

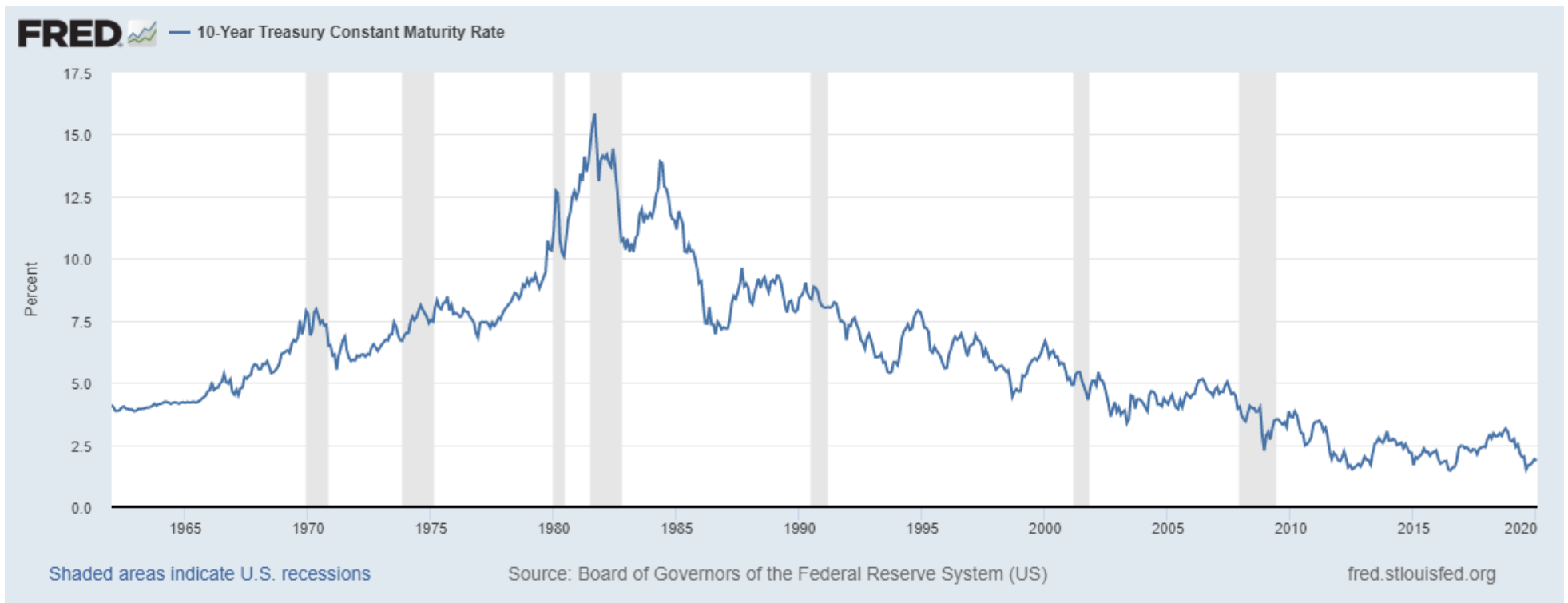
High Income In a Low Yield Desert

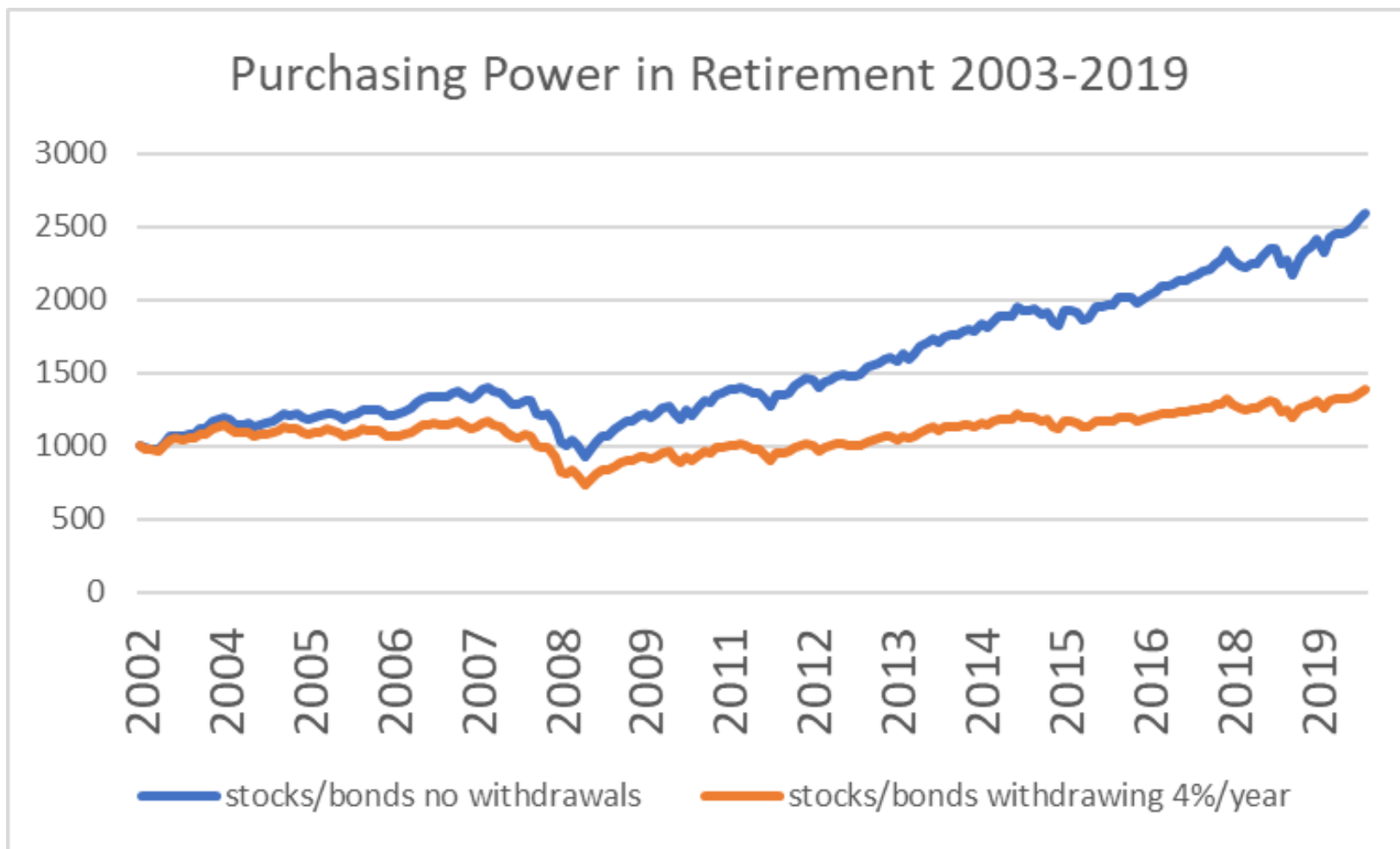
Marvin Appel, M.D., Ph.D.
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Mappel@signalert.com
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Outline

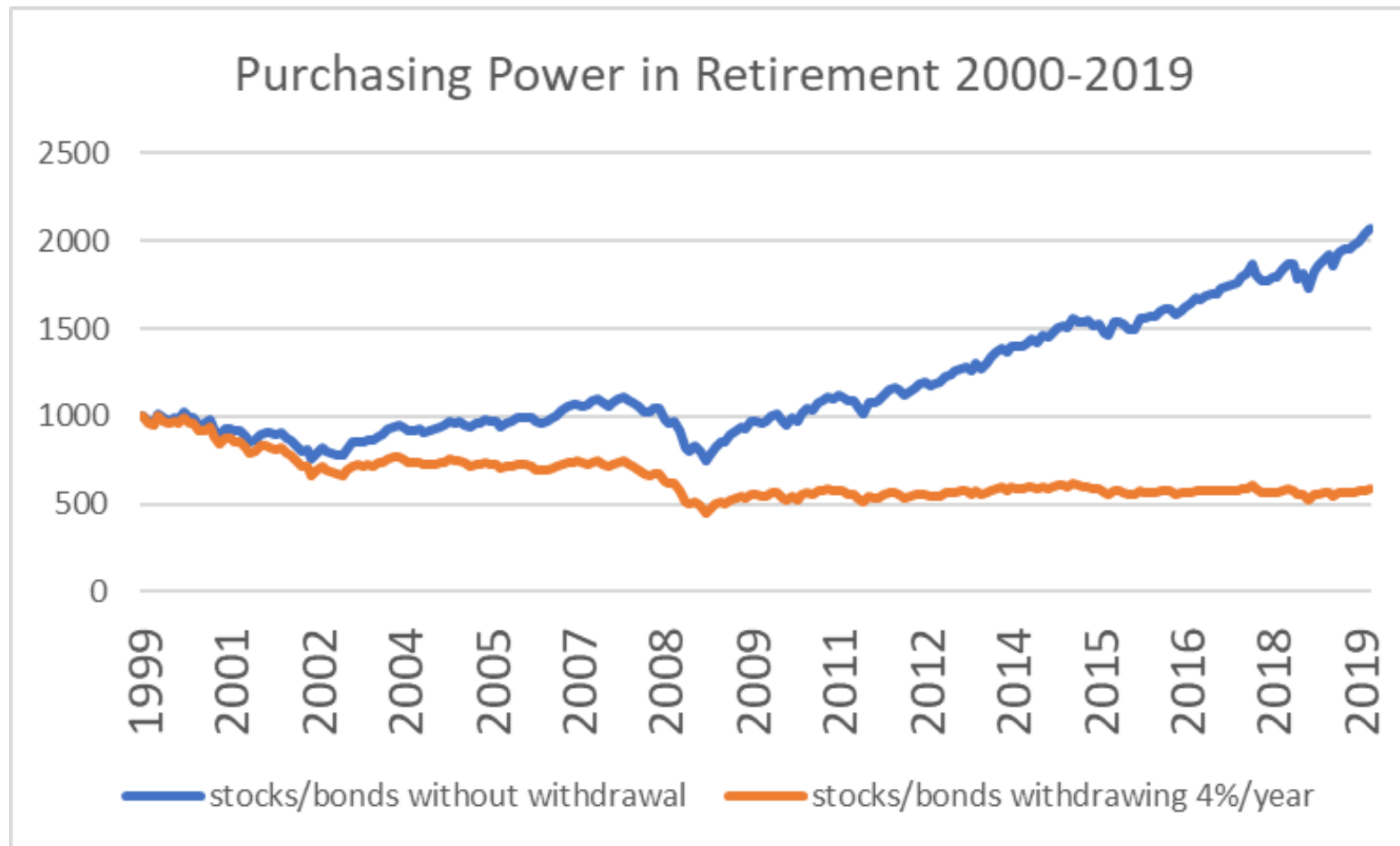
- Investment landscape: low interest rates, potentially high volatility
- Fixed income investing to take advantage of higher yields
 - High yield bond fund trading
 - Floating rate funds
 - Floating rate preferred stocks (AGNCO, CIM-B)
- Covered call writing and cash-secured put writing

Interest Rates Remain Near Multi-Decade Lows





60% S&P 500, 40% Barclays US Aggregate Bond, Withdraw 0.333% of initial principal per month, adjusted for inflation (but not for taxes or expenses)

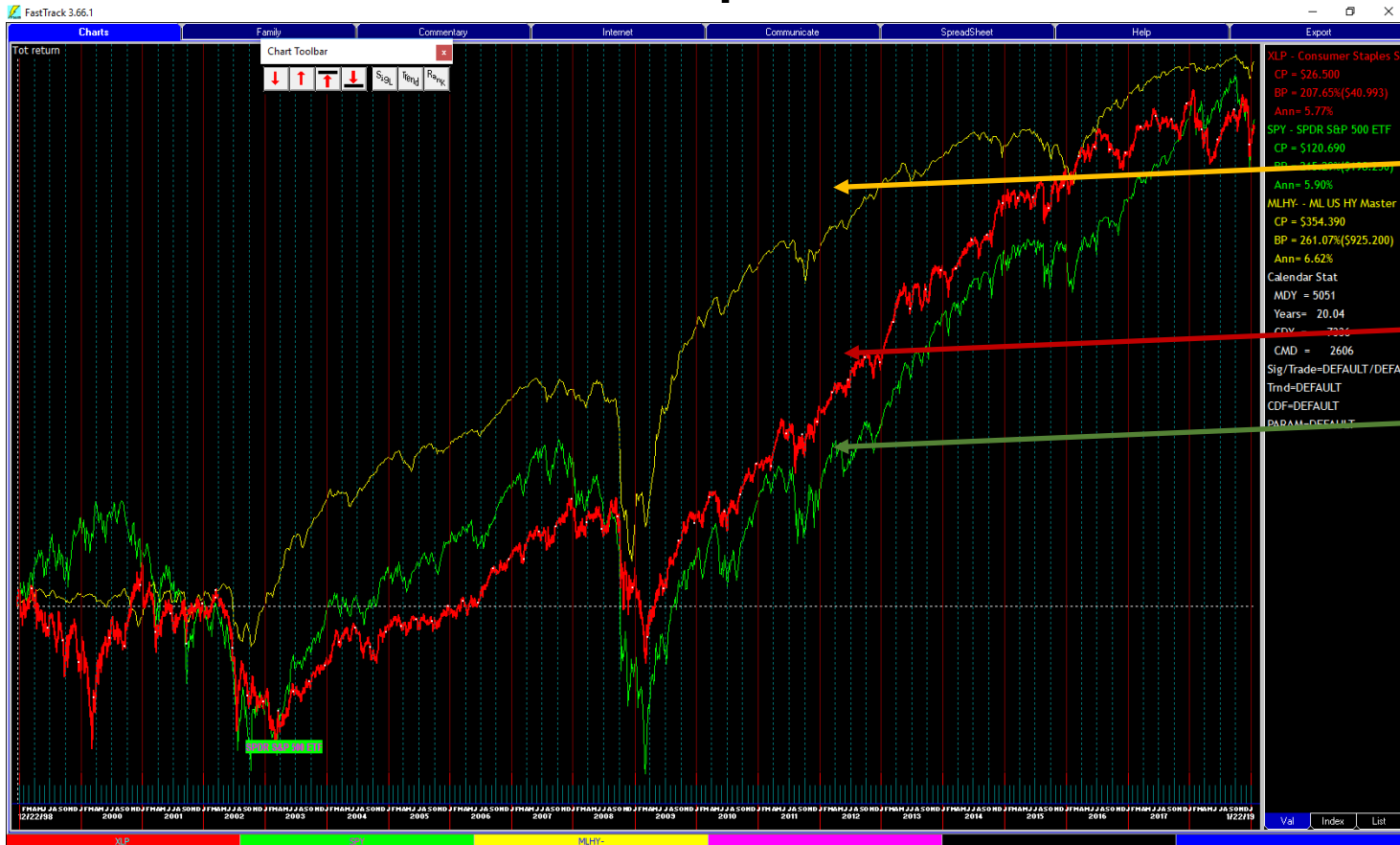


60% S&P 500, 40% Barclays US Aggregate Bond, Withdraw 0.333% of initial principal per month, adjusted for inflation (but not for taxes or expenses)

High yield (junk) bond fund trading



High yield bonds have been competitive with equities 1999-2019

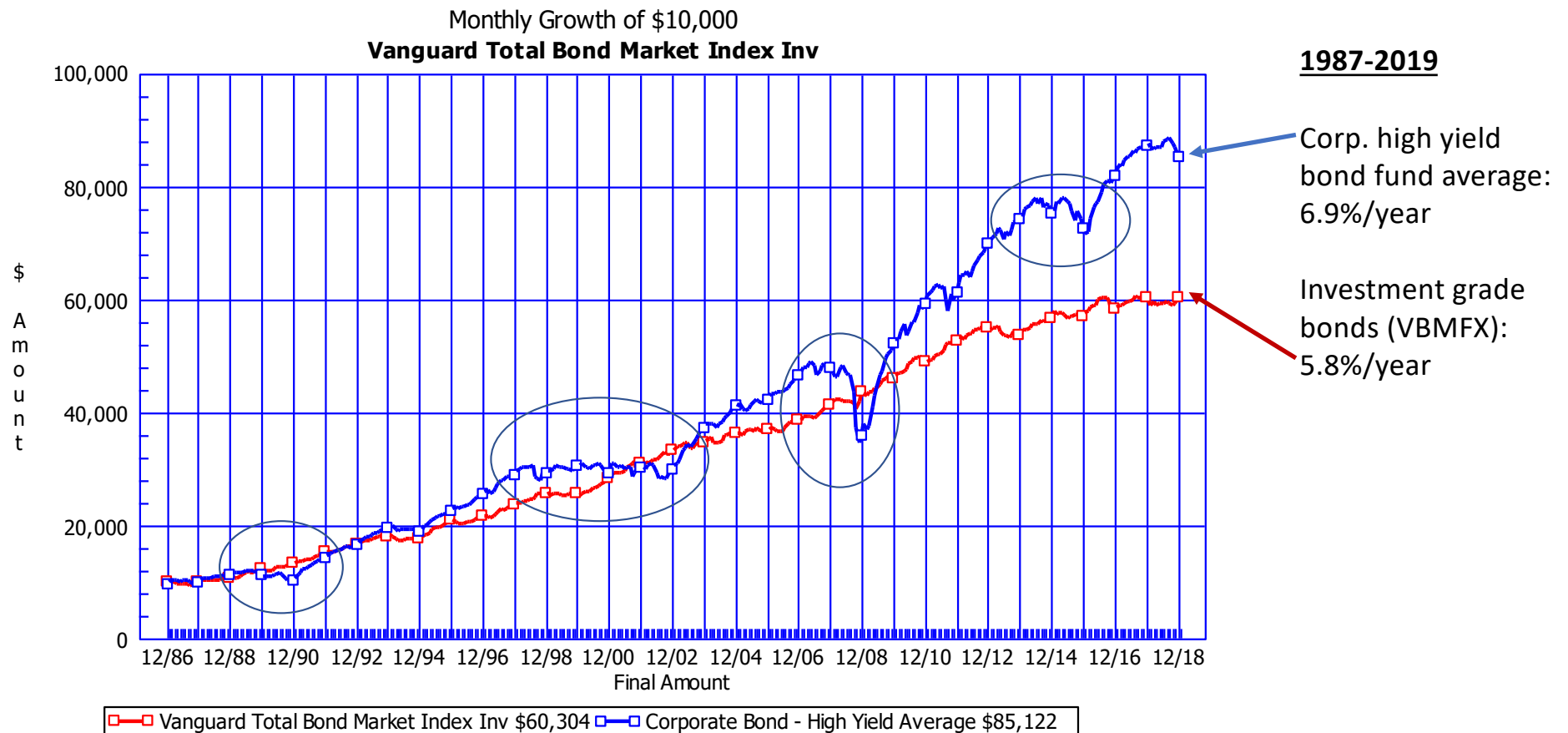


- Merrill Lynch U.S. High Yield Master II 6.6%/year, 35% max drawdown

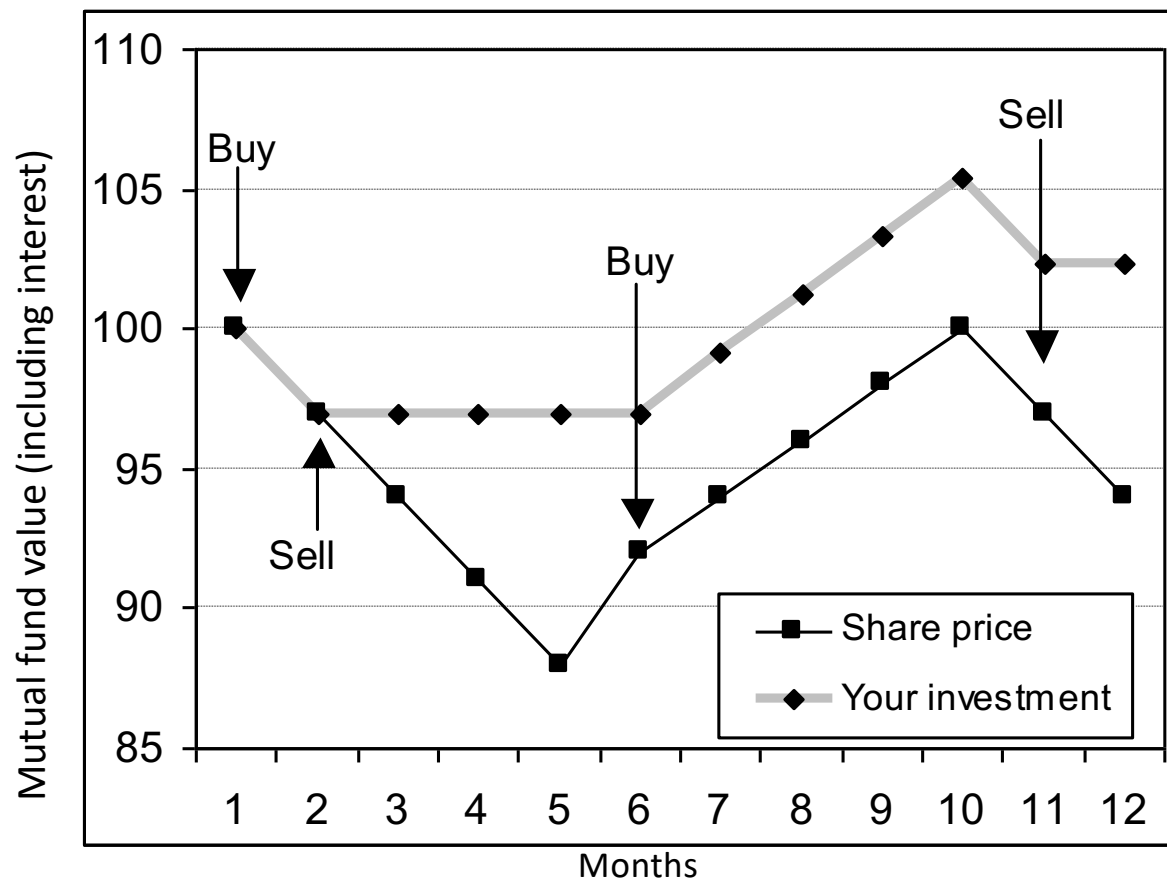
Consumer Staples Sector
SPDR (XLP) 5.8%/year, 36%
- max drawdown

- S&P 500 SPDR (SPY)
5.9%/year, 55% max
drawdown

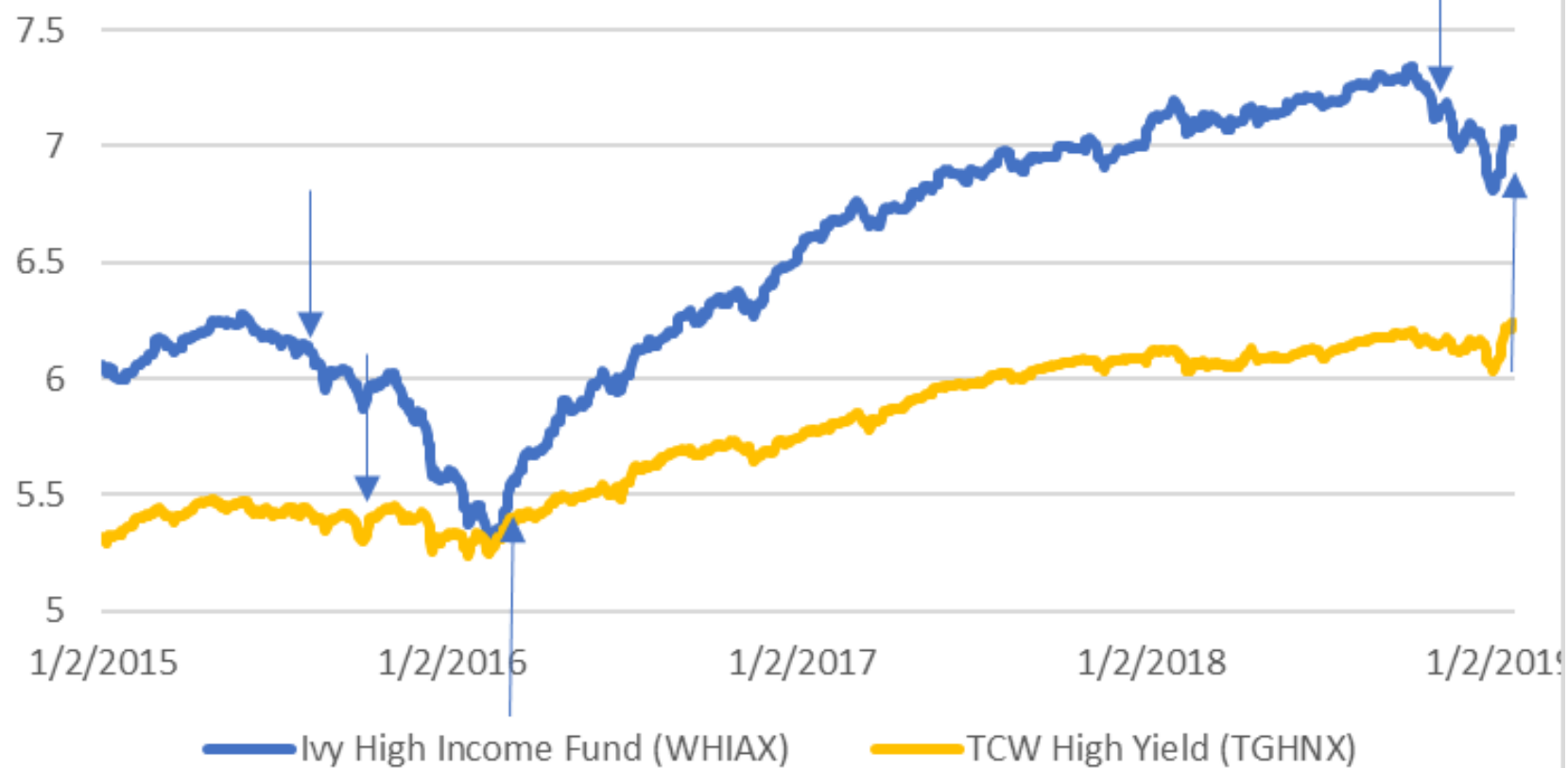
Opportunity in Corporate High Yield Bond Funds



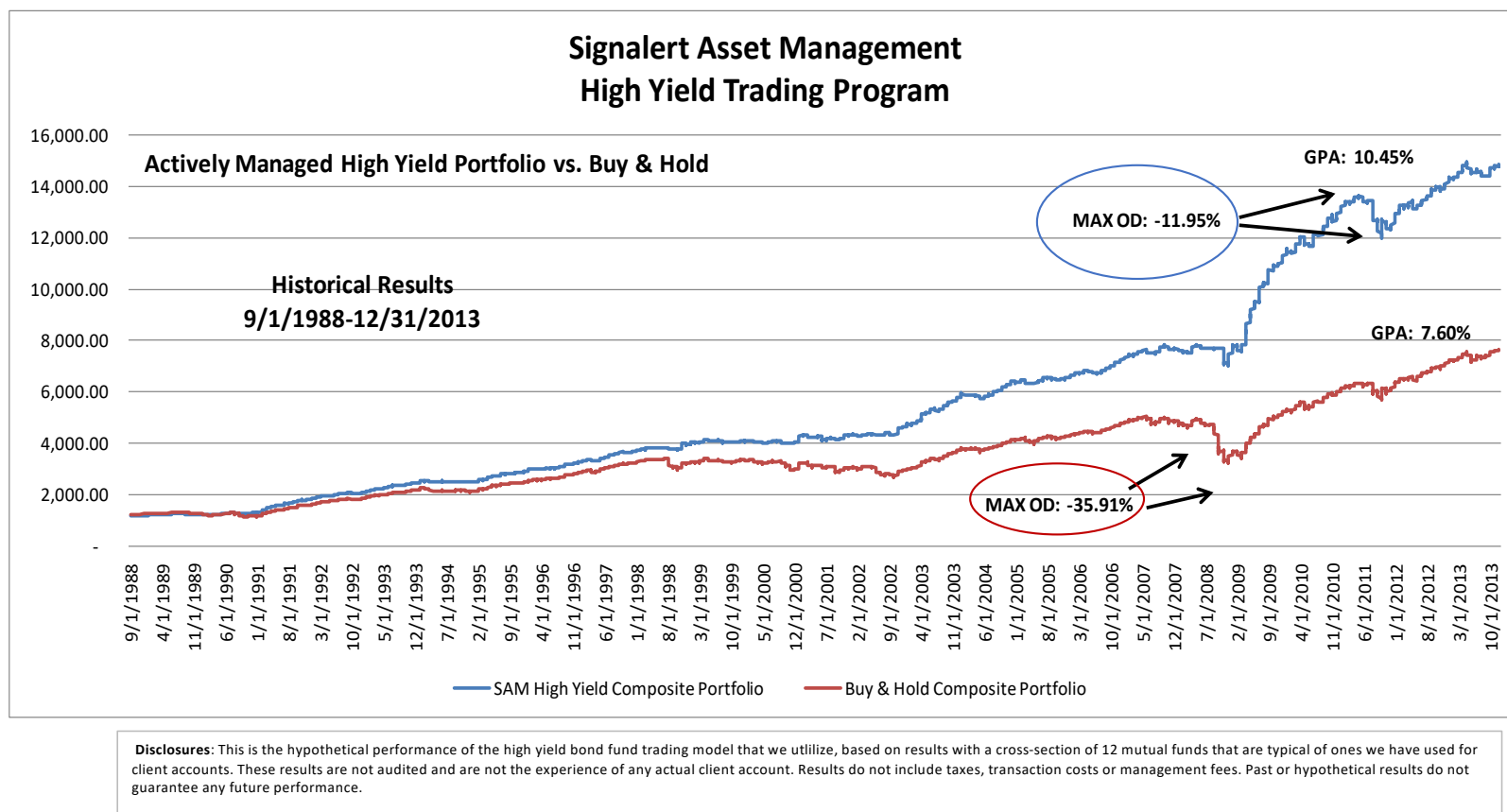
3% Buy and sell stops



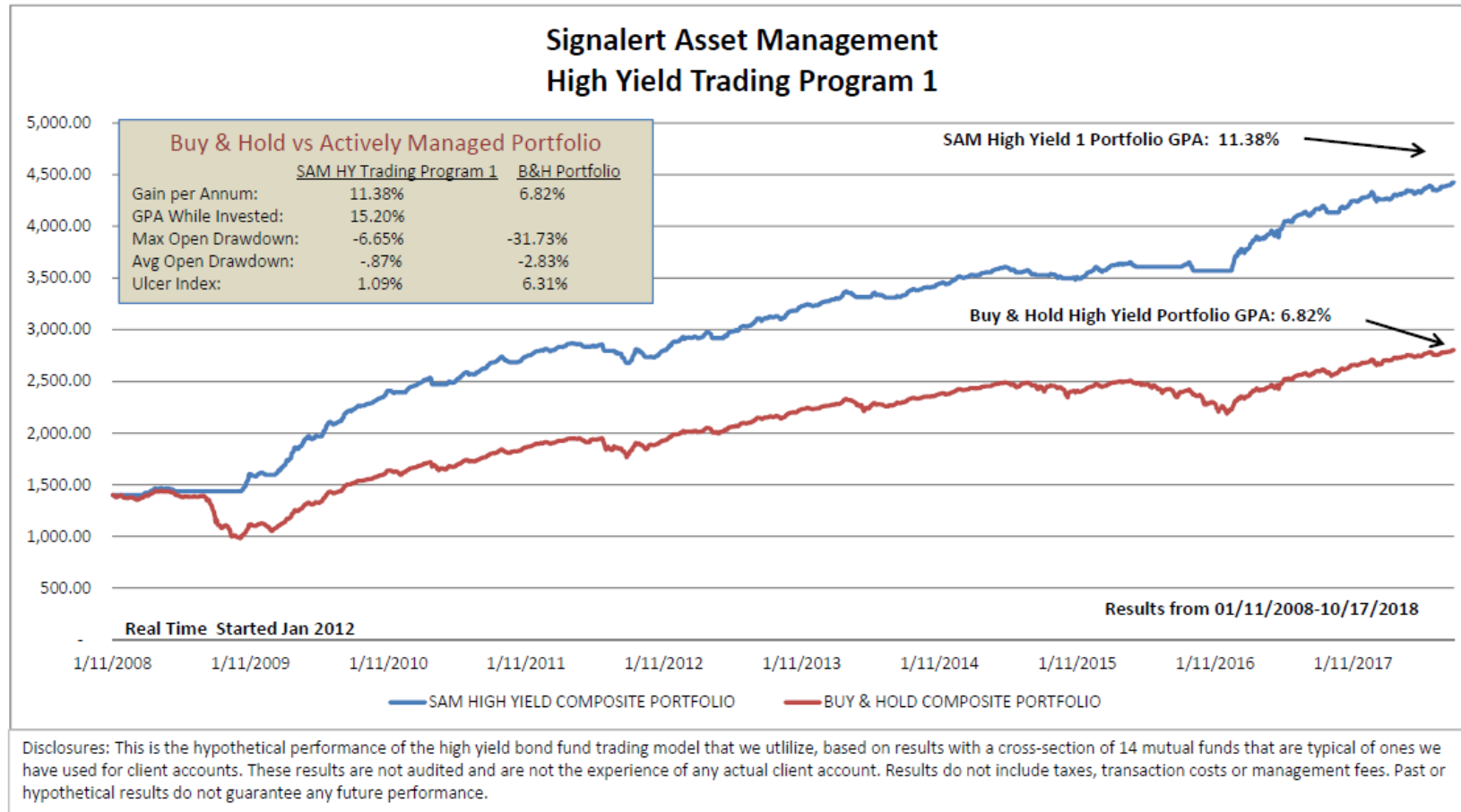
Examples of High Yield Trading 2015-2019



Trading High Yield Bond Funds



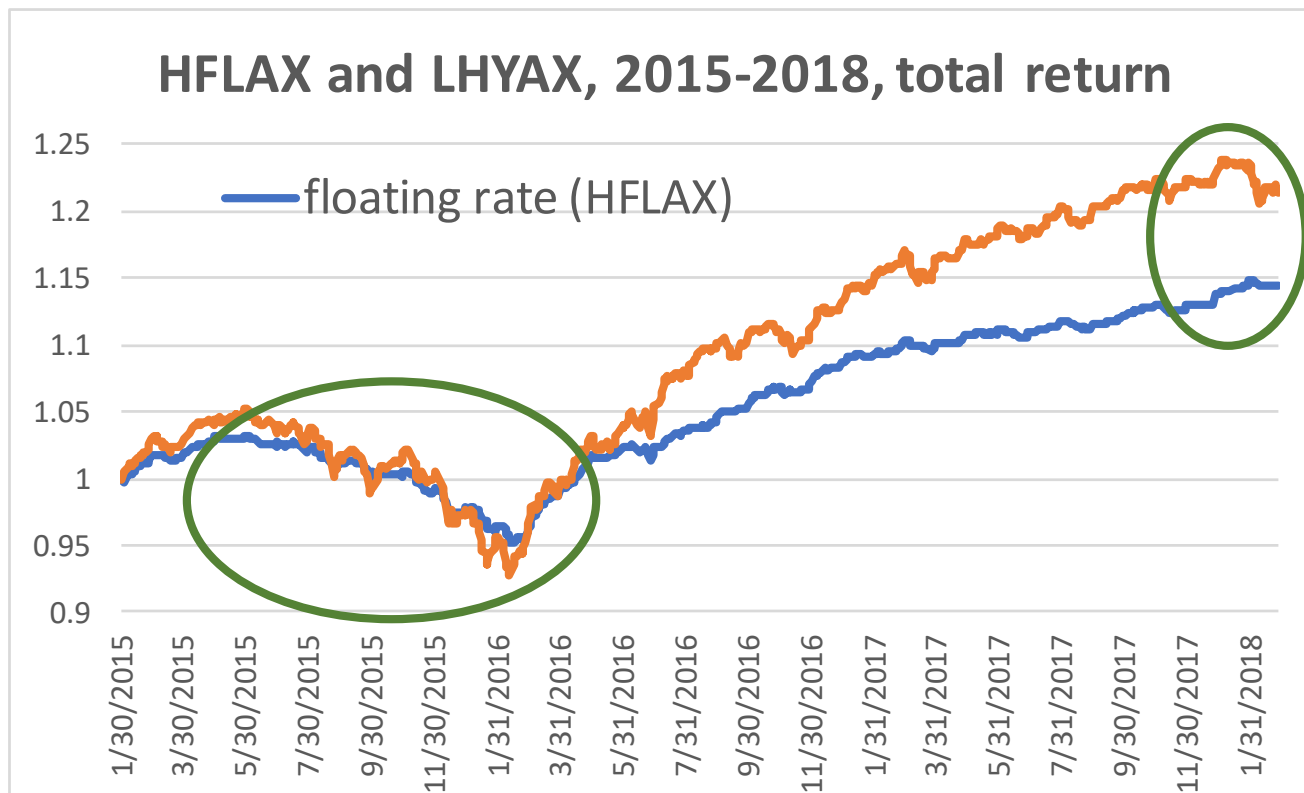
High yield bond fund trading 2008-2018



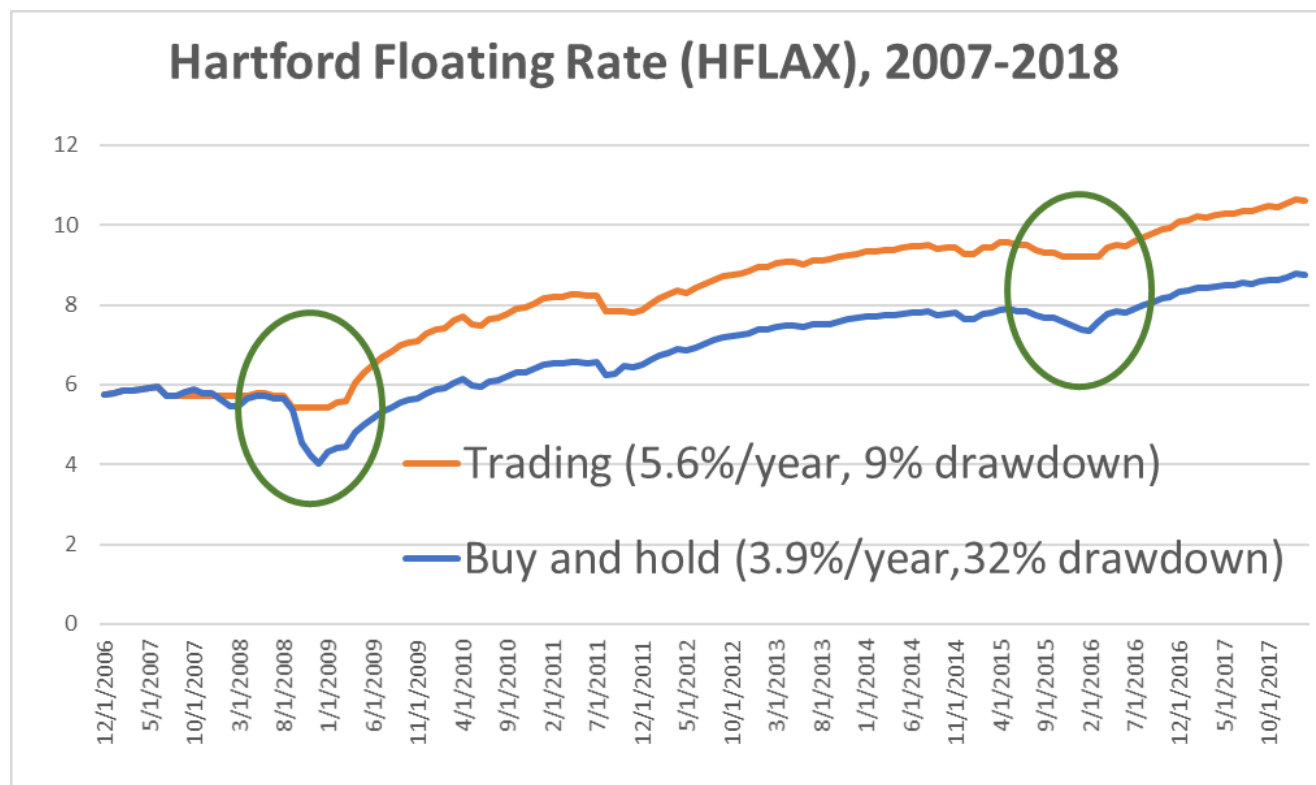
Floating rate bond funds

- Hold adjustable rate bank loans made to below-investment grade borrowers
- Better collateralized than high yield bonds, so better recovery (>80%) in cases of default
- Interest income tracks the prime rate, currently 5%, which rises and falls parallel to the Fed Funds Rate
- No interest rate risk, but potentially significant credit-spread risk
- Beware of potential liquidity problems (as in 2008). Read your fund's prospectus regarding trading restrictions.

Floating rate funds are less volatile than corporate high yield bond funds



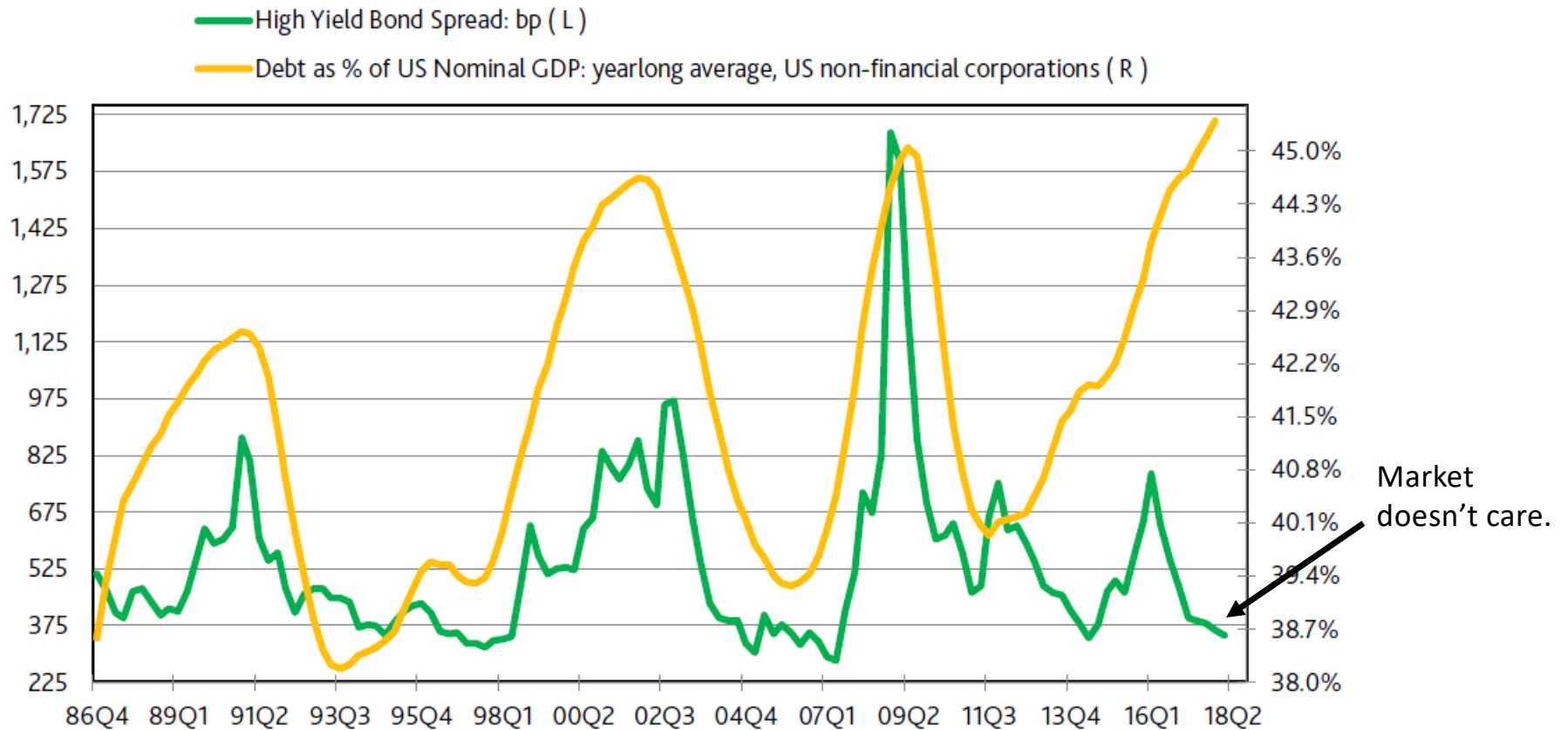
Example of Trading Floating Rate Funds



High yield bond spreads are tight

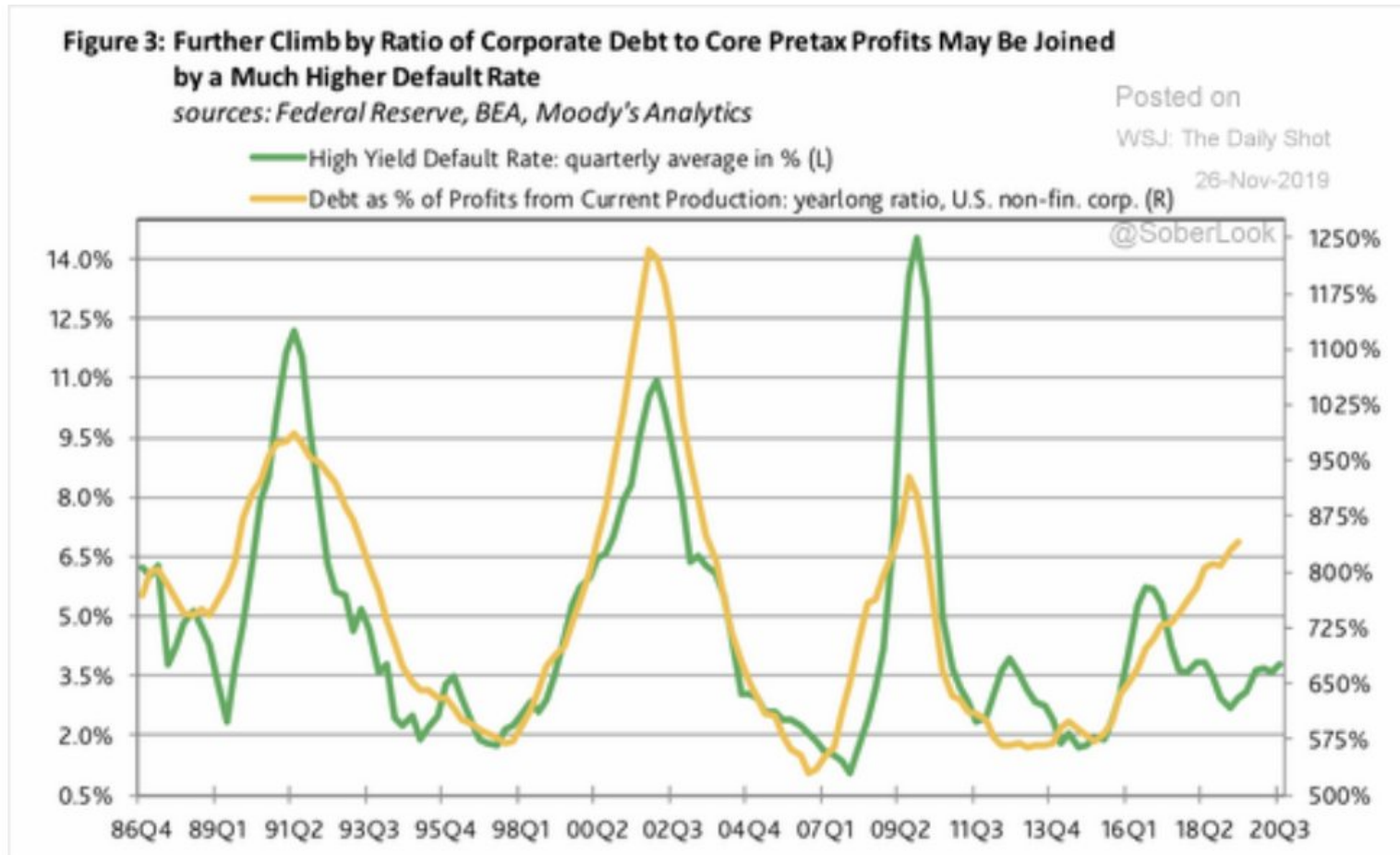


Corporate Debt is at a Record High vs. GDP



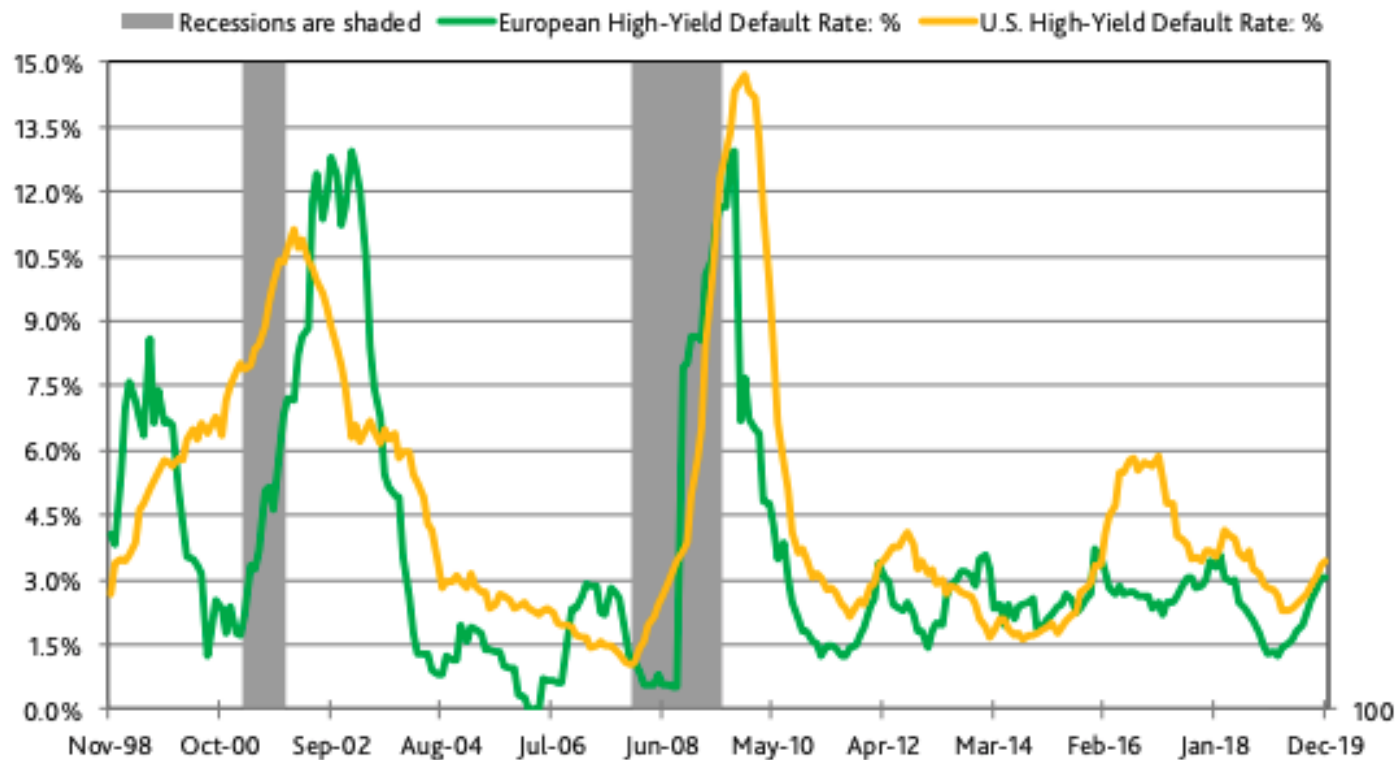
Source: Moody's Capital Markets Research, "Default Rate Defies Record Ratio of Corp. Debt to GDP"

Debt burdens are climbing faster than profits

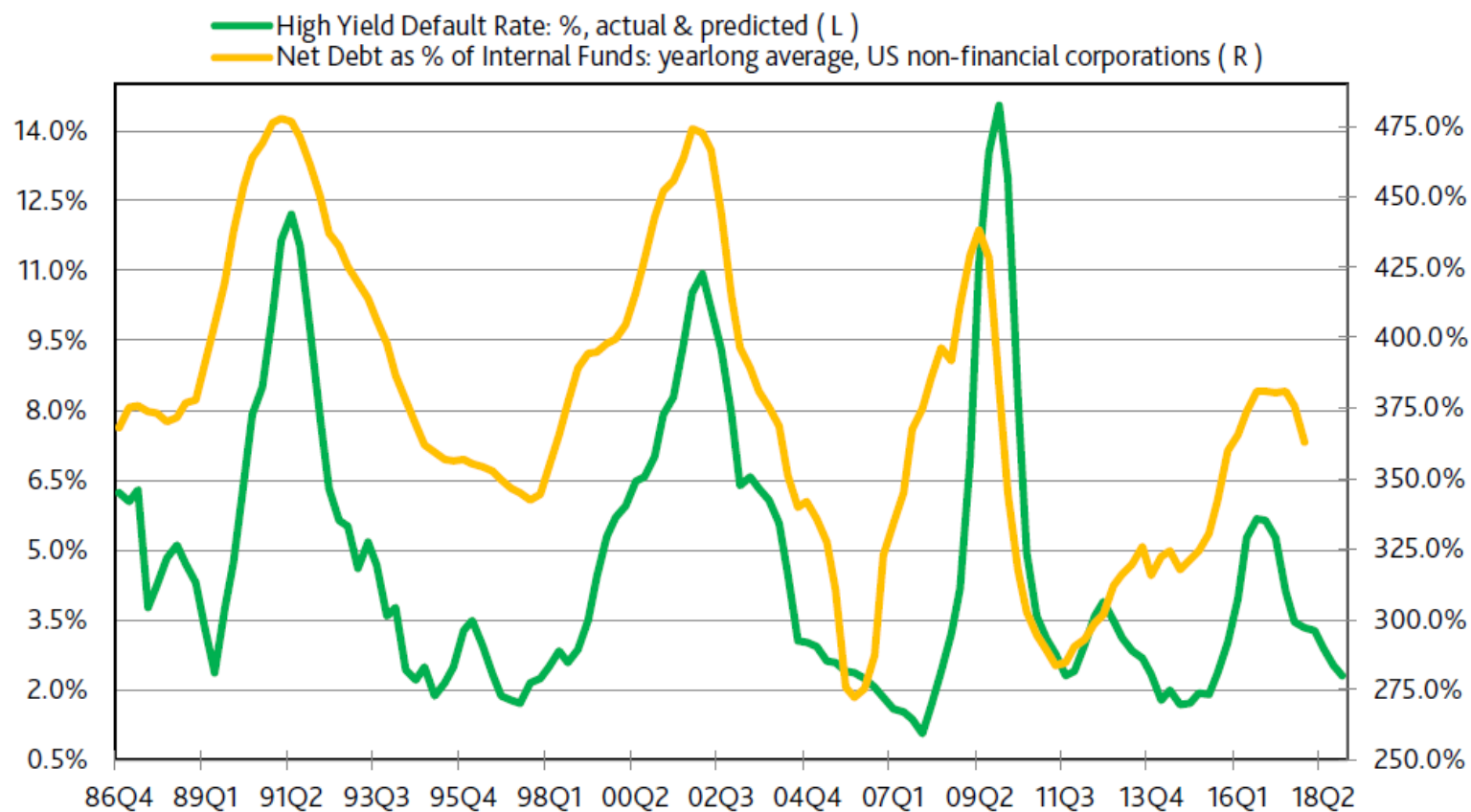


High Yield Bond Default Risk Is Picking Up

Figure 1: The European and U.S. High-Yield Default Rates Are Likely to Start Rising Together This Spring
sources: Moody's Investors Service, NBER, Moody's Analytics



Good news: debt burdens are still manageable.

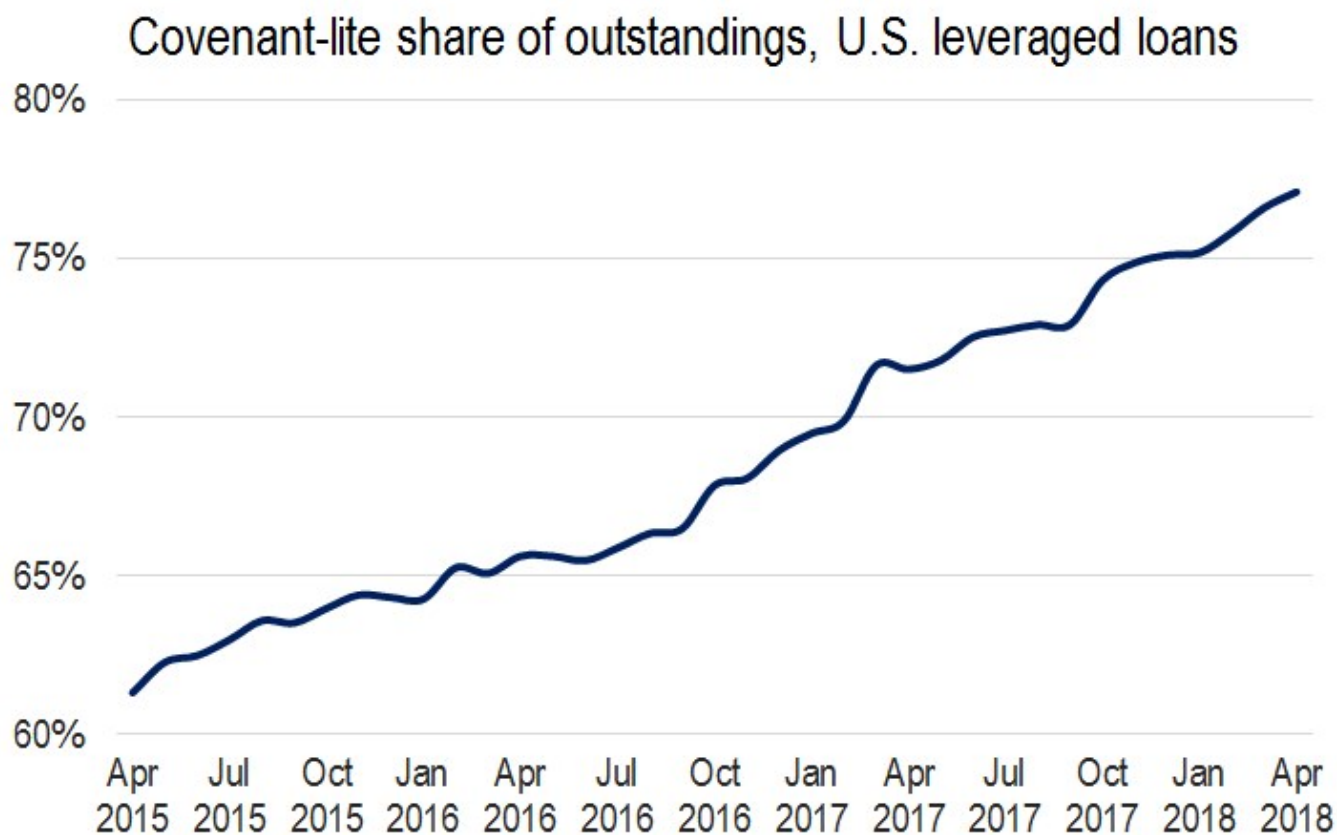


Source: Moody's Capital Markets Research, "Default Rate Defies Record Ratio of Corp. Debt to GDP"

Treasury markets are signaling caution



The next decline will be dangerous



Source: LCD, an offering of S&P Global Market Intelligence

Recommended preferred stock: AGNCO

- Mortgage REIT—All agency mortgages
- 6.5% coupon until 10/15/2024
- Then floating coupon LIBOR + 4.993%
- Callable starting 10/15/2024
- Cumulative
- Earnings would have to fall by more than 90% before threatening the preferred dividend (AGNC, the common share, yields 11% which appears sustainable under current interest rate conditions).
- Recommended below \$26/share

Floating rate preferred stock for aggressive investors: CIM-B

- Chimera Investments: mostly private-label mortgages (credit risk)
- 8% coupon until 3/30/2024
- Then LIBOR + 5.791%
- Callable starting 3/30/2024
- Cumulative
- Earnings would have to fall by more than 90% before threatening the preferred dividend. (The common dividend is 11.8% and appears sustainable under current interest rate conditions.)
- CIM-B recommended below \$26/share for aggressive income investors (recently 26.55)

off the mark.com by Mark Parisi



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An Option Strategy When Investors are Fearful

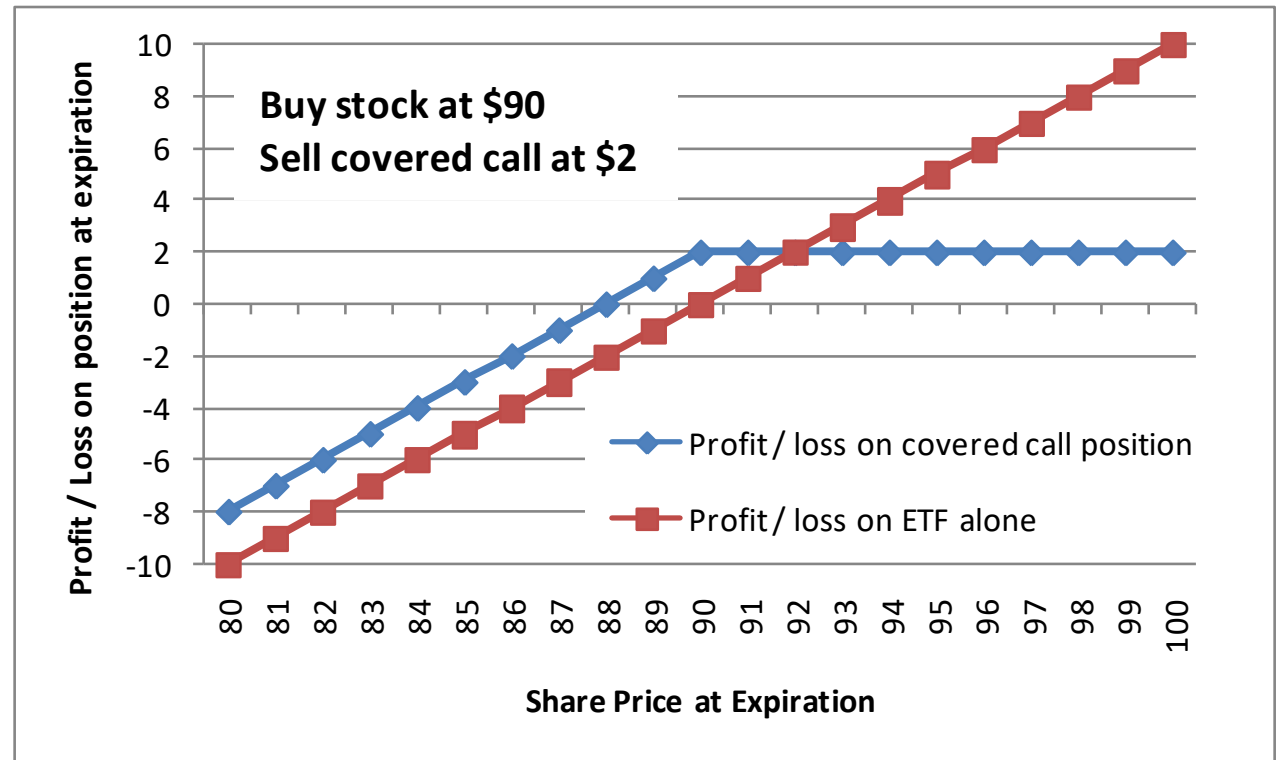


Introduction to options

- Call option
 - Gives the owner the *right* but not the obligation to buy 100 shares at a pre-agreed price (*strike price*) on or before an *expiration date*.
 - Value of a call option rises when the underlying stock or ETF rises.
- Put option
 - Gives the owner the *right* but not the obligation to *sell* 100 shares at a pre-agreed price (*strike price*) on or before an *expiration date*.
 - Value of a put option rises when the underlying stock or ETF falls.
- For every option bought there must be someone writing options on the other side of the trade who must pay up if the buyer exercises the option.
- All else being equal, options are more expensive the longer until the expiration date and the more volatile traders expect the underlying stock or ETF to be.

Covered call position

- Buy 100 shares of stock and sell one option on the stock.
- Gain is likely to occur, but is limited.
- Losses are relatively unlimited, but in a losing month writing a covered call always reduces losses compared to owning the shares alone.



Put-Call parity

$$\text{Stock} + \text{dividends} = \text{call} - \text{put} + \text{cash}$$

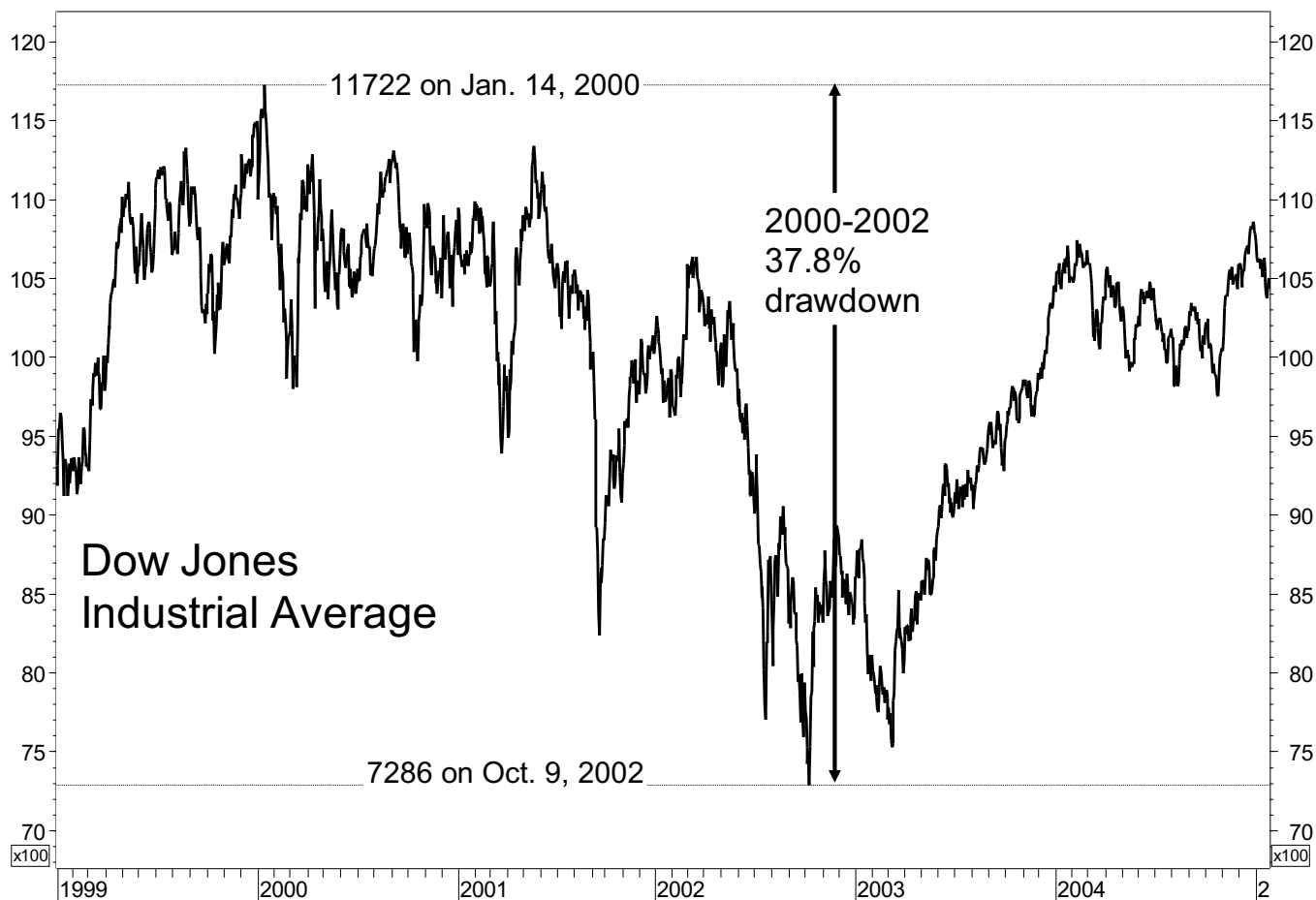
(cash earns risk-free interest)

As a result,

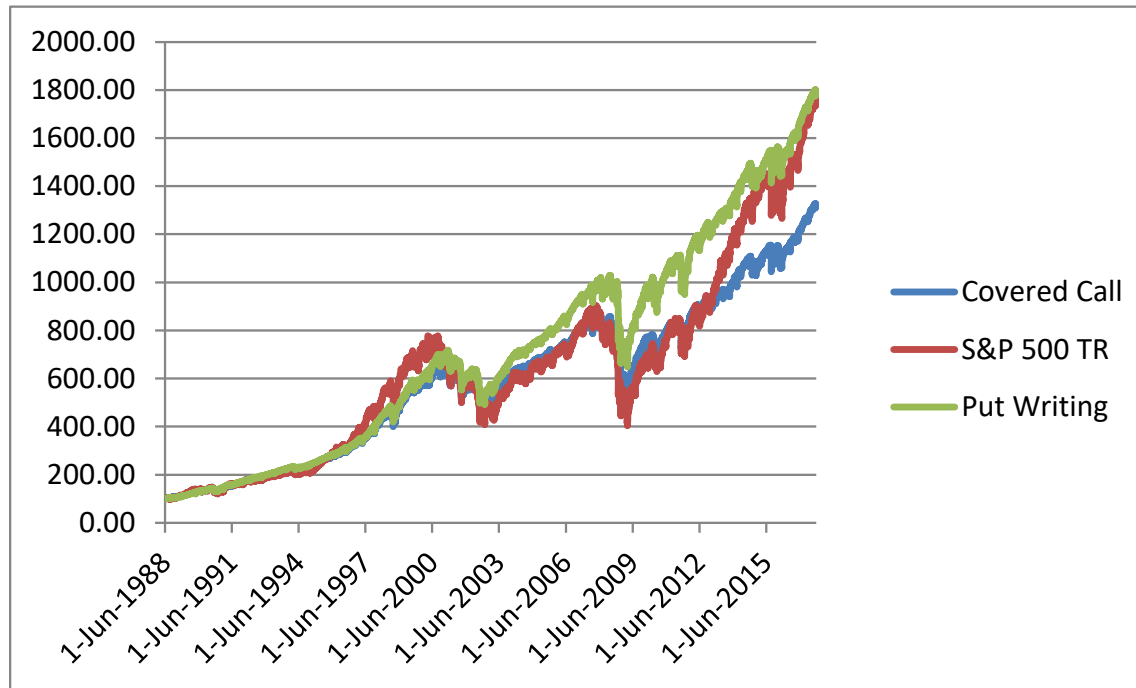
$$\text{Stock} - \text{call} = \text{cash} - \text{put}$$

In theory, covered call writing should return the same as cash-secured put writing.

Risk measure: worst drawdown



Total Returns 1988-2017

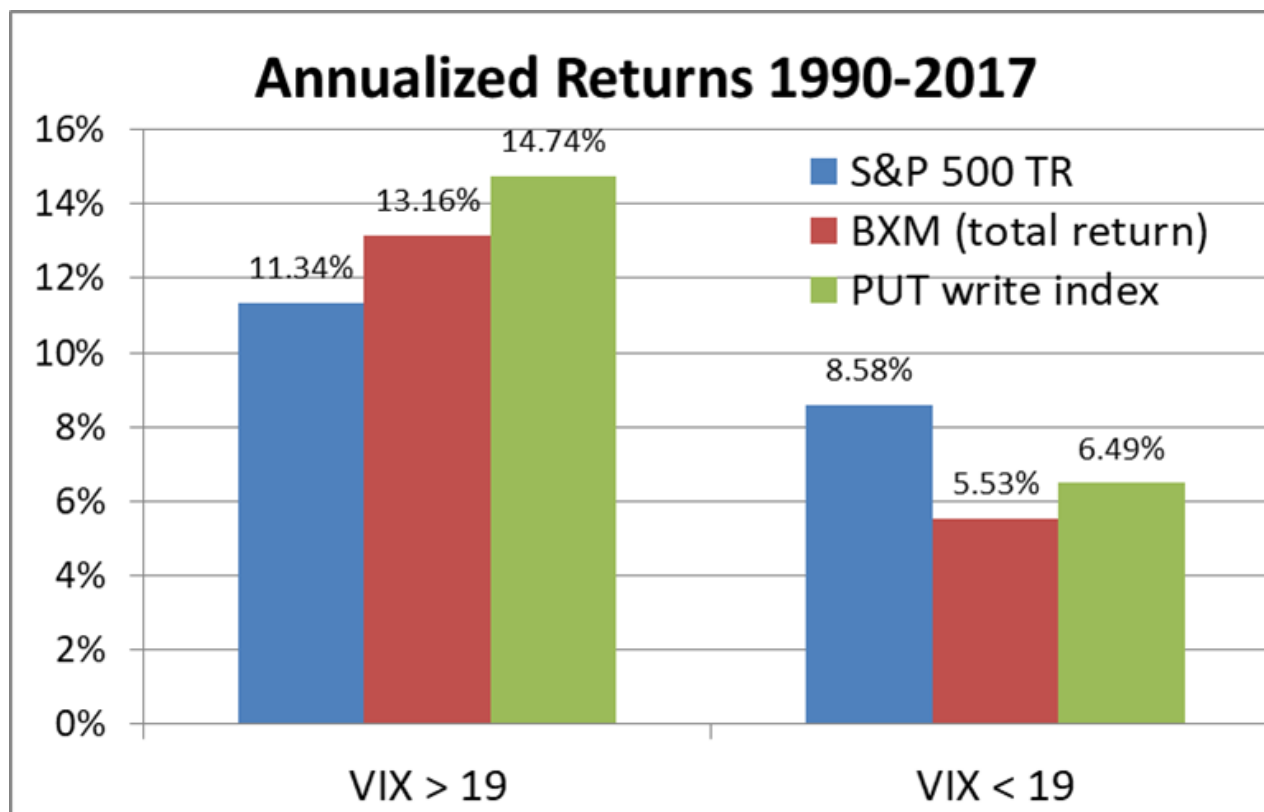


Index	Annual return	Worst Drawdown
Covered call (BXM)	9.2%	-40%
S&P 500 total return	10.3%	-55%
Put writing (PUT)	10.4%	-37%

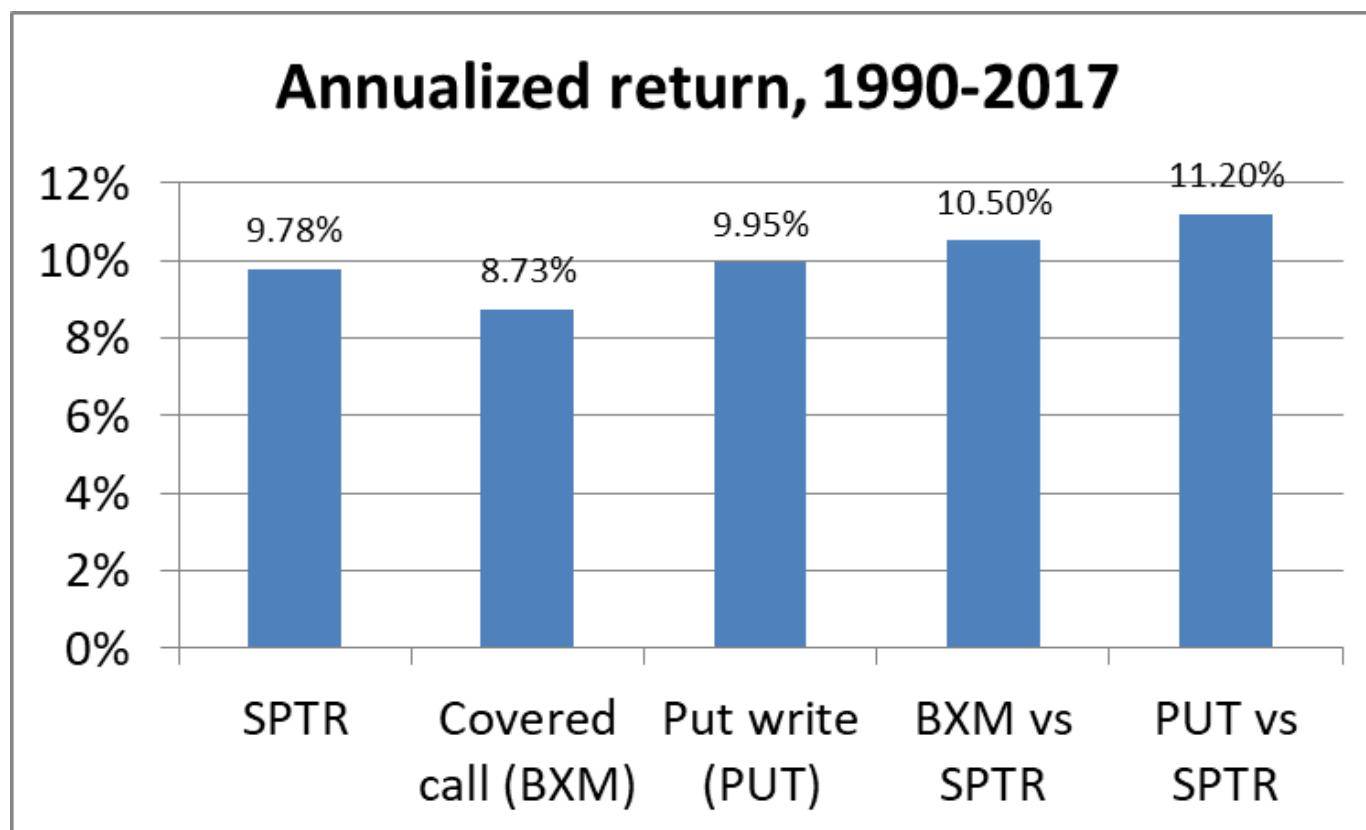
Implied volatility and VIX

- “Implied volatility” is the level of volatility that a stock must demonstrate between now and expiration to make its stock options fairly priced.
- VIX is an index that measures the average level of implied volatility (annualized) over the next 30 days built into S&P 500 Index options (puts and calls) expiring between 23 and 37 days from now. Its average value has been 19.5%.
- **The higher the level of implied volatility, the more expensive the same level of option protection.**
- **Just because options are cheap (low VIX) doesn't mean that they are a bargain.**

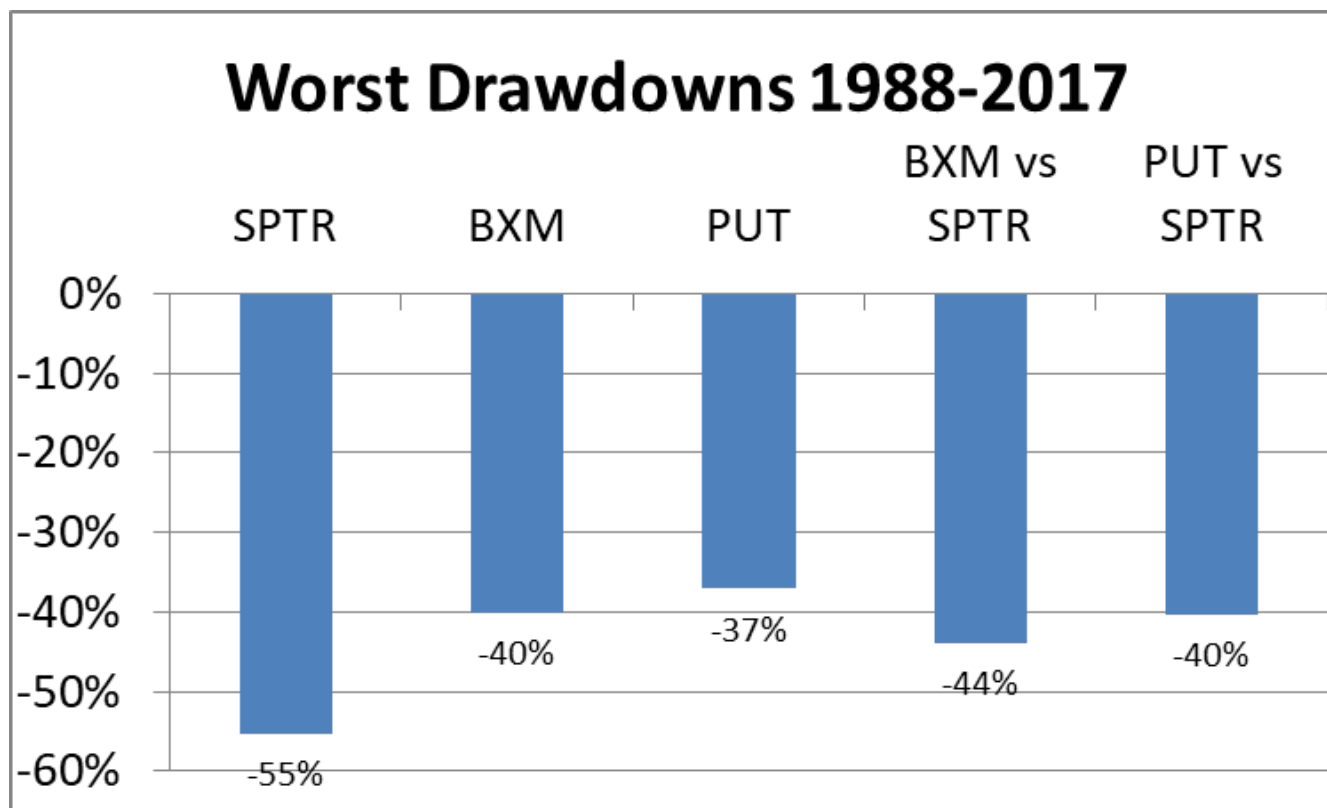
Market returns under high versus low volatility



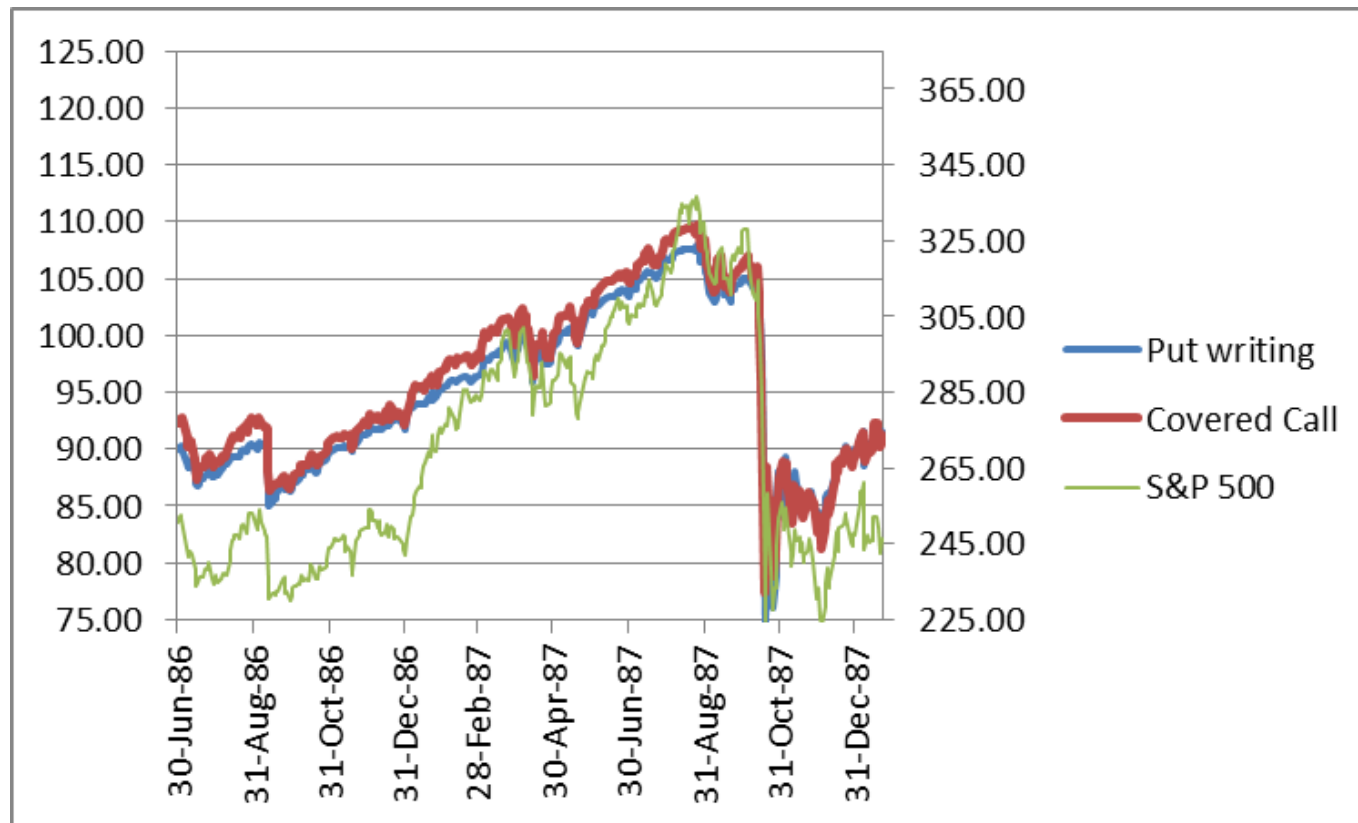
Take advantage of VIX to guide your strategy: write options when $VIX > 19$



These are not conservative strategies



Poor risk management during market crashes

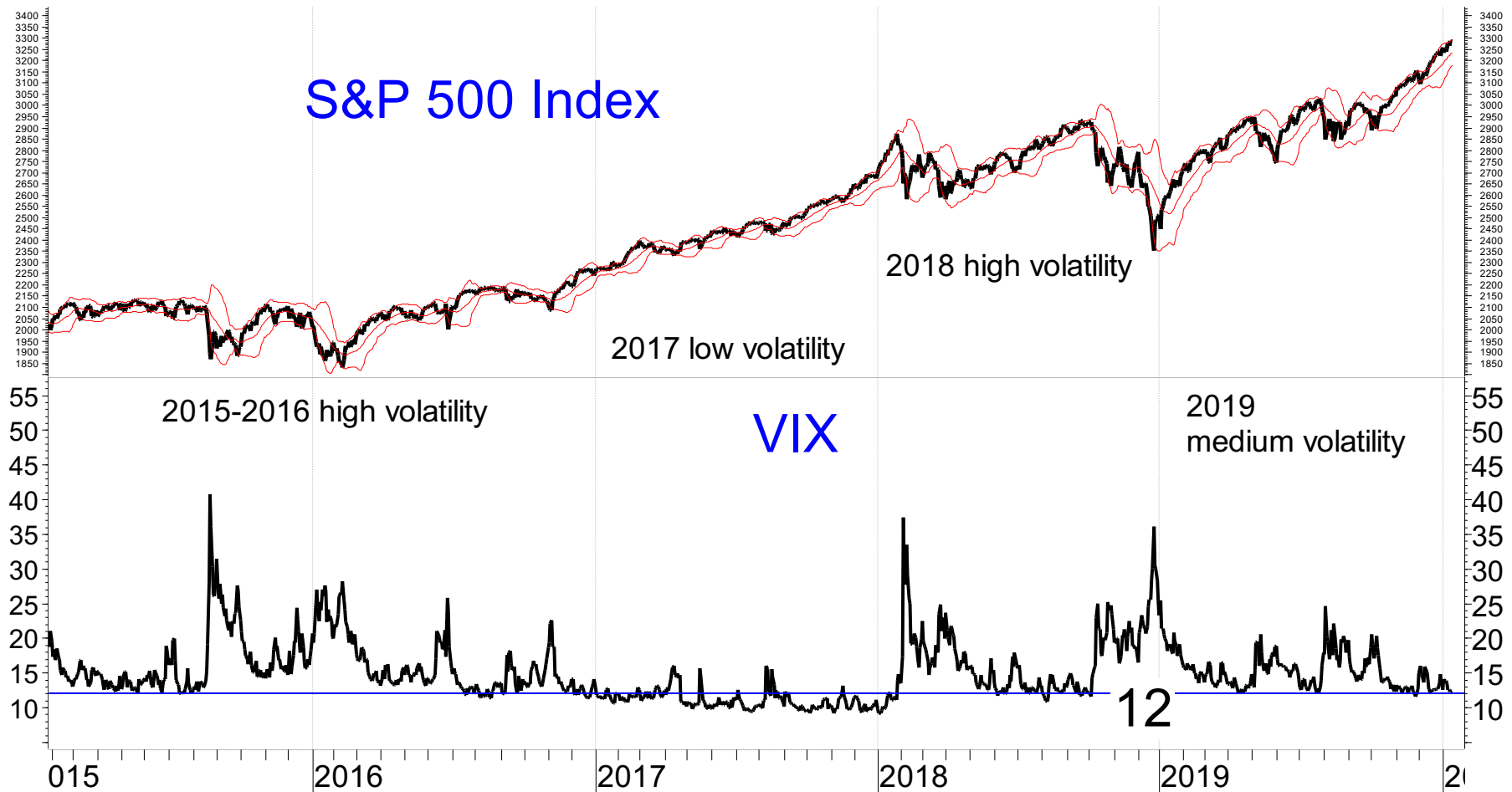


There are other covered call indexes available from CBOE

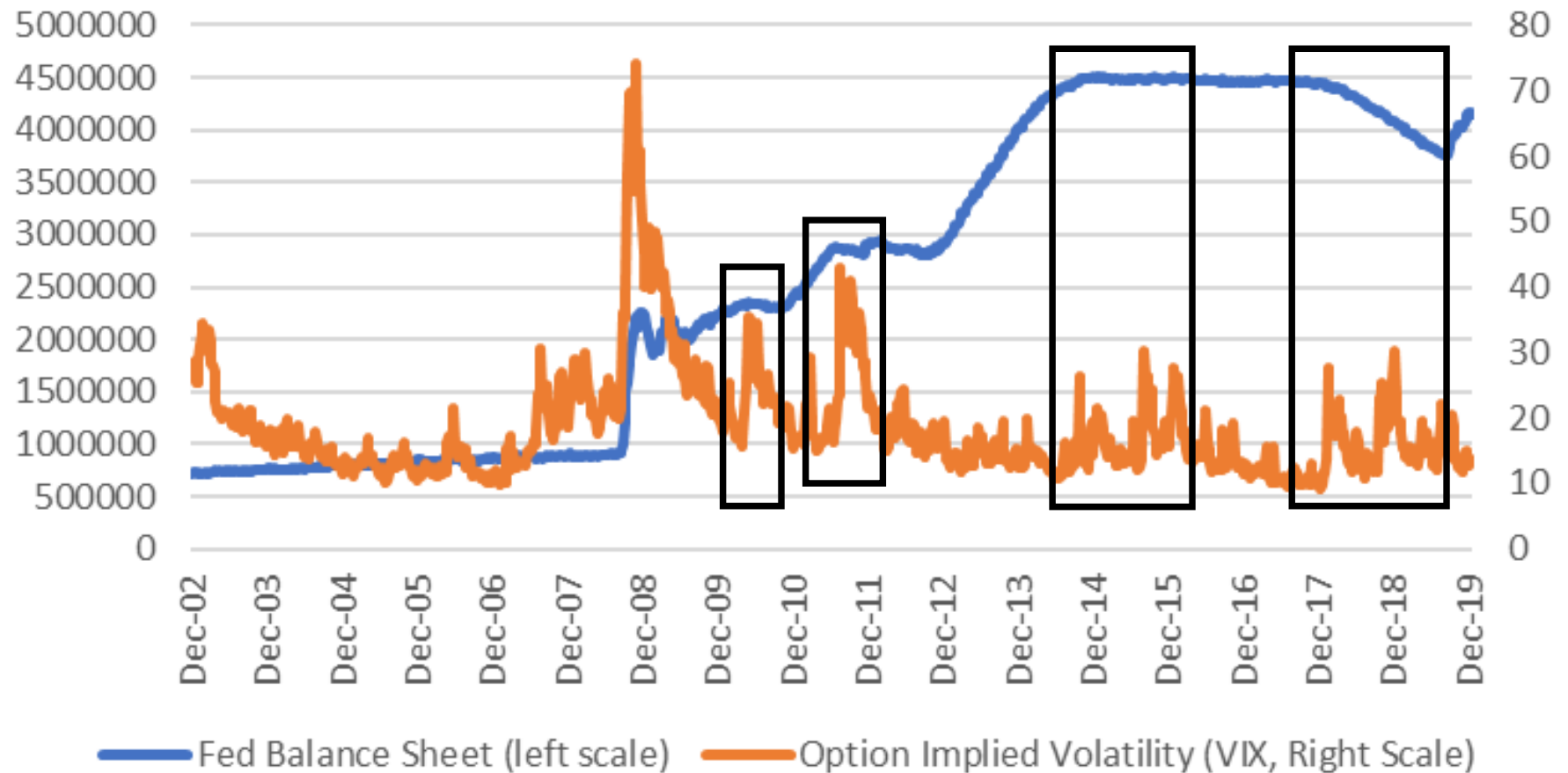
- Dow Jones Industrial Average (BXD, 1997-2017)
- Russell 2000 Index (BXR, 2001-2017)
- Nasdaq 100 Index (BXN, 1995-2017)

Beware: Not all ETF covered call strategies are created equal.

Volatility Ebbs and Flows



Fed Tightening Raises Volatility 2002-2020



Strategy for low volatility conditions

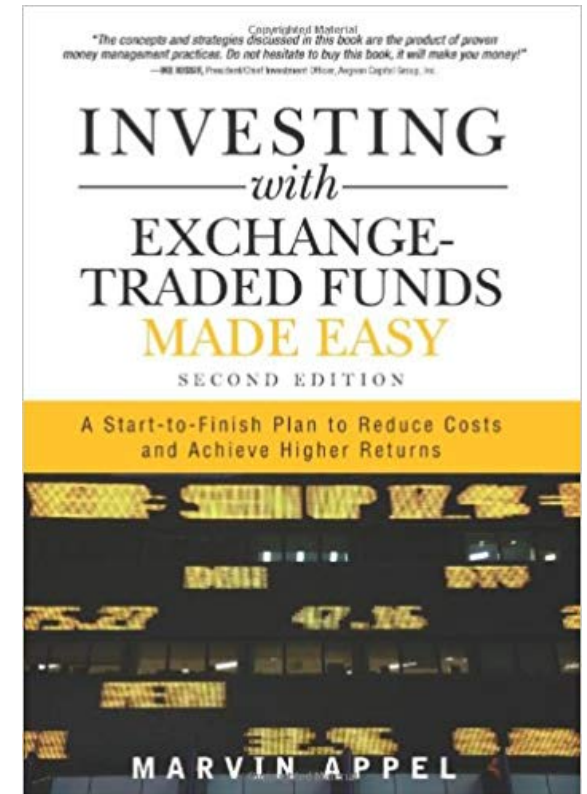
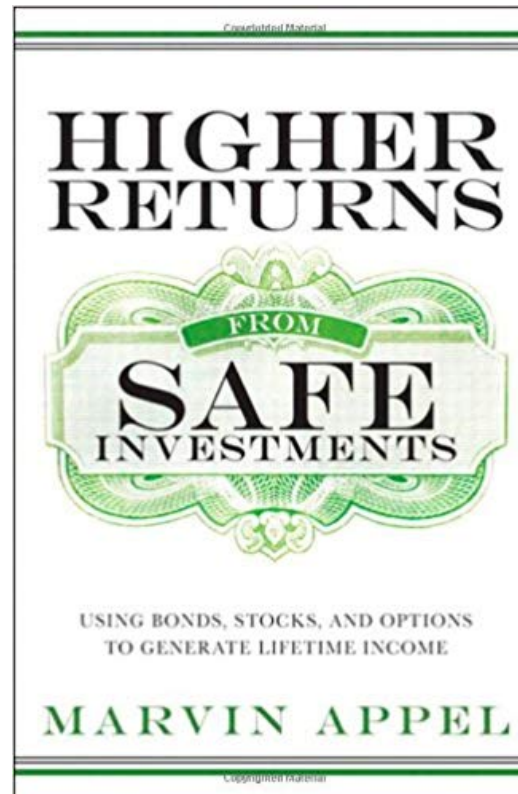
- Buy an S&P 500 Index Option (SPX, XSP or SPY)
 - Shoot for 5%-10% in the money, a year to expiration
- Use remaining capital to trade high yield bond funds
- Result: Approximately match gain of S&P 500 Index with less risk
- Example (based on close on 1/14/2020)—Instead of investing \$328,3000 in an S&P 500 Index fund or SPY (S&P 500 Index at 3283):
 - Buy 3100 call at 320 (183 points in the money, time value 137 points or 4.2% of notional value. Maximum risk of call option is 10.3% of notional value)
 - Use remaining capital (\$296,300) to trade high yield bond funds
 - Need to make 6.6% to match S&P 500 Index total return. (S&P 500 dividend yield of 1.8%)

Summary—Strategies for Volatile, Low-Yield Markets

- Corporate high yield bond fund trading
- Floating rate bond fund trading
- Floating rate preferred stocks AGNCO and CIM-B (buy and hold)
- Covered call or cash-secured put writing on S&P 500 index ETFs when options are expensive
- Long call options and high yield bond fund trading when options are cheap
- Market timing

Books by Marvin Appel

(published by
Prentice-Hall)



For more information

- Money management by Signalert Asset Management:
www.signalert.com
- Investment newsletter: Systems and Forecasts
- Free newsletter trial (Sign up at www.systemsandforecasts.com)
- Copy of these slides:

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Active Asset Allocation Strategies Using Foreign and U.S. Equity ETFs

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For my presentation today I'll be reading the PowerPoint slides word for word

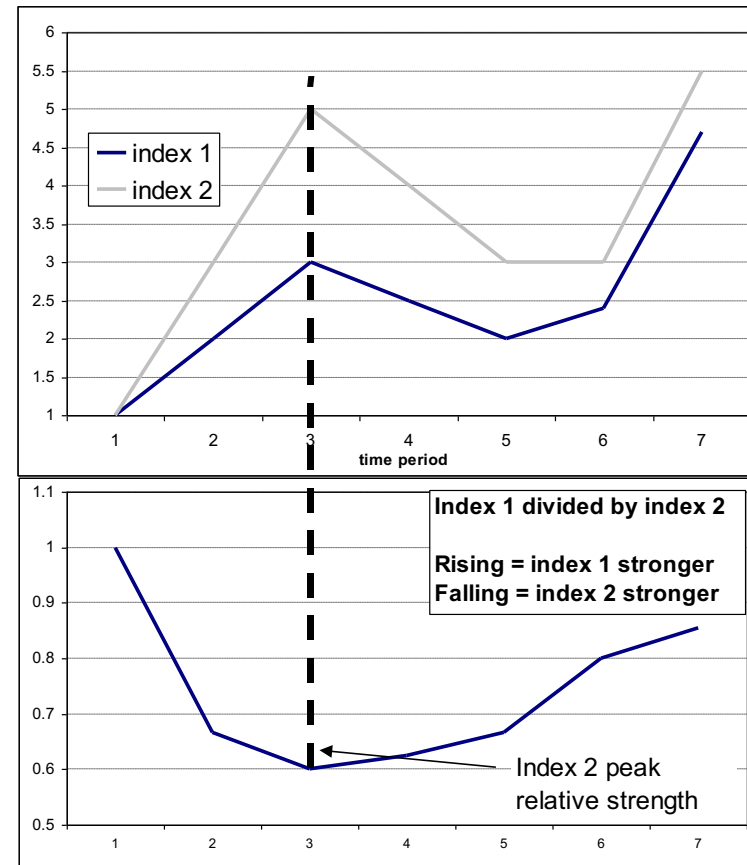


Outline

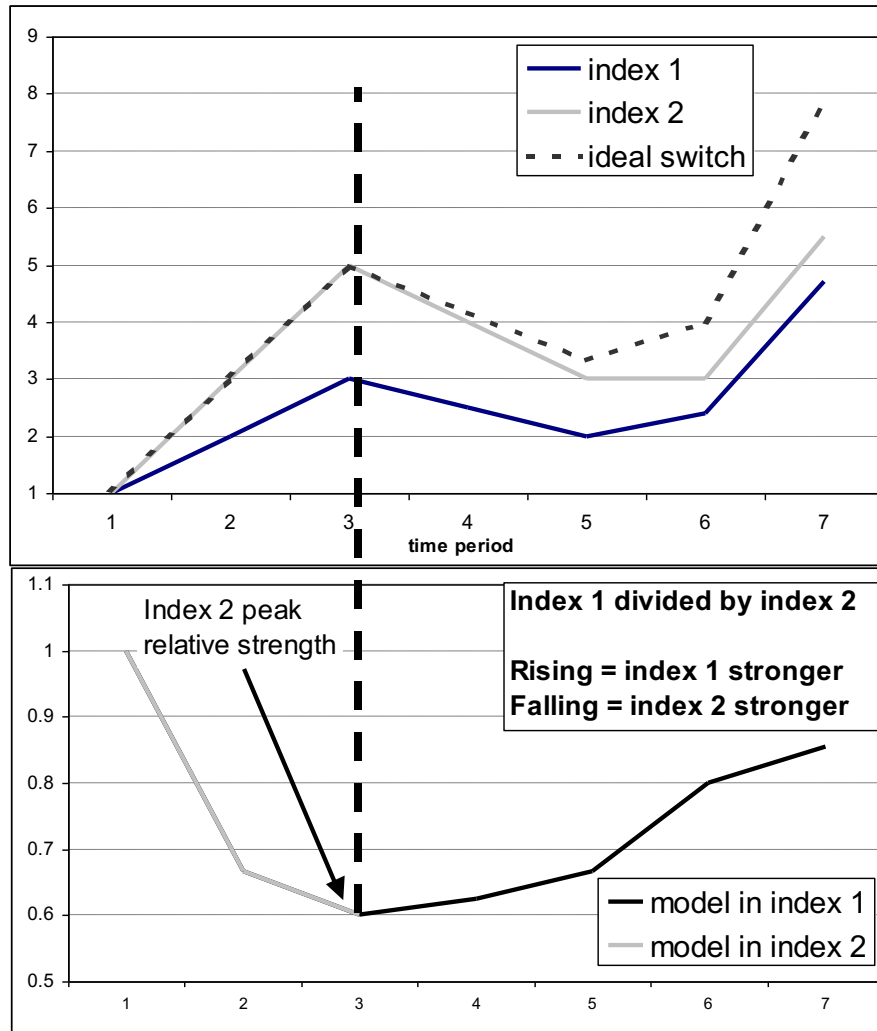
- Concept of relative strength between two indexes
- Monthly EAFE vs S&P 500 model
- Monthly EEM vs S&P 500 model
- Equity and bond market outlook--Gains will be hard to achieve given valuations.
- Presidential elections and the stock market

Concept of relative strength

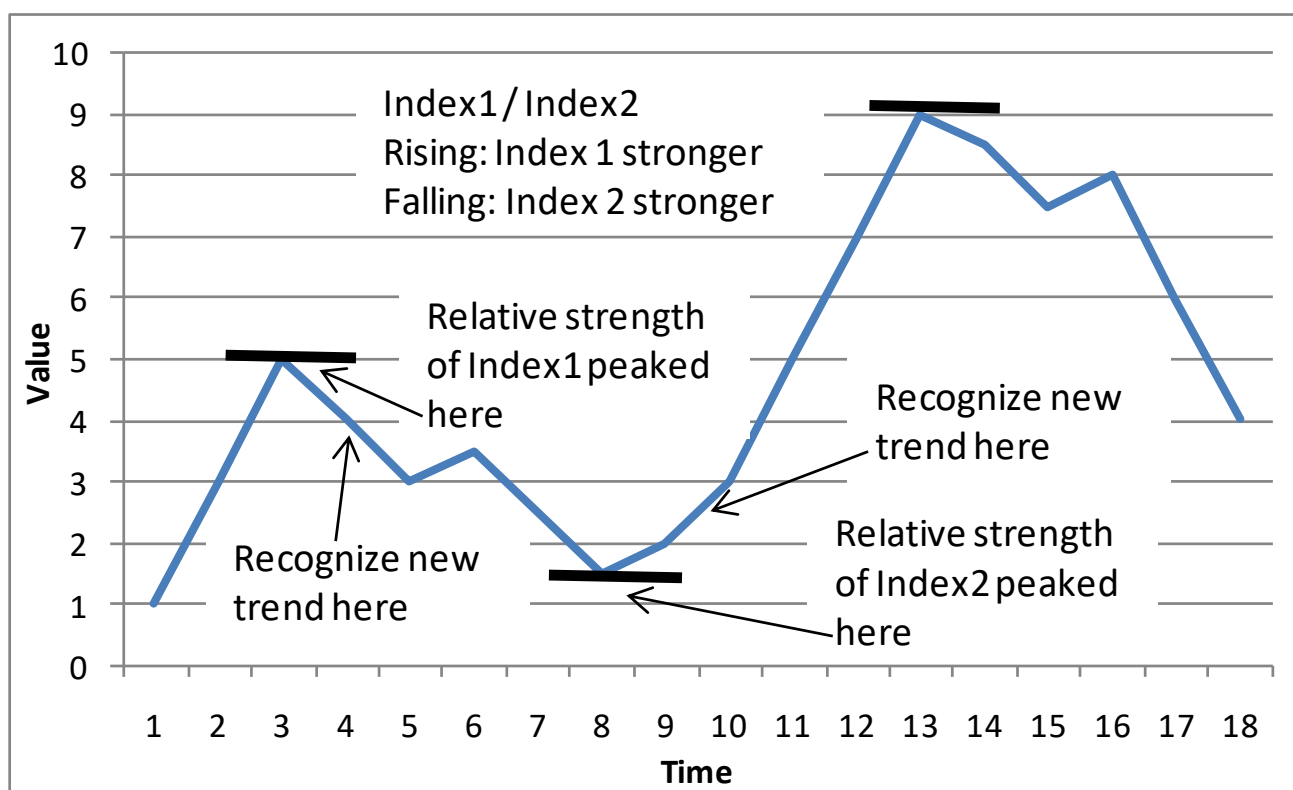
- Divide index_1 by index_2 . These indexes may reflect price or total return.
- Rising ratio means index_1 (numerator) is stronger.
- Falling ratio means index_2 (denominator) is stronger.
- Relative strength leadership does not tell you whether either or both indexes are showing profits or losses.



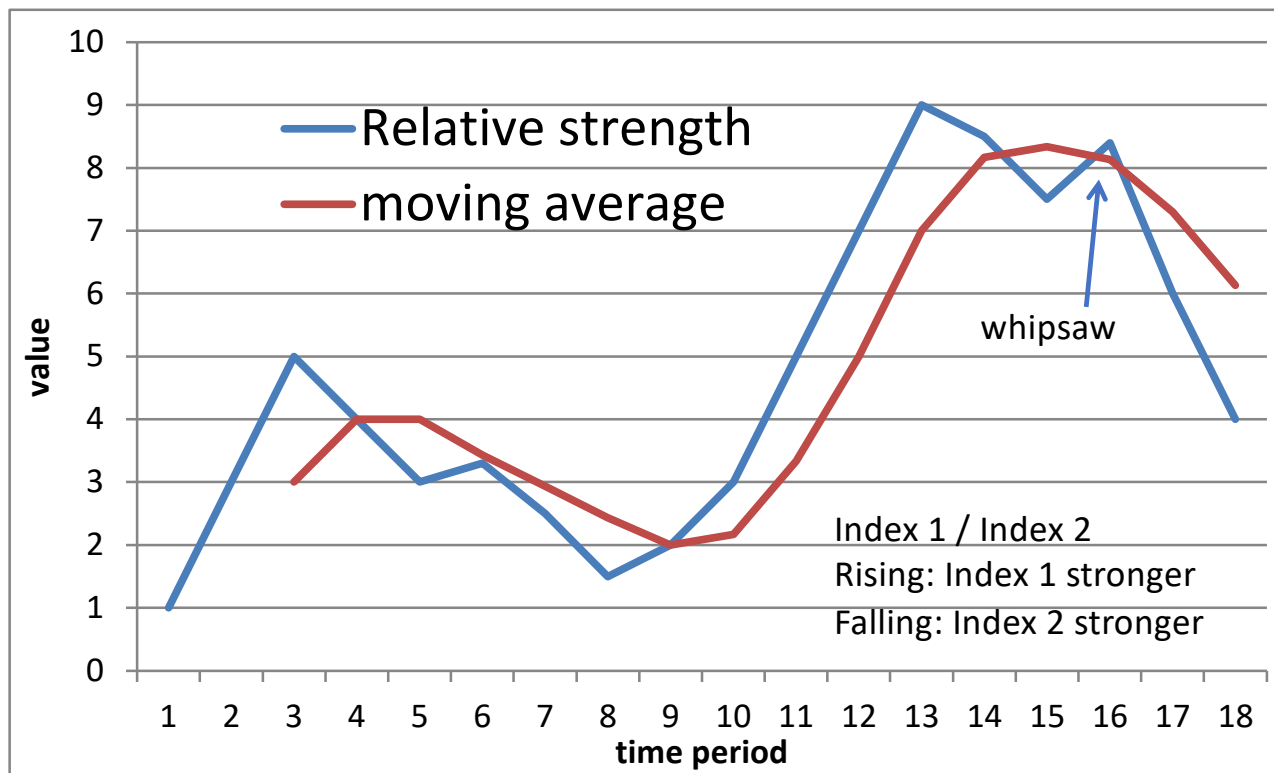
Hypothetical ideal relative strength switching model



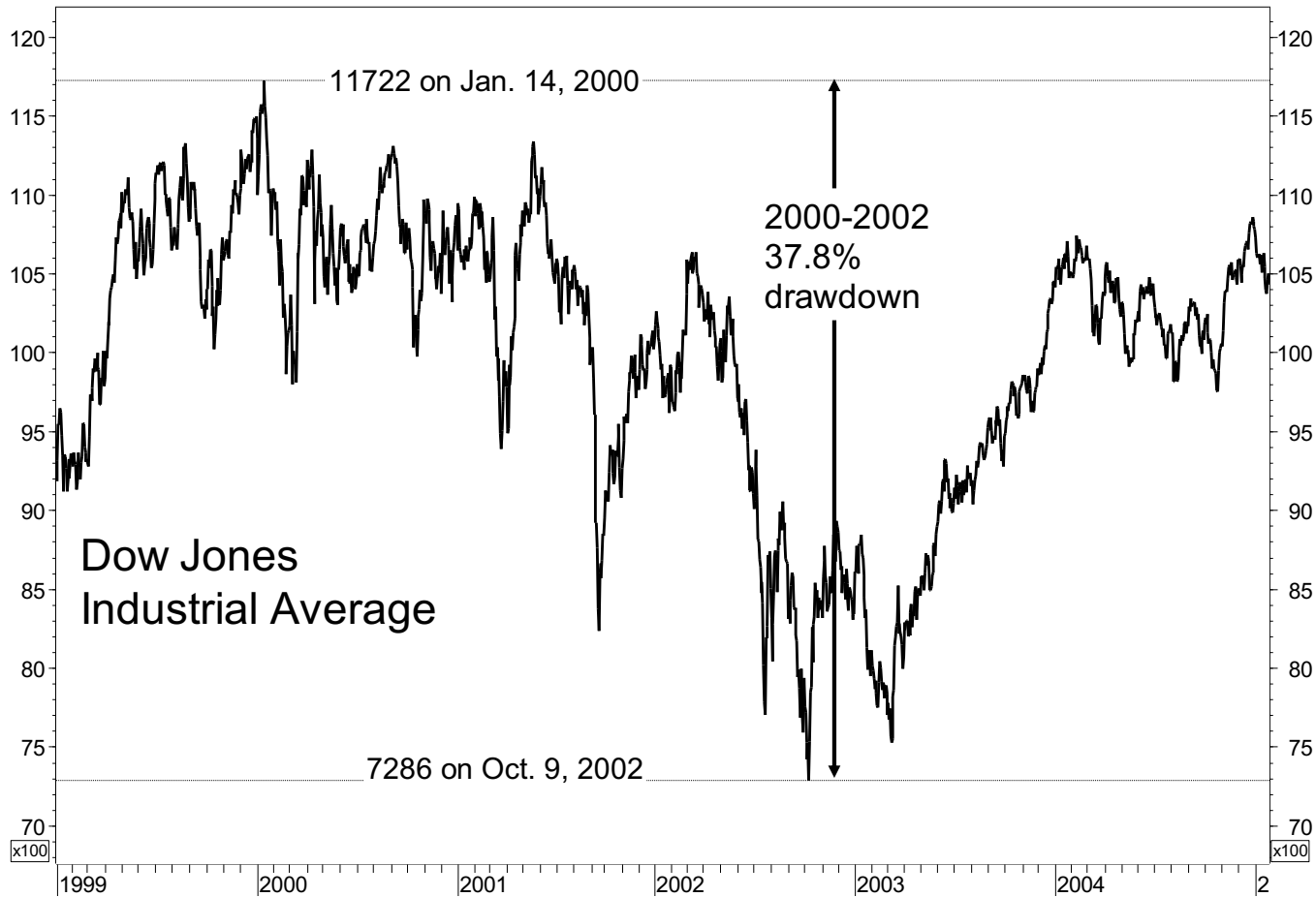
Recognizing new trends in relative strength—trailing stops



Recognizing new trends in relative strength—moving average



Risk measure: worst drawdown



Foreign Equity Relative Strength Models



EAFE and S&P 500, 1970-2019



Foreign (developed country) versus U.S. stock model

- Use MSCI EAFE Index as the benchmark for foreign stocks and S&P 500 Index as the U.S. benchmark.
- Calculate the ratio of MSCI EAFE / S&P 500 (total return) on the last day of each month.
- A new trend is defined by a crossing a 19-month exponential moving average.
- Can use ETFs (EFA and SPY)

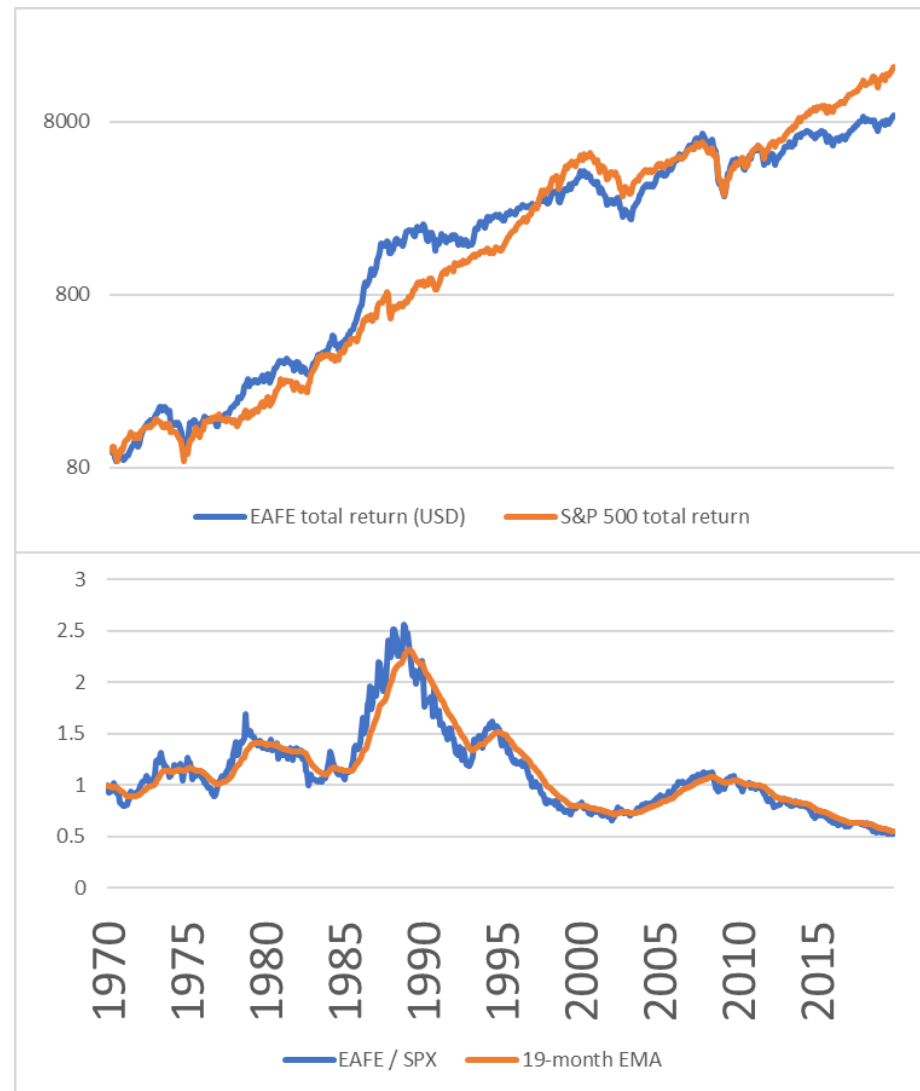
Calculating 19-Month Exponential Moving Average

- You will need
 - Last month's exponential moving average
 - This month's new ratio
 - To start the data series, use last month's ratio as last month's moving average in the formula below
- New exponential moving average =
 $0.9 * (\text{last month's average}) + 0.1 * (\text{this month's new ratio})$

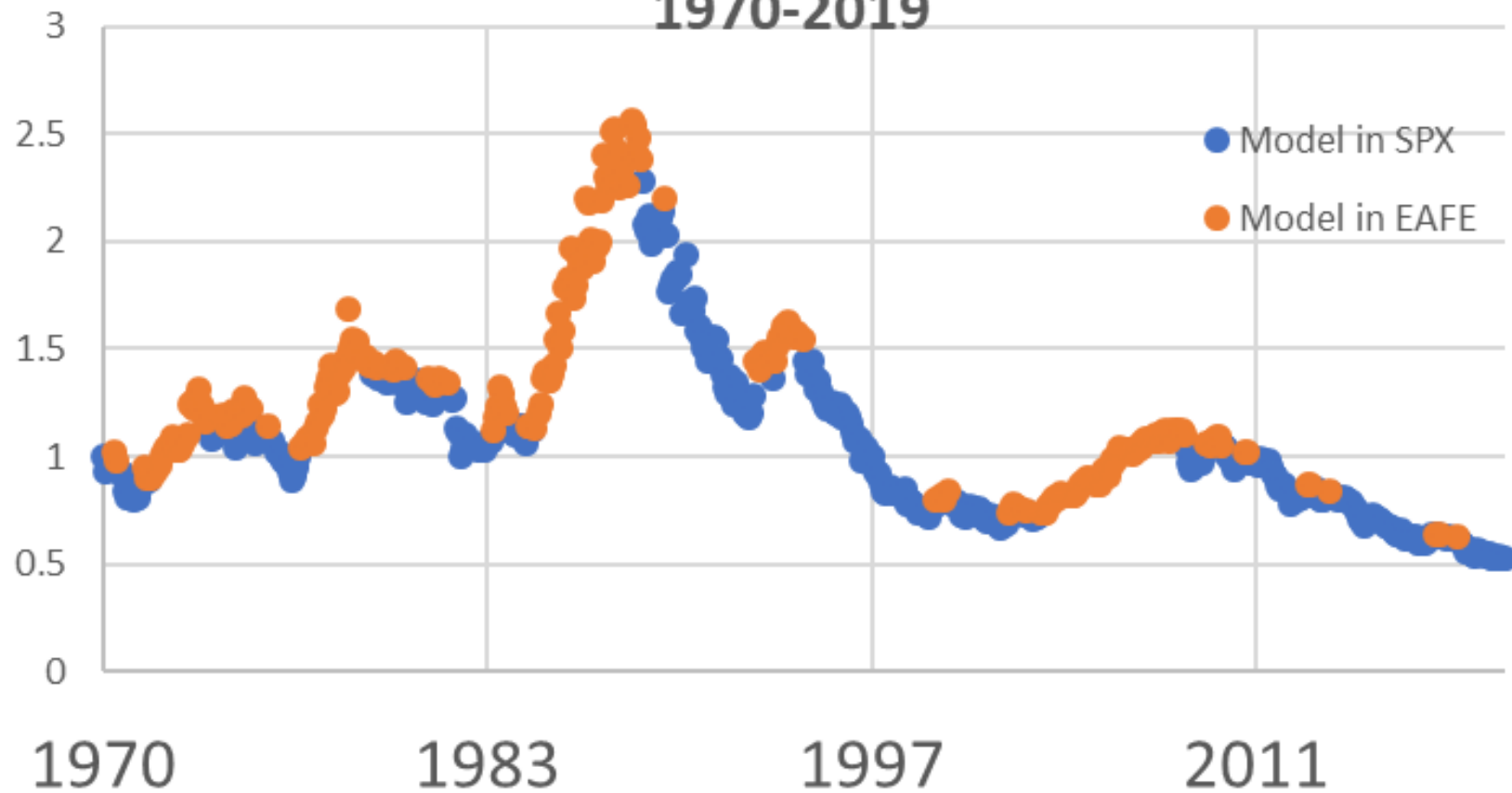
EAFE and SPX
(top)

EAFE / SPX
and 19-
month EMA
(bottom)

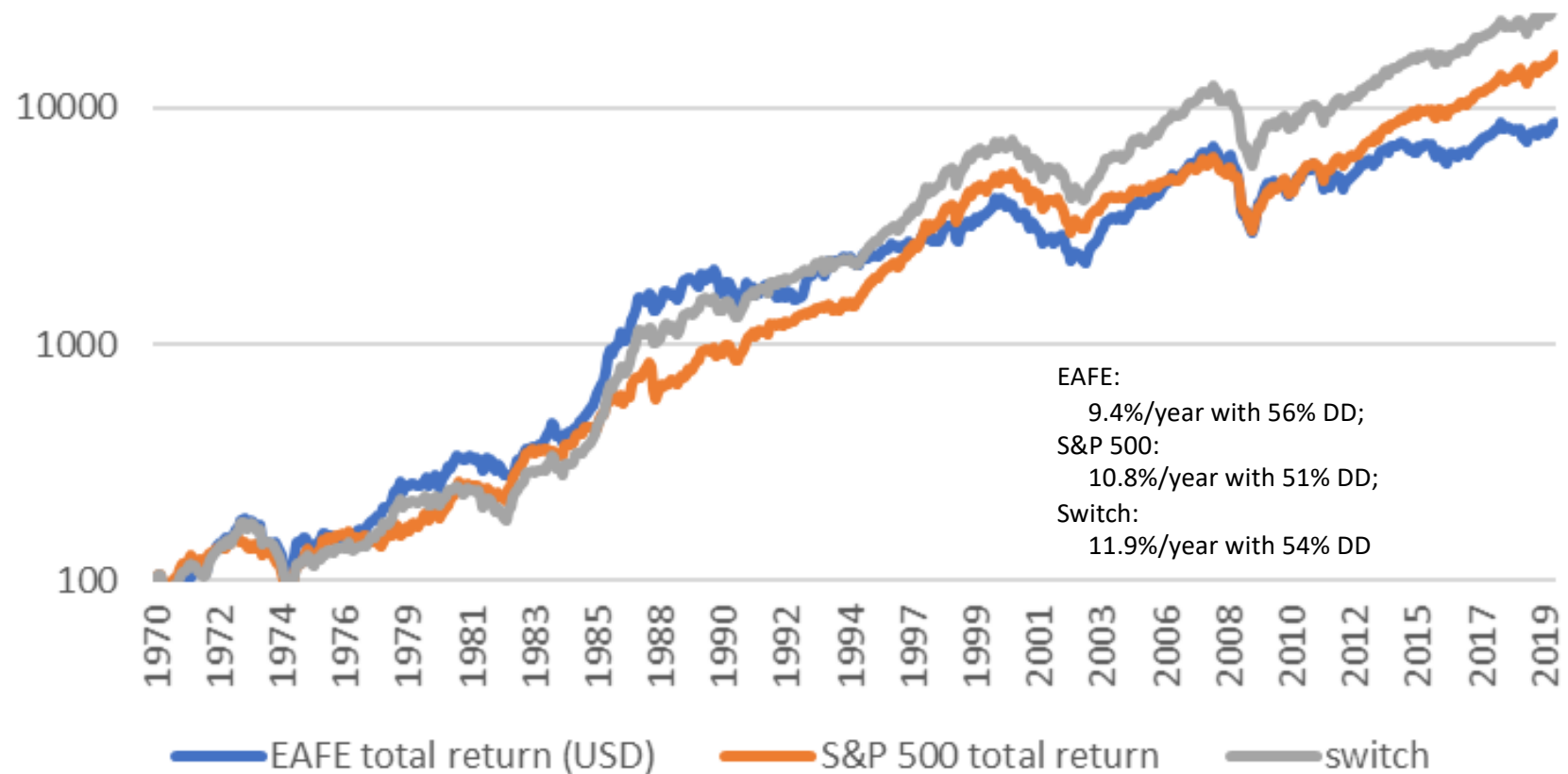
1970-2019



**History of EAFE / SPX Ratio and Model Position,
1970-2019**

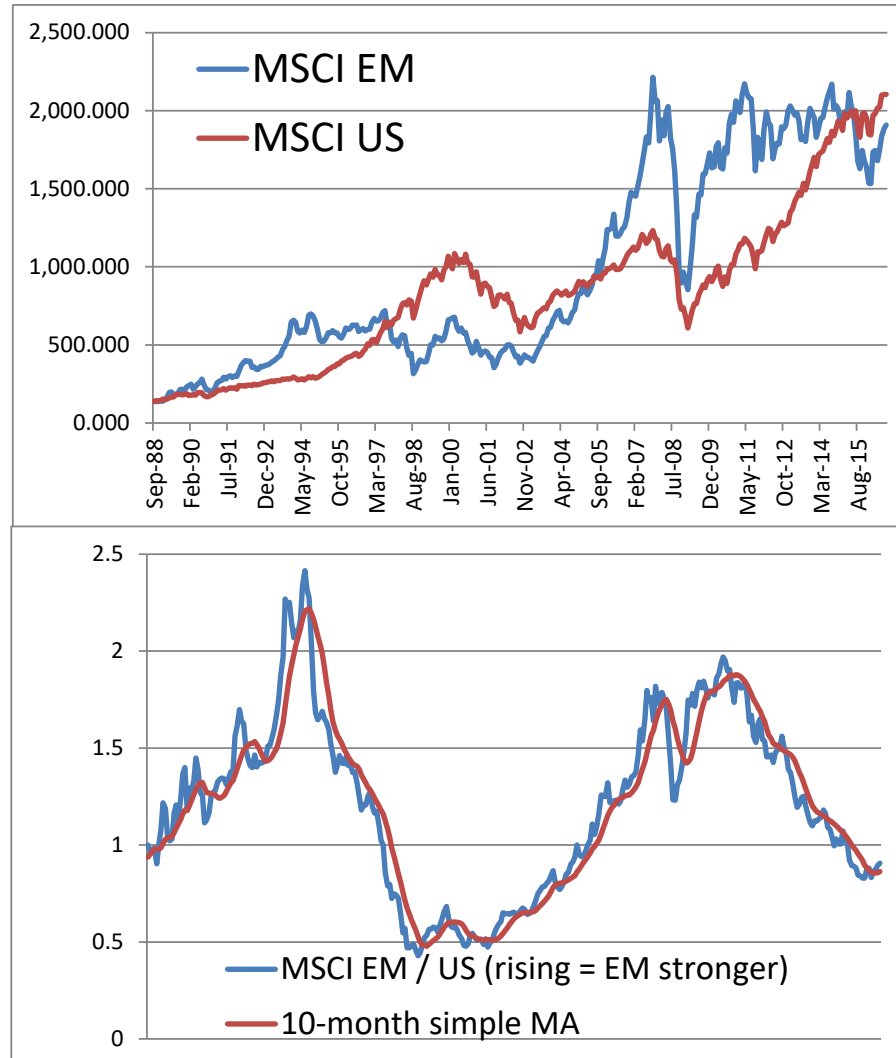


EAFE, S&P 500 and switching, 1970-2019



Source: Mutual Fund Expert as of 12/31/2019

MSCI Emerging Markets and U.S. Indexes (total return, \$), 1988- 2016



Summary of EAFE vs S&P 500 Index Model

- Use EFA and SPY (total return data)
- Near the close of the last trading day of each month calculate EFA / SPY
- Calculate the 19-month exponential moving average of EFA / SPY
- If EFA / SPY is larger than its exponential moving average then be in EFA for the coming month
- If EFA / SPY is smaller than its exponential moving average then be in SPY for the coming month

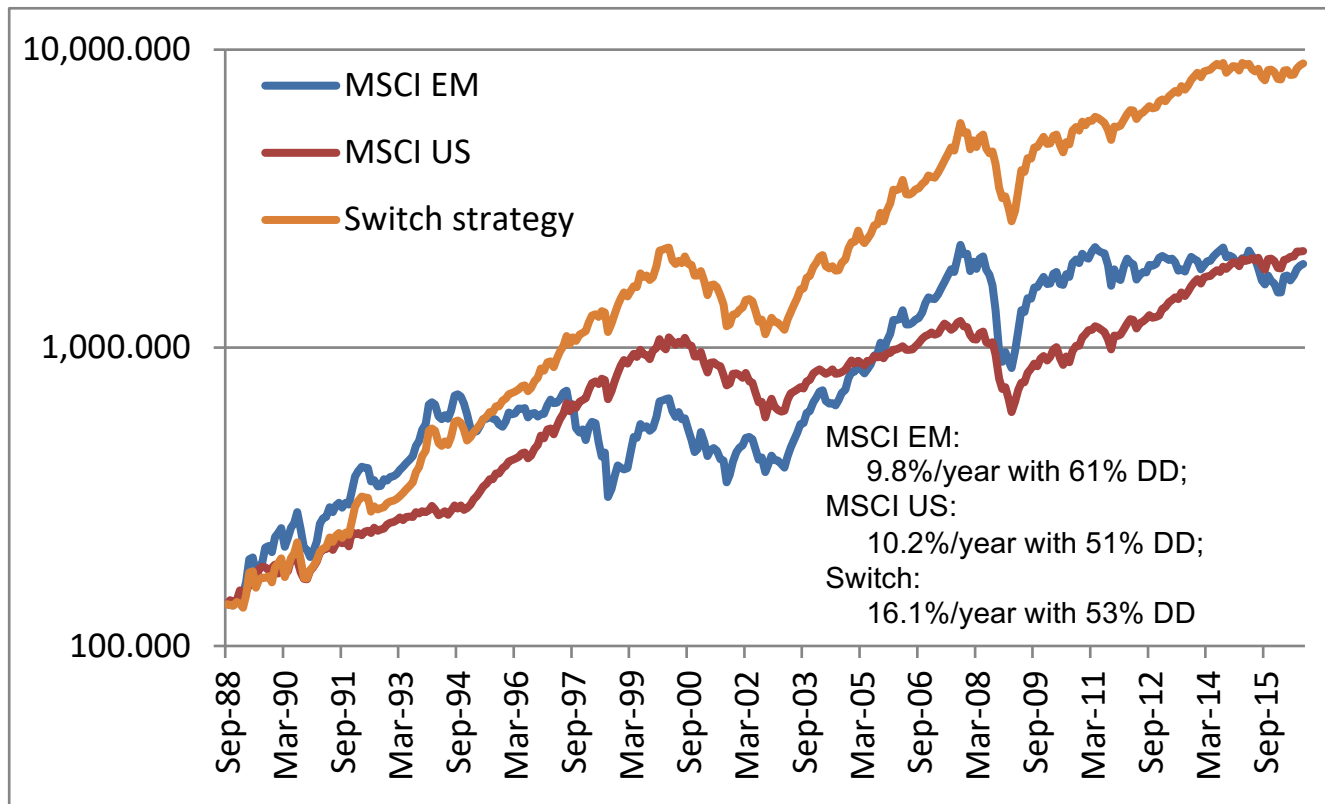
Monthly switching model: Emerging markets vs. U.S.

- On the last trading day of each month update total return indexes for MSCI EM and for U.S.
- Calculate the ratio (emerging markets divided by U.S.) and update its 10-month simple moving average.
- If the ratio is above its moving average, be in emerging markets for the coming month. Otherwise, be in U.S. equities. (Model is in U.S. as of 2/28/2019).
- Can use ETFs: EEM or VWO, and SPY.

Calculate Simple 10-month moving average

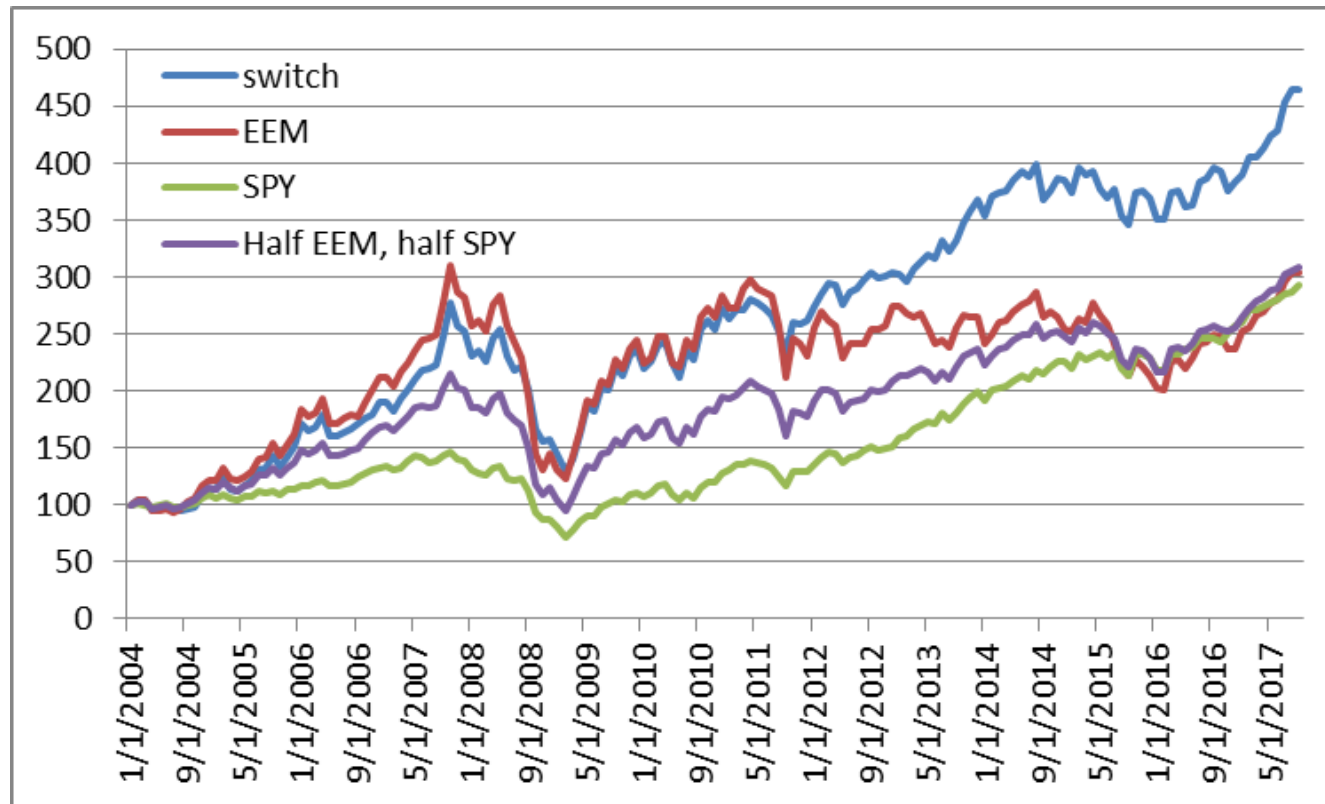
- Near the close of the last trading day of each month calculate the ratio EEM / SPY
- Average this month's ratio with the average of the most recent 10 months' ratios (including this one).
 - For example, on 2/29/2020 you will calculate the average of the EEM / SPY ratios recorded on 5/31/2019, 6/30/2019...2/29/2020.
- If this month's ratio is above the average of the most recent ten months' ratios then be in EEM for the coming month
- If this month's ratio is below the average of the most recent ten months' ratios then be in SPY for the coming month

Results of switching 1988-2016: Emerging markets vs. US equities



Source: www.msci.com

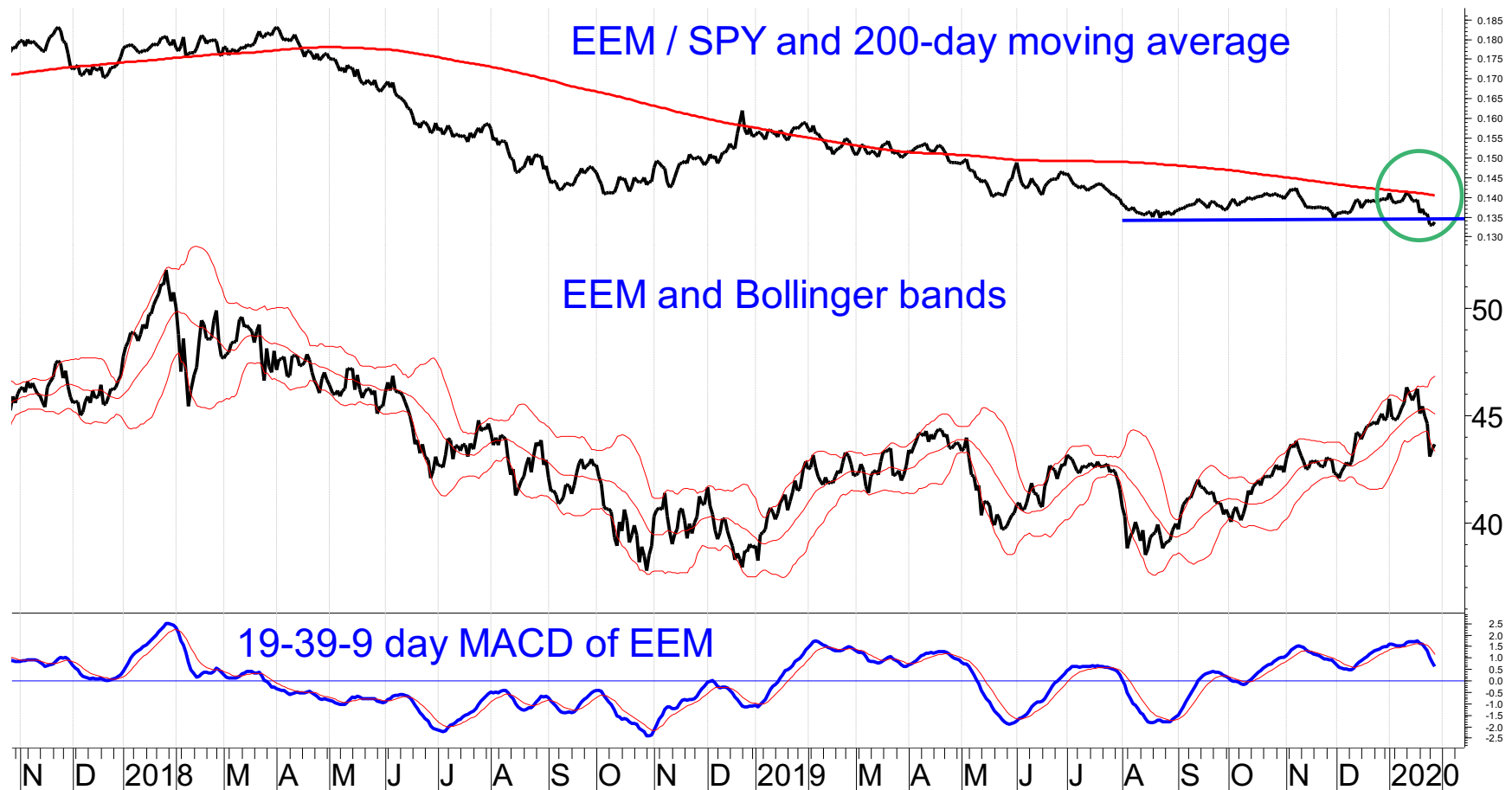
Update on emerging markets vs. U.S. equities



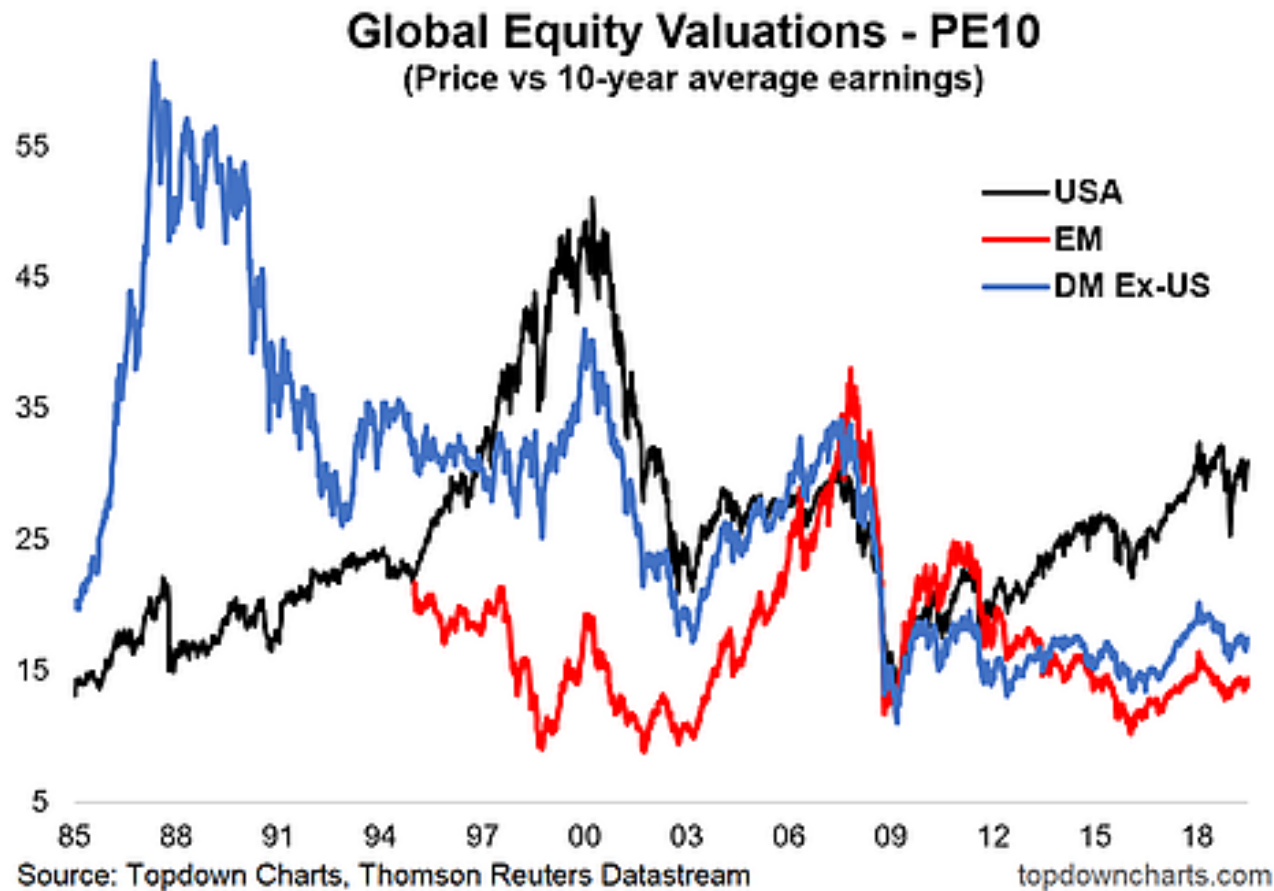
Latest trades of Emerging Markets vs U.S. model

- Prior trade: 7/31/2016 to 4/30/2018 in emerging markets
 - SPY gain 26%
 - EEM gain 34%
- Model favored SPY over EEM from 4/30/2018 to 1/31/2019
 - SPY up 3.6%, EEM down 6.2% during that trade
- One month flip to EEM in February 2019
 - EEM down 1.5%, SPY up 3.2%
- Back to SPY as of 2/28/2019
 - Since then, EEM up 5.3%, SPY up 19.5% (as of 1/28/2020)

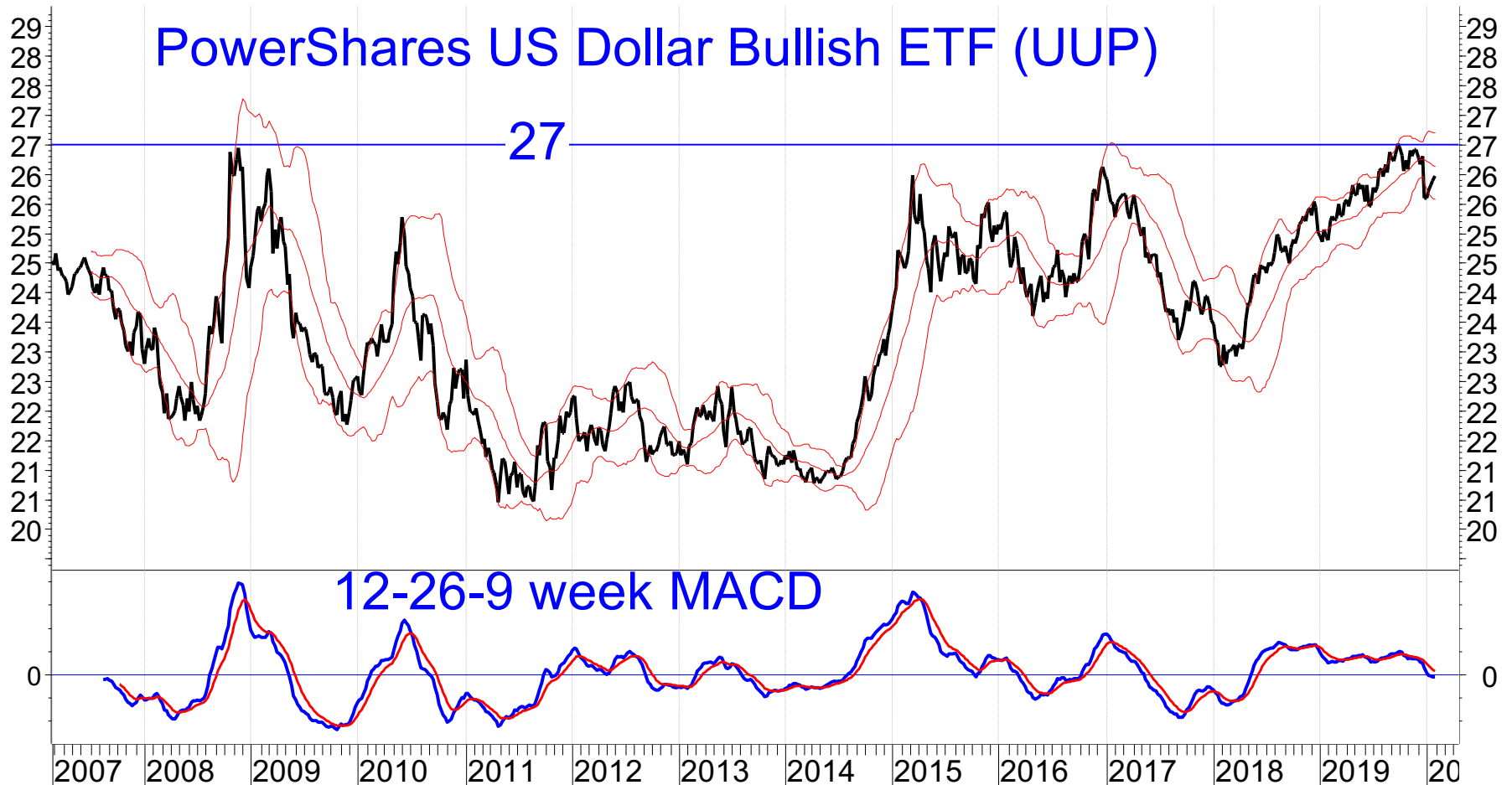
We almost had an emerging markets buy in 2020



Relative Valuations for EM are Attractive



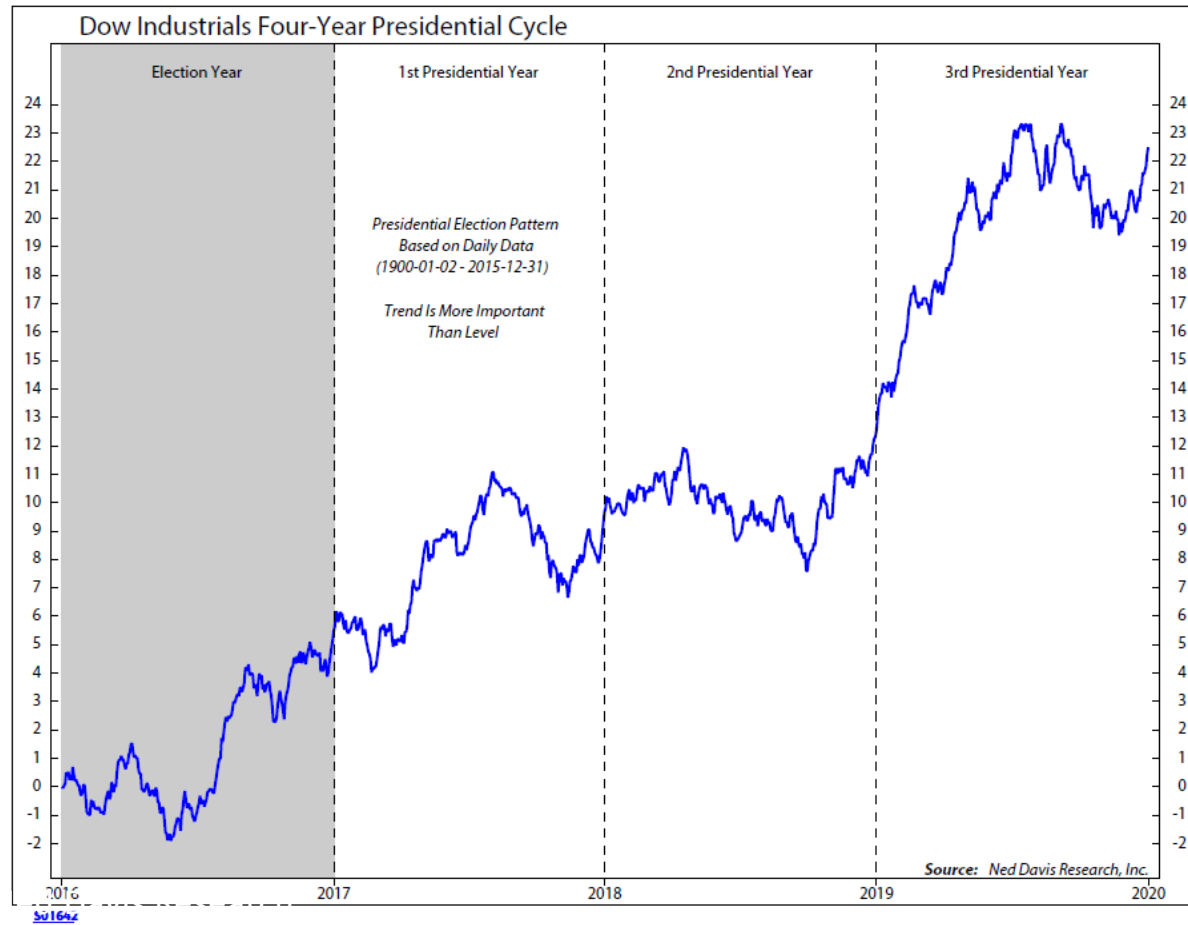
Dollar more likely to fall: good for EEM



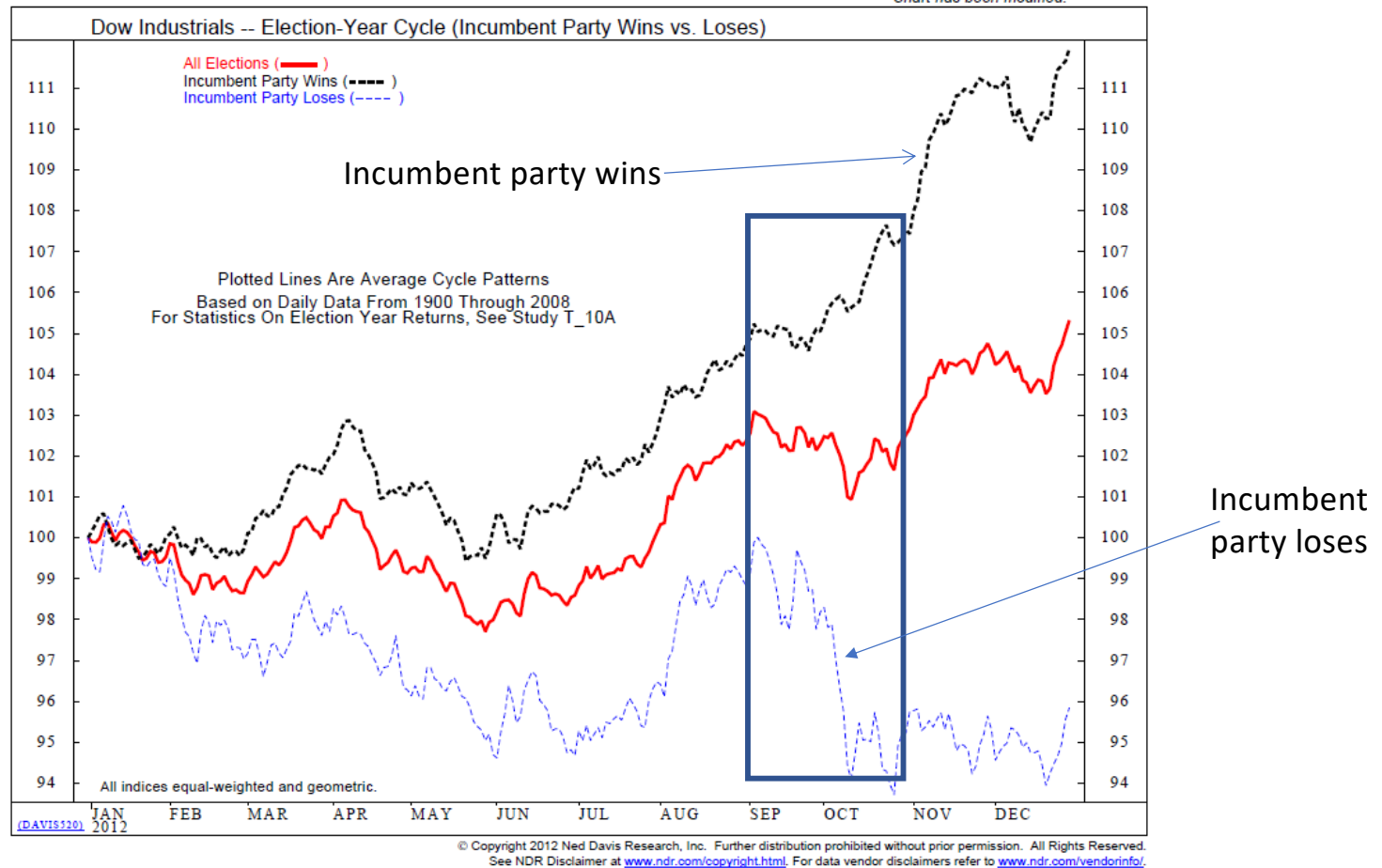


First, let us pray.

Election years are good on average



Re-election of incumbent party is important



Presidential Predictor: Reelection or Replacement?

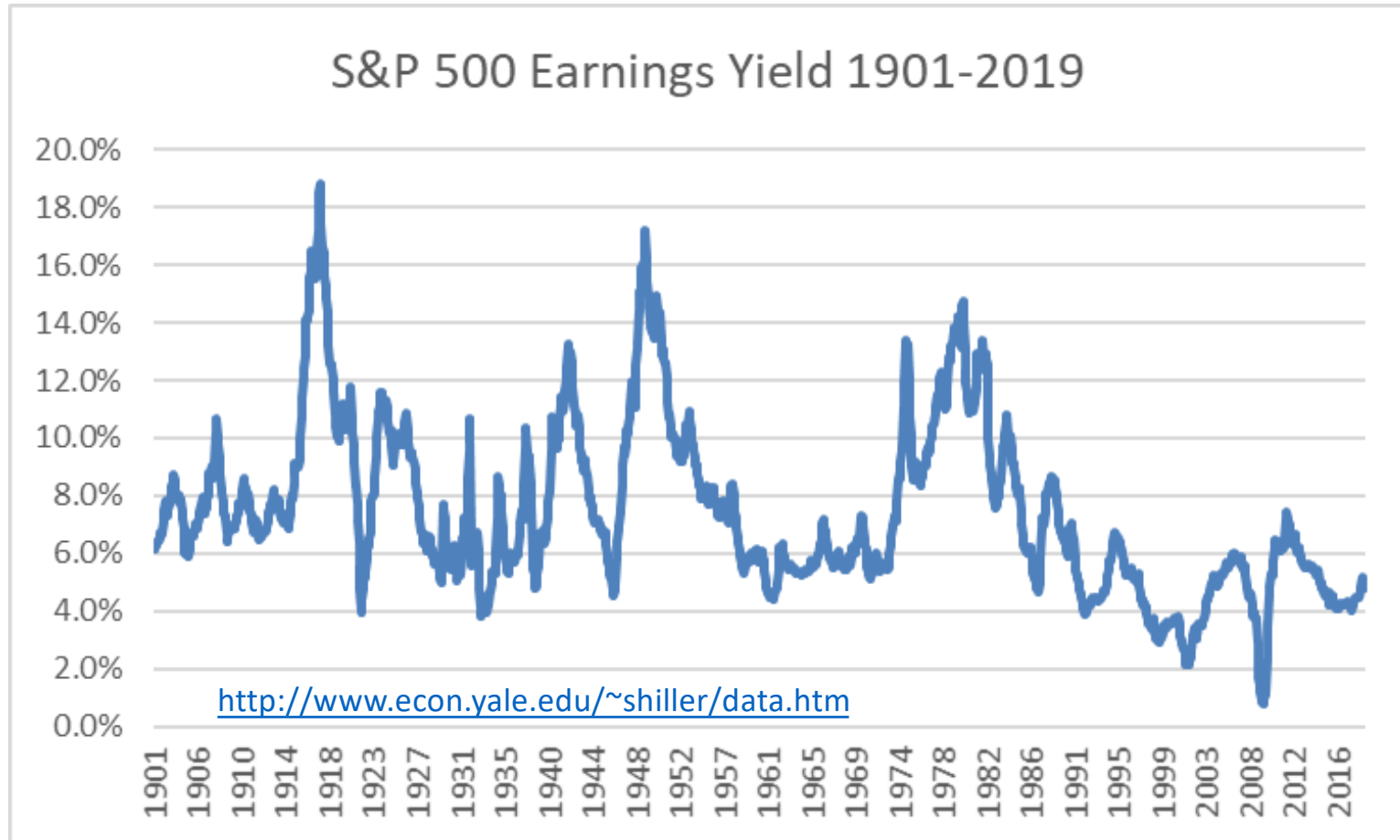
The S&P 500's Price Return July 31 thru Oct. 31 Has Typically Been a Reliable Indicator of Presidential Party Reelection or Replacement

Election Year	Candidates		S&P 500 Aug.-Oct.	Correct Prediction?	
	Democrat	Republican		Reelection	Replacement
1944	FDR	Dewey	0.6	1	
1948	Truman	Dewey	4.4	1	
1952	Stevenson	Eisenhower	(3.5)		1
1956	Stevenson	Eisenhower	(7.7)		0
1960	Kennedy	Nixon	(3.8)		1
1964	Johnson	Goldwater	2.0	1	
1968	Humphrey	Nixon	5.8	0	
1972	McGovern	Nixon	3.9	1	
1976	Carter	Ford	(0.5)		1
1980	Carter	Reagan	4.8	0	
1984	Mondale	Reagan	10.2	1	
1988	Dukakis	Bush	2.6	1	
1992	Clinton	Bush	(1.3)		1
1996	Clinton	Dole	10.2	1	
2000	Gore	Bush	(0.1)		1
2004	Kerry	Bush	2.6	1	
2008	Obama	McCain	(23.6)		1
2012	Obama	Romney	2.4	1	
			Success Rate	82%	86%

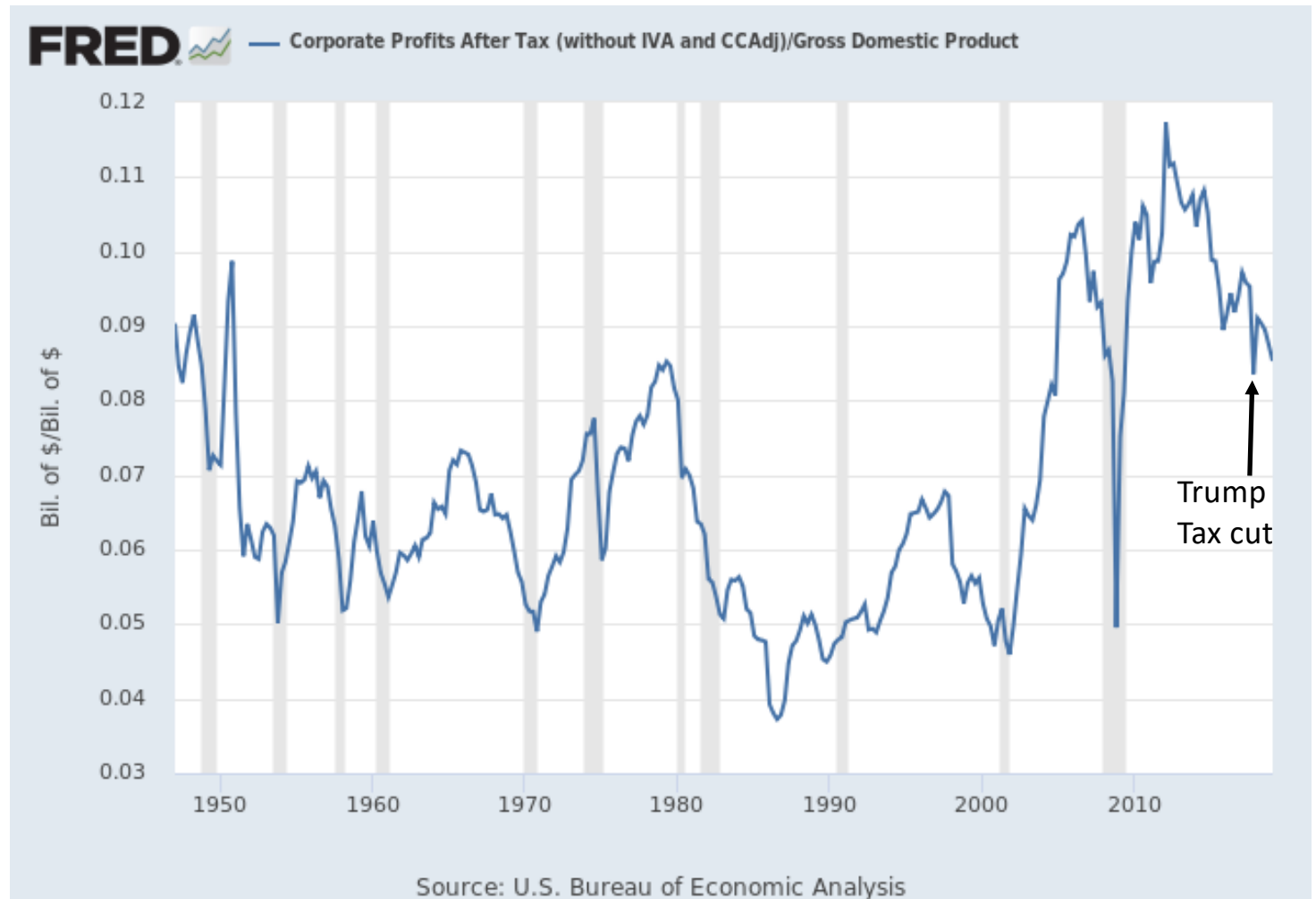
Source: S&P Global Market Intelligence, S&P Dow Jones Indices. Past performance is no guarantee of future results. Data: 12/31/45-10/31/12.

<http://www.bloomberg.com/news/articles/2016-09-30/this-chart-predicts-trump-will-win-unless-the-s-p-rallies-in-october>

Stocks are priced for perfection

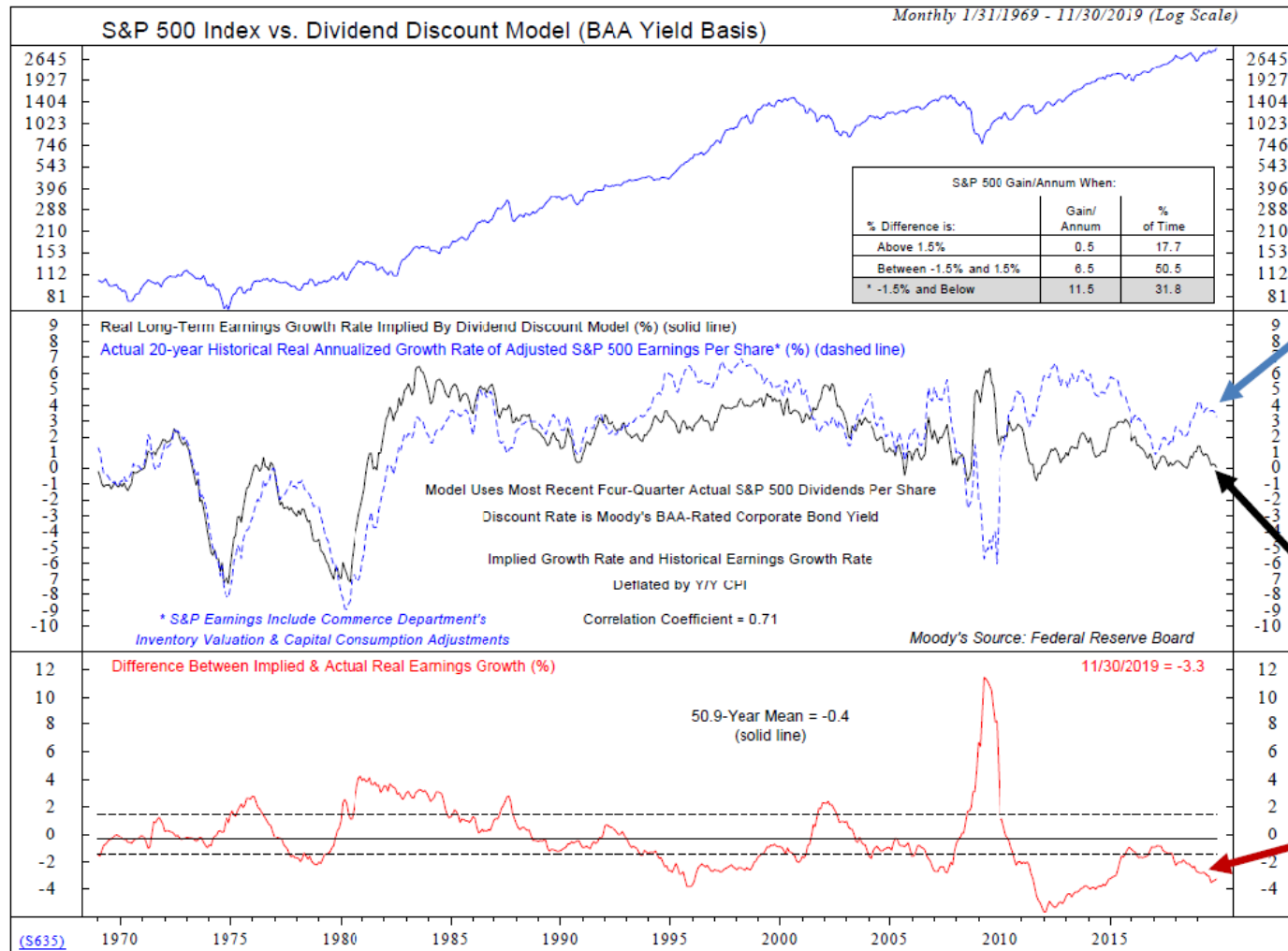


Business
still has it
good.



Stocks
are
cheap
relative
to Baa
yields

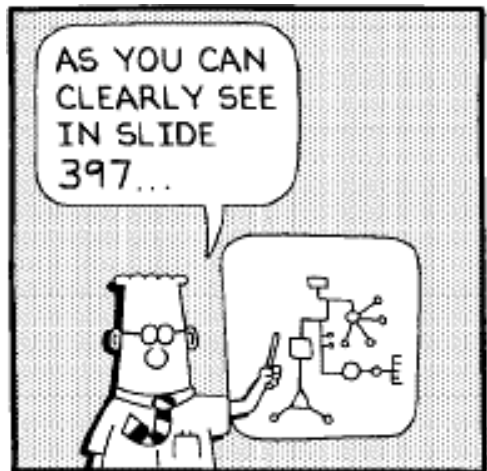
source: Ned
Davis Research



Actual
earnings
growth

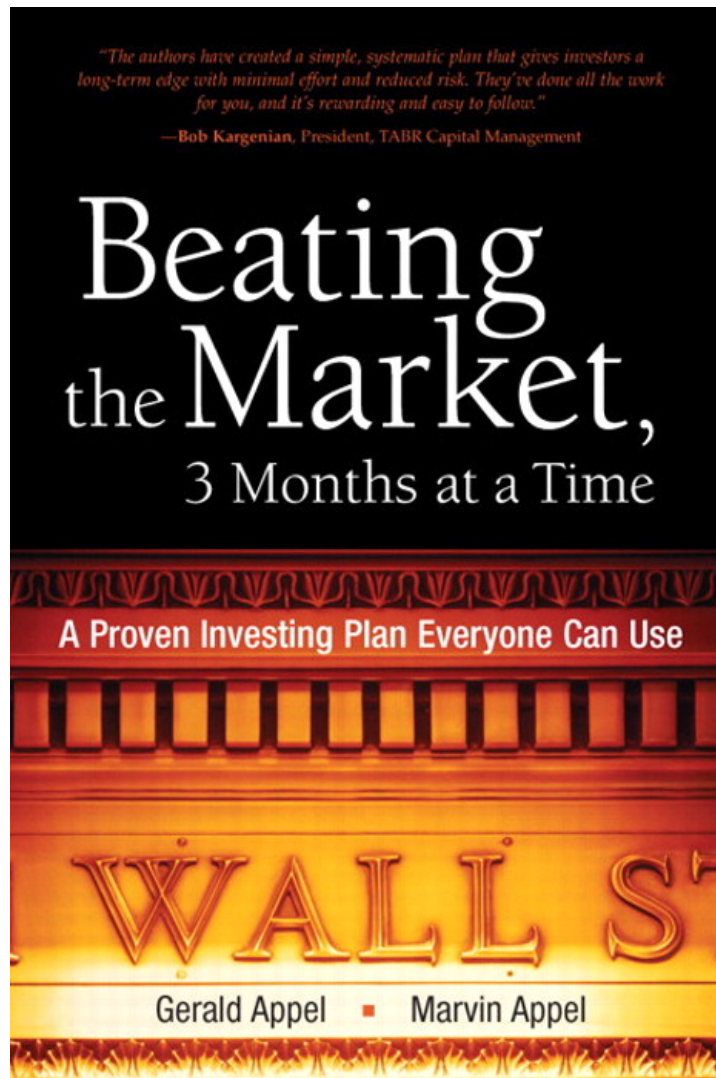
Growth rate
implied
from current
interest
rates and
p/e ratio.

Stocks
undervalued
(bullish)



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A Quarterly Asset
Allocation Strategy for
Foreign-Equity ETFs

FT Press 2008

HIGHER RETURNS



USING BONDS, STOCKS, AND OPTIONS
TO GENERATE LIFETIME INCOME

MARVIN APPEL

"The concepts and strategies discussed in this book are the product of proven money management practices. Do not hesitate to buy this book, it will make you money!"
—IKE KOSKOFF, President/Chief Investment Officer, Aegean Capital Group, Inc.

INVESTING *with* EXCHANGE- TRADED FUNDS MADE EASY

SECOND EDITION

A Start-to-Finish Plan to Reduce Costs
and Achieve Higher Returns



For more information

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- Index data from www.msci.com and from Steele Mutual Fund Expert.