

## February 28, 2019

### Business Cycle Index

The BCI at 250.2 is below last week's 250.9, and remains below this business cycle's peak as indicated by the BCIp at 95.4. However, the 6-month smoothed annualized growth BCIg at 9.8 is above last week's 9.7. Both BCIp and BCIg are not signaling a recession.

## March 1, 2019

### Market Signals Summary:

The MAC-US model switched into the markets on 2/26/2019. So is the iM-Low Frequency Timer as well as the "3-mo Hi-Lo Index of the S&P500" which generated its buy signal on 2/22/2019. The monthly updated S&P500 Coppock switched out of the market on 1/29/2019. The MAC-AU has signaled a buy on 2/7/2019 and is invested in the markets. 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 indeterminate and signaled buy FLAT end November 2018. The iM-Gold Timer sold gold on 12/31/2018, and the gold Coppock model is invested in gold, however the silver model is in cash since early August 2018. The monthly iM-GT-Timer, which is based on Google trends, has switched to cash on November 1, 2018.

### Stock-markets:

#### MAC-US

The MAC-US model switched into the markets on 2/26/2019. The sell-spread (red line) now needs to move above zero before a sell signal can be generated.

#### 3-mo Hi-Lo Index

The 3-mo Hi-Lo Index of the S&P500 is above last week's level at 9.32% (last week 6.44%), generating the buy signal on 2/22/2019 and is invested in the markets.

#### MAC-AU

The MAC-AU model is invested in the markets after signaling a buy on February 7, 2019. The sell-spread (red line) now needs to move above zero before a sell signal can be generated.

### Recession:

#### COMP

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.

#### iM-BCIg

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

#### Forward Rate Ratio

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

## iM-Low Frequency Timer

The iM-Low Frequency Timer is back in the markets since 1/22/2019.

## 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 near 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's is near last week's level and its trend is indeterminate. It signaled a buy FLAT mid November 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:

### Coppock 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.

### iM GOLD-TIMER

The iM GOLD-TIMER Rev-1 sold gold on 12/31/2018 and the model is in cash

## Silver:

### Coppock Silver

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

## Monthly Updates

February 1, 2019 (next update March 8, 2019)

### Unemployment

The unemployment rate recession model (article link), has been updated with the January UER of 4.0%. The model does not signal a recession, however if unemployment rises to 4.1% in the coming months a recession will be signaled.

### The Dynamic Linearly Detrended Enhanced Aggregate Spread:

The updated level of this indicator, -218bps, above last months -229bps, 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 exited the market on 1/29/2019 and is in cash. 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; the level moved from +2 to 0 end of Jan-2019. This indicator is described here.

To avoid the bear market, exit stocks when the spread between the 5-month and 25-month moving averages of S&P-real becomes negative and simultaneously the CAPE-Cycle-ID score is 0 or -2. (read more)

### Estimated Forward 10-Year Returns

The estimated forward 10-year annualized real return are estimated at 6.3% with a 95% confidence interval : 4.9% to 7.7%

### iM-GT Timer

Fig-10.-2-1-2019The iM-GT Timer, based on Google Search Trends volume switched to cash on 11/1/2018..

### Trade Weighted USD

The Trade Weighted \$ value remains near its past value.

### TIAA Real Estate Account

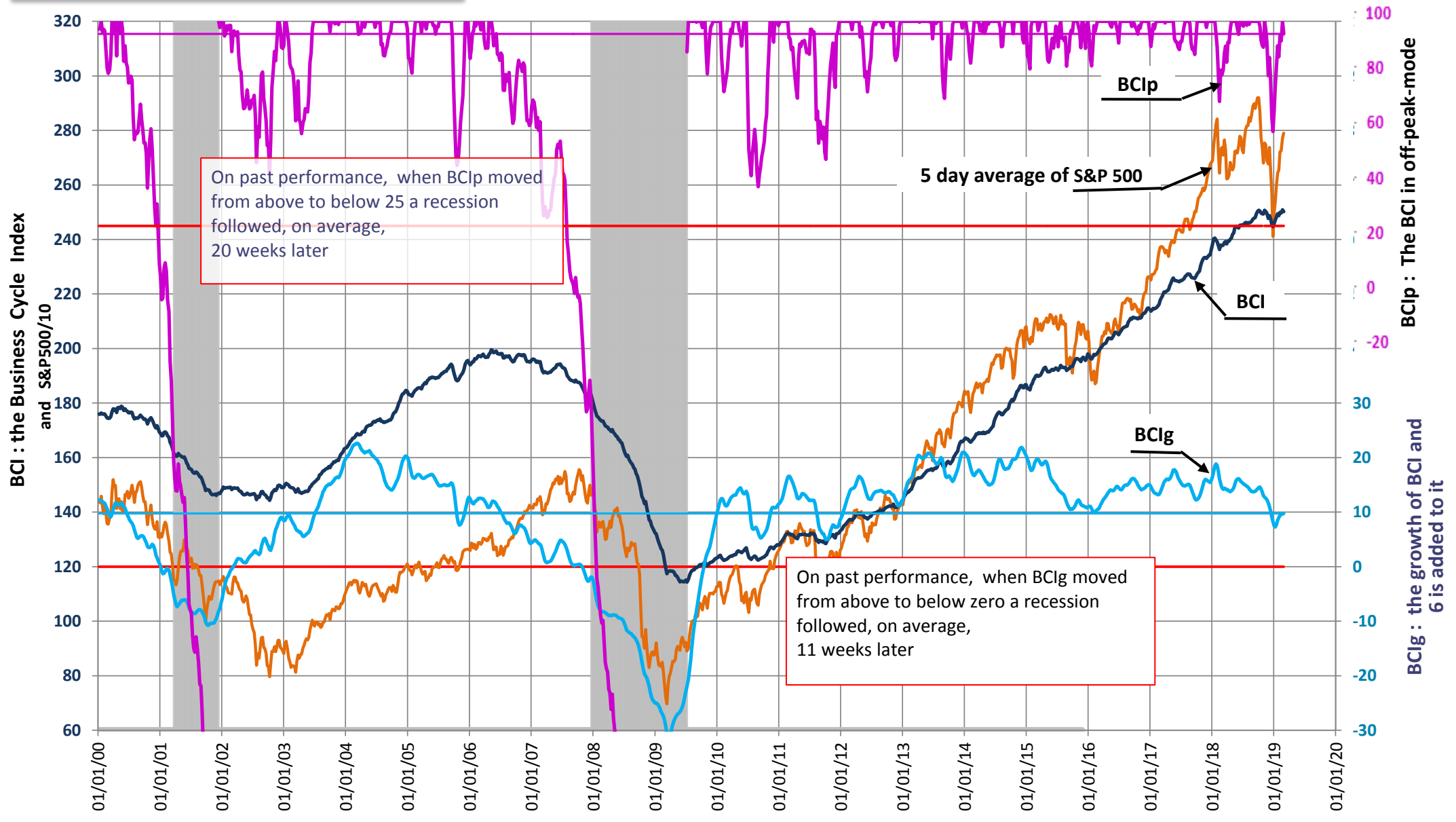
The 1-year rolling return for the end of last month is 4.79%. A sell signal is not imminent.

# iM's Business Cycle Index (BCI)

Date	01/31	02/07	02/14	02/21	02/28
BCIp	87.0	94.7	92.9	100.0	95.4
BCI	248.8	249.9	249.6	250.9	250.2
BCIg	9.0	9.4	9.5	9.7	9.8

BCIp, BCI and BCIG  
updated to February 28, 2019

On past performance, BCIp = 100 can be interpreted as an average one year "time-to-live" to a recession.



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...2/28/19

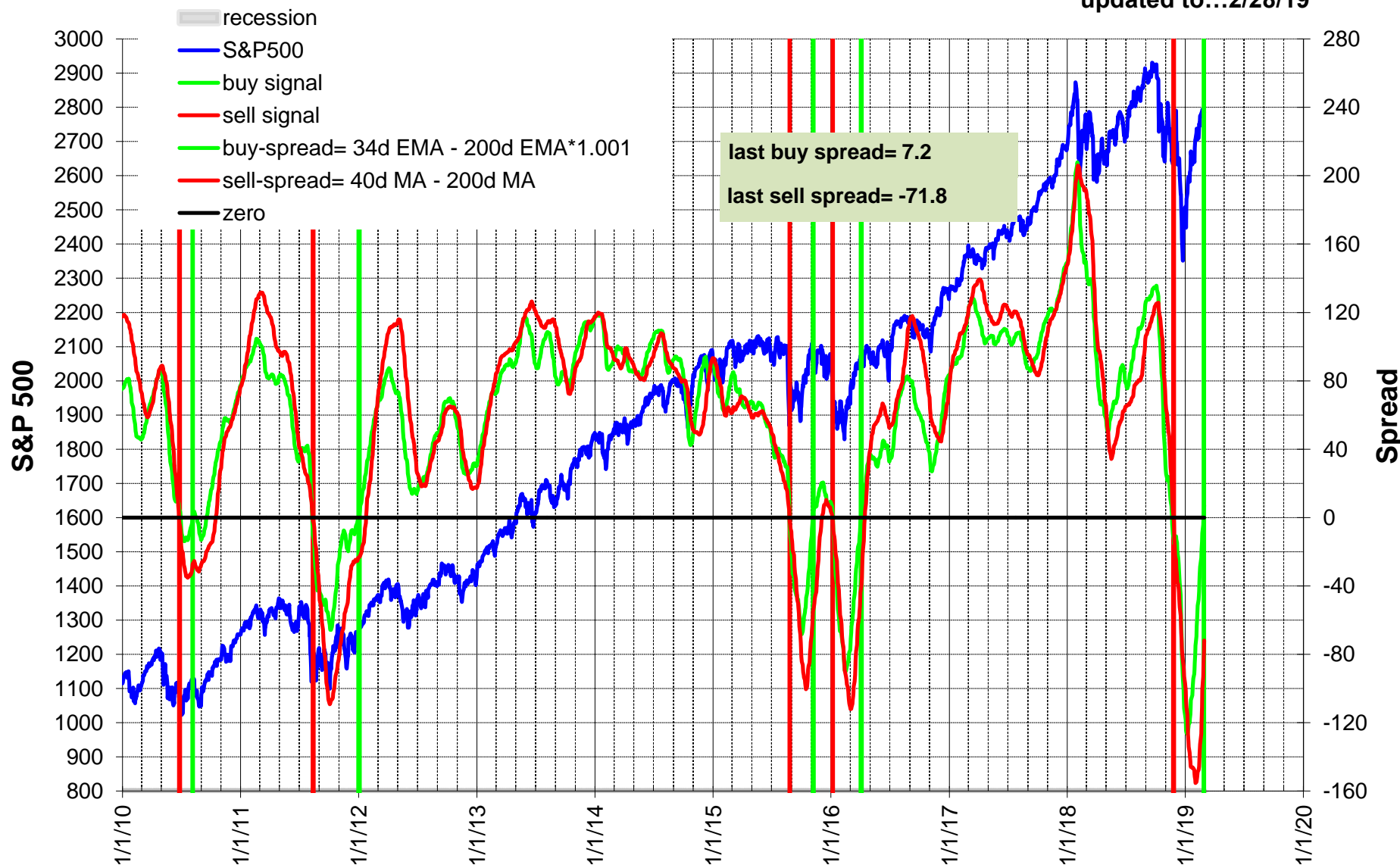




Fig 2.1: Buy and Sell signals for the Australia All Ordinaries Index from the MAC-AU System

updated to Mar-1-19

last buy spread= 151.8

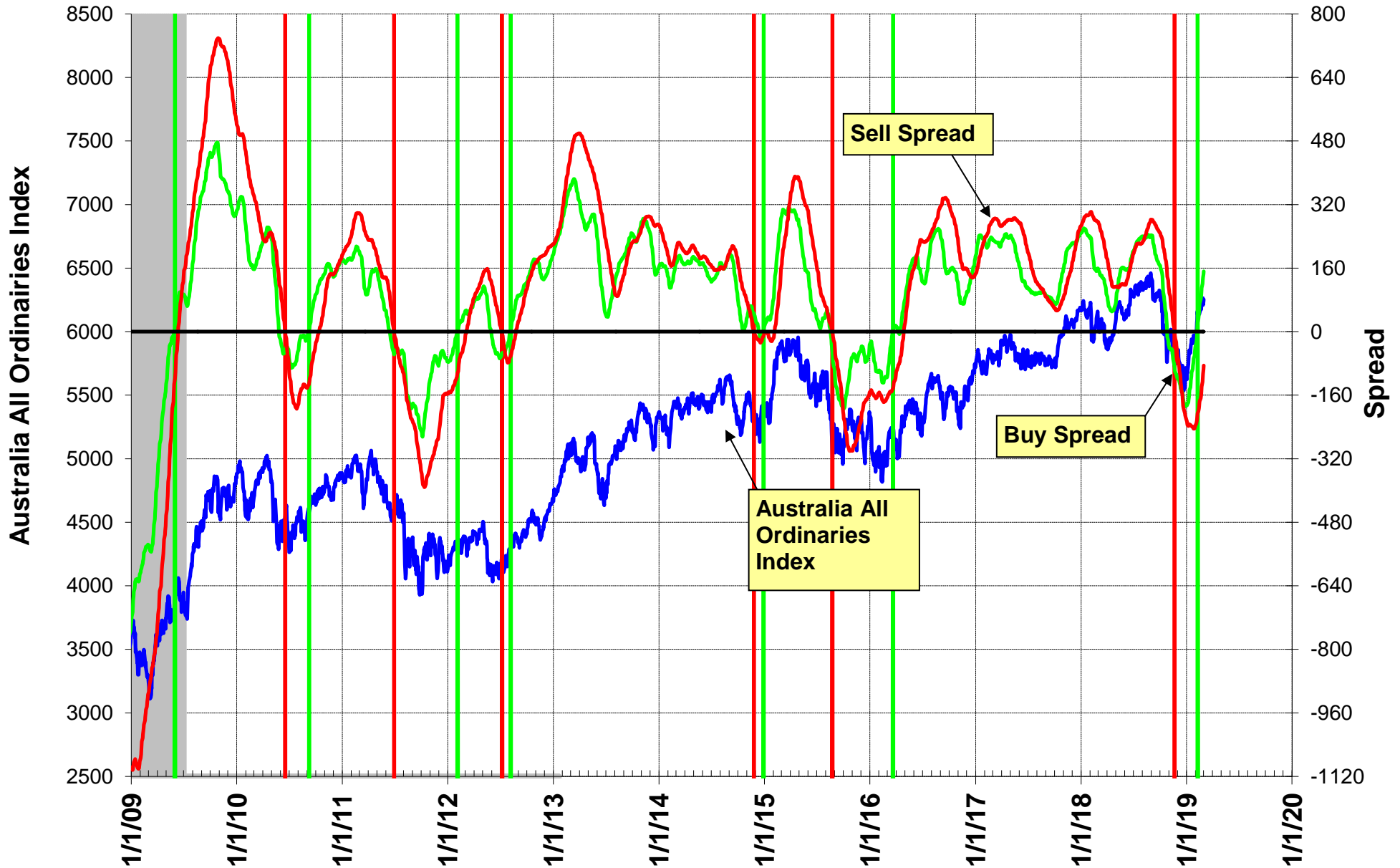
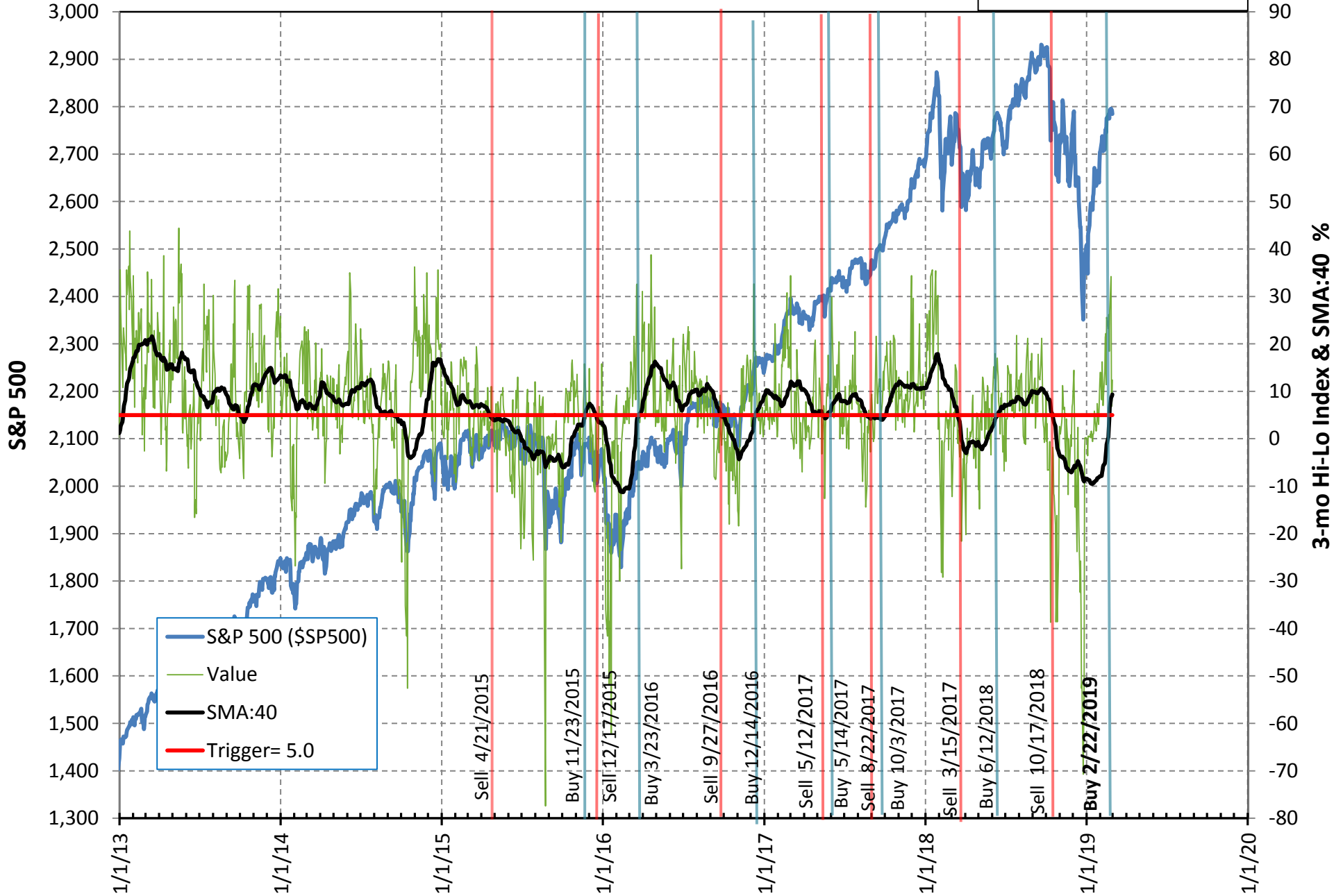


Fig 2.2 3-mo Hi-Lo Index of the S&P500 & 40-day SMA of Index

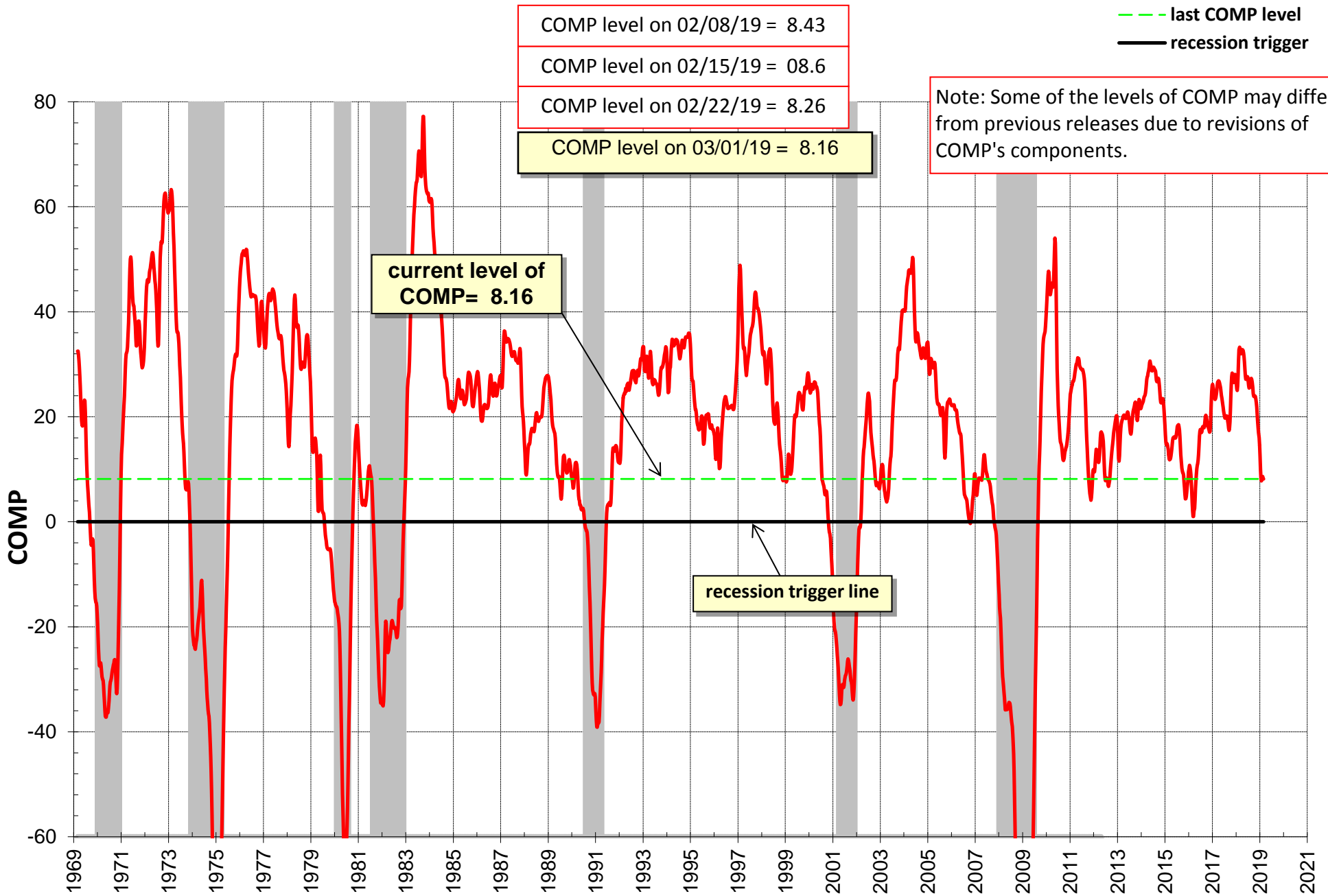
updated to 2/28/2019

last SMA:40= 9.32%



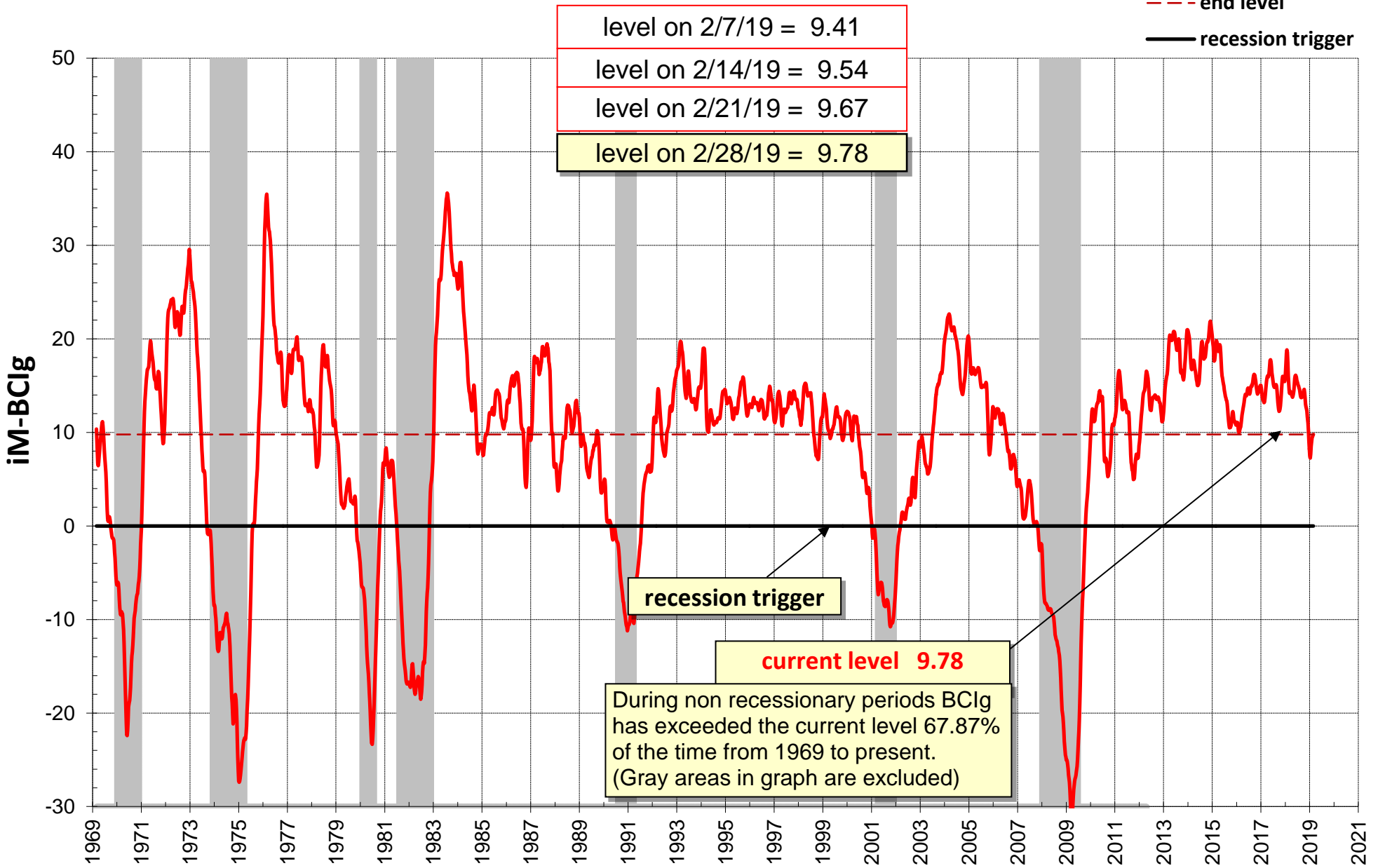
**Fig. 3: COMP Leading Indicator of US Economy 1969-2019**

- recession
- COMP
- last COMP level
- recession trigger



### Fig 3.1: iM-BCI<sub>g</sub> 1969-2019

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



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

updated to 02/28/2019

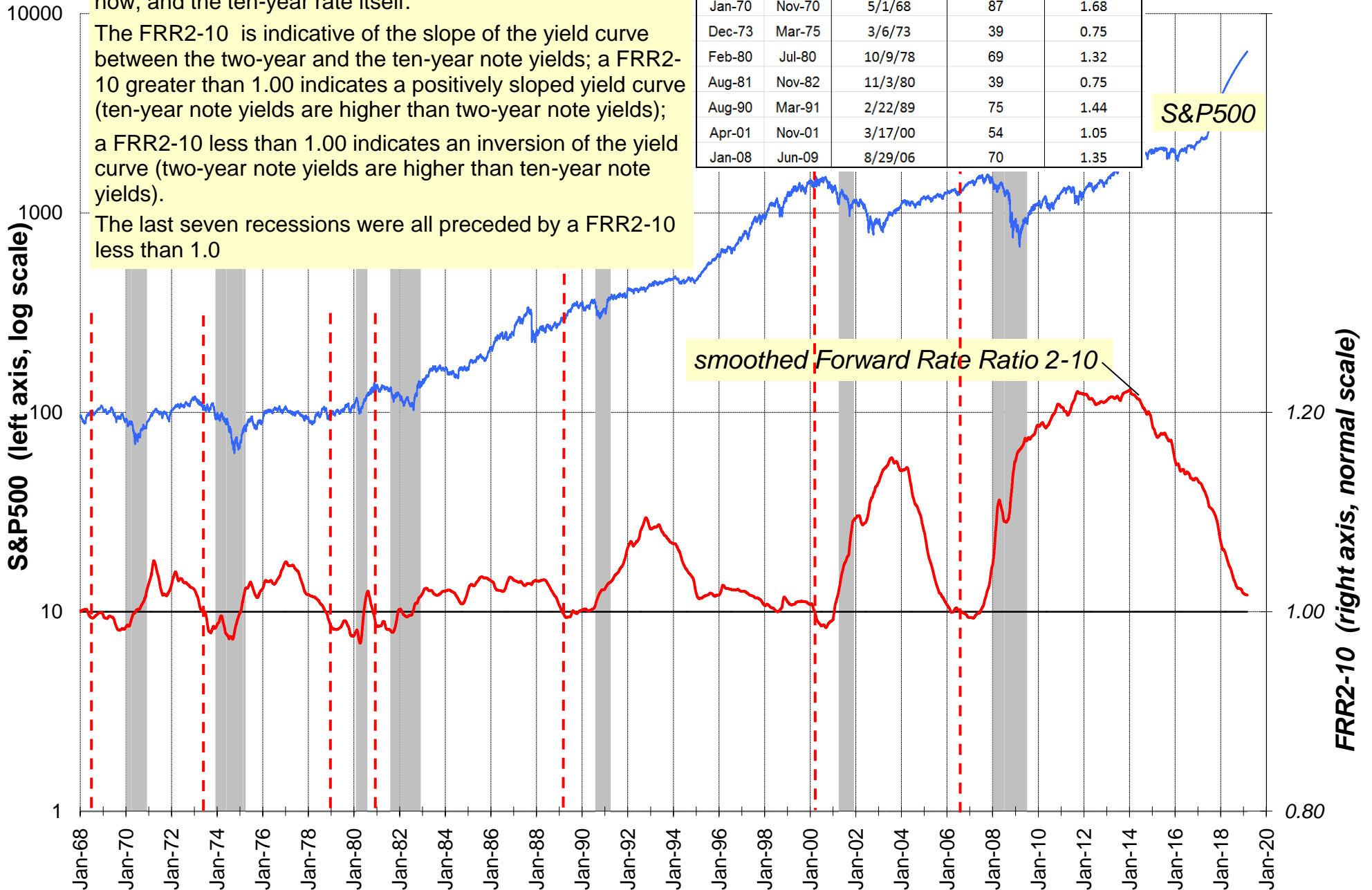
EMA of FRR2-10 = 1.017

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).

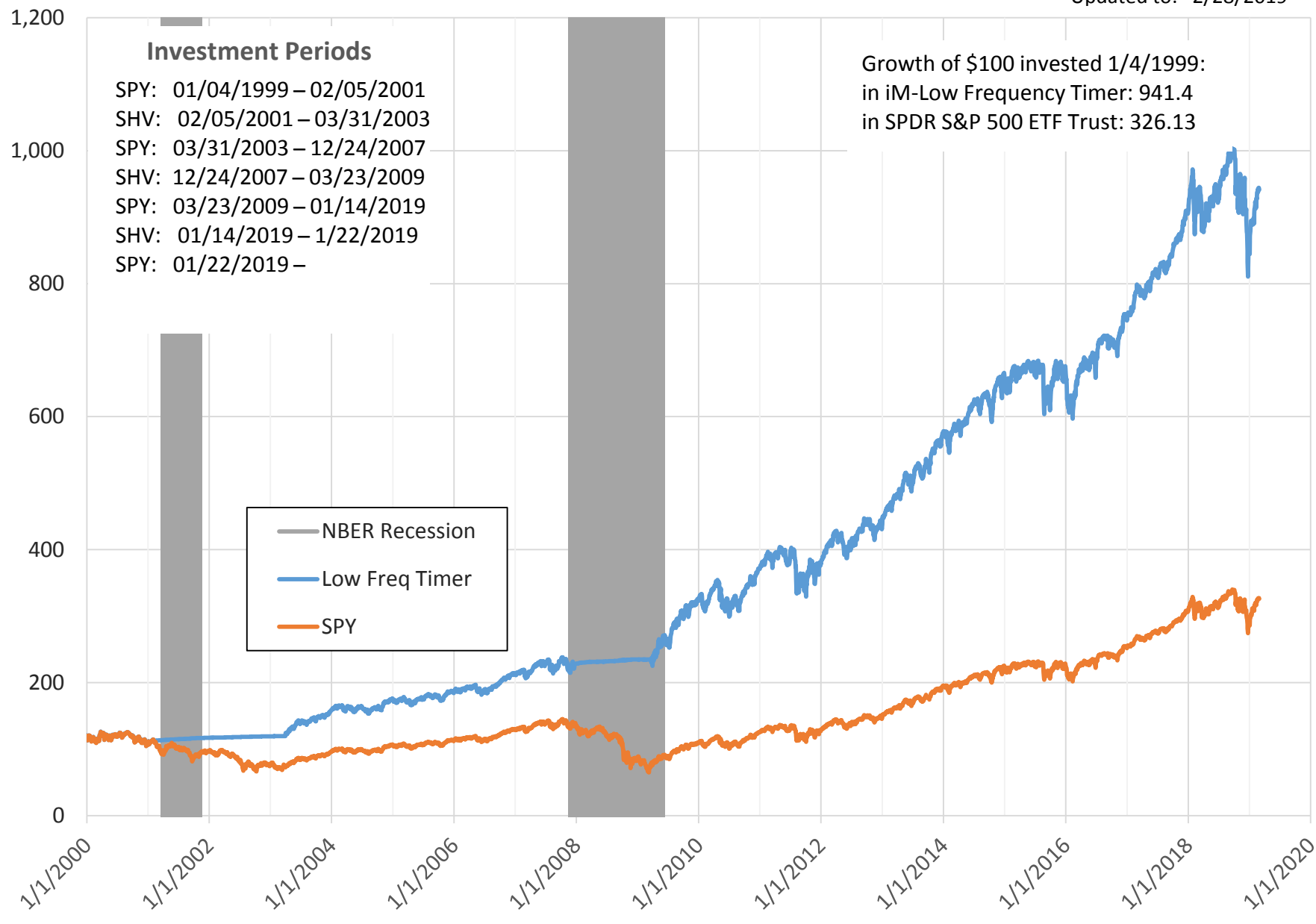
The last seven recessions were all preceded by a FRR2-10 less than 1.0

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

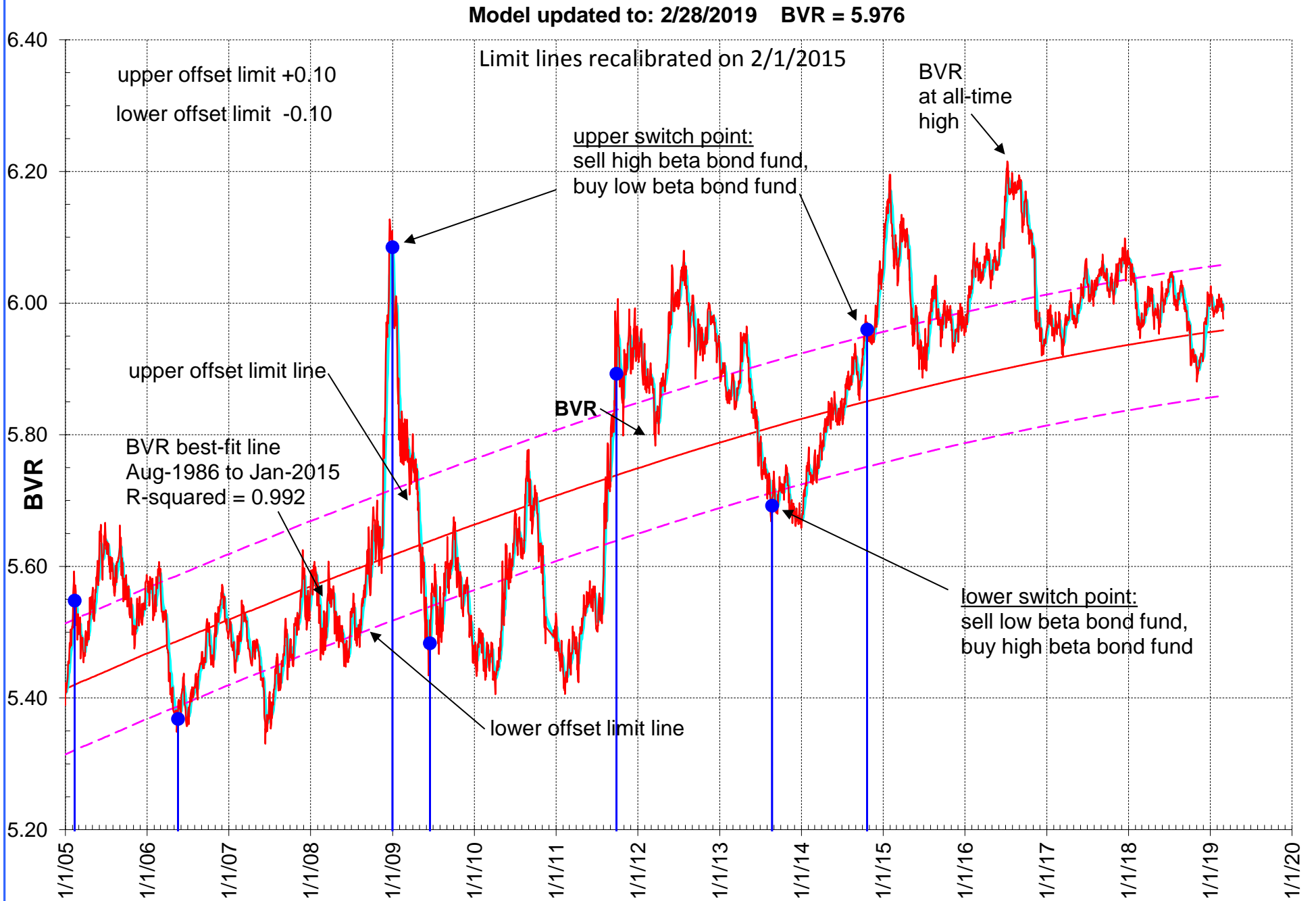


### Fig.3.3 iM-Low Frequency Timer

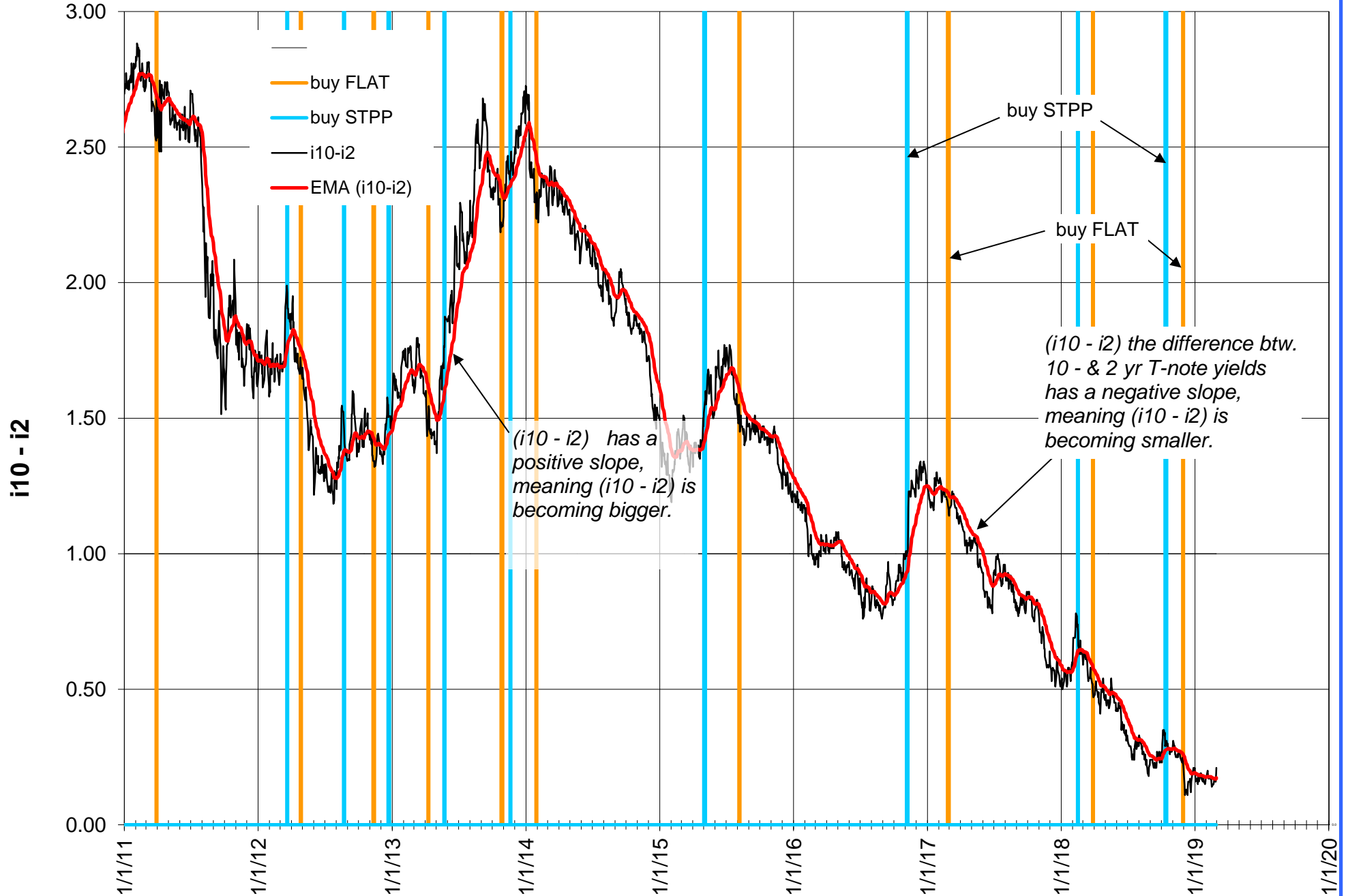
Updated to: 2/28/2019



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



**Figure 5: i10 - i2** Updated to.....2/28/2019



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

updated to 02/28/2019

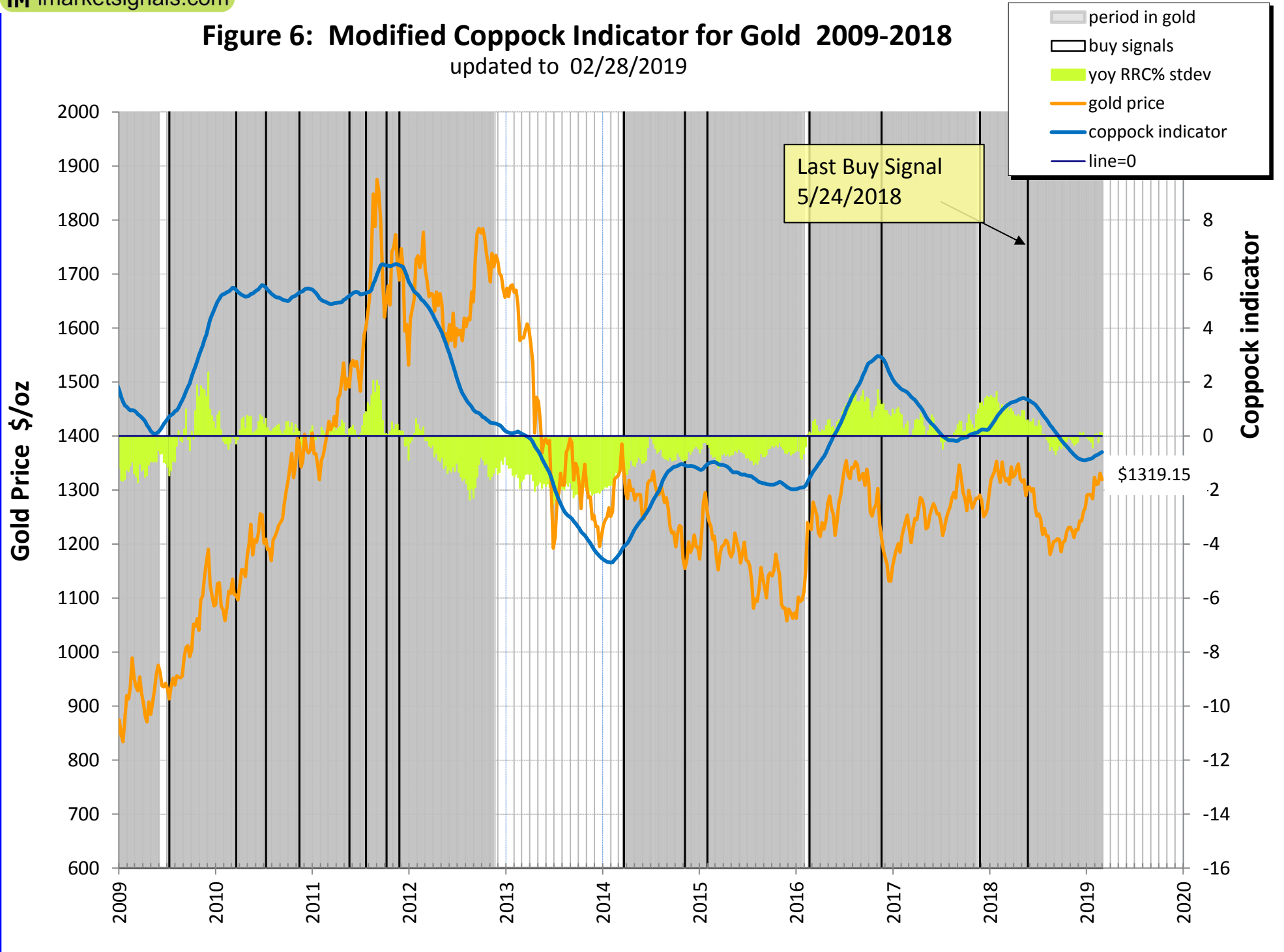
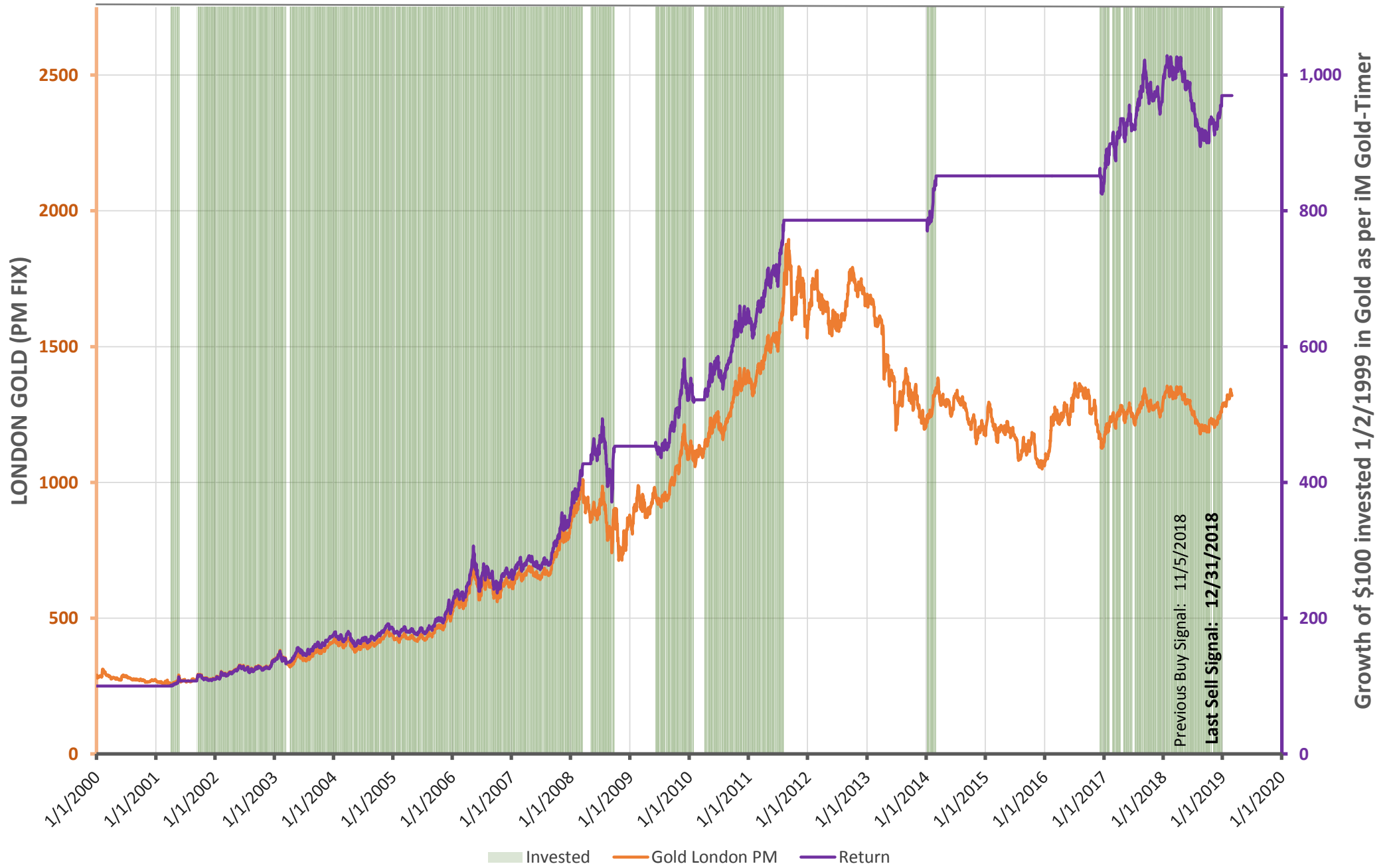


Fig. 6.1a iM GOLD-TIMER - Rev 1

Updated to: 2/28/2019



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

updated to 02/28/2019

