Seeking Reasonable Returns While Reducing Risk: A Practical Approach for Conservative Investors

Silicon Valley Chapter – AAII

Presented by Rob Bernstein, President, RGB Capital Group LLC

October 19, 2019

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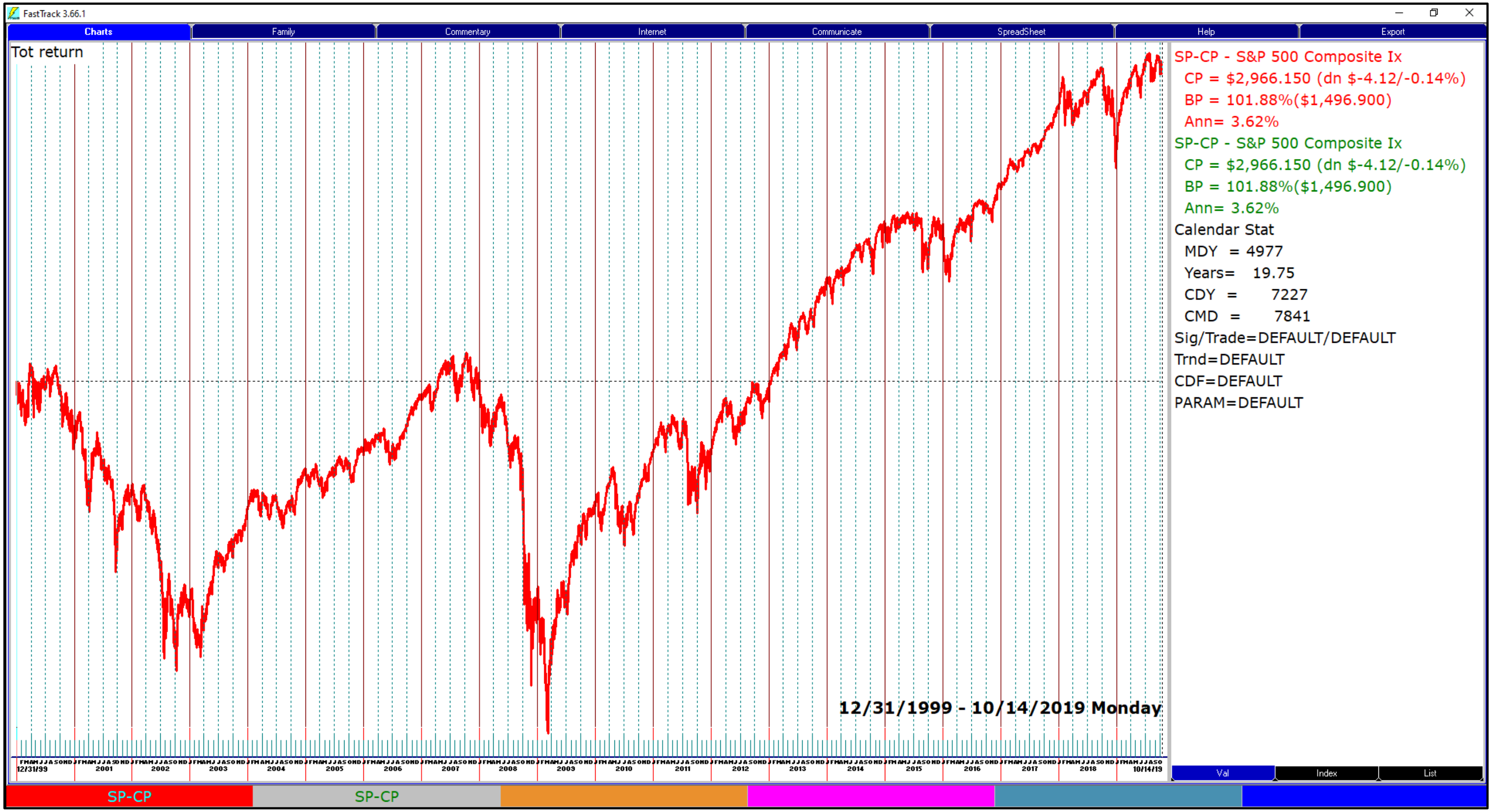
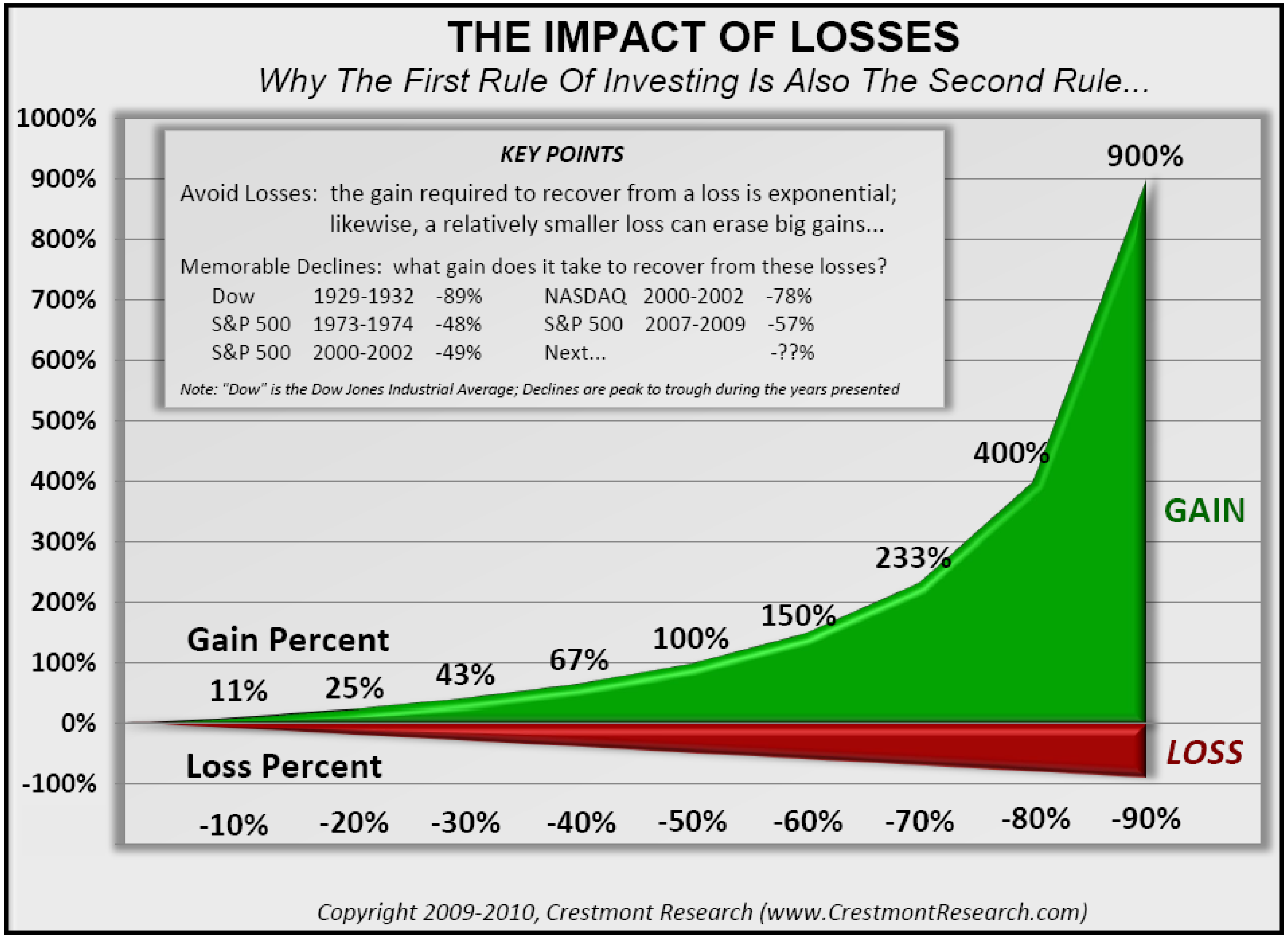
S&P 500 (19+ Years)



“If you fail to plan, you are planning to fail.”

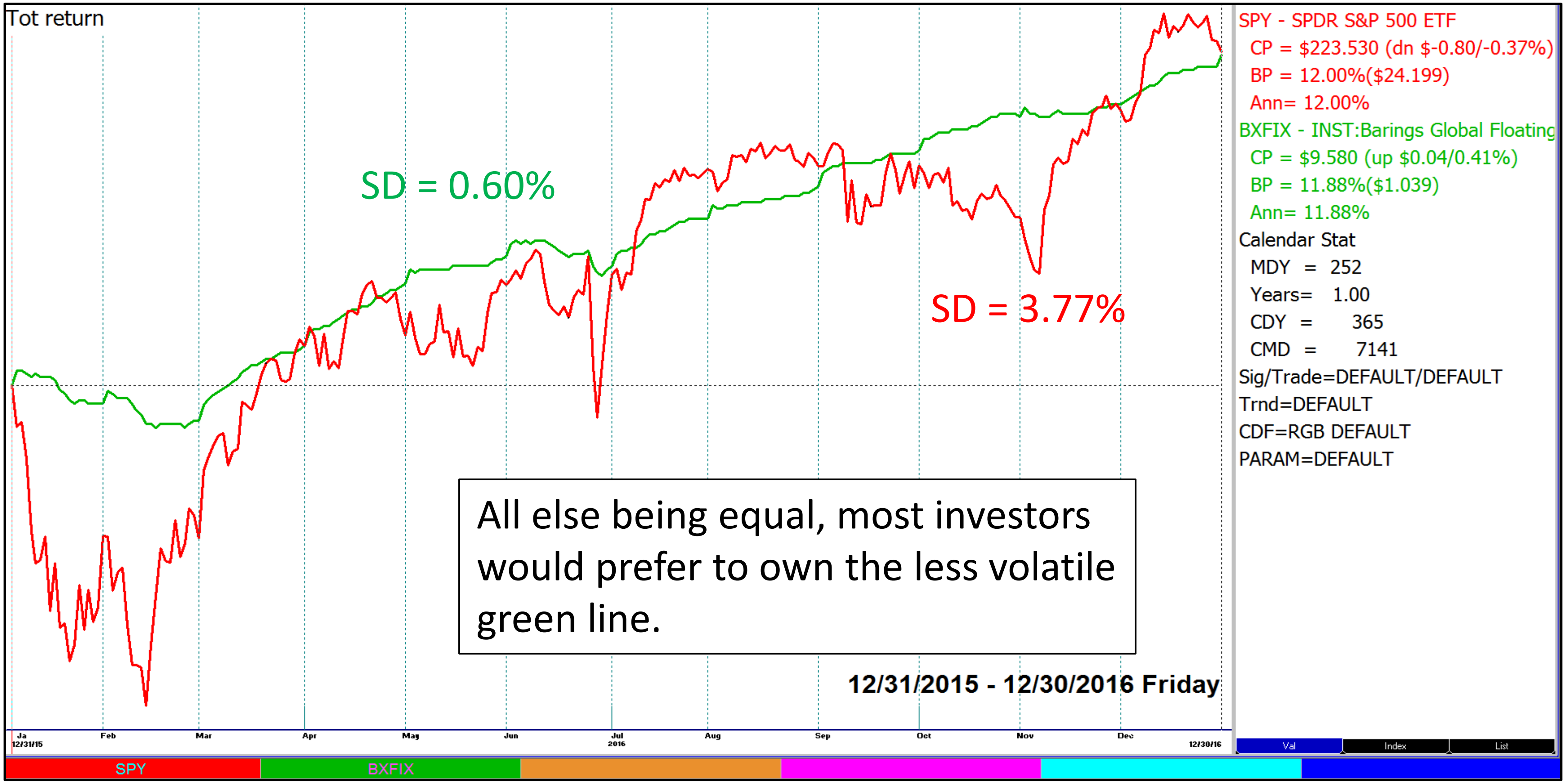
- Benjamin Franklin

What is Risk?



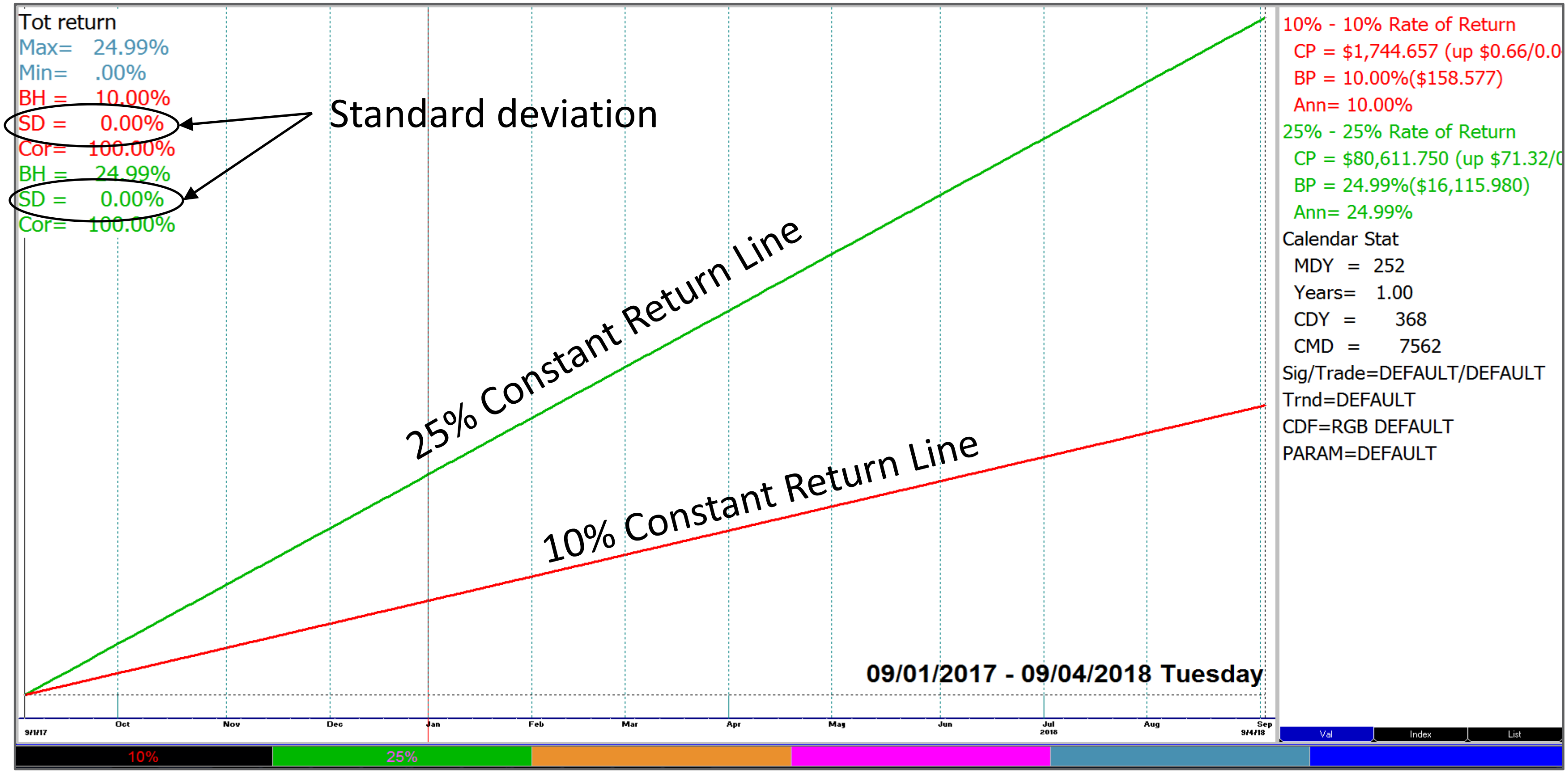
The exponential impact of portfolio losses has a direct impact on the ability to create wealth.

What is Risk?



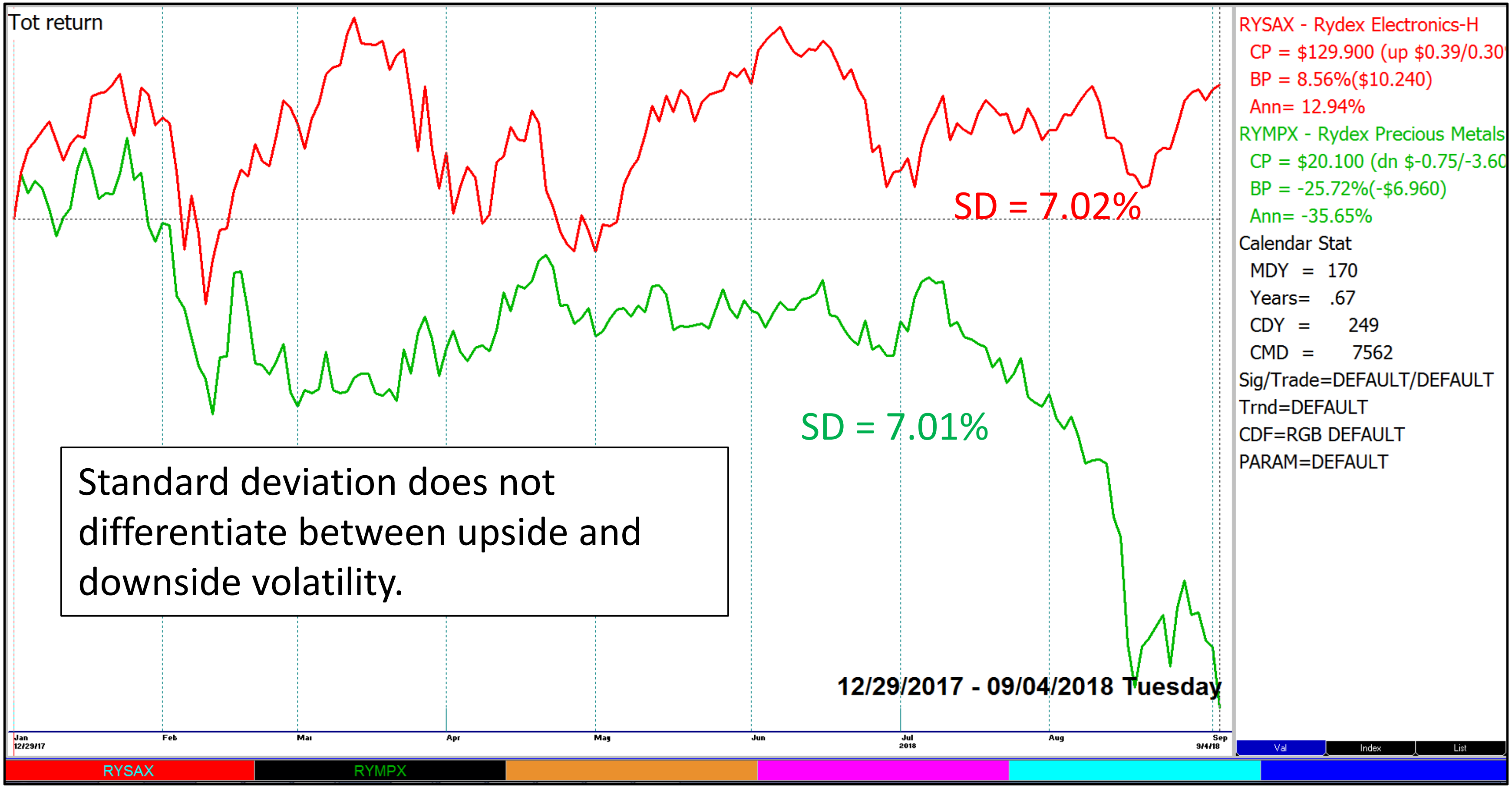
- Assuming two investment choices that were expected to provide the same return but one has a fraction of the expected risk, which investment would you select?
- Standard deviation (SD) is a common measure of volatility; volatility implies risk.

Limitations of Standard Deviation



- By definition, the standard deviation of a straight line is zero.
- Therefore, standard deviation does not provide clues to the strength of return.

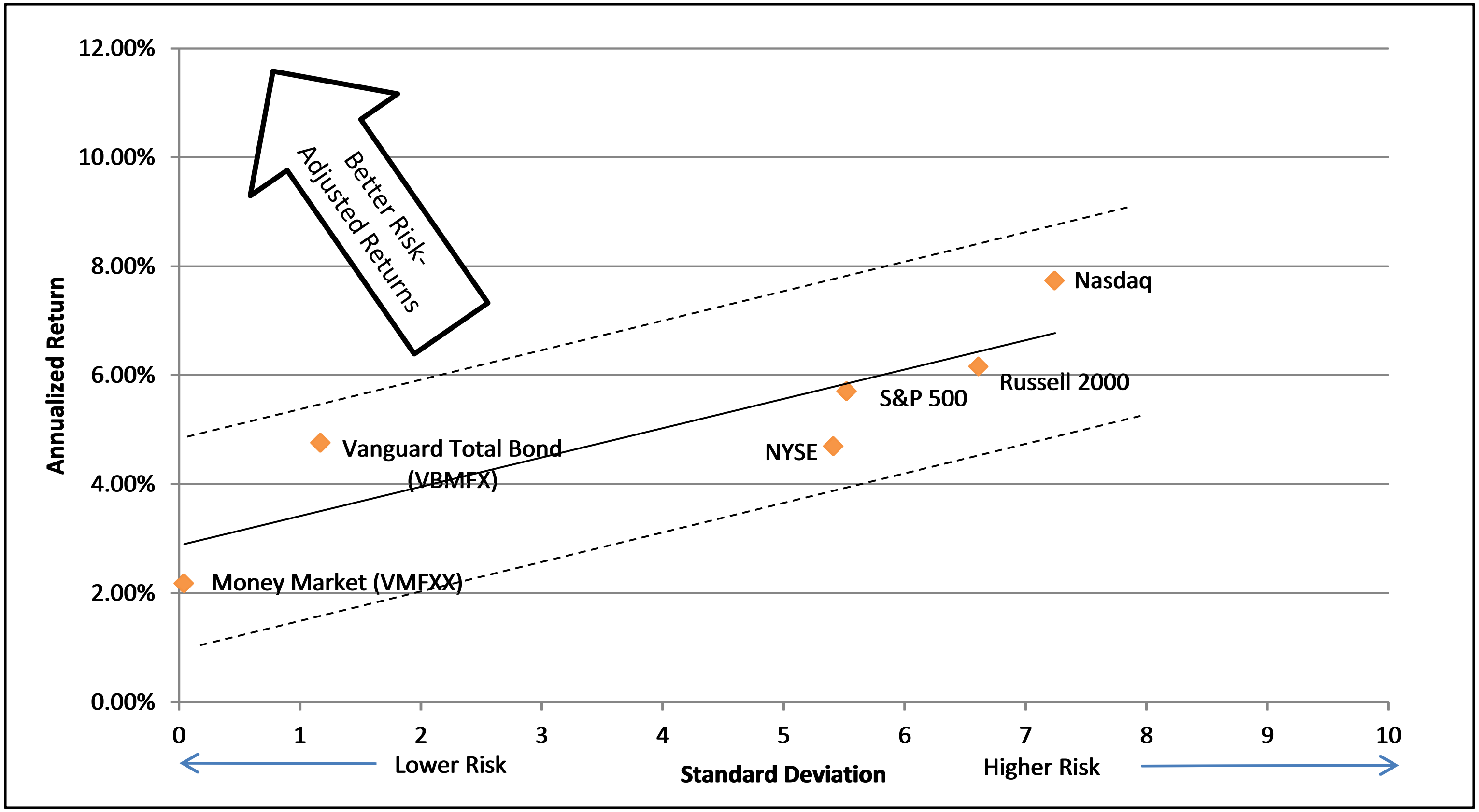
Limitations of Standard Deviation



Standard deviation does not differentiate between upside and downside volatility.

Risk vs. Reward

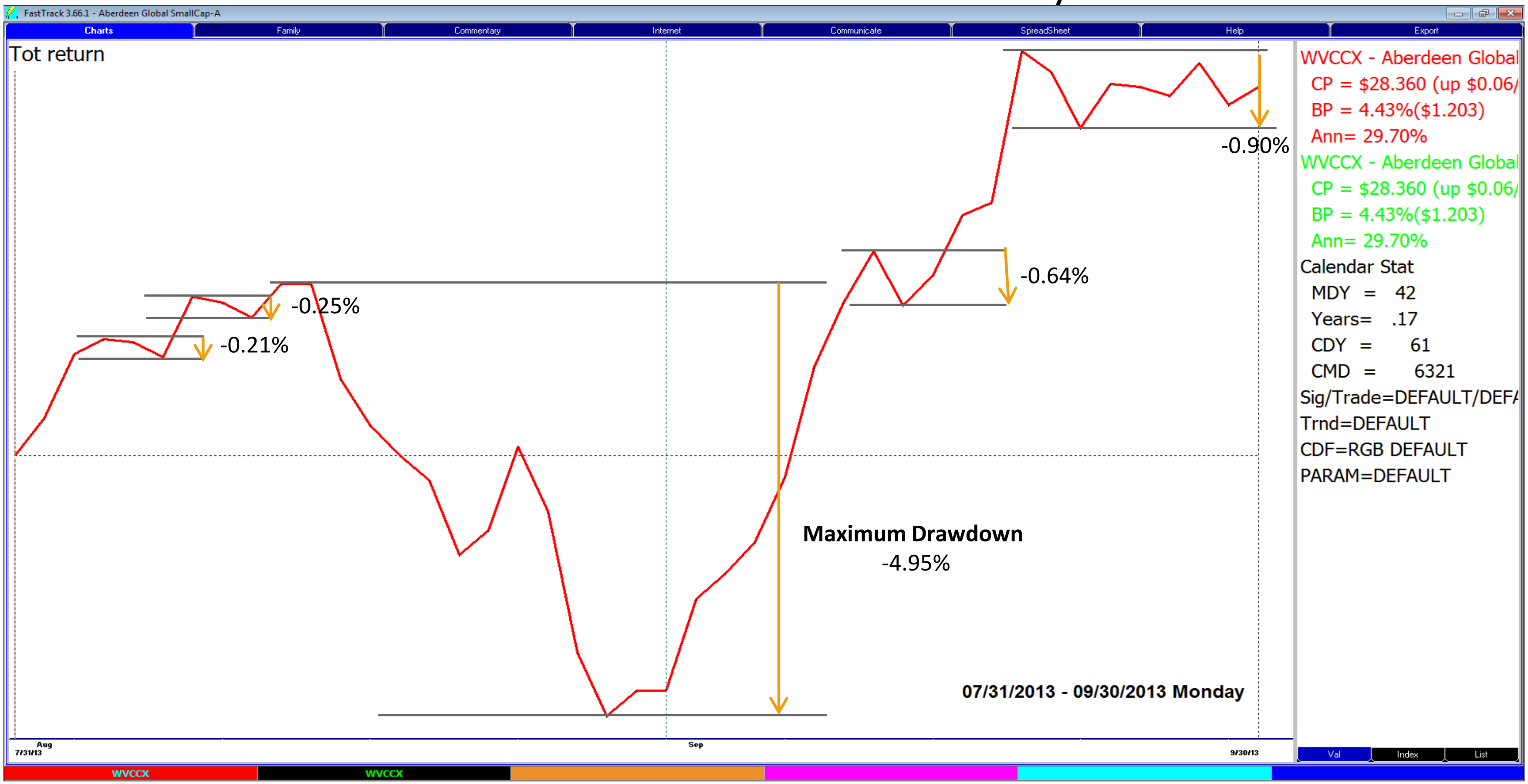
12/31/1996 – 12/31/2018



Our goal as investors is to achieve returns outside the long-term, expected return channel by striving for better risk-adjusted returns (i.e. upper left-hand quadrant).

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 and Ulcer Performance Index

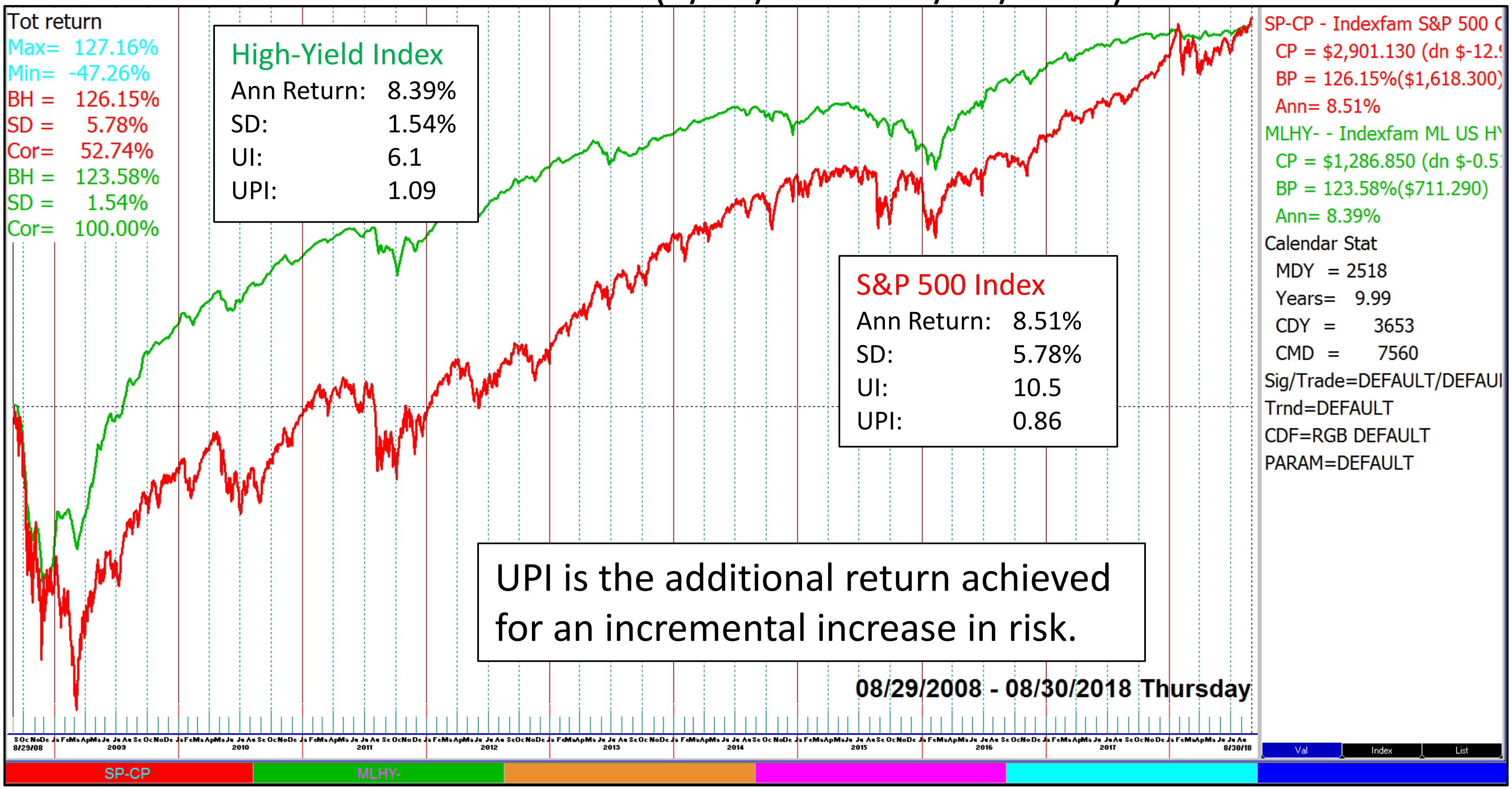
Ulcer Index (UI) is a downside volatility metric that incorporates depth and duration of drawdowns. Lower values represent less volatile investments.

Ulcer Performance Index (UPI) is a measure of trend strength that uses downside volatility. Higher values represent better risk-adjusted returns.

For a detailed handout on how to calculate the Ulcer Index and Ulcer Performance Index please visit: www.rgbcapitalgroup.com/resources and select the UI-UPI Guide.

Understanding UI and UPI

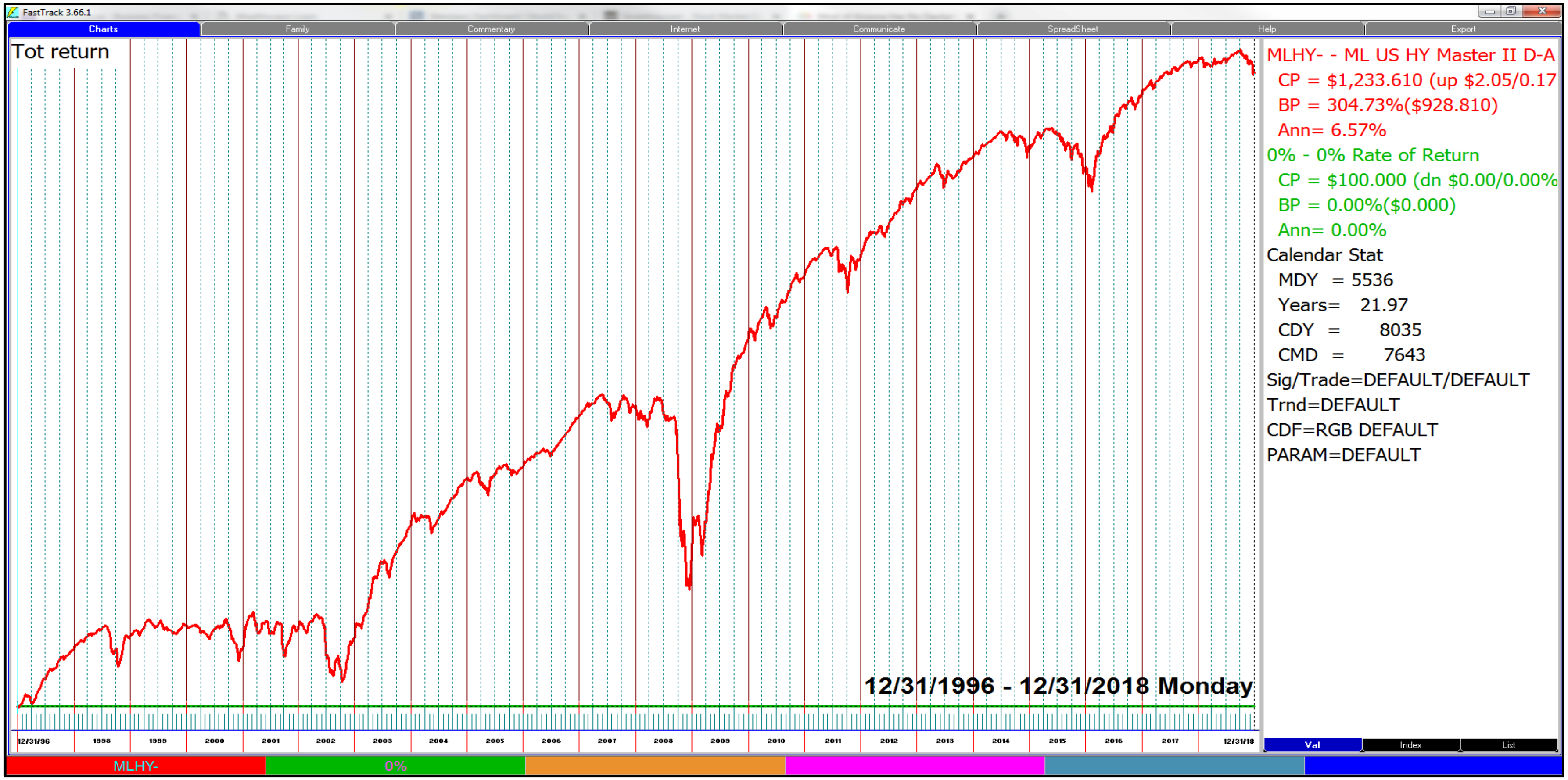
10-Year Chart (8/29/2008 – 8/30/2018)



High-Yield (Junk) Bonds
The Epitome of a Low Volatility Asset Class

Merrill Lynch US High-Yield Master II Index

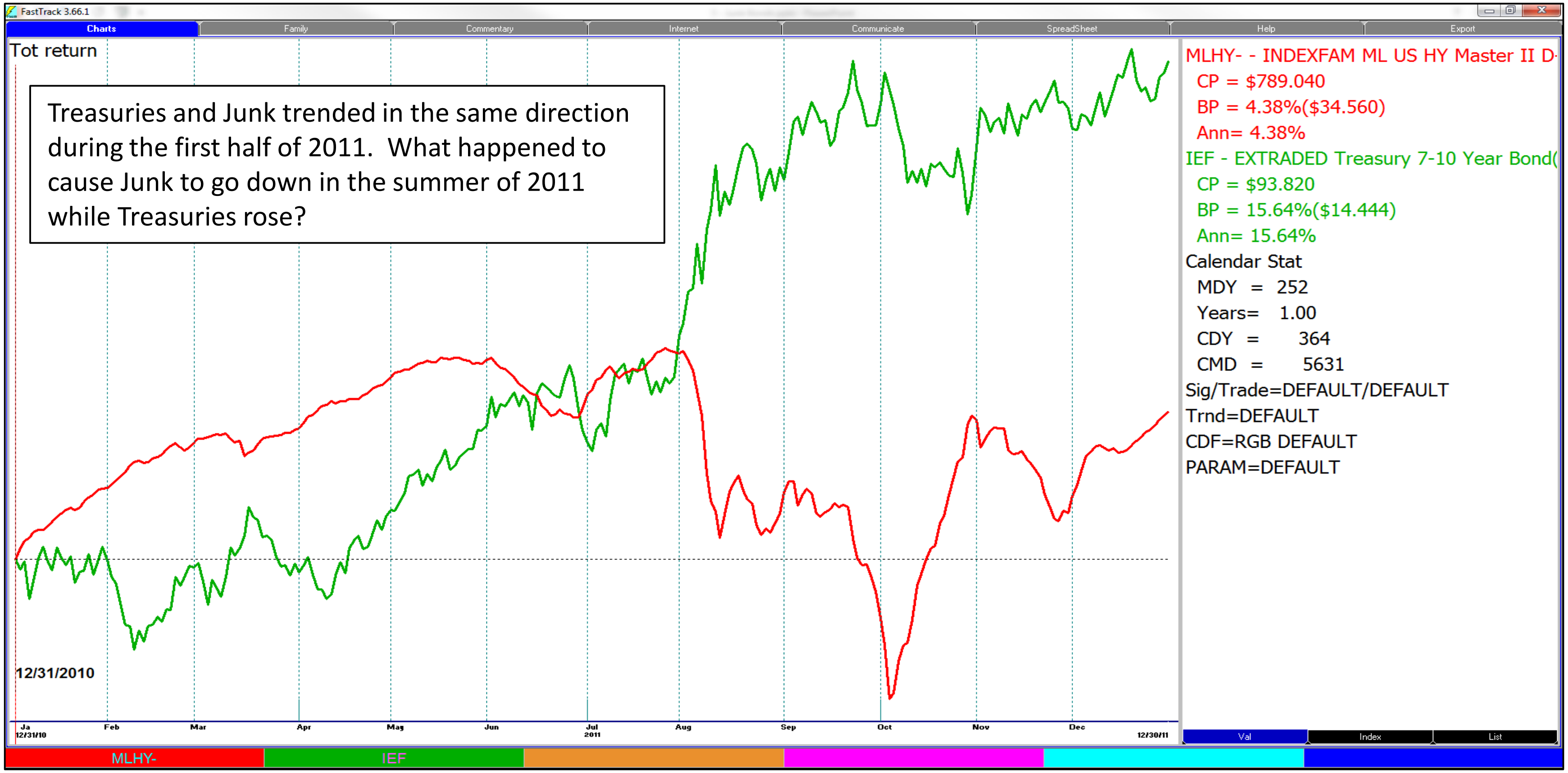
12/31/1996 – 12/31/2018



- Merrill Lynch US High-Yield Master II Index tracks below investment grade rated corporate debt publicly issued in the US domestic market.
- To qualify for inclusion in the Index, bonds must have a below investment grade rating, at least one year to maturity, a fixed coupon schedule, and a minimum of $100 million outstanding.

Junk Bonds

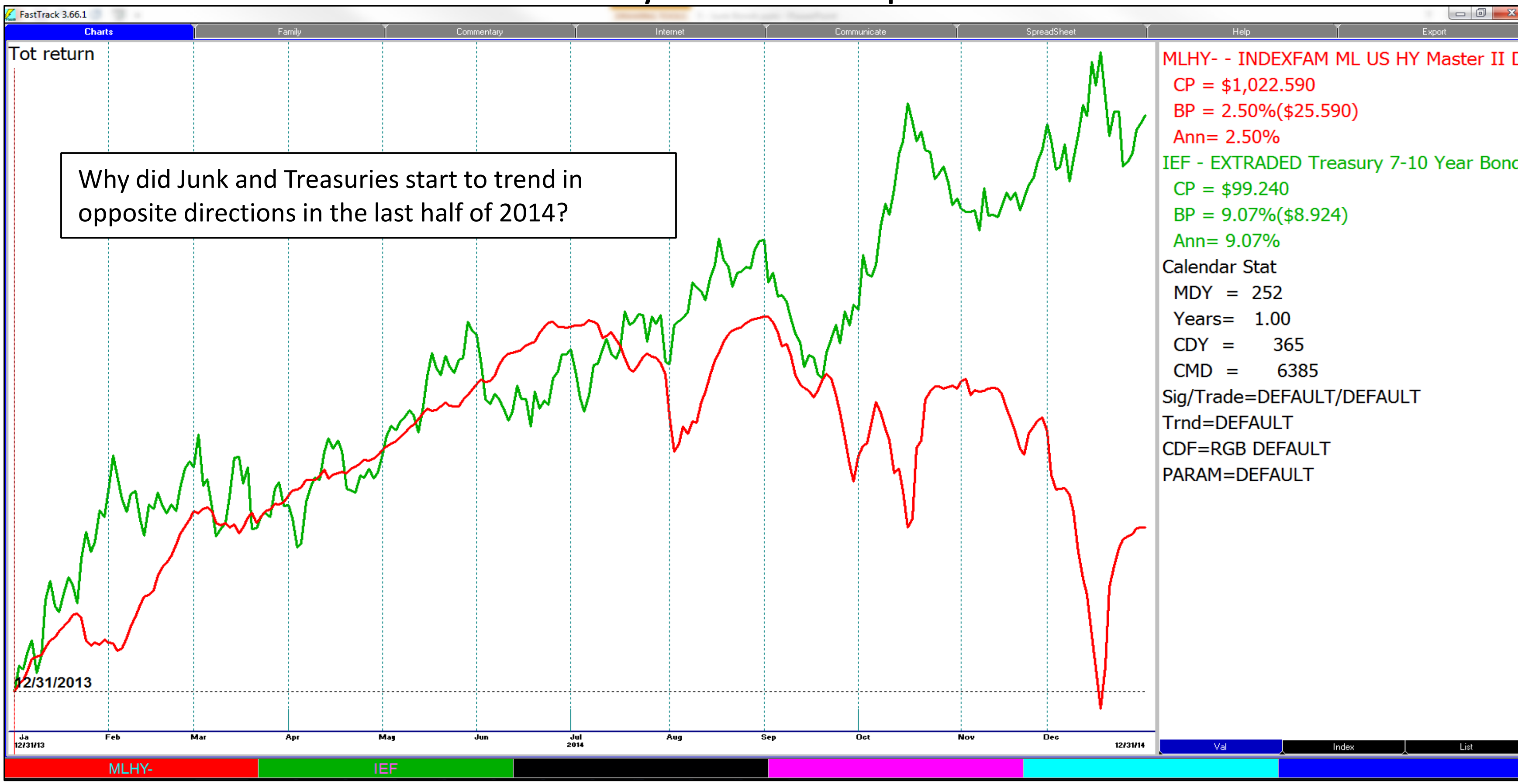
Are they bonds or equities?



- Junk bonds share characteristics with both bonds and equities.
- Junk bond prices are influenced by interest rates like most other bonds but are also influenced by economic conditions and expected default rates. As expected default rates rise, investors require additional yield to compensate for this risk.

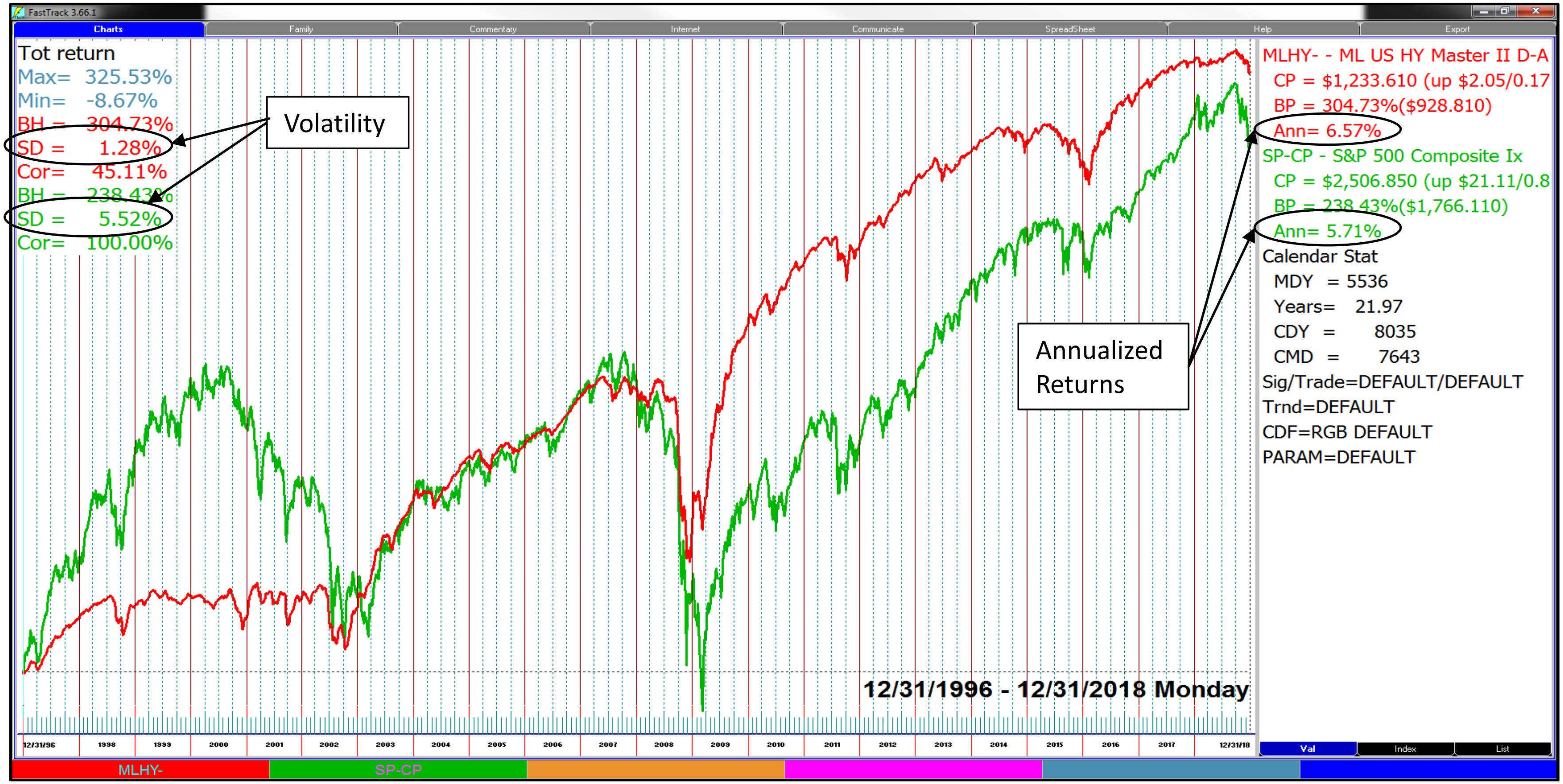
Junk Bonds

Are they bonds or equities?



MLHY- vs. S&P 500

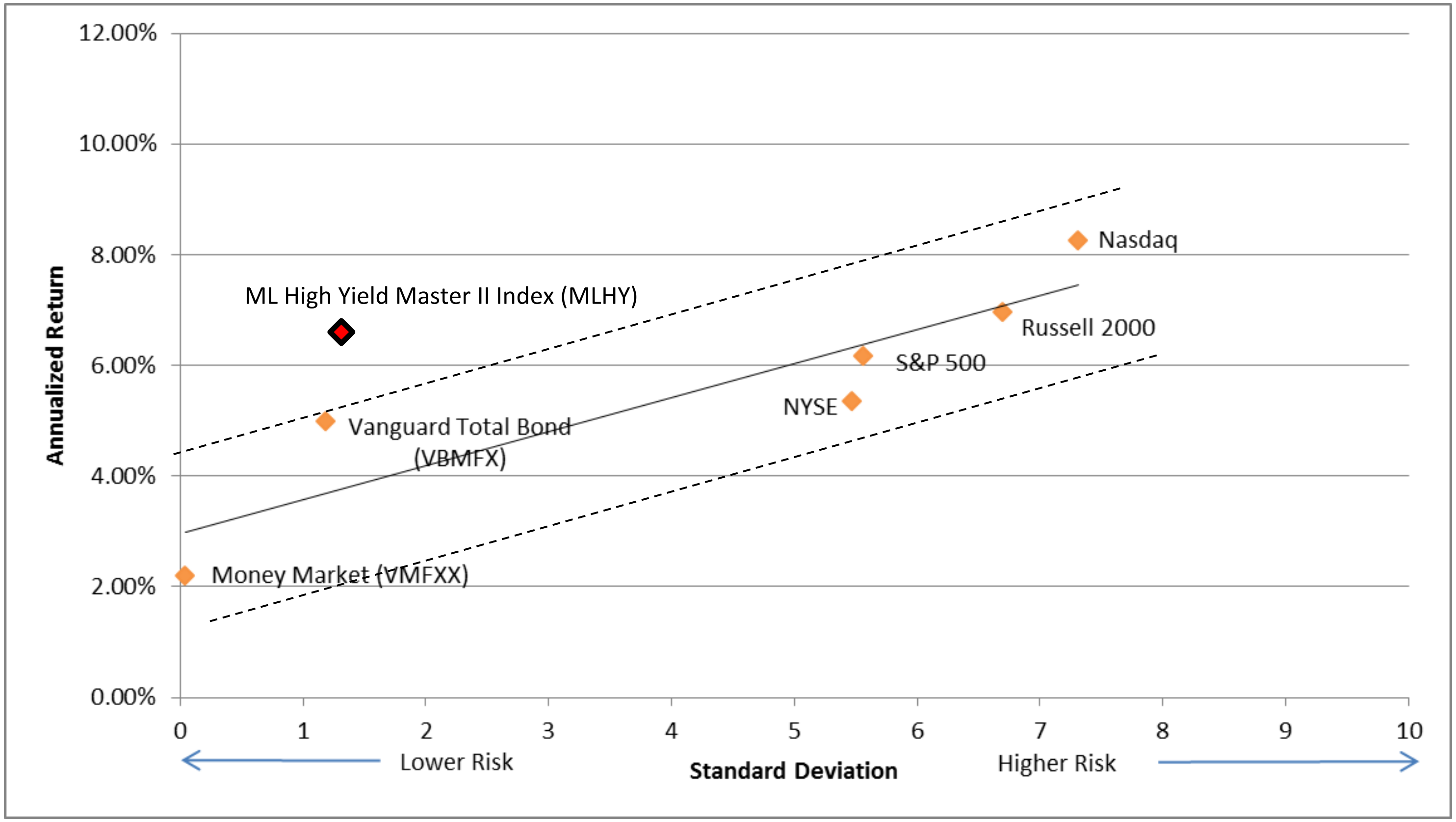
12/31/1996 – 12/31/2018



- Junk bonds tend to trend in the same direction as equities but over the long-term, junk bonds have provided returns that exceed the returns of the S&P 500 index on a fraction of the volatility, which makes them a desirable investment for most investors.

Junk Bonds

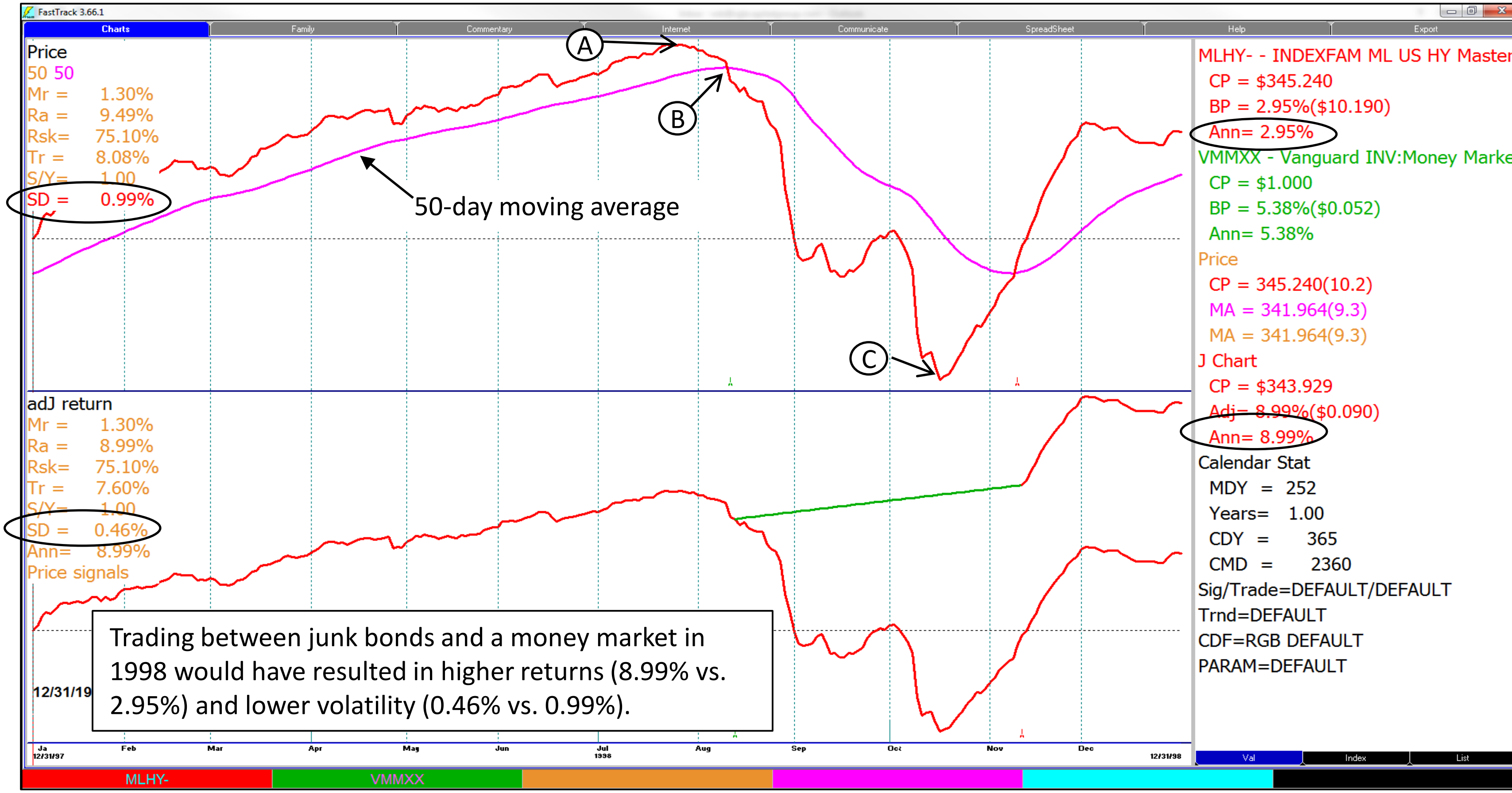
Risk vs. Reward (12/31/1996 – 12/31/2018)



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

MLHY- Timed with a 50-day Moving Average

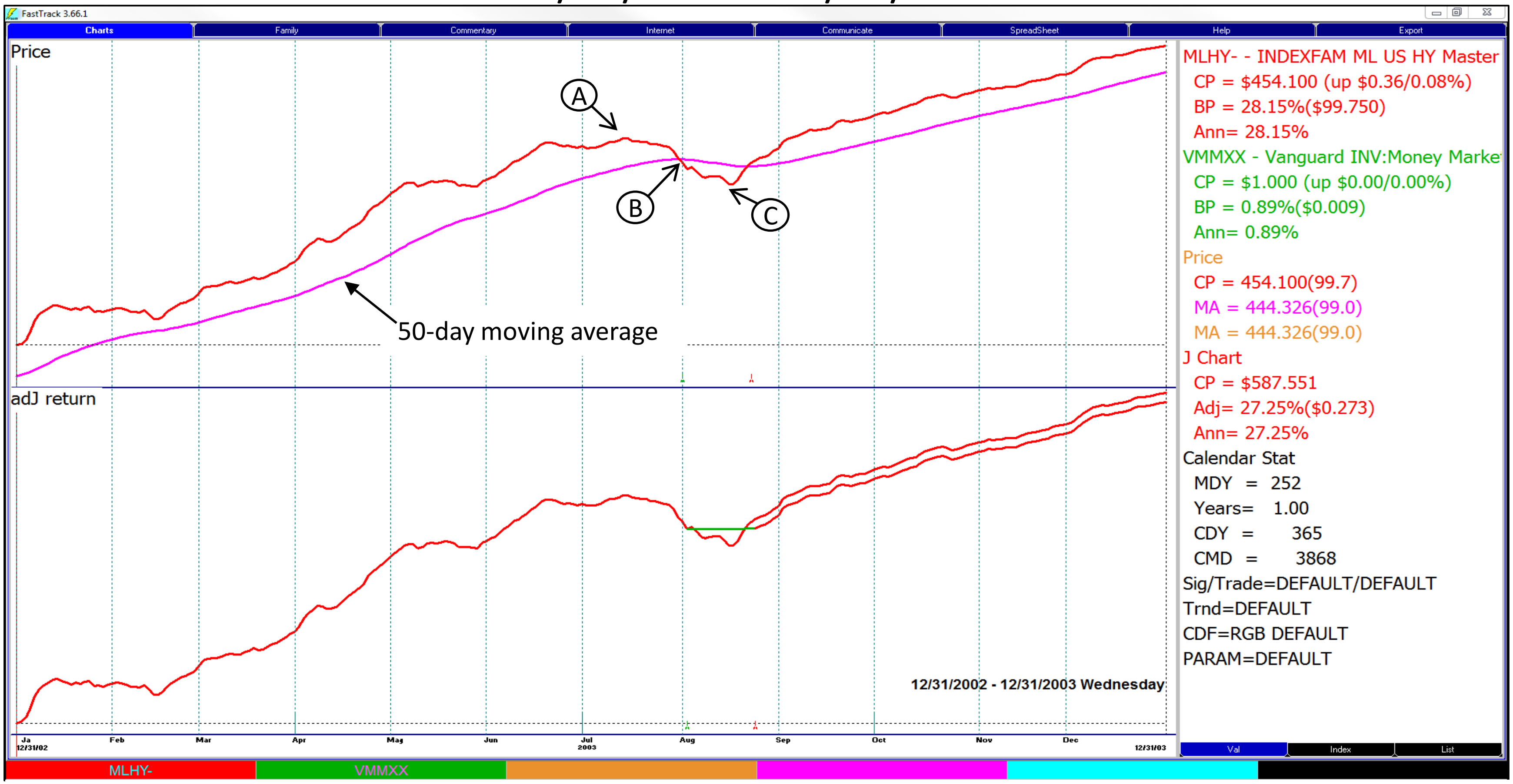
12/31/1997 – 12/31/1998



- Moving average timing can provide appropriate entry and exit points when investing in junk bonds.
- Timed drawdown is the % decline from a peak to the point it crosses the moving average (with a 1-day trading delay); total drawdown is the % decline from a peak to a trough prior to crossing above the moving average.
- The timed drawdown (point A → B) is -1.0%; much better than the -8.7% total drawdown (point A → C).
- During 1998, a 50-day moving average would have increased returns and reduced overall volatility/drawdown.

MLHY- Timed with a 50-day Moving Average

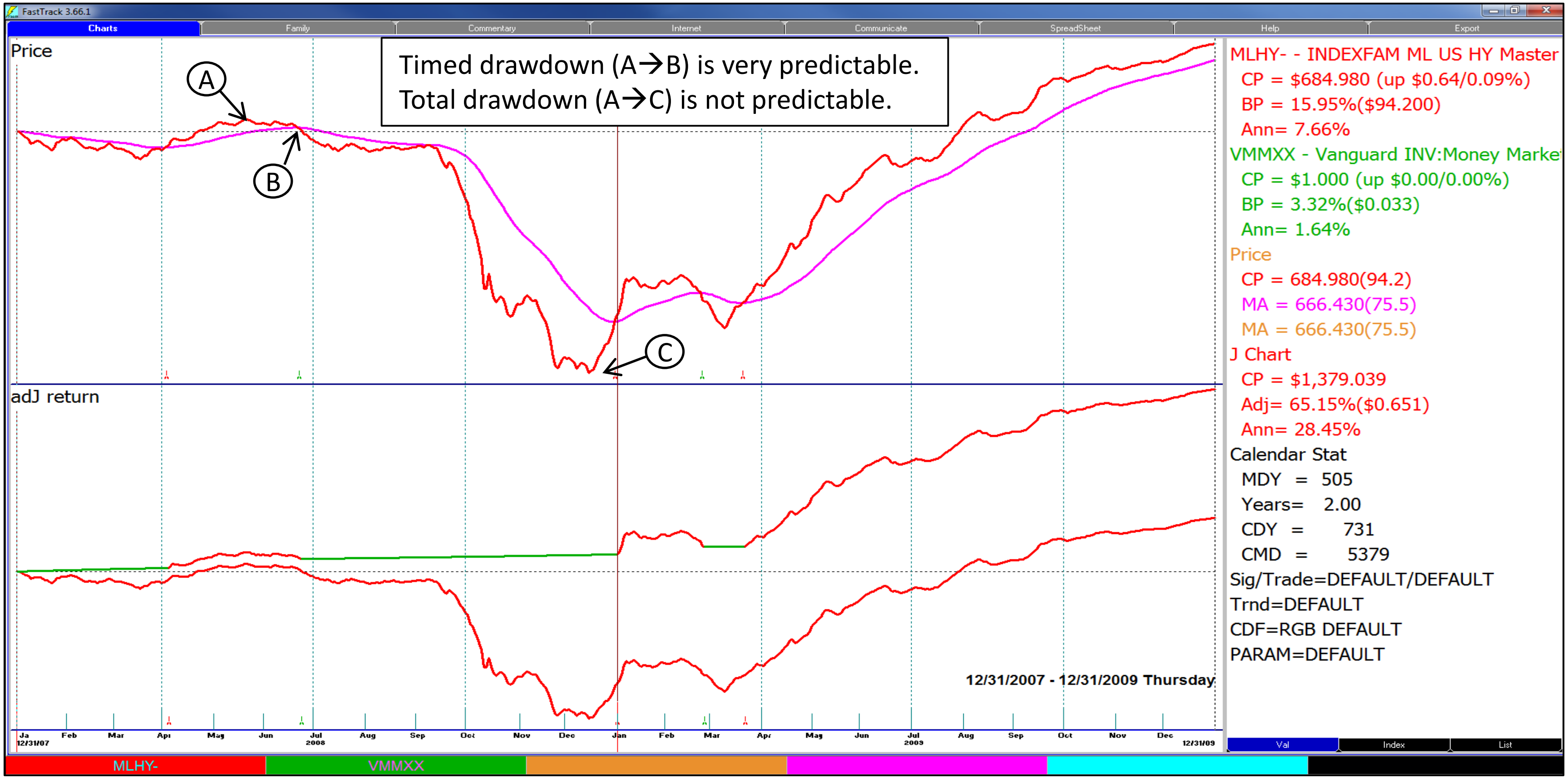
12/31/2002 – 12/31/2003



- Timing junk bonds will not always generate larger returns, however it will always limit drawdown.
- In 2003, the timed drawdown (point A → B) was -2.0%; total drawdown (point A → C) was only -3.7%.
- In this case, trading when MLHY- crossed the 50-day moving average resulted in a whipsaw creating slightly less return.

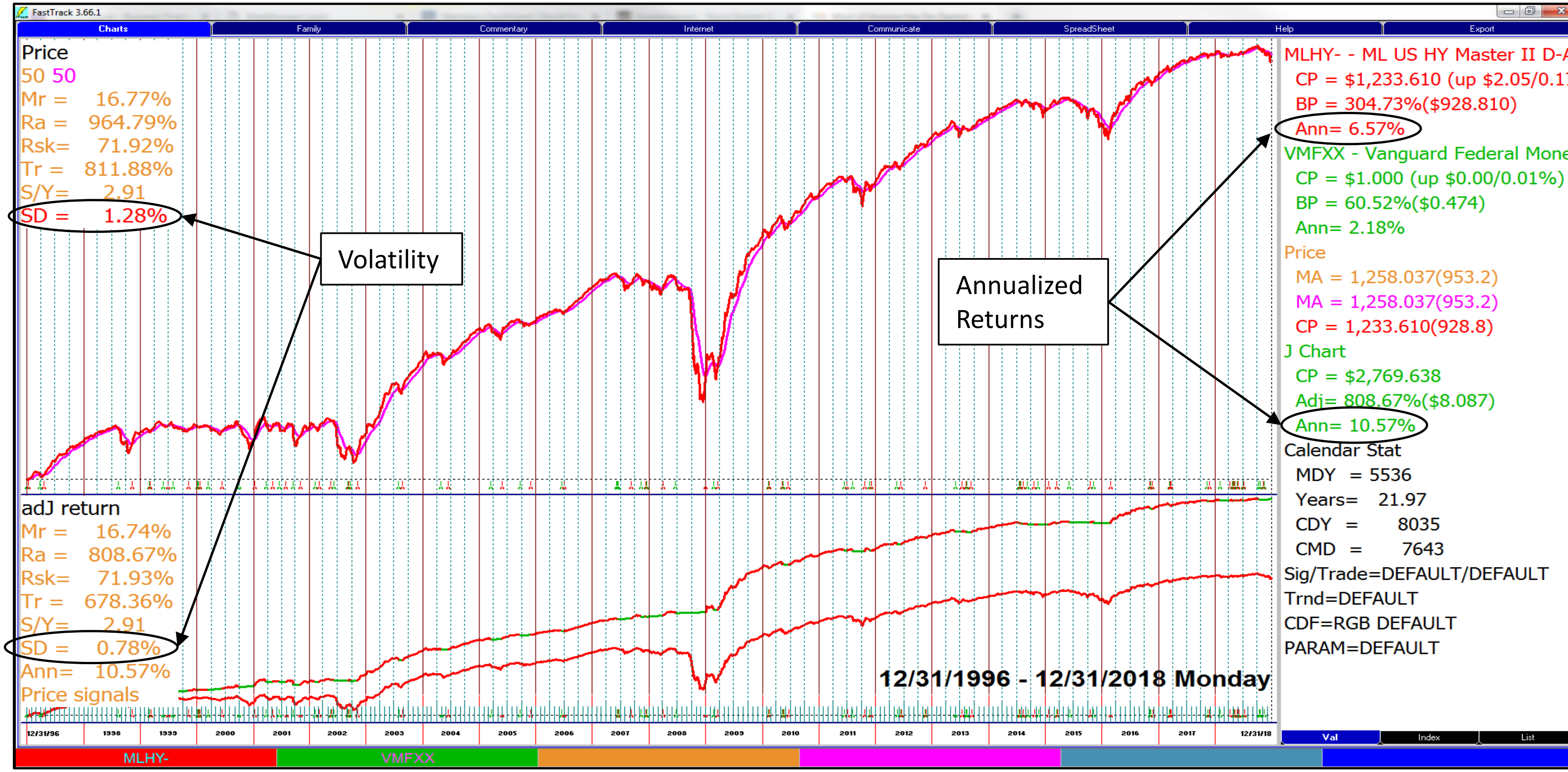
MLHY- w/ 50-day Moving Average

12/31/2007 – 12/31/2009



- Timed drawdown for MLHY- (A → B) was 1.5%; a lot better than the total drawdown (A→C) of 34.7%.
- Timed drawdown for MLHY- using a 50-day MA for the last 20 years is generally between 1%-3% and is very predictable.
- Total drawdown is not predictable.

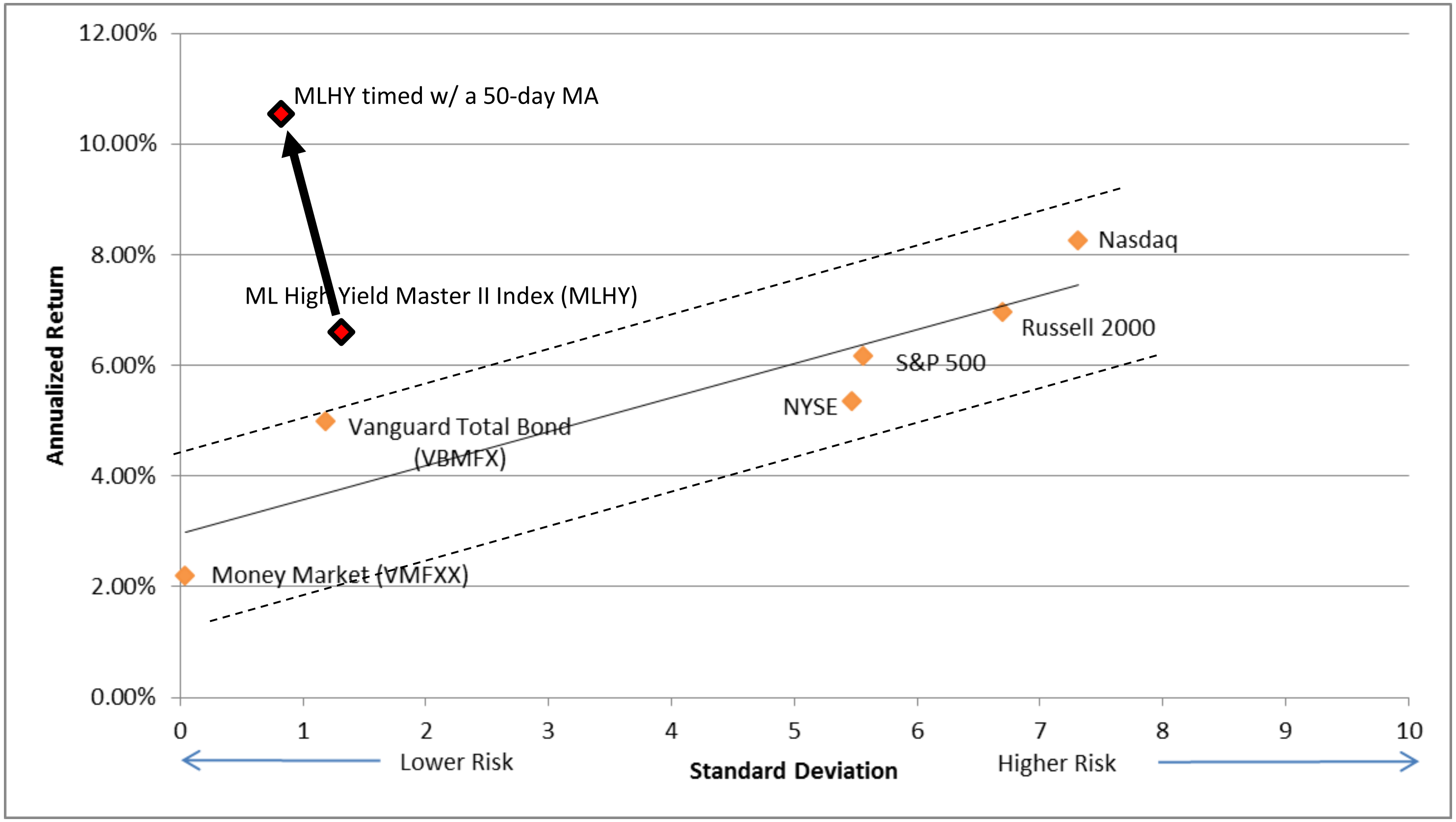
MLHY- w/ 50-day Moving Average
12/31/1996 – 12/31/2018



- Over the 20-year history of MLHY-, using a 50-day moving average has resulted in higher annualized returns and lower volatility.
- The maximum drawdown for the timed strategy is less than 6%.

Junk Bonds

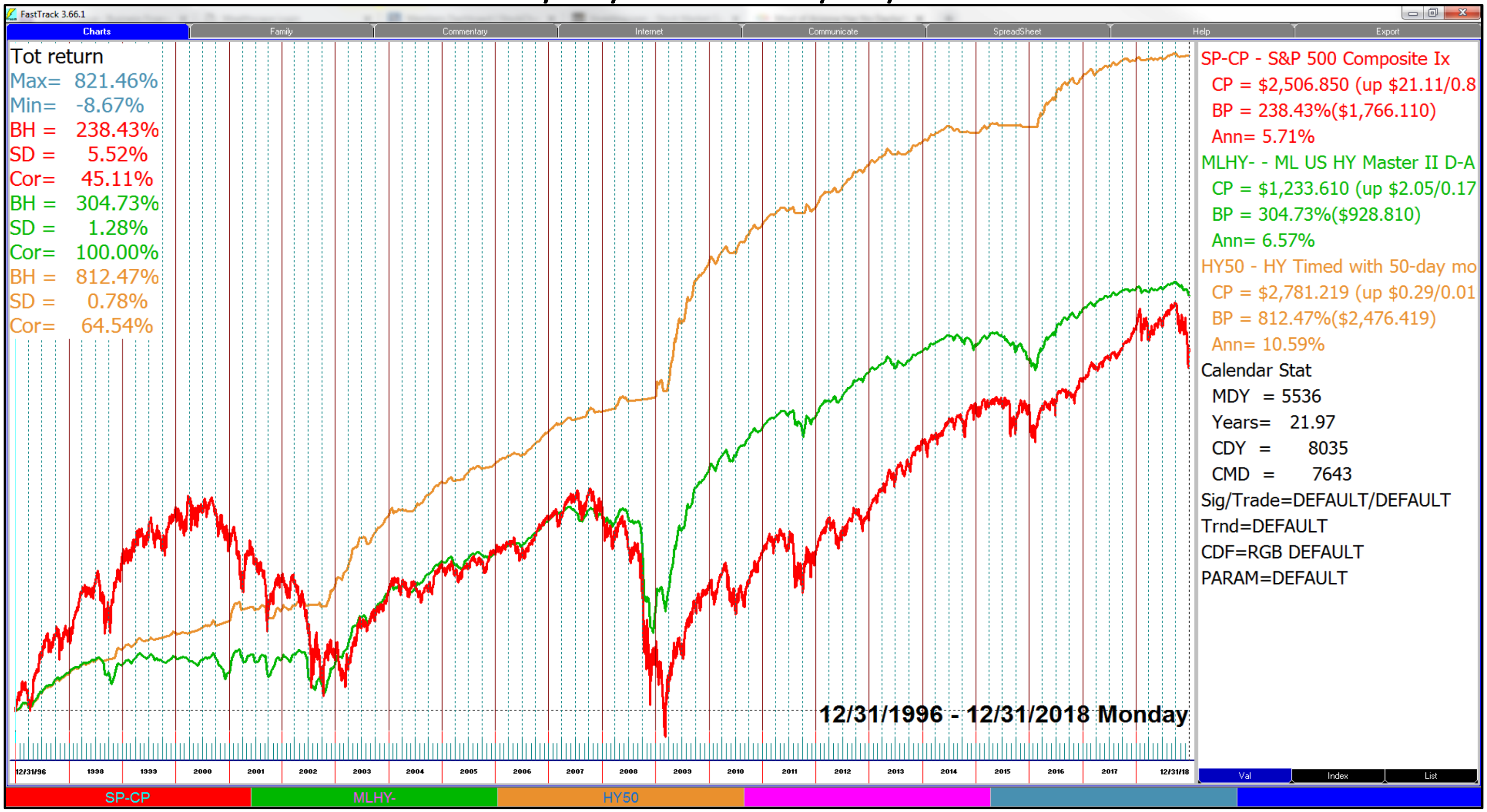
Risk vs. Reward (12/31/1996 – 12/31/2018)



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

MLHY- w/ 50-day Moving Average

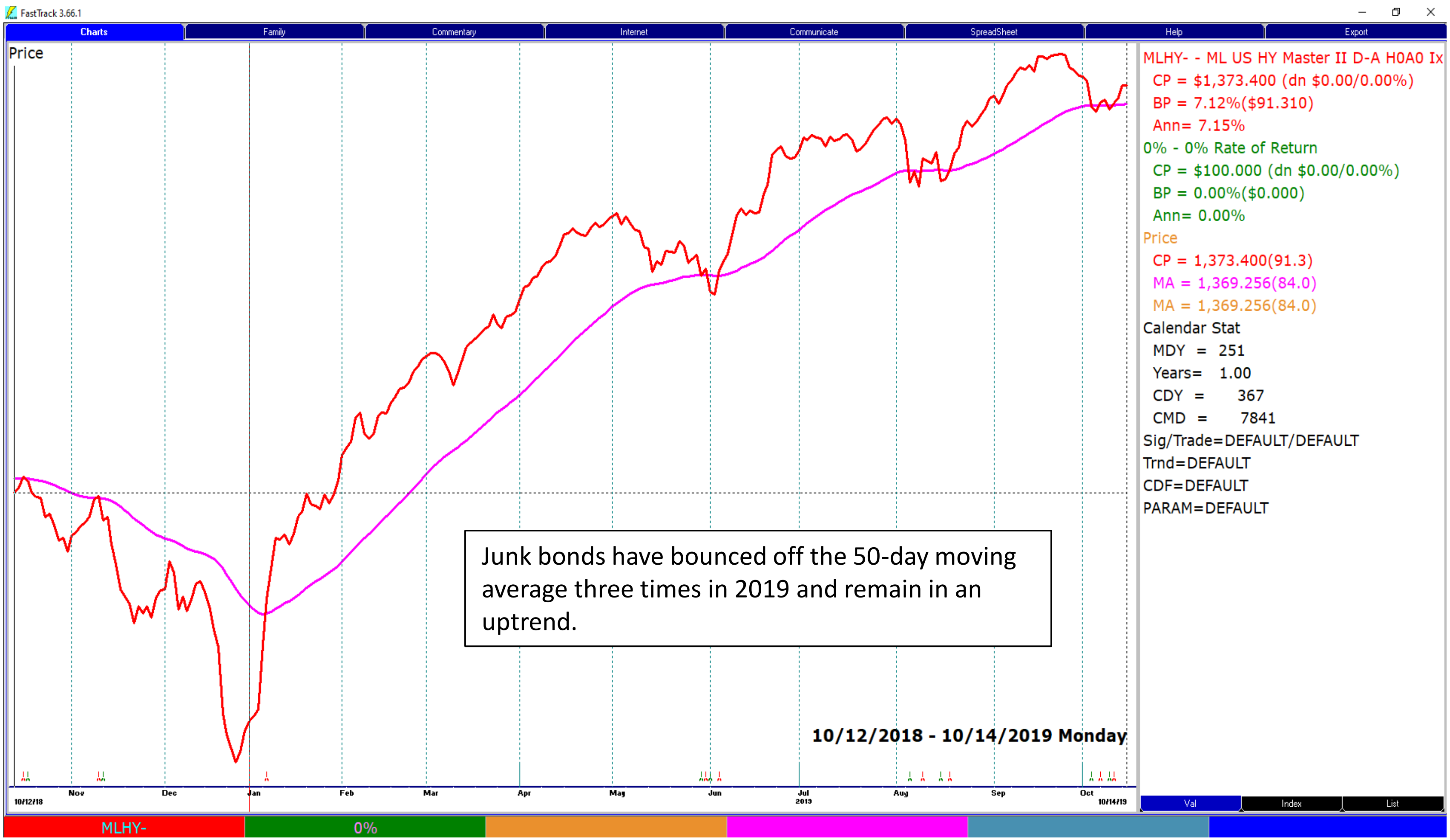
12/31/1996 – 12/31/2018



Symbol	Description	Annual Return	ULCER	UPI	Max Drawdown	Standard Deviation
SP-CP	Indexfam S&P 500 Composite Index	5.71%	19.38	0.13	-56.78%	5.52%
MLHY-	Indexfam ML US HY Master II D-A H0A0 Ix	6.57%	5.31	0.65	-34.99%	1.28%
HY50	MLHY Timed with 50-Day Moving Average	10.59%	1.11	6.71	-5.94%	0.78%

MLHY- w/ 50-day Moving Average

One-Year Chart



Junk Bonds: Implementation Considerations

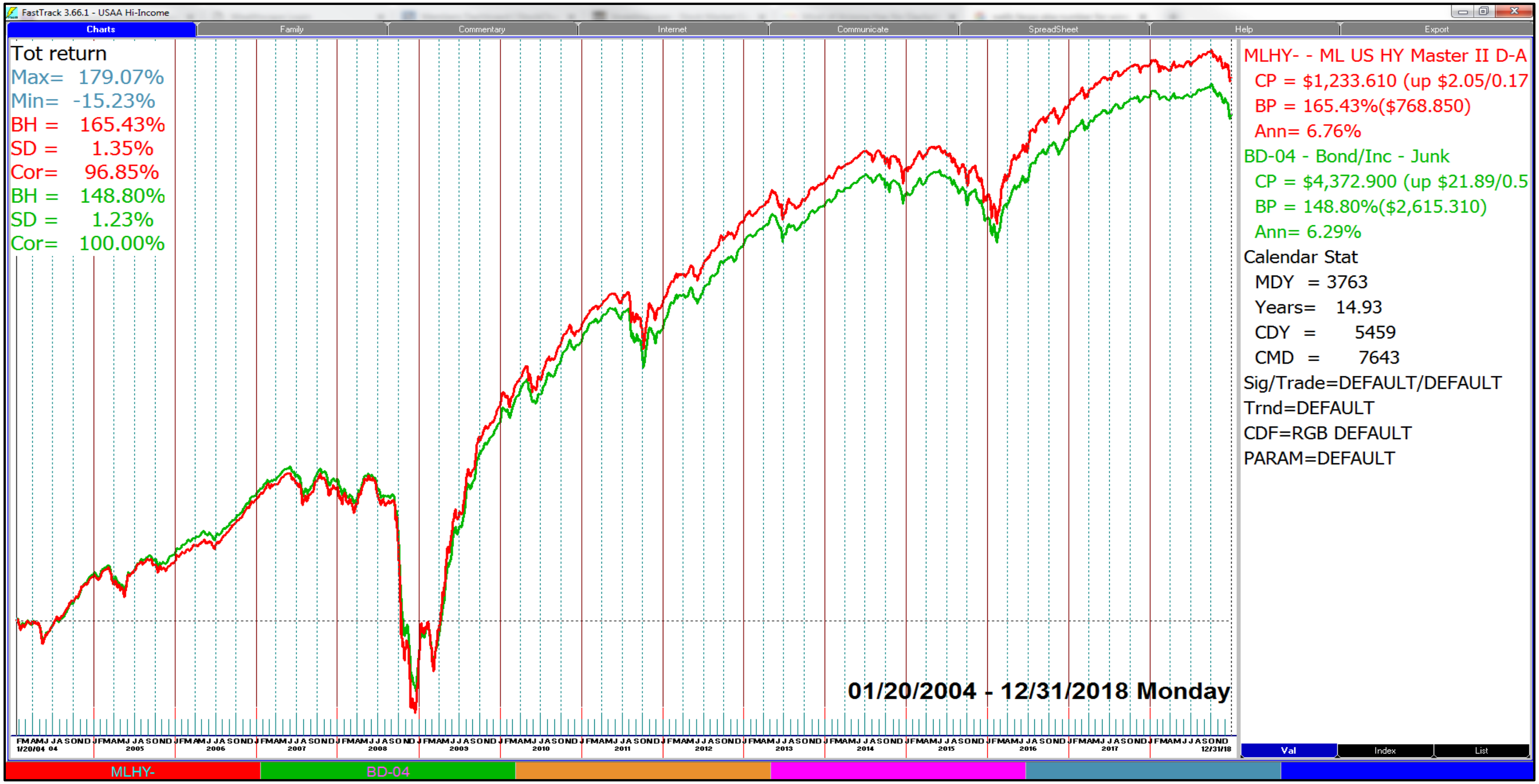
Tracking the Merrill Lynch High-Yield US Master II Index

Available in FastTrack (symbol: MLHY-) or the Federal Reserve Economic Data website.

Go to https://fred.stlouisfed.org/ and search for 'ICE BofAML US High Yield Master II Total Return Index Value'.

Junk Bond Mutual Funds

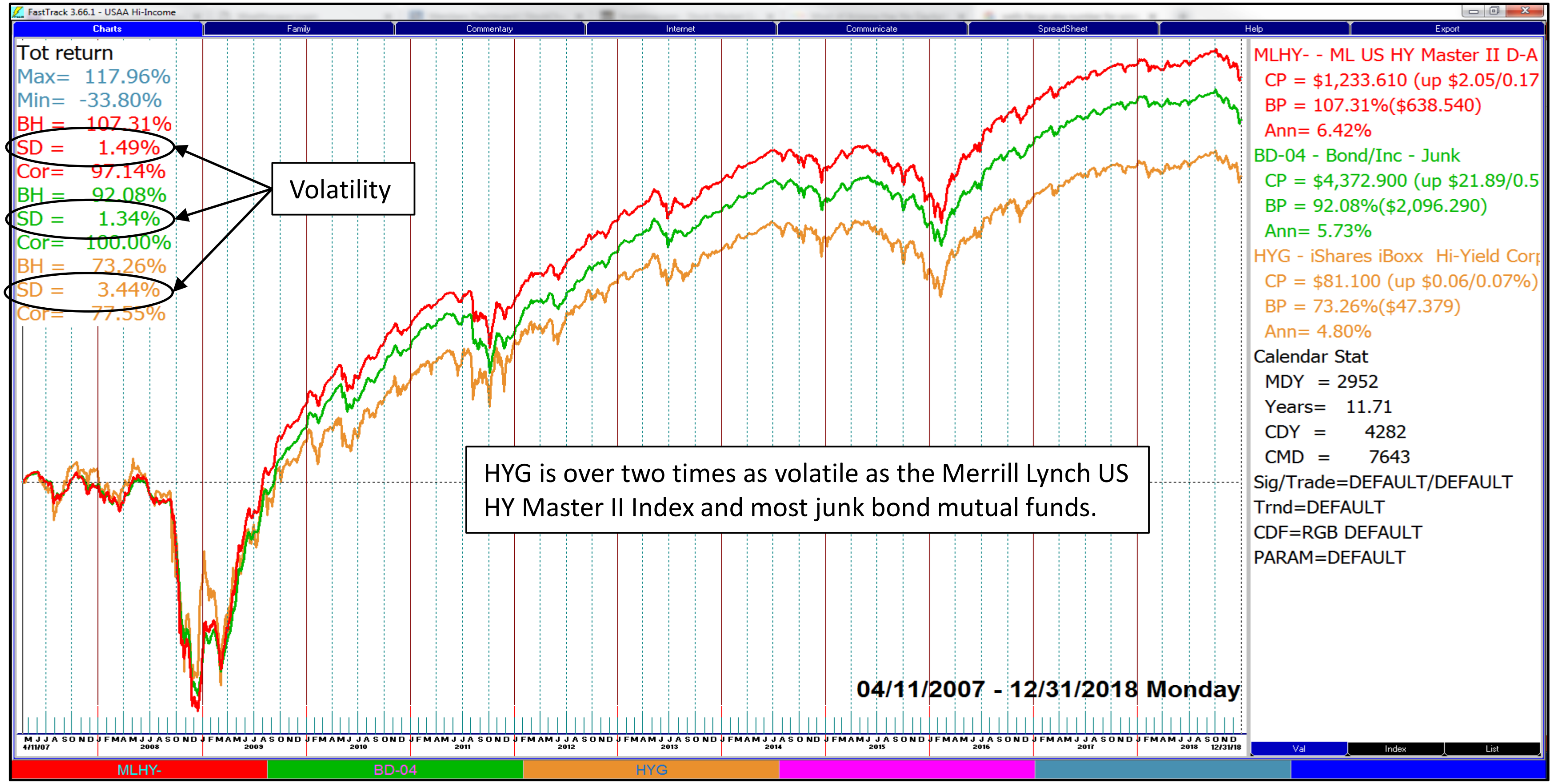
A Good Proxy for Merrill Lynch US High-Yield Master II Index



- You can not invest in the Merrill Lynch US High-Yield Master II Index. However, junk bond mutual funds do a good job of tracking the overall high-yield market as represented by the Merrill Lynch US High-Yield Master II Index.

Junk Bond ETFs

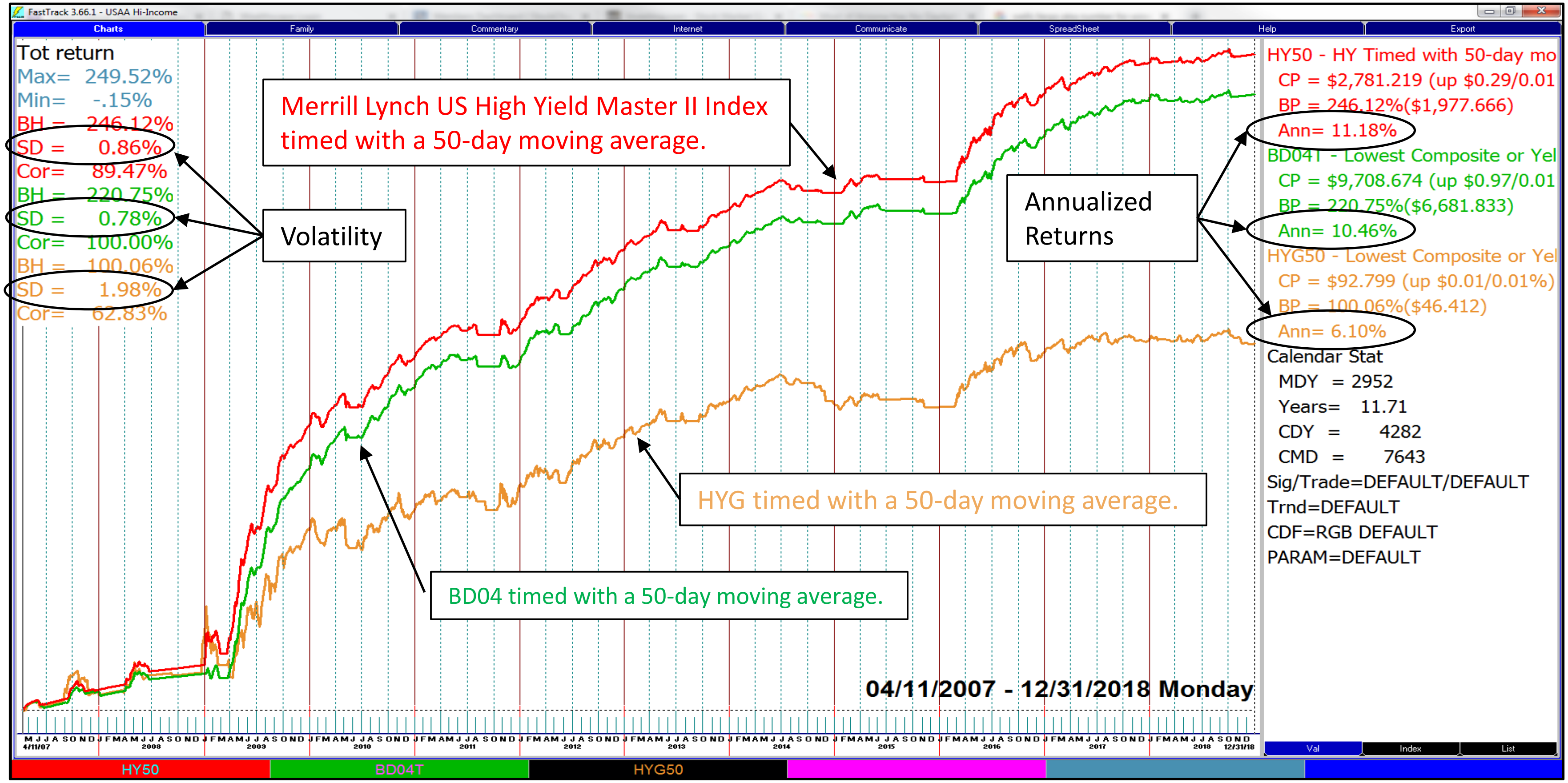
Junk Bond ETFs do a Poor Job of Tracking the Junk Bond Market



- Junk bond ETFs follow the general trend of the Merrill Lynch US High-Yield Master II Index and most junk bond mutual funds, however on increased volatility.
- The effectiveness of timing investments with a moving average is reduced as volatility increases.

Mutual Funds vs. ETFs

Can I use Junk Bond ETFs with 50-day Moving Average?



- You can use junk bond ETFs with a 50-day moving average. However, using a 50-day moving average on HYG resulted in lower returns than MLHY- and higher volatility which is generally inconsistent with investors' desire for better risk-adjusted returns.

Selecting a Junk Bond Mutual Fund

- Look at dividend-adjusted charts of the funds you are considering.
- Select funds that meet your personal objectives. For example, you may consider:
  a) Higher volatility funds that may have larger upside potential when they are trending above their moving average.
  b) Funds that are highly correlated to the Merrill Lynch US High Yield Master II Index.
  c) Lower volatility funds that are for more conservative investors.
- Before purchasing:
  a) Understand the fees, including short-term redemption fees (avoid front-end loads and contingent deferred sales charges).
  b) Verify the availability of the fund on your trading platform.
  c) Review the prospectus.
- If you sell a fund, don't immediately buy back the same fund. Use a different fund family to avoid issues with frequent trading.

Timing Merrill Lynch High-Yield Master II Index

Which Moving Average Should I Use?

Moving Average	Annualized Return	Max DrawDown	Standard Deviation	Switches / Year
10-day Moving Average	14.17%	-2.69%	0.75%	9.22
20-day Moving Average	13.46%	-2.50%	0.75%	5.05
30-day Moving Average	12.58%	-2.75%	0.74%	3.91
40-day Moving Average	11.41%	-4.63%	0.78%	3.18
50-day Moving Average	10.99%	-5.94%	0.78%	2.60
60-day Moving Average	10.30%	-6.61%	0.76%	2.34
70-day Moving Average	9.87%	-7.39%	0.76%	2.40
80-day Moving Average	9.59%	-7.32%	0.76%	2.50
90-day Moving Average	9.17%	-7.33%	0.77%	2.55

Time Period: 12/31/1996 – 3/8/2016

- Adjusting the moving average will impact risk and return – higher moving averages produce higher drawdown and lower return; the lower moving averages produce less drawdown and higher returns.
- Investors need to consider the switches per year (S/Y) due to restrictions on frequent trading with mutual funds.

Why Is Managing Risk So Important?

A Hypothetical Situation

- Retirement Date: 12/31/1998
- Retirement Savings: $1,000,000 as of 12/31/1998
- Distributions: 5% of beginning balance ($50,000) increased by 3% each year.
- Two Scenarios
  a) Retiree #1 (Joe): Uses a buy-and-hope strategy using SPY with dividends reinvested.
  b) Retiree #2 (Mary): Invests in timed junk bond strategy with dividends reinvested.

Who would be more successful?

- Who would have been more comfortable during the first 20 years of retirement?
- Would either retiree have enough funds for another 10 years? 20 years? 30 years?
- Most importantly…why?

Impact of Losses on a Portfolio

“Buy-and-Hope” Strategy Investing in SPY

Year	Beginning Balance	Investment Gain (%)	Investment Gain ($)	Withdrawal	Ending Balance	Withdrawal %
1999	1,000,000	20.76%	197,220	50,000	1,147,220	5.0%
2000	1,147,220	-9.73%	(106,614)	51,500	989,106	4.5%
2001	989,106	-11.75%	(109,987)	53,045	826,074	5.4%
2002	826,074	-21.59%	(166,553)	54,636	604,884	6.6%
2003	604,884	28.18%	154,598	56,275	703,207	9.3%
2004	703,207	10.70%	69,041	57,964	714,284	8.2%
2005	714,284	4.83%	31,616	59,703	686,198	8.4%
2006	686,198	15.85%	99,016	61,494	723,720	9.0%
2007	723,720	5.14%	33,944	63,339	694,325	8.8%
2008	694,325	-36.81%	(231,567)	65,239	397,520	9.4%
2009	397,520	26.37%	87,106	67,196	417,430	16.9%
2010	417,430	15.06%	52,442	69,212	400,660	16.6%
2011	400,660	1.89%	6,225	71,288	335,597	17.8%
2012					304,092	21.9%
2013					302,279	24.9%
2014					254,582	25.8%
2015	254,582	1.25%	2,179	80,235	176,526	31.5%
2016	176,526	12.00%	11,266	82,642	105,149	46.8%
2017	105,149	21.70%	4,346	85,122	24,374	81.0%
2018	24,374	-4.56%	2,887	87,675	(60,415)	359.7%

Without changes to his withdrawal rate or investment strategy, Joe would have run out of money in 2018. ☹

The impact of large losses is detrimental to a successful investment strategy. The impact of large losses coupled with taking withdrawals can be absolutely devastating.

Impact of Losses on a Portfolio

Merrill Lynch Master II Index with 50-day Moving Average Strategy

Year	Beginning Balance	Investment Gain (%)	Investment Gain ($)	Withdrawal	Ending Balance	Withdrawal %
1999	1,000,000	5.54%	52,630	50,000	1,002,630	5.0%
2000	1,002,630	3.98%	37,855	51,500	988,985	5.1%
2001	988,985	3.78%	35,379	53,045	971,319	5.4%
2002	971,319	8.12%	74,435	54,636	991,117	5.6%
2003	991,117	27.25%	254,744	56,275	1,189,586	5.7%
2004	1,189,586	12.07%	136,587	57,964	1,268,209	4.9%
2005	1,268,209	6.17%	74,565	59,703	1,283,071	4.7%
2006	1,283,071	11.62%	141,947	61,494	1,363,524	4.8%
2007	1,363,524			63,339	1,391,199	4.6%
2008	1,391,199			65,239	1,389,739	4.7%
2009	1,389,739			67,196	2,083,931	4.8%
2010	2,083,931	13.78%	277,628	69,212	2,292,348	3.3%
2011	2,292,348	6.31%	140,149	71,288	2,361,209	3.1%
2012	2,361,209	15.05%	344,311	73,427	2,632,093	3.1%
2013	2,632,093	8.00%	204,517	75,629	2,760,981	2.9%
2014	2,760,981	3.23%	86,664	77,898	2,769,746	2.8%
2015	2,769,746	2.12%	57,018	80,235	2,746,528	2.9%
2016	2,746,528	18.20%	484,827	82,642	3,148,713	3.0%
2017	3,148,713	6.02%	184,428	85,122	3,248,020	2.7%
2018	3,248,020	1.59%	50,249	87,675	3,210,594	2.7%

Mary would have over 200% increase in value! ☺

Avoiding large drawdowns has a dramatic impact on portfolio returns.

Summary

What is Your Plan?

- Investors can control risk, but not returns. Focus on downside risk metrics that are important to you as an investor.
- Major market corrections will occur in the future. Be prepared before they happen.
- Junk bond mutual funds
  a) Have a high propensity to trend (high serial day-to-day correlation),
  b) Are low volatility in both up and down markets, and
  c) Drastically reduce default risk relative to holding individual junk bonds.
- Timing junk bonds. Nothing more than a moving average is necessary. Keep it simple.
  a) Invest in junk bonds when they are trending up above their moving average.
  b) Sell junk when they are trending down below their moving average.
  c) Avoid trading when junk bonds are in a trading range. Wait for a trend to develop.
- Whipsaws are a normal aspect of investing; stick with your plan.
- Consider the frequent trading restrictions of mutual funds. If you have to sell a mutual fund and want to buy again, use a different fund family.
- Whatever you invest in, set stops to avoid life altering losses that can be detrimental to your financial future.

Continue Learning

Free Resources

Weekly – RGB Perspectives
1 Page

RGB Perspectives — October 7, 2019

Written by Rob Bernstein (rob@rgbcapitalgroup.com)

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The RGB Capital Group Annual Meeting is scheduled for Saturday, November 2 at 10 am PDT at the DoubleTree by Hilton San Diego – Del Mar and simultaneously broadcast via a live webinar. The meeting is open to both clients and non-clients who want to learn more about our risk management techniques and business operations. Details of the meeting can be found at www.rgbcapitalgroup.com/events. To attend, you must register using one of the two links below.

Register to Attend in Person — Register to Attend the Webinar

If you plan to attend, please register by October 18th so that we can make the necessary arrangements. Thank you.

The stock market has been weak over the last three weeks. While the short-term trend is down, the intermediate-term trend continues to move in a choppy, sideways trading pattern. The S&P 500 Composite Index is about the same place it was at the end of May and less than 2% above where it was a year ago.

Small-cap stocks have a similar chart pattern moving down over the last several weeks but remains in a wide trading range over the last eight months. The Russell 2000 Index is at about the same level it was at the end of January and is down over 8% from where it was a year ago.

While the stock market remains in a trading range, junk bonds continue to trend up. The BofA Merrill Lynch High-Yield Master II Index pulled back slightly over the last few weeks but remains in an intermediate-term uptrend. The index is less than 1% away from its all-time high and up over 6% from where it was at this time last year.

The effects of the U.S.–China trade war are starting to impact the overall economy with manufacturing and services output declining sharply. These reports were offset with an increased likelihood that the Fed will continue to reduce interest rates to bolster the economy. With this type of environment, it is not surprising to see a choppy stock market. If junk bonds turn down sharply with a significant drop below their 50-day moving average, I will be more concerned about the U.S. economy.

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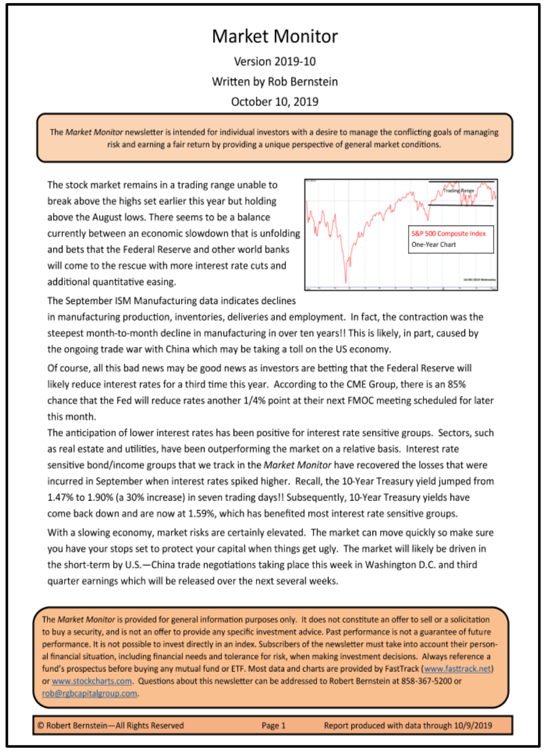
Prepared with data through 10/7/2019

Monthly – Market Monitor
8 – 10 Pages



Market Monitor

Version 2019-10

Written by Rob Bernstein

October 10, 2019

The *Market Monitor* newsletter is intended for individual investors with a desire to manage the conflicting goals of managing risk and earning a fair return by providing a unique perspective of general market conditions.

The stock market remains in a trading range unable to break above the highs set earlier this year but holding above the August lows. There seems to be a balance currently between an economic slowdown that is unfolding and bets that the Federal Reserve and other world banks will come to the rescue with more interest rate cuts and additional quantitative easing.

The September ISM Manufacturing data indicates declines in manufacturing production, inventories, deliveries and employment. In fact, the contraction was the steepest month-to-month decline in manufacturing in over ten years!! This is likely, in part, caused by the ongoing trade war with China which may be taking a toll on the US economy.

Of course, all this bad news may be good news as investors are betting that the Federal Reserve will likely reduce interest rates for a third time this year. According to the CME Group, there is an 85% chance that the Fed will reduce rates another 1/4% point at their next FMOC meeting scheduled for later this month.

The anticipation of lower interest rates has been positive for interest rate sensitive groups. Sectors, such as real estate and utilities, have been outperforming the market on a relative basis. Interest rate sensitive bond/income groups that we track in the *Market Monitor* have recovered the losses that were incurred in September when interest rates spiked higher. Recall, the 10-Year Treasury yield jumped from 1.47% to 1.90% (a 30% increase) in seven trading days!! Subsequently, 10-Year Treasury yields have come back down and are now at 1.59%, which has benefited most interest rate sensitive groups.

With a slowing economy, market risks are certainly elevated. The market can move quickly so make sure you have your stops set to protect your capital when things get ugly. The market will likely be driven in the short-term by U.S.—China trade negotiations taking place this week in Washington D.C. and third quarter earnings which will be released over the next several weeks.

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Annual Meeting
Open To Everyone

RGB Annual Meeting
November 2, 2019
10:00 am PDT

In Person:
DoubleTree by Hilton Del Mar
San Diego, CA

Webinar:
Live stream from your computer

Registration Required:
Complete survey form or
www.rgbcapitalgroup.com/events

To sign up, please complete a survey form today or send an email to info@rgbcapitalgroup.com.

Thank You!!

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Survey Form

A Practical Approach for Conservative Investors & Managing Equity Risk in Uncertain Times

Saturday, October 19, 2019

AAII – Silicon Valley

Please return this form at the meeting or email to info@rgbcapitalgroup.com or fax to 858-324-2050

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