

September 13, 2018

## Business Cycle Index

The BCI at 248.5 is above last week's upward revised level of 247.6, and formed a new high for this business cycle indicated by the BCIp of 100. However, the 6-month smoothed annualized growth BCIg at 14.4 is unchanged at last week's level.

No recession is signaled.

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September 14, 2018

## Market Signals Summary:

The MAC-US model is invested. [iM] [iM level="3" ages="28"] The "3-mo Hi-Lo Index of the S&P500" generated a buy signal on 6/12/2018 and is invested in the markets. The monthly updated S&P500 Coppock indicator is also invested. The MAC-AU is also invested. The recession indicators COMP and iM-BCIg do not signal a recession. The bond market model avoids high beta (long) bonds, and the yield curve is flattening and signaled buy FLAT end March 2018. The gold Coppock model is invested, however the silver model is in cash since early August 2018. The iM-Gold Timer is in gold since 7/10/2017..

## Stock-markets:

The [MAC-US](#) model generated a buy-signal 4/5/2016 and thus is invested in the stock-markets. The sell-spread (red graph) is above last week's level and has to fall below zero to signal a sell.

The [3-mo Hi-Lo Index](#) of the S&P500 is above last week's level at 9.81% (last week 9.55%) and is invested in the market since 6/12/2018..

The MAC-AU model is invested in the markets after it generated a buy signal on March 21, 2016. The sell-spread is remains below last week's level and has to fall below zero to signal a sell.

## Recession:

Figure 3 shows the **COMP** down from last week's level. No recession is indicated. COMP can be used for stock market exit timing as discussed in this article [The Use of Recession Indicators in Stock Market Timing](#).

Figure 3.1 shows the **recession indicator iM-BCIg** at last week's level. An imminent recession is not signaled .

The **Forward Rate Ratio** between the 2-year and 10-year U.S. Treasury yields (FRR2-10) is down from last week's level and is not signaling a recession. The FRR2-10 general trend is downwards.

The **iM-Low Frequency Timer** is invested in the markets

### Bond-market:

The [BVR-model](#) avoids high beta bonds (long-bonds) and also intermediate duration bonds.

The Bond Value Ratio is shown in Fig 4. The BVR is below last week's level. According to the model, only when BVR turns upward after having been lower than the lower offset-line should one consider long bonds again.

### The Yield Curve:

The [yield curve model](#) indicates the trend of the 10-year and 2-year Treasuries yield spread. Figure 5 charts (i10 – i2) shows that the yield curve is flattening and signaled a buy FLAT end March 2018. FLAT and STPP are ETNs; STPP profits from a steepening yield curve and FLAT increases in value when the yield curve flattens. This model confirms the direction of the BVR.

### Gold:

The modified Coppock Gold indicator shown in Fig 6. This model generated a new buy signal end May 2018 2017 and is invested in gold.

The [iM GOLD-TIMER Rev-1](#) is invested in gold since 7/10/2017.

### Silver:

The modified Coppock Silver indicator shown in Fig 7. This model generated a sell signal early August 2018 and is in cash.

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## Monthly Updates (next update 9/7/2018)

September 7, 2018

### Unemployment

The unemployment rate recession model ([article link](#)), has been updated with the August UER of 3.9%. Based on the historic patterns of the unemployment rate indicators prior to recessions one

can reasonably conclude that the U.S. economy is not likely to go into recession anytime soon. The growth rate UERg is at minus 9.43% (last month minus 11.2%) and EMA spread of the UER is at minus 0.17% (last month minus 0.19%).

### **The Dynamic Linearly Detrended Enhanced Aggregate Spread:**

The updated level of this indicator, -203bps, is above last months -191bps, confirms the January 20, 2017 signal.. Based on past history a recession could have started at the earliest in October 2017, but not later than May 2019. The average lead time to previous recessions provided by DAGS was 15 months which would indicate a recession start for April 2018. (Note: All our other recession indicators are far from signal a recession.)

### **Coppock Indicator for the S&P500**

The Coppock indicator for the S&P500 entered the market end May 2017 and generated a new buy signal in mid February 2018 This model is in stocks. This indicator is described [here](#).

### **CAPE-Cycle-ID**

Fig 9a depicts the CAPE-Cycle-ID and the year-on-year rate-of-change of the Shiller CAPE. A model using this indicator invests in the market when the Cycle-ID is +2 or 0, and when the Cycle-ID equals -2 the model is in cash. This indicator is described [here](#).

### **Trade Weighted USD**

The Trade Weighted \$ value continues to strengthen.

### **TIAA Real Estate Account**

The 1-year rolling return for the end of last month is 5.42%. A sell signal is not imminent.

Please note: Past performance does not guarantee future returns, investments may increase or decrease in value and you may lose money using this model.

### Figure 2: Buy and Sell signals for S&P 500 2010-18 from the modified golden-cross MAC-System



updated to...9/13/18

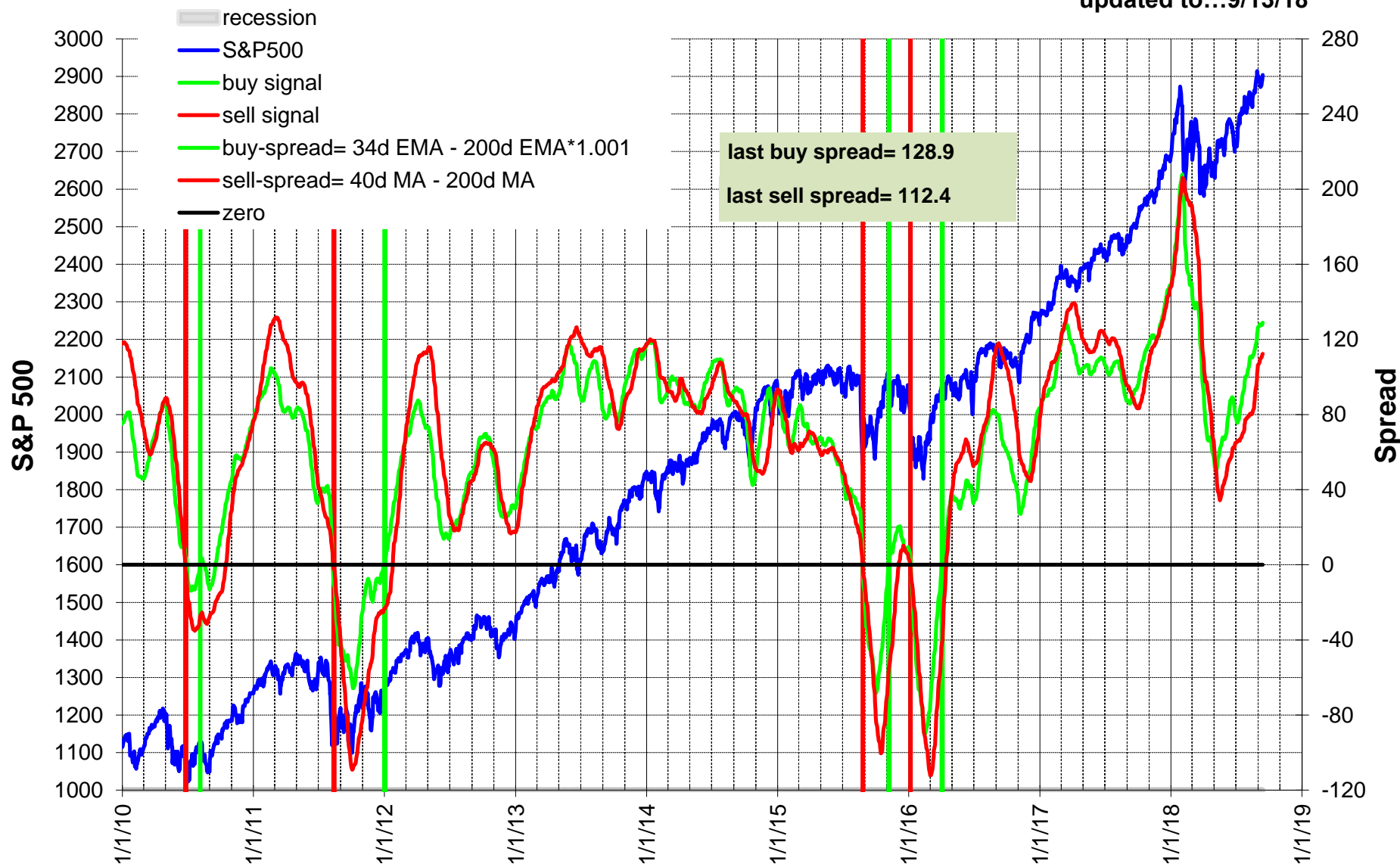


Fig 2.1: Buy and Sell signals for the Australia All Ordinaries Index from the MAC-AU System



updated to Sep-13-18  
last sell spread= 271.2

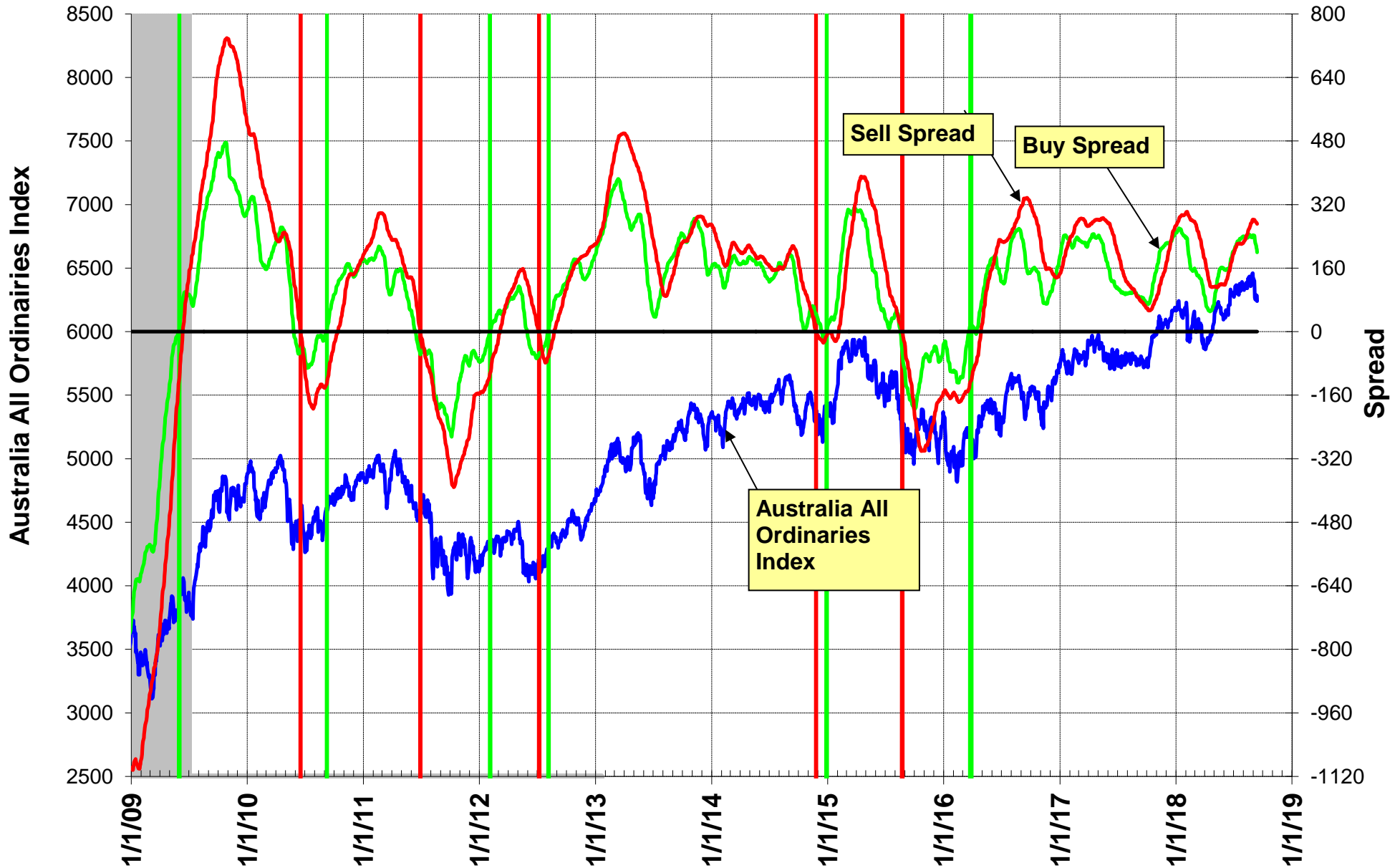


Fig 2.2 3-mo Hi-Lo Index of the S&P500 & 40-day SMA of Index

updated to 9/13/2018

last SMA:40= 9.81%

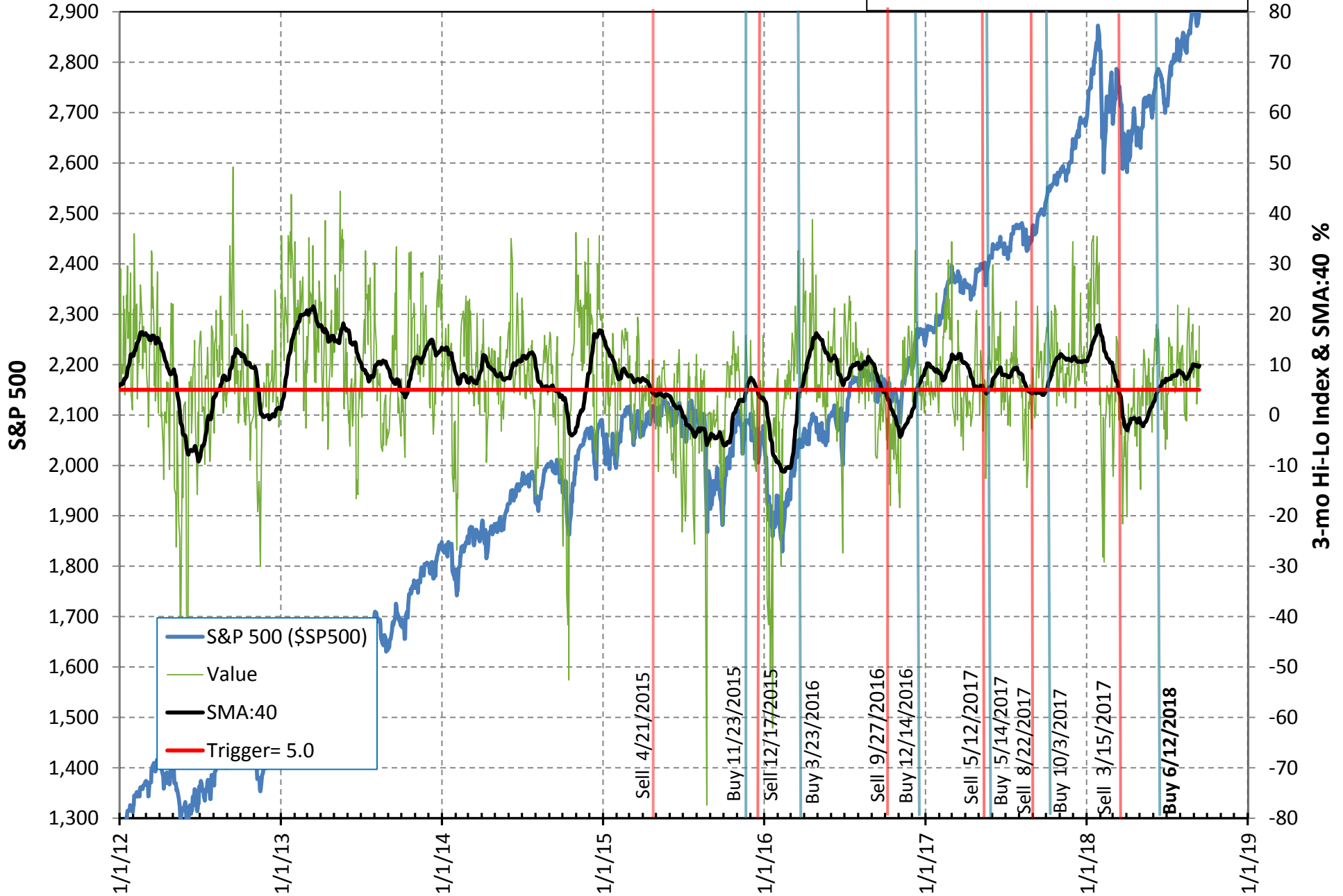
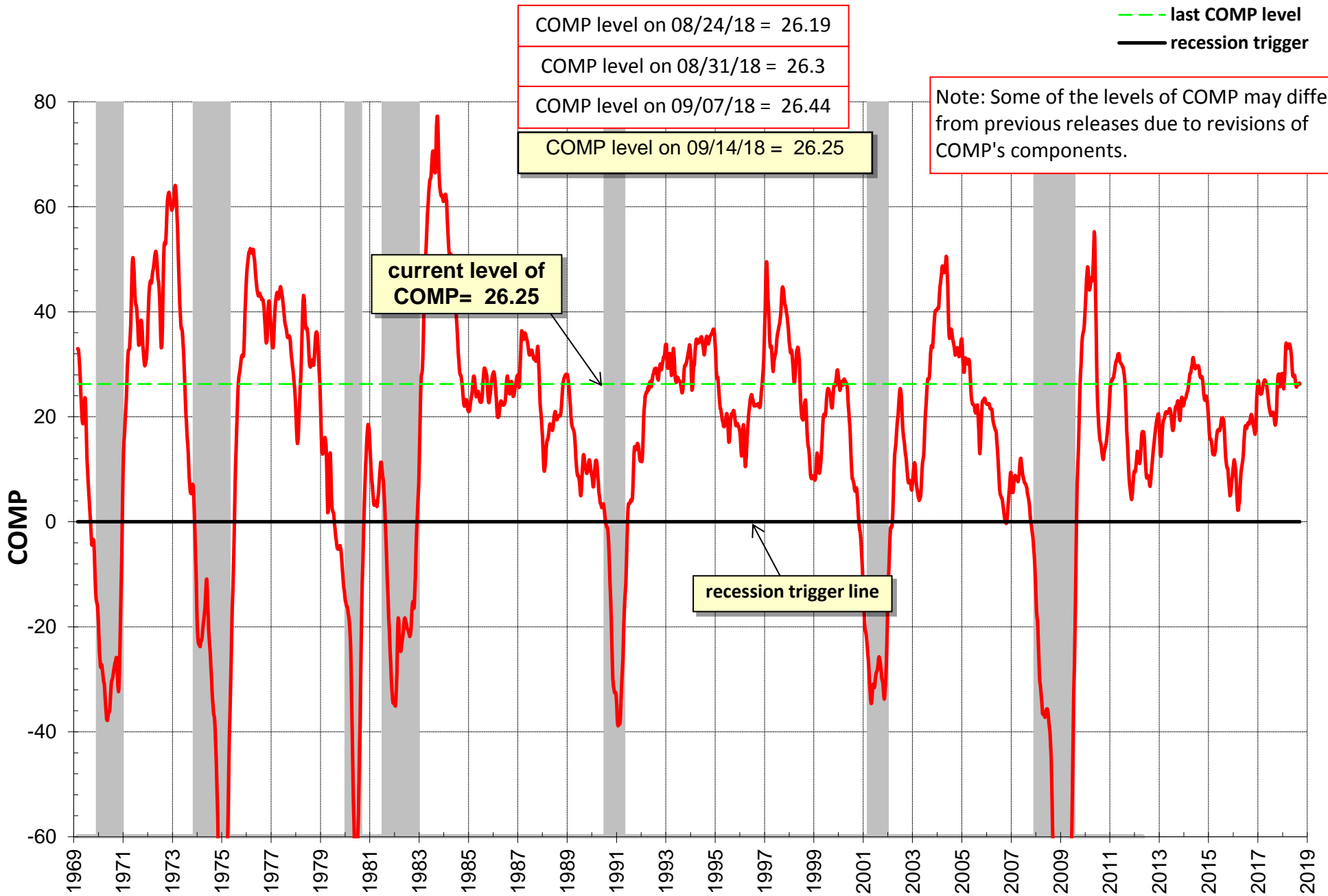


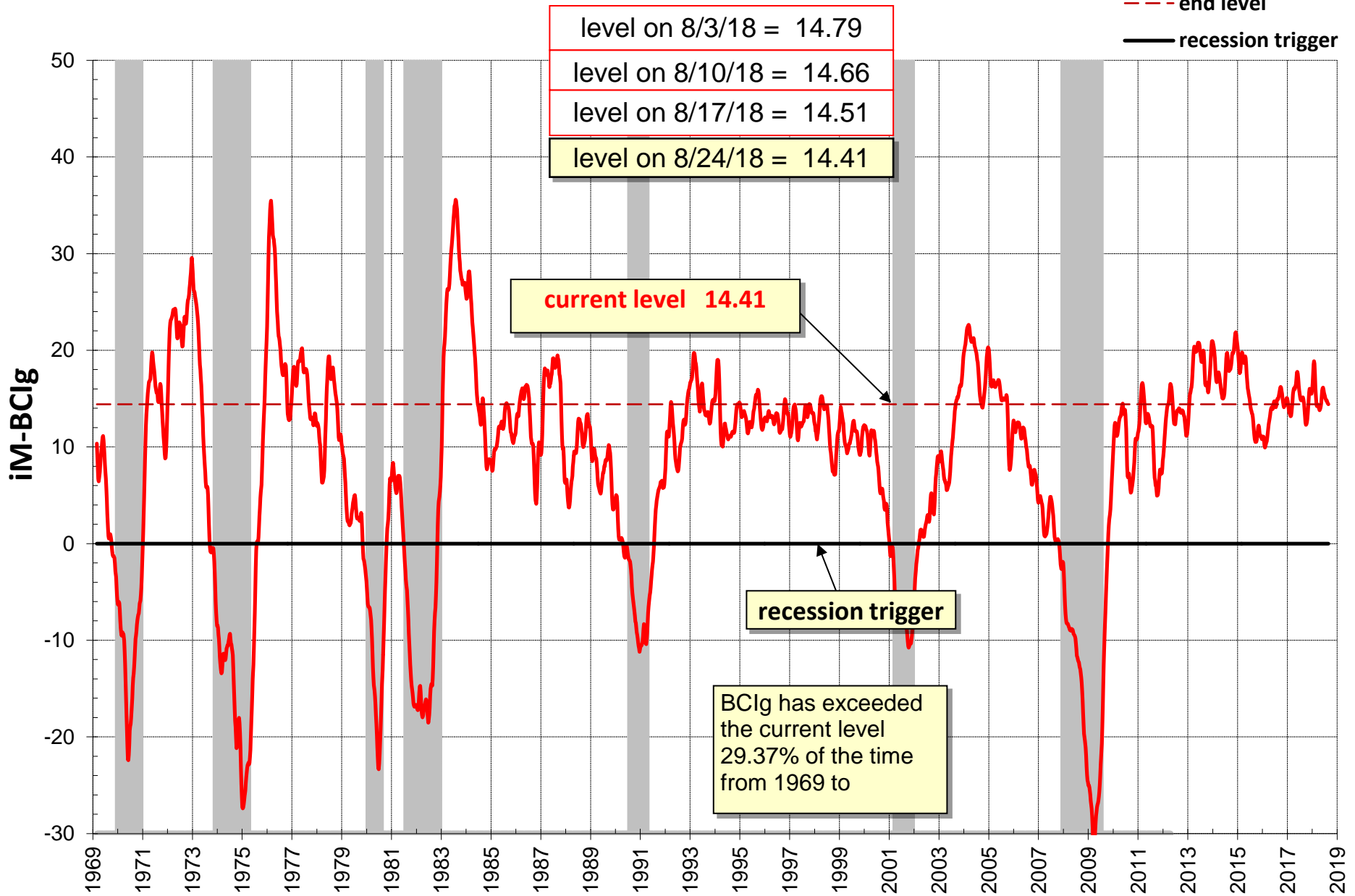
Fig. 3: COMP Leading Indicator of US Economy 1969-2018

- recession
- COMP
- last COMP level
- recession trigger



### Fig 3.1: iM-BCI<sub>g</sub> 1969-2016

- recession
- iM-BCI<sub>g</sub>
- end level
- recession trigger



**Figure 3.2: Forward Rate Ratio FRR2-10 - leads to Recessions**

updated to 09/13/2018

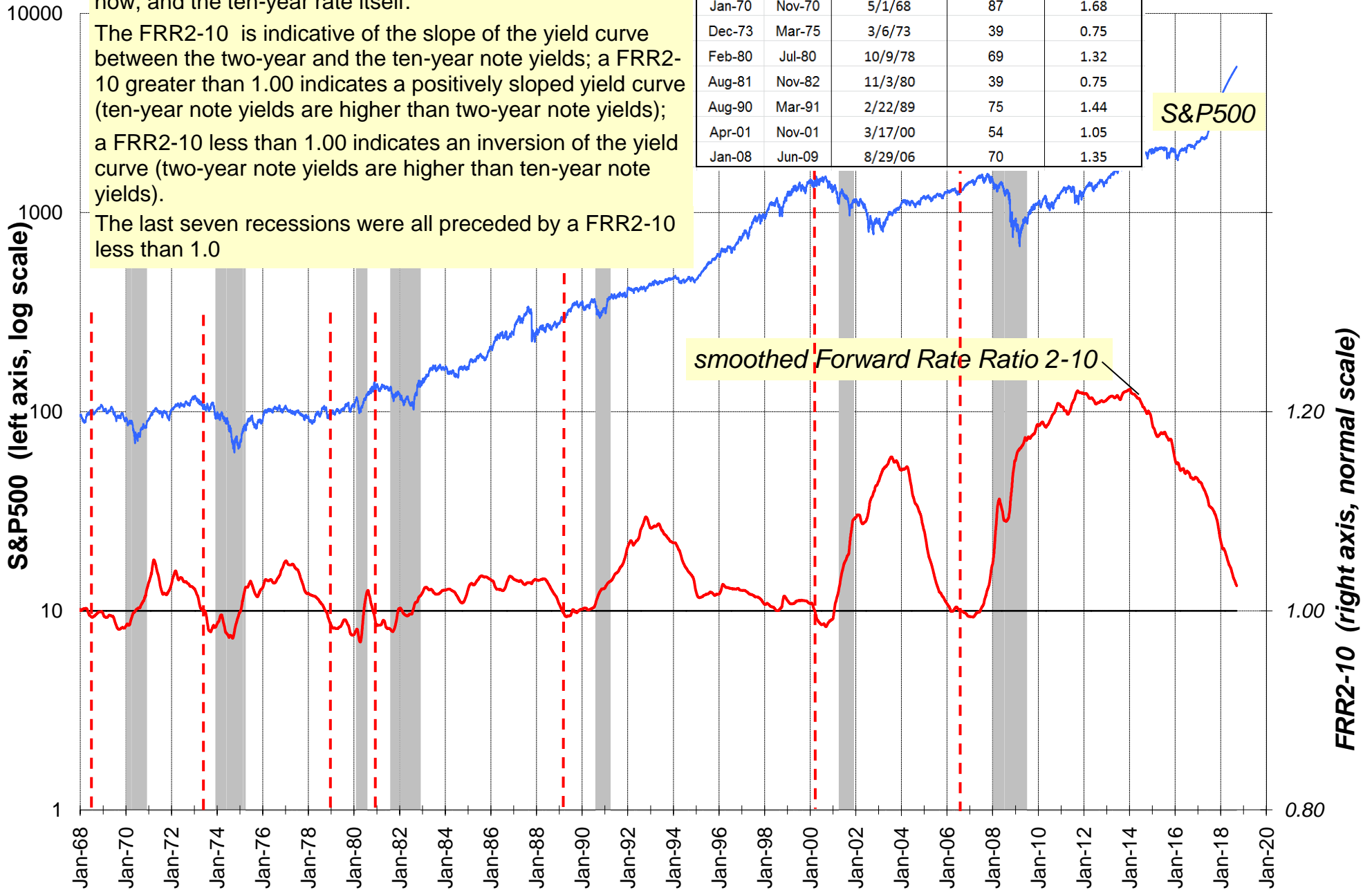
EMA of FRR2-10 = 1.025

FRR2-10 is the ratio of the rate at which one can lock in borrowing for the eight year period starting two years from now, and the ten-year rate itself.

The FRR2-10 is indicative of the slope of the yield curve between the two-year and the ten-year note yields; a FRR2-10 greater than 1.00 indicates a positively sloped yield curve (ten-year note yields are higher than two-year note yields); a FRR2-10 less than 1.00 indicates an inversion of the yield curve (two-year note yields are higher than ten-year note yields).

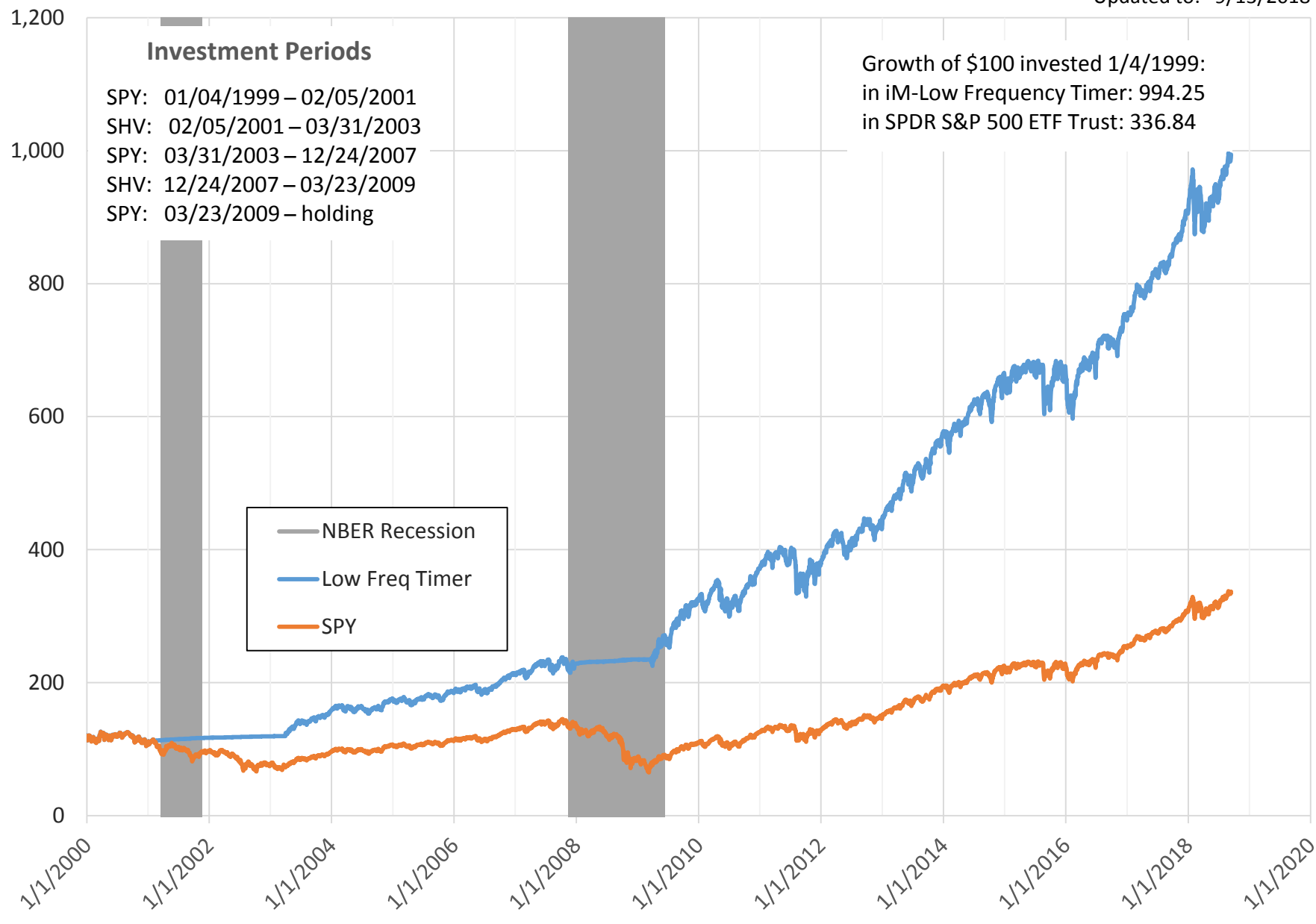
The last seven recessions were all preceded by a FRR2-10 less than 1.0

Recessions start	Recessions end	Date when EMA of FRR2-10 less than 1.0	Lead to Ression start (weeks)	Lead to Ression start (years)
Jan-70	Nov-70	5/1/68	87	1.68
Dec-73	Mar-75	3/6/73	39	0.75
Feb-80	Jul-80	10/9/78	69	1.32
Aug-81	Nov-82	11/3/80	39	0.75
Aug-90	Mar-91	2/22/89	75	1.44
Apr-01	Nov-01	3/17/00	54	1.05
Jan-08	Jun-09	8/29/06	70	1.35

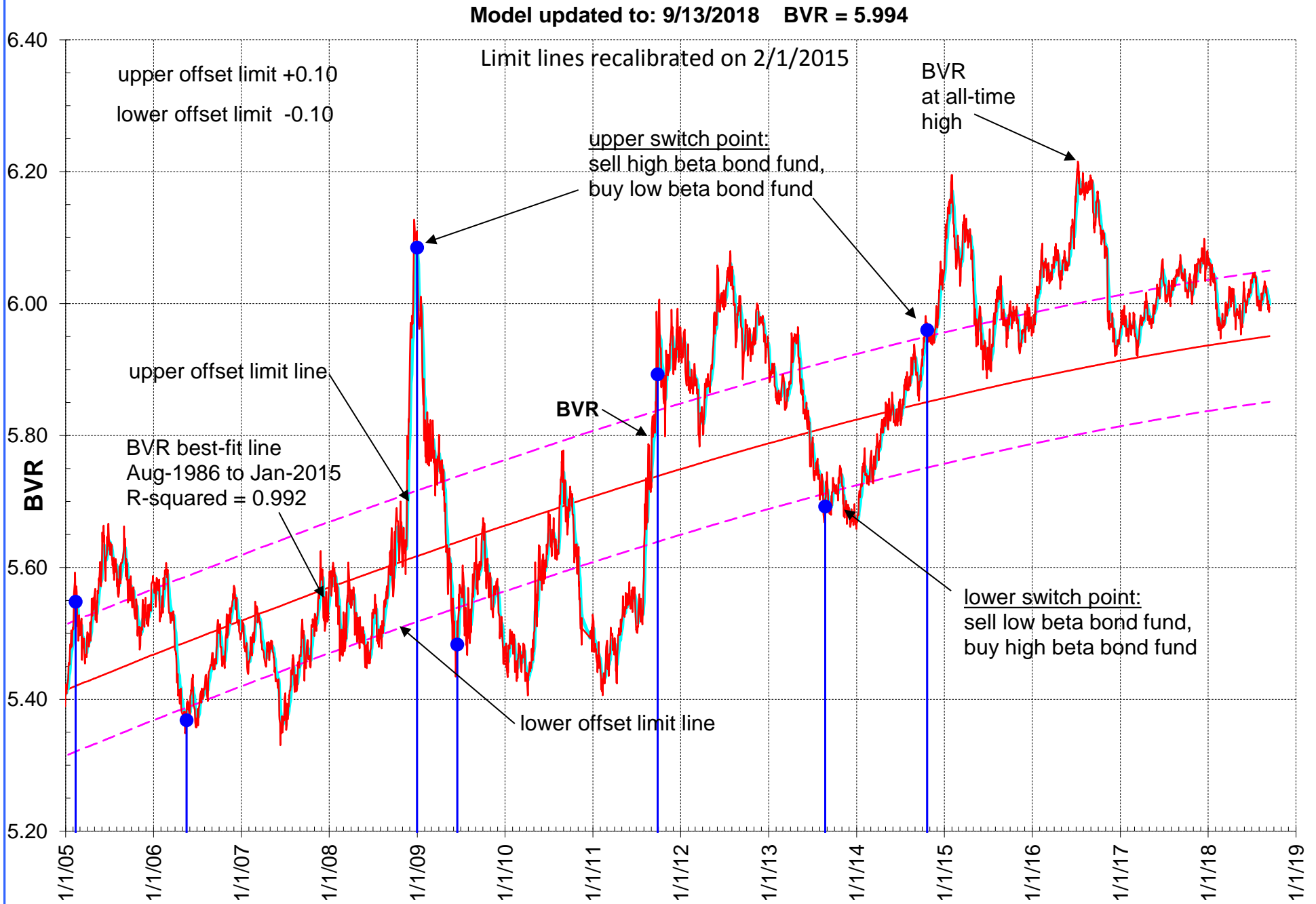


### Fig.3.3 iM-Low Frequency Timer

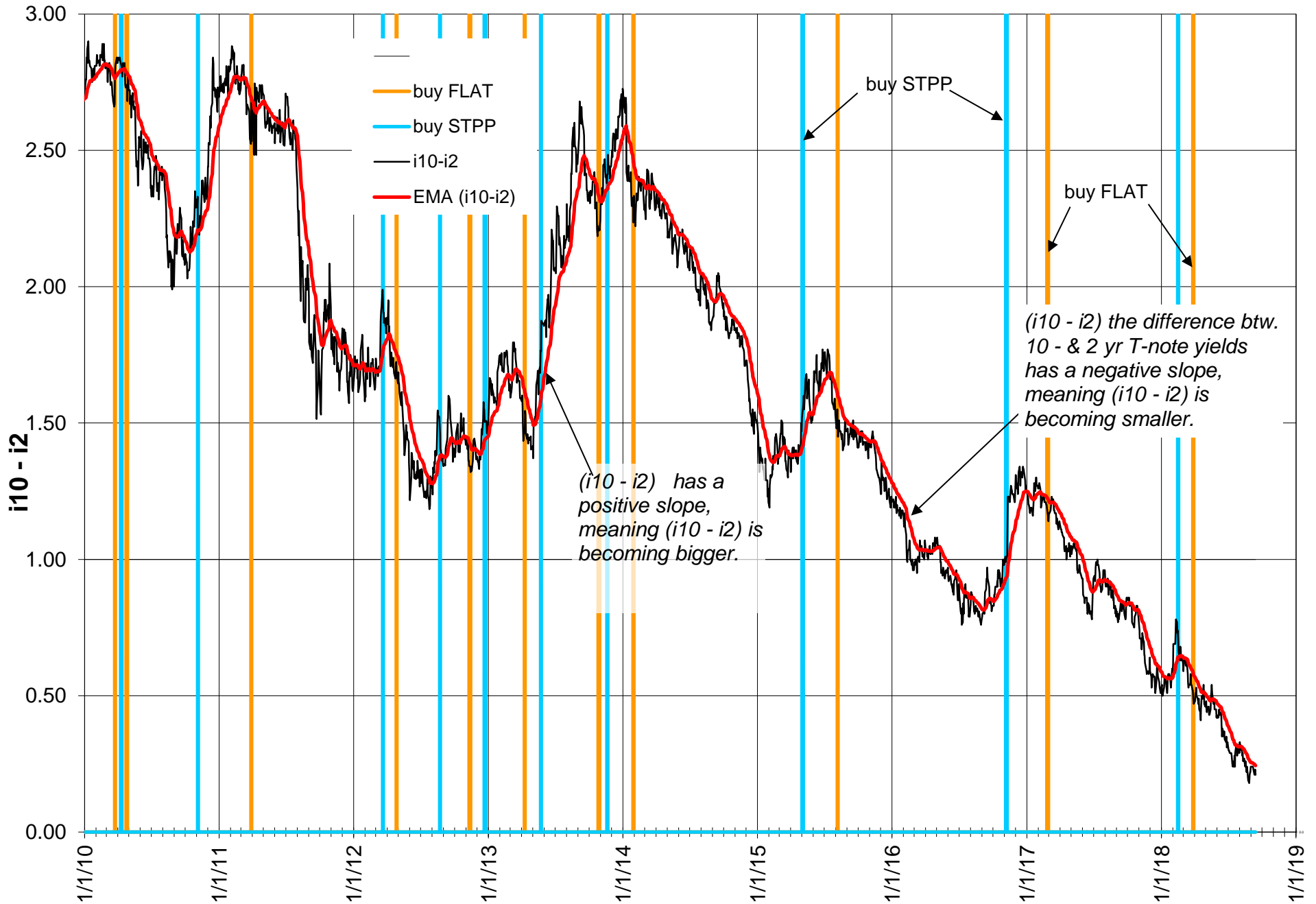
Updated to: 9/13/2018



### Figure 4: Bond Value Ratio (BVR) from 2005 to 2018



**Figure 5: i10 - i2 Updated to.....9/13/18**



*(i10 - i2) the difference btw. 10 - & 2 yr T-note yields has a negative slope, meaning (i10 - i2) is becoming smaller.*

*(i10 - i2) has a positive slope, meaning (i10 - i2) is becoming bigger.*

### Figure 6: Modified Coppock Indicator for Gold 2009-2018

updated to 09/13/2018

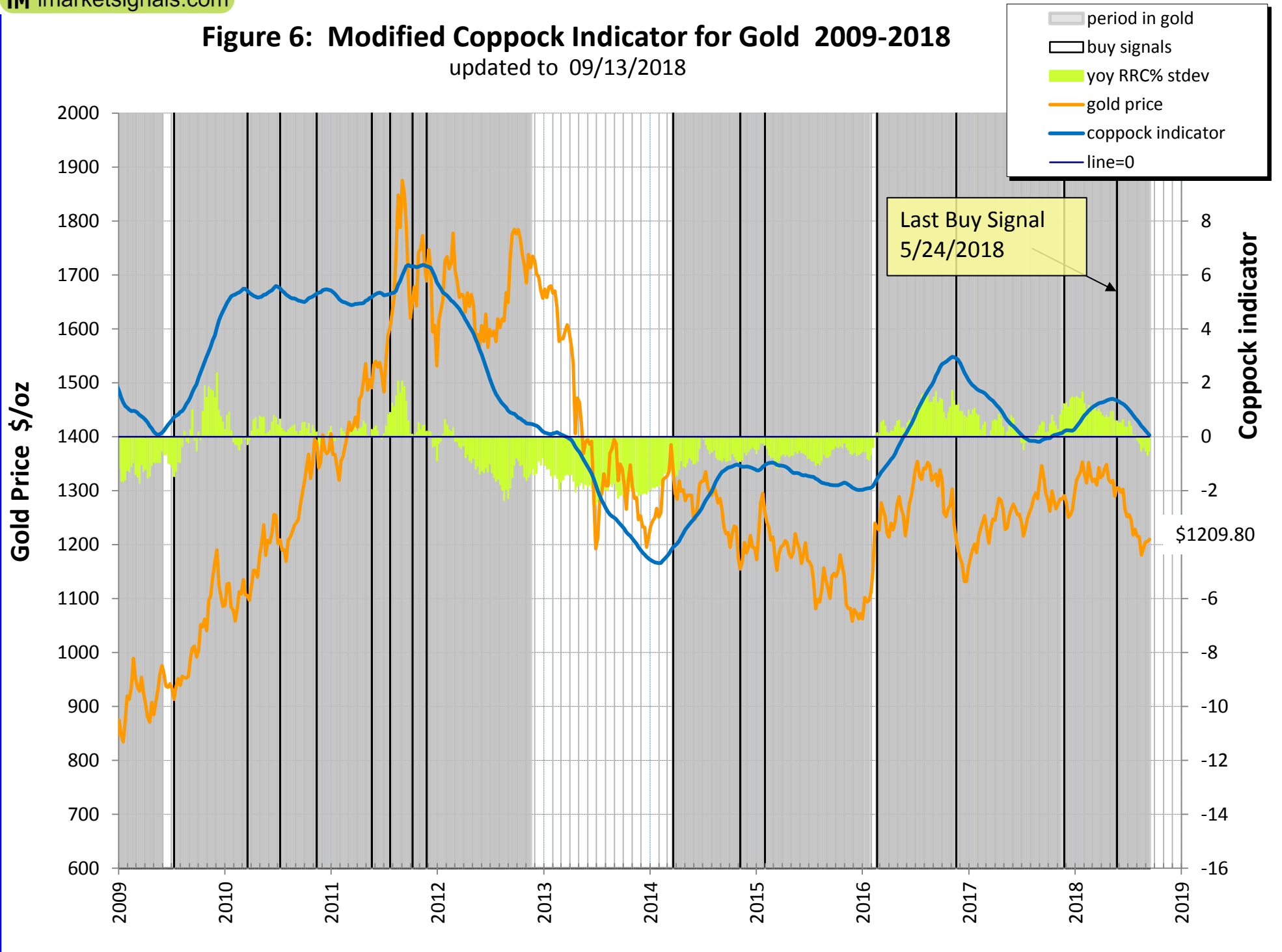
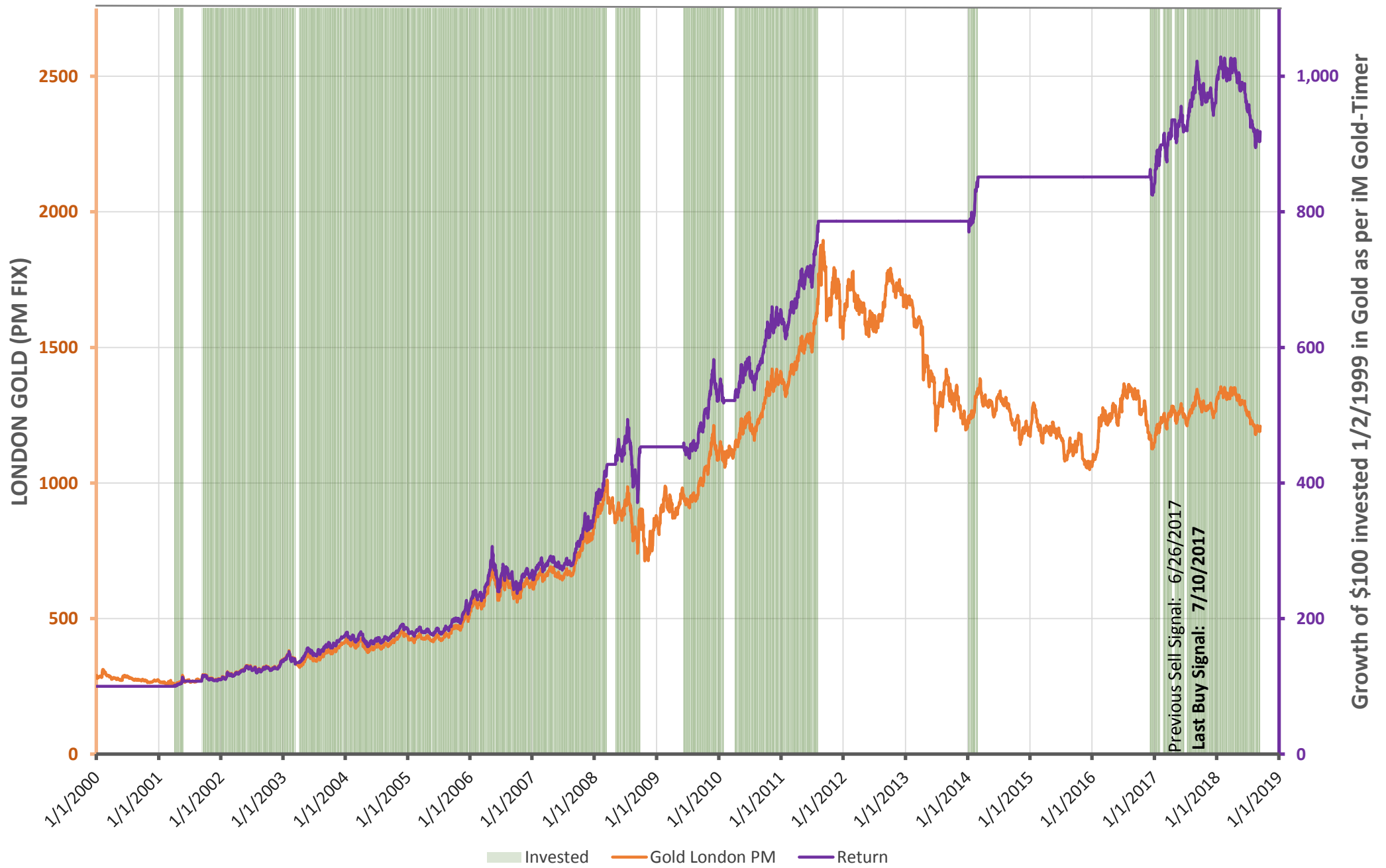


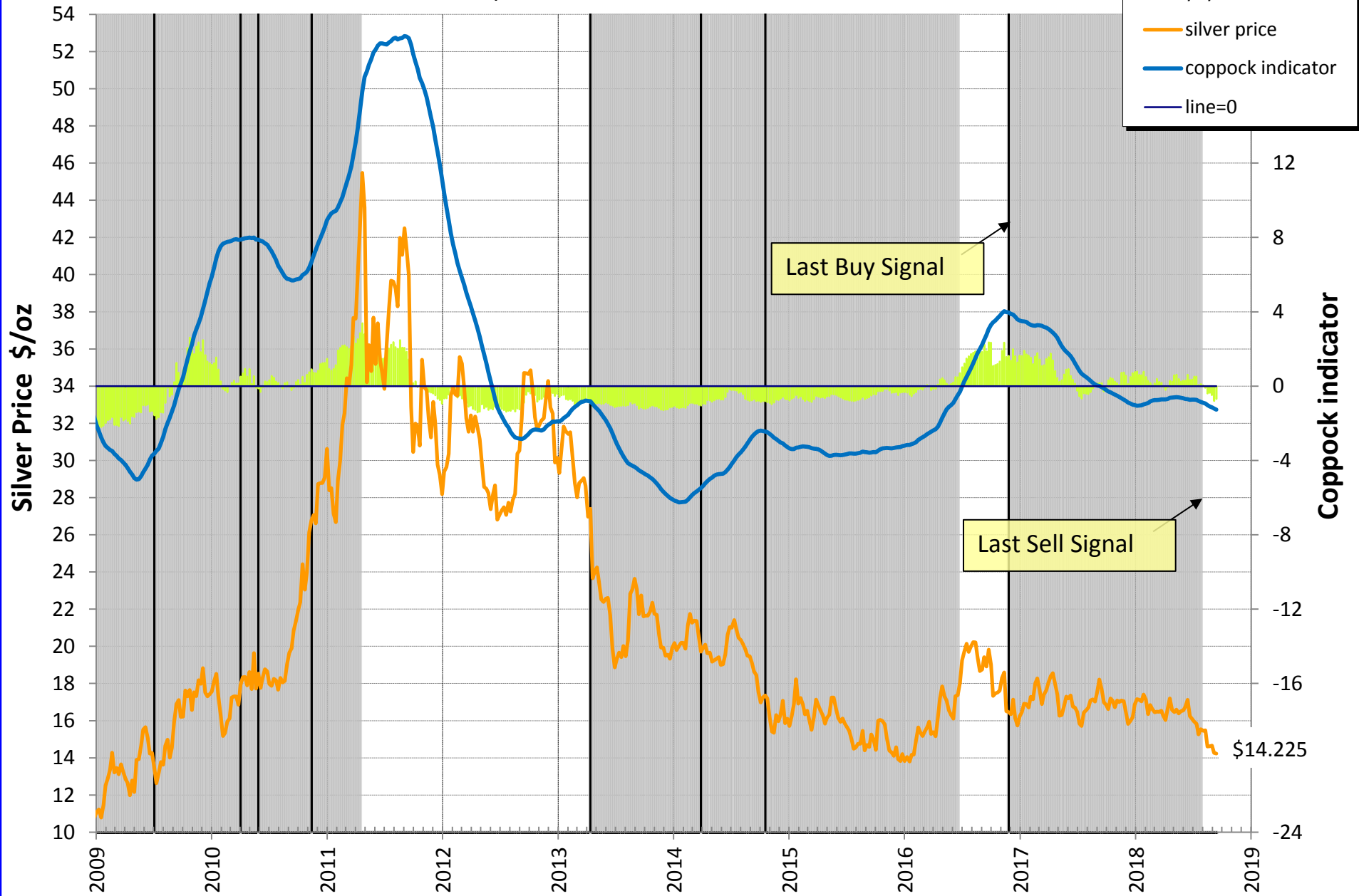
Fig. 6.1a iM GOLD-TIMER - Rev 1

Updated to: 9/13/2018



### Figure 7: Modified Coppock Indicator for Silver 2009-2018

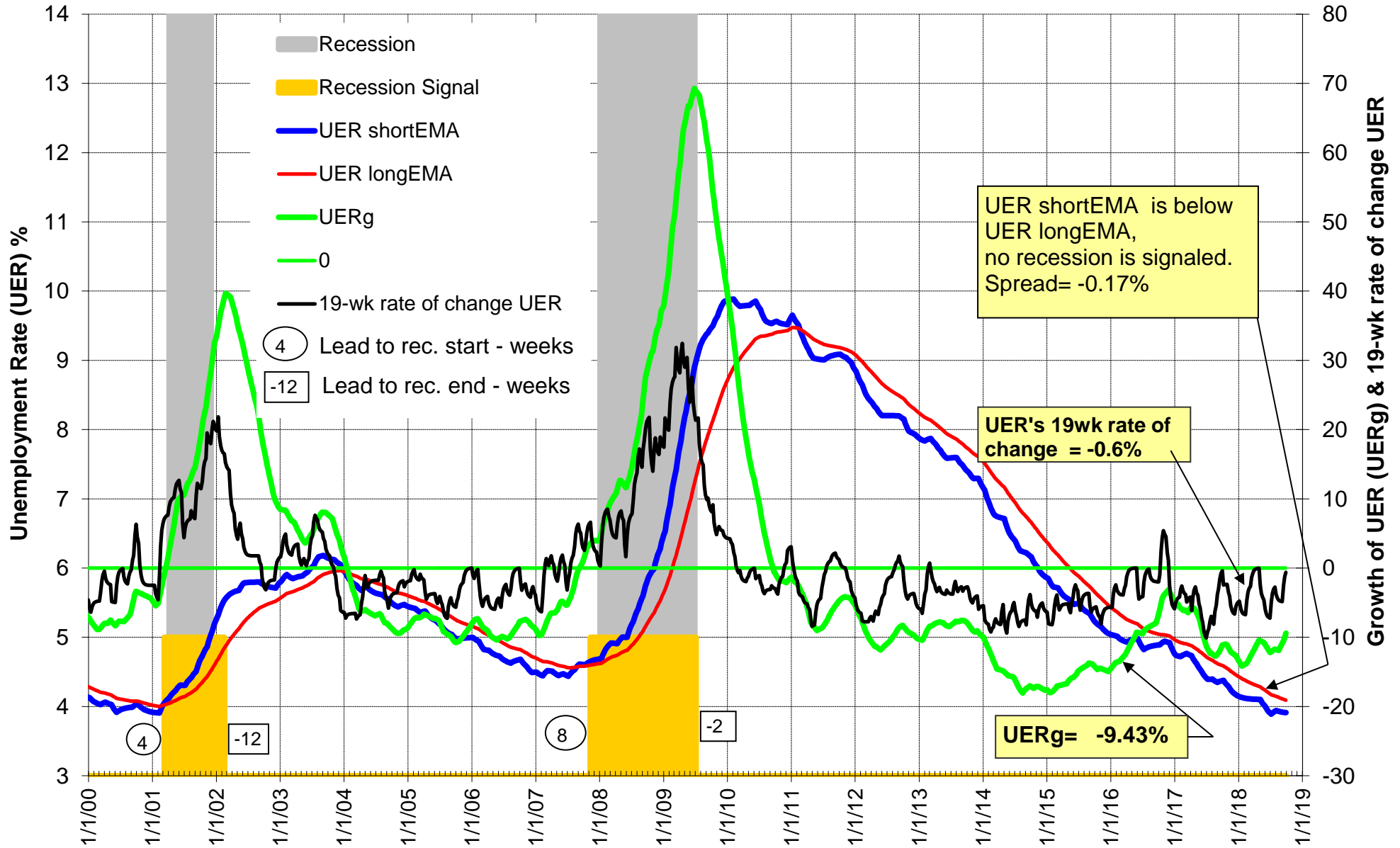
updated to 09/13/2018



### Fig-8 Unemployment Rate and Recessions (real-time) 2000-2018

Leads to recession starts and to recession ends are positive numbers in weeks, lags are negative numbers.

updated to 9-28-2018 with August UER= 3.9%



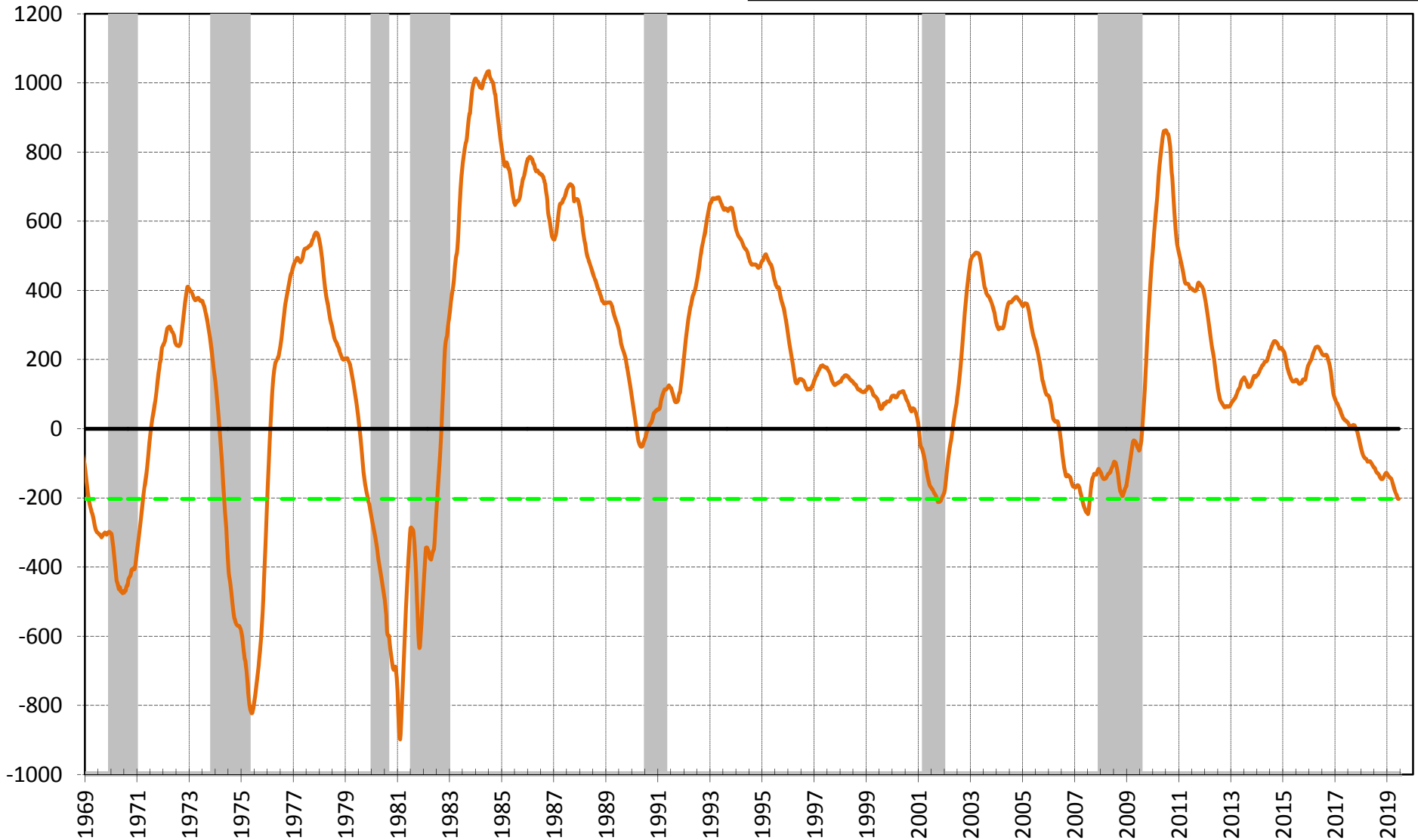
# Long Leading Recession Indicator DAGS: shifted forward in time by 40 weeks

<http://imarketsignals.com/2016/the-dynamic-linearly-detrended-aggregate-spread-a-long-leading-recession-indicator/>

- recession
- DAGS
- recession trigger line
- last level of DAGS

possible recession signaled some times after October 2017

updated on Sep-7-2018, last level of DAGS = -203 bps



### Fig-9 Modified Coppock Indicator for S&P500 2005-2018

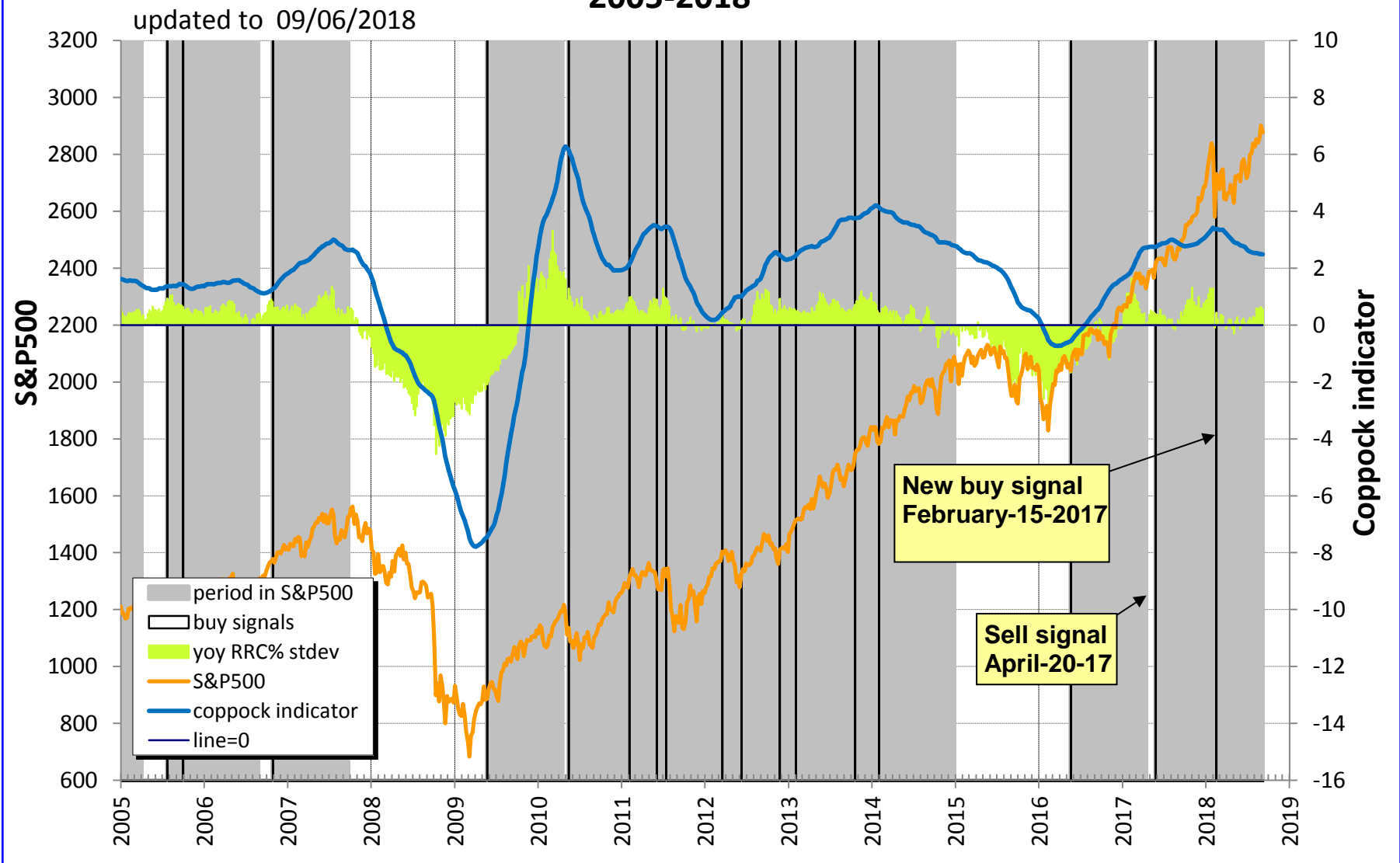
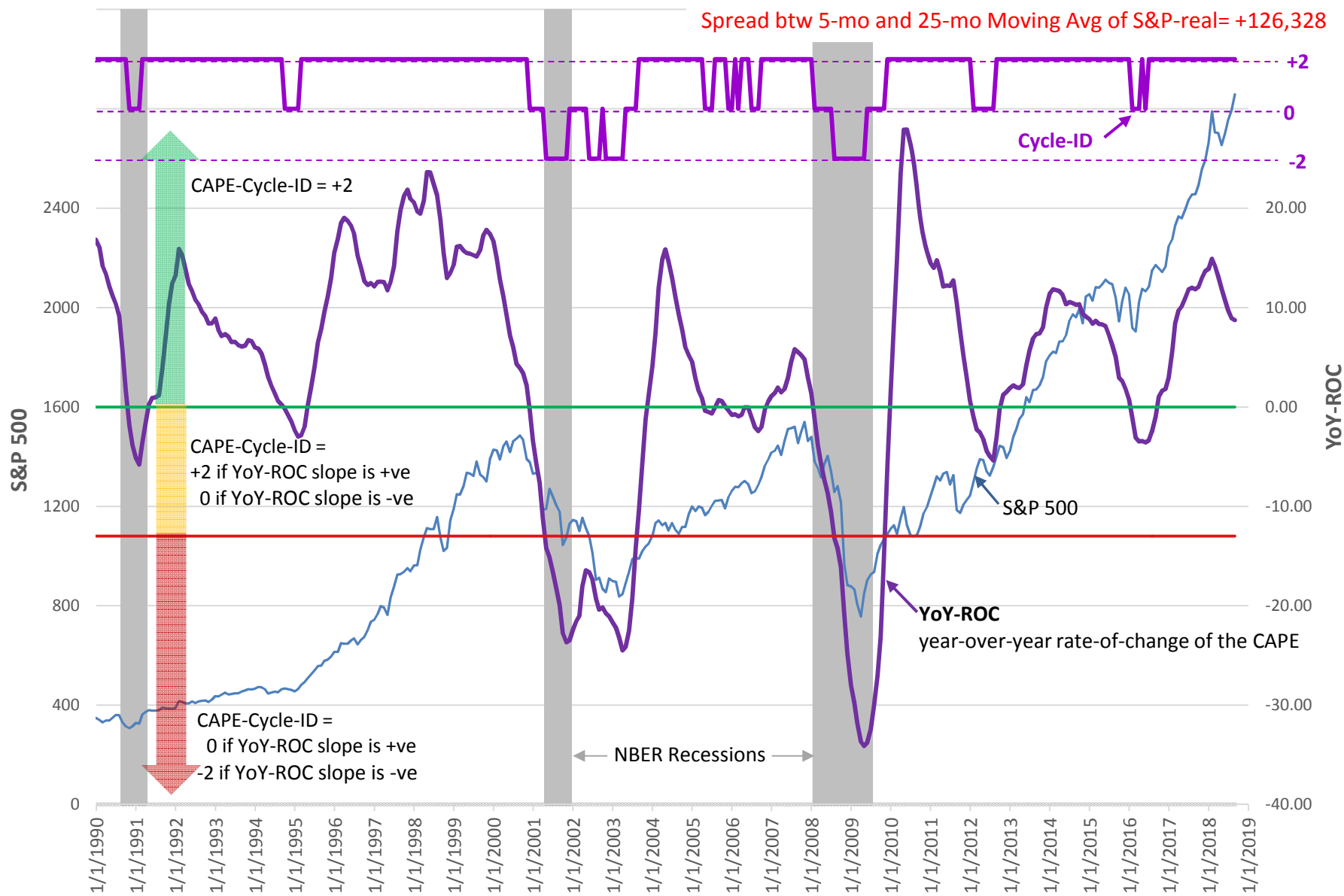


Fig. 9a CAPE-Cycle-ID and the YoY-ROC from 1990

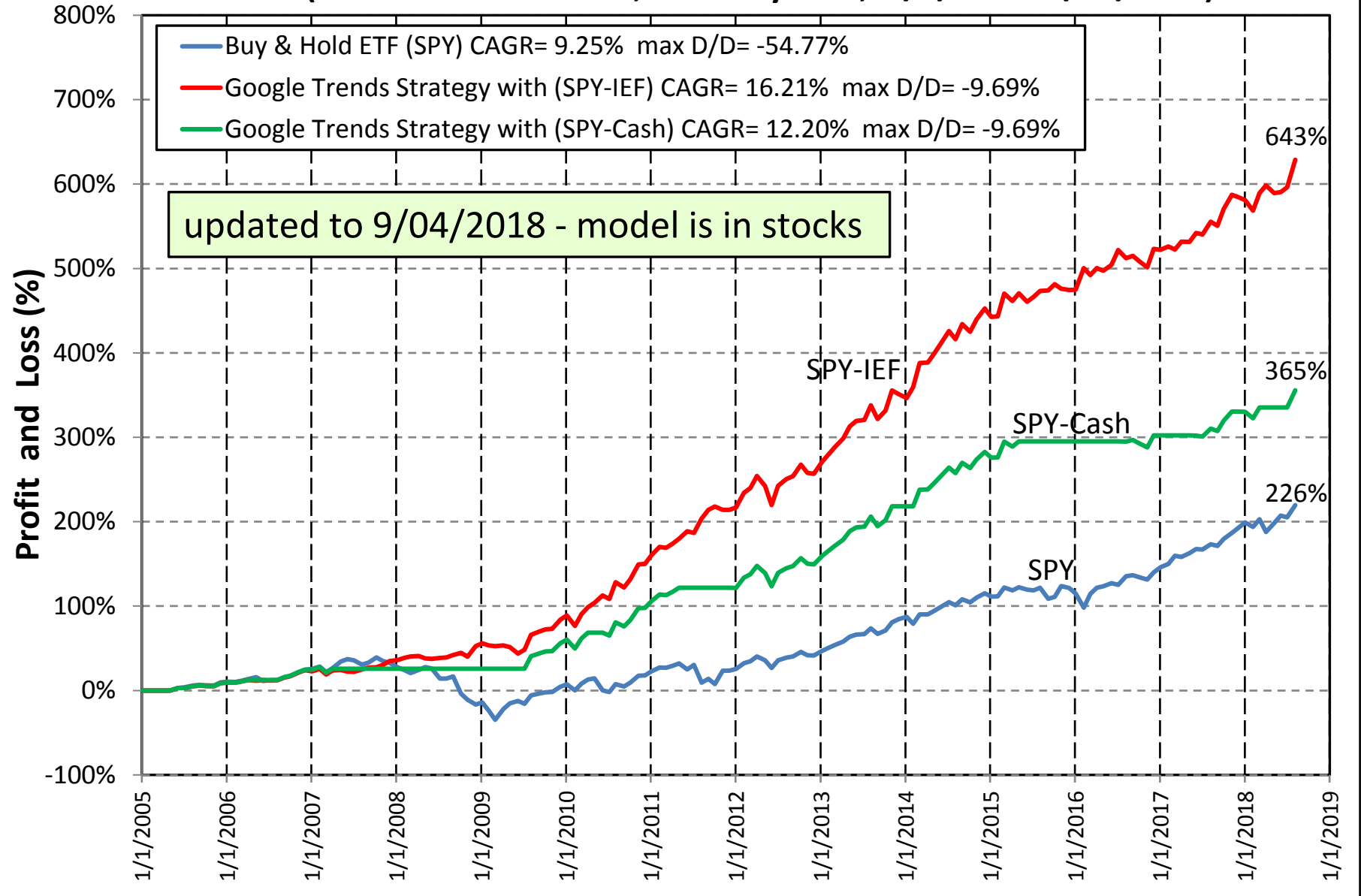
updated to 8/31/2018

Shiller CAPE= 32.35

Spread btw 5-mo and 25-mo Moving Avg of S&P-real= +126,328



**Fig 9b: Cumulative Performance iM-GT Timer**  
(Search Term = "debt", monthly data, 5/2/2005 -9/04/2018)

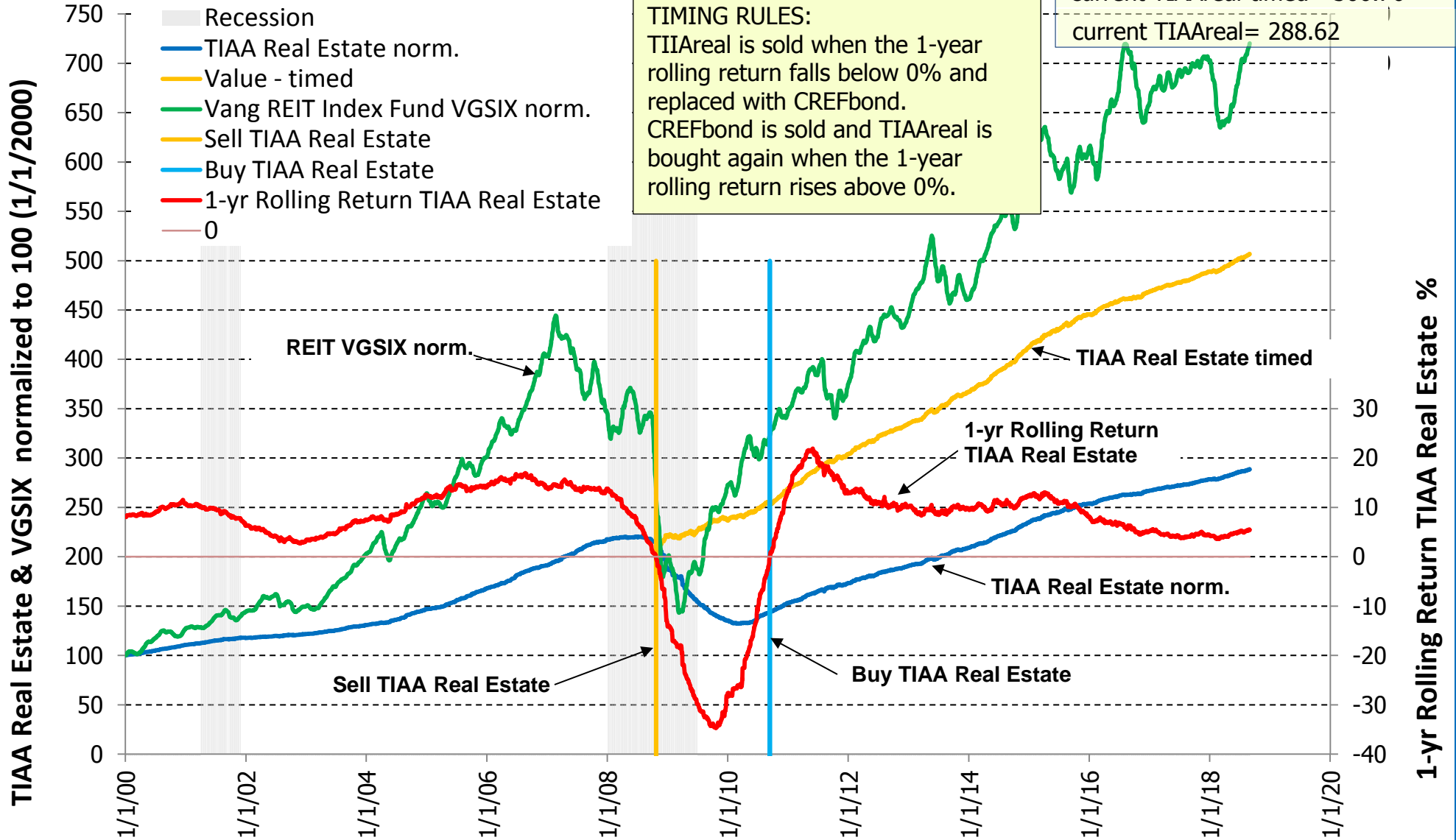


## TIAA Real Estate Account vs. Vanguard REIT Index Fund (VGSIX) 2000 - 2018

updated to 8/31/18, TIAAreal current 1-year rolling return= 5.42%

current TIAAreal-timed= 506.76

current TIAAreal= 288.62



Updated to Aug 30, 2018

# Trade Weighted US Dollar and Interest Rates

