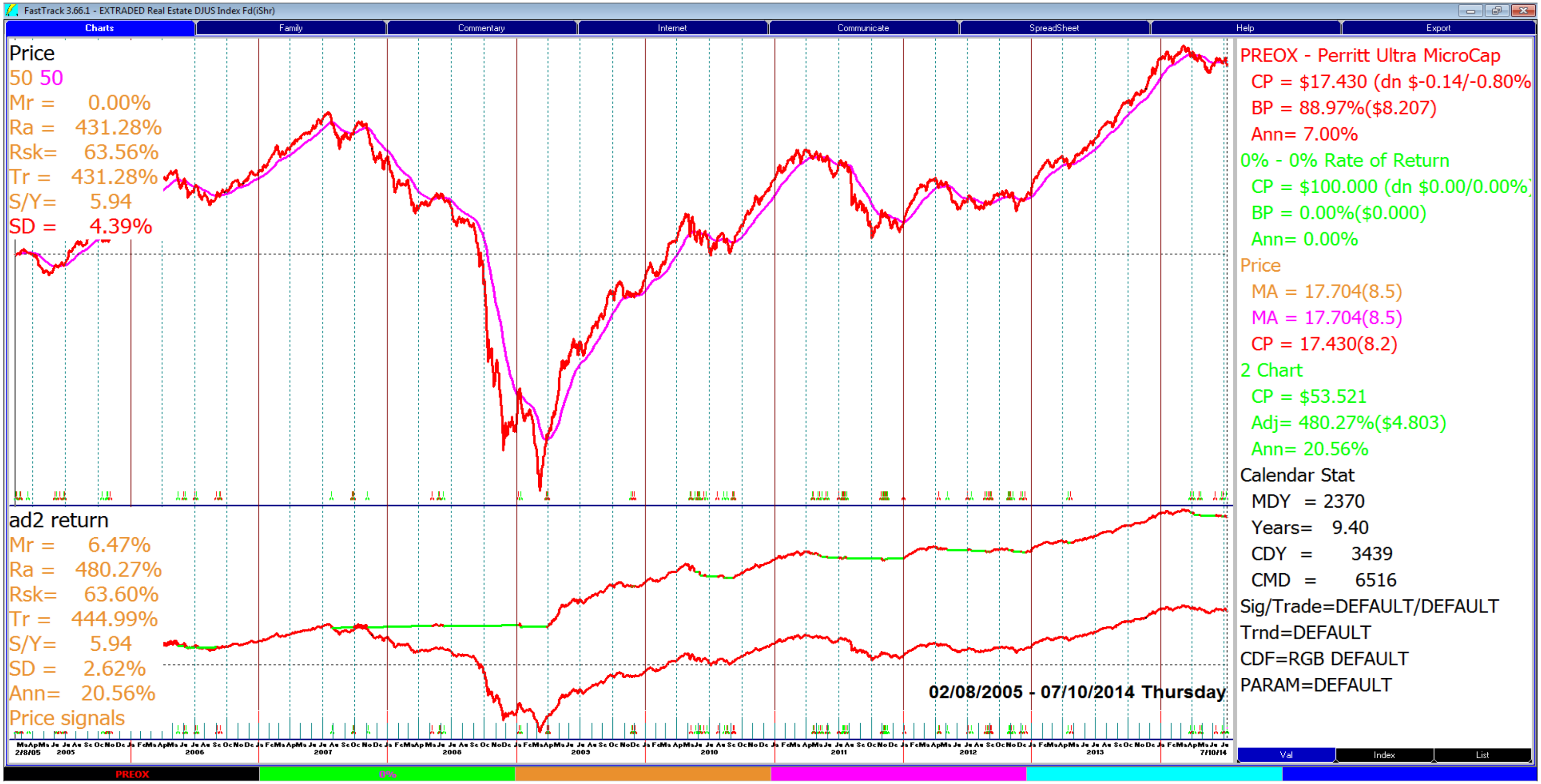
KIFYX (5/25/2006 – 7/10/2014)



- Some real estate funds tend to have high day-to-day serial correlation and therefore are a potential candidate for moving average timing.
- Trading KIFYX based on a 50-day moving average resulted in better risk-adjusted returns then a simple buy-and-hold approach (return increased from 6.40% to 18.92% annually; standard deviation dropped from 4.62 to 1.72).

Small and Microcap Funds

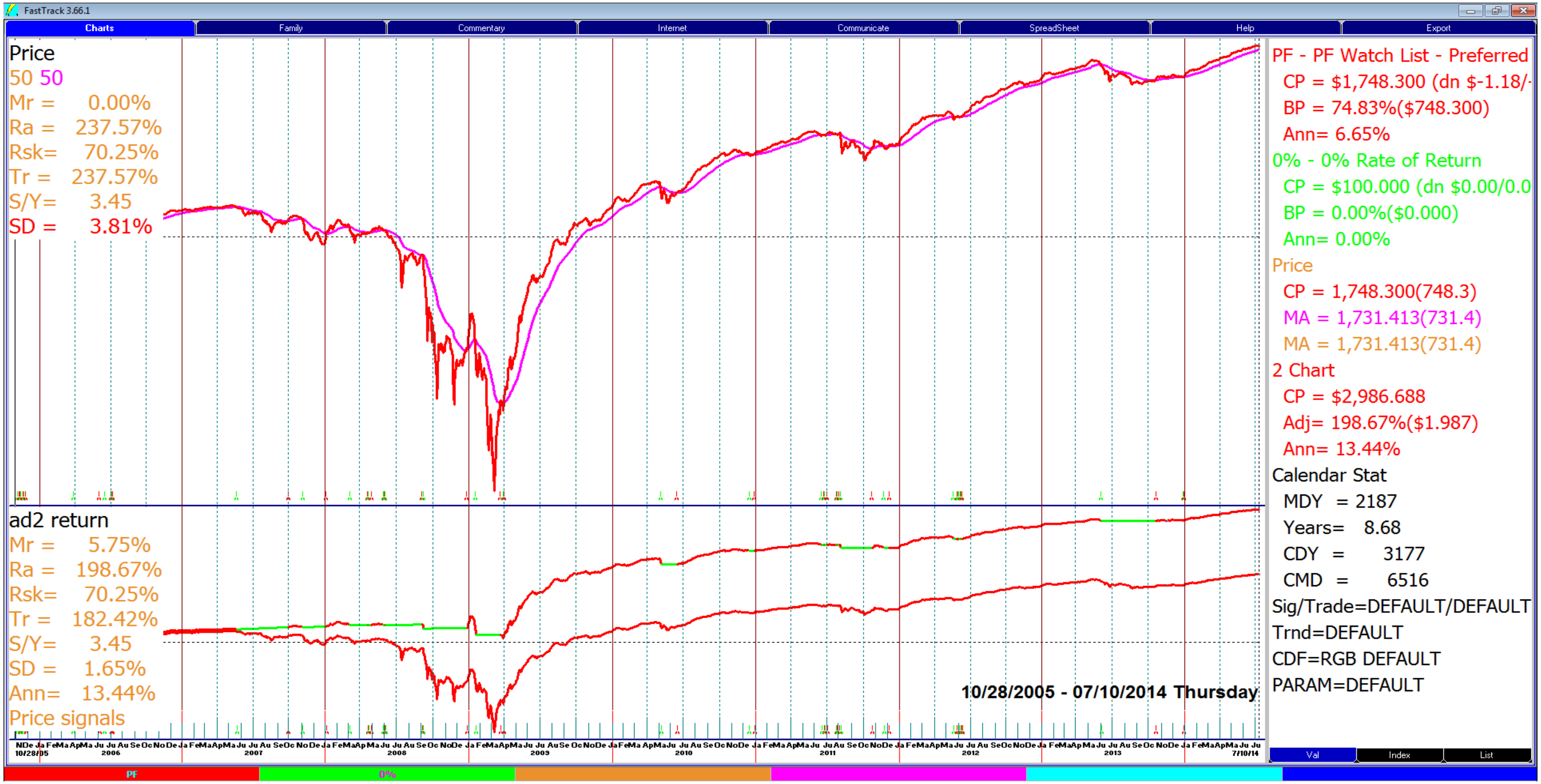
PREOX (2/8/2005 – 7/10/2014)



- Small and microcap funds can exhibit low volatility trends at certain times.
- Be ware of trend reversals. Steep drawdowns can occur without much warning. The drawdown between 2007 and 2009 was over 72%.

Preferred Securities

Preferred Securities Index (10/28/2005 – 7/10/2014)



- Preferred securities have characteristics of both stocks (price appreciation) and bonds (fixed dividends). The preferred status over common stocks provides for much less volatility.