

January 3, 2019

Business Cycle Index

The BCI at 242.4 is below last week's downward revised 245.1, and remains below this business cycle's peak as indicated by the BCIp at 46.9. Also, the 6-month smoothed annualized growth BCIg at 7.6, is below last week's 8.7. Both BCIp and BCIg are not signaling a recession.

January 4, 2019

Market Signals Summary:

The MAC-US model is in cash after signaling a sell on 11/26/2018. The "3-mo Hi-Lo Index of the S&P500" generated a sell signal on 10/17/2018 and is in cash. The monthly updated S&P500 Coppock indicator remains invested. The MAC-AU has signaled a sell on 11/20/2018. 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 November 2018. **The iM-Gold Timer sold gold on 12/31/2018 and is in cash.** The gold Coppock model is invested in gold, however the silver model is in cash since early August 2018.

Stock-markets:

The [MAC-US](#) model **generated a sell-signal 11/26/2018** and thus is in cash. The buy-spread (green graph) is below last week's level needs to rise above zero to signal a buy.

The [3-mo Hi-Lo Index](#) of the S&P500 is below last week's level at -8.57% (last week -8.49%), generated the sell signal on 10/17/2018 and is in cash.

The MAC-AU model is in cash after it generated a sell signal on November 20, 2018.

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** below 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 below 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 above 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 trend is flattening. It signaled a buy FLAT end 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:

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

The [iM GOLD-TIMER Rev-1](#) sold gold on 12/31/2018 and is in cash

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 (next update 1/4/2019)

January 4, 2019

Unemployment

The unemployment rate recession model ([article link](#)), has been updated with the November UER of 3.7%. 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 11.57% (last month minus 10.94%) and EMA spread of the UER is at minus 0.22% (last month minus 0.24%).

The Dynamic Linearly Detrended Enhanced Aggregate Spread:

The updated level of this indicator, -223bps, is above last months -184bps, 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 September 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](#).

iM GT Timer

The iM-GT Timer, based on Google Search Trends volume switched to cash on 11/1/2018. This indicator is described [here](#).

Trade Weighted USD

The Trade Weighted \$ value continues to strengthen.

TIAA Real Estate Account

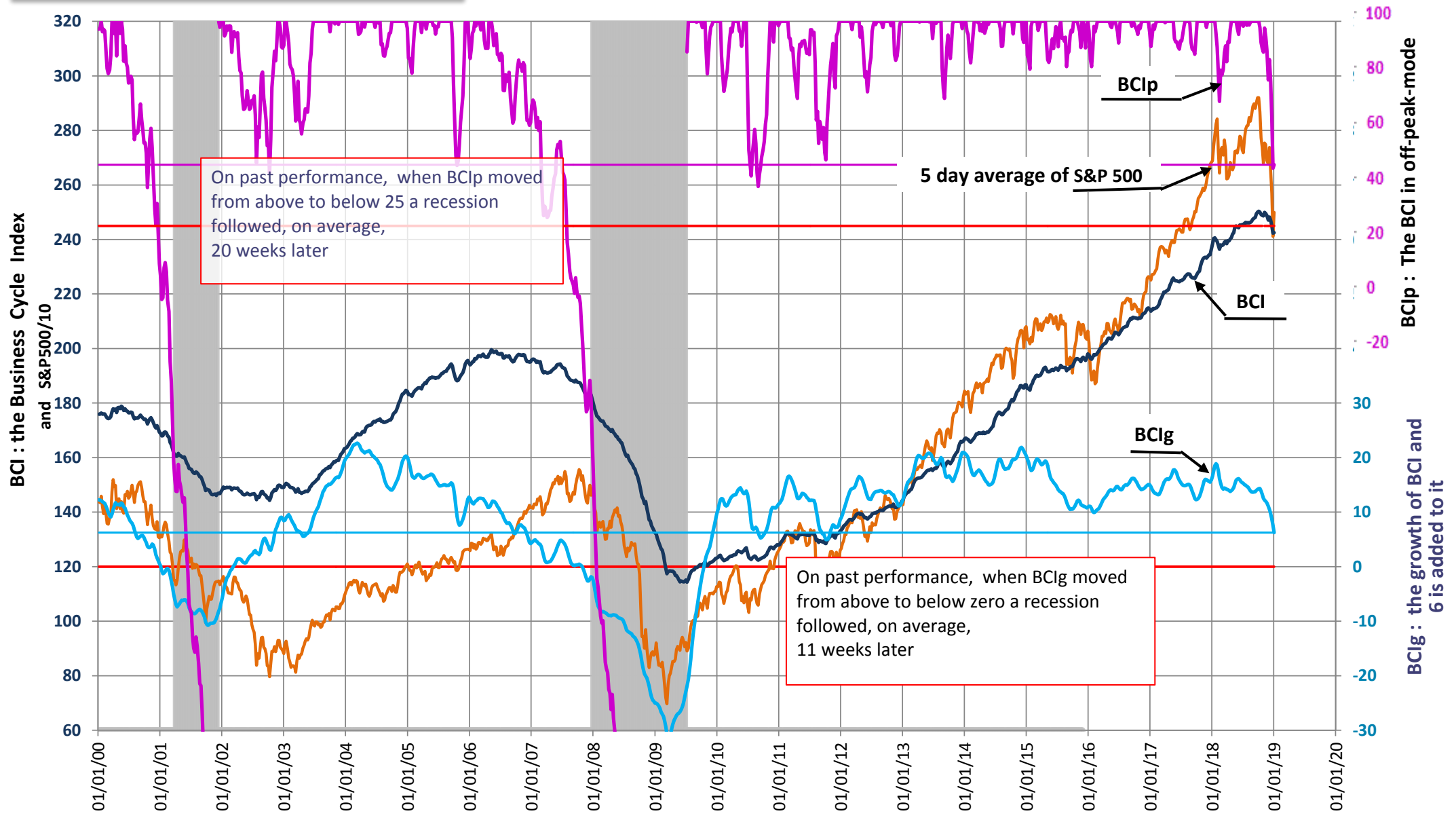
The 1-year rolling return for the end of last month is 5.27%. A sell signal is not imminent.

iM's Business Cycle Index (BCI)

Date	12/06	12/13	12/20	12/27	01/03
BCIp	86.0	78.0	64.5	46.2	47.4
BCI	248.3	247.1	245.1	242.3	242.5
BCIg	10.5	9.7	8.7	7.6	6.2

BCIp, BCI and BCIG
updated to January 03, 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...1/3/19

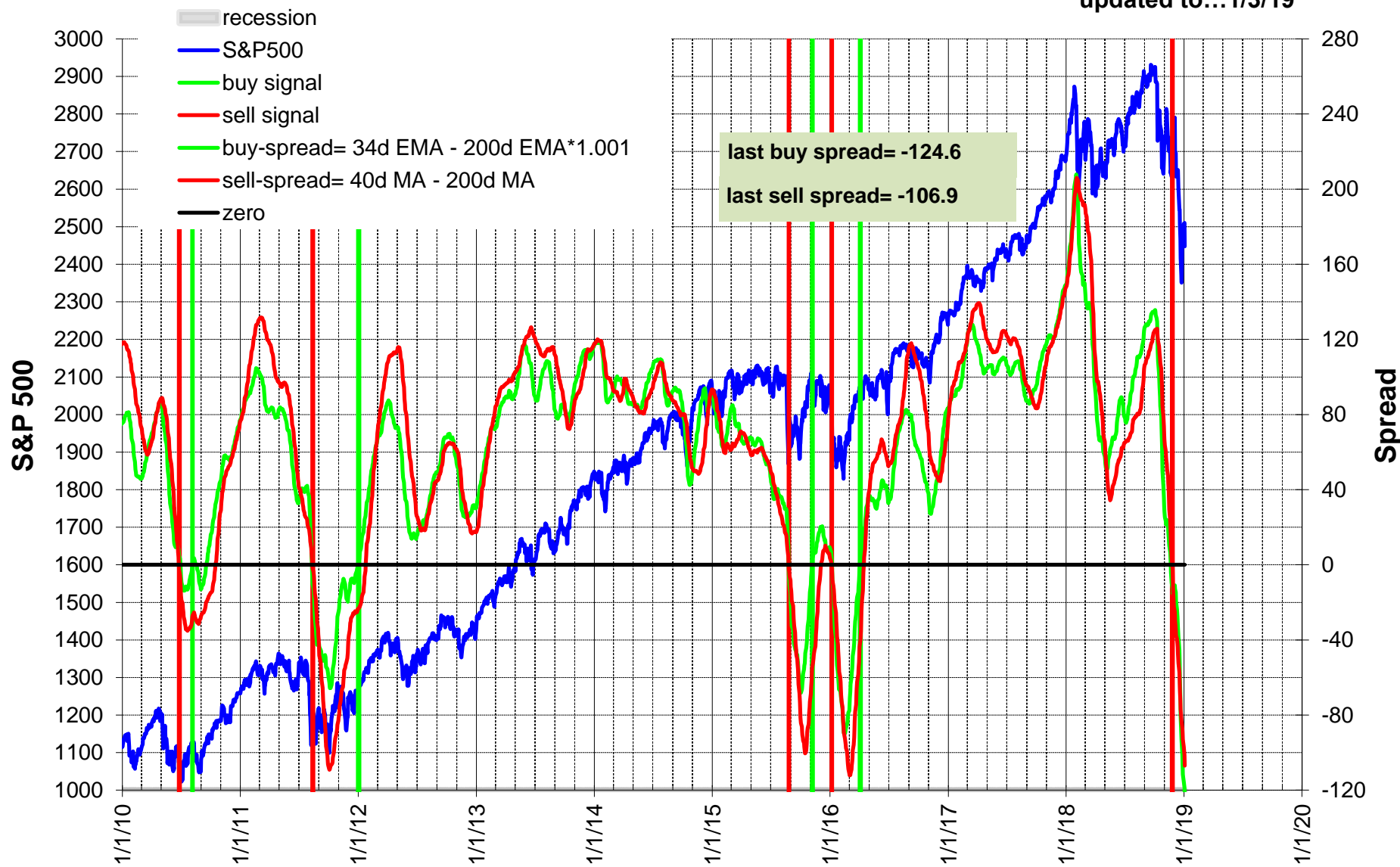




Fig 2.1: Buy and Sell signals for the Australia All Ordinaries Index from the MAC-AU System

updated to Jan-4-19

last buy spread= -182.4

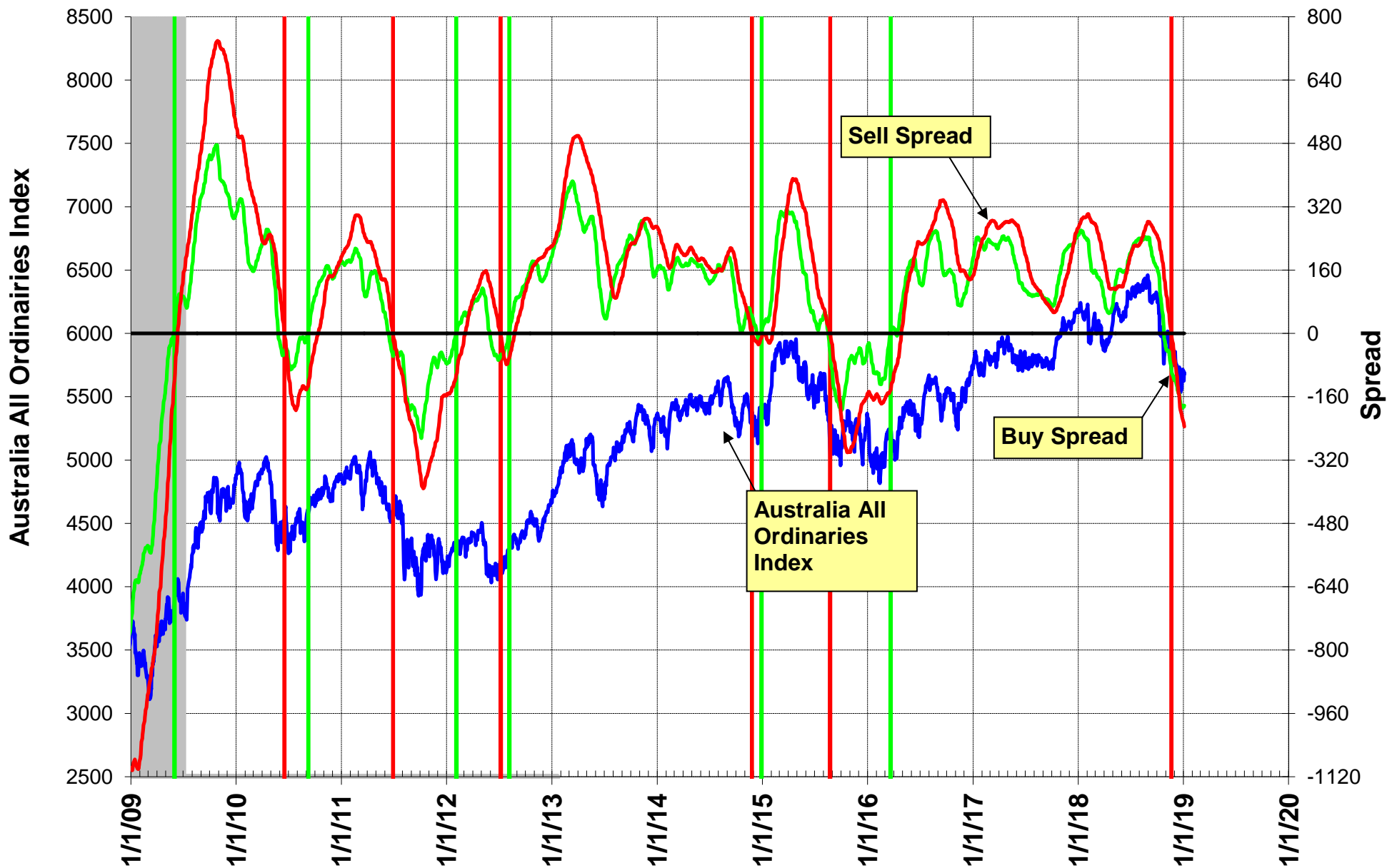


Fig 2.2 3-mo Hi-Lo Index of the S&P500 & 40-day SMA of Index

updated to 1/3/2019

last SMA:40= -8.57%

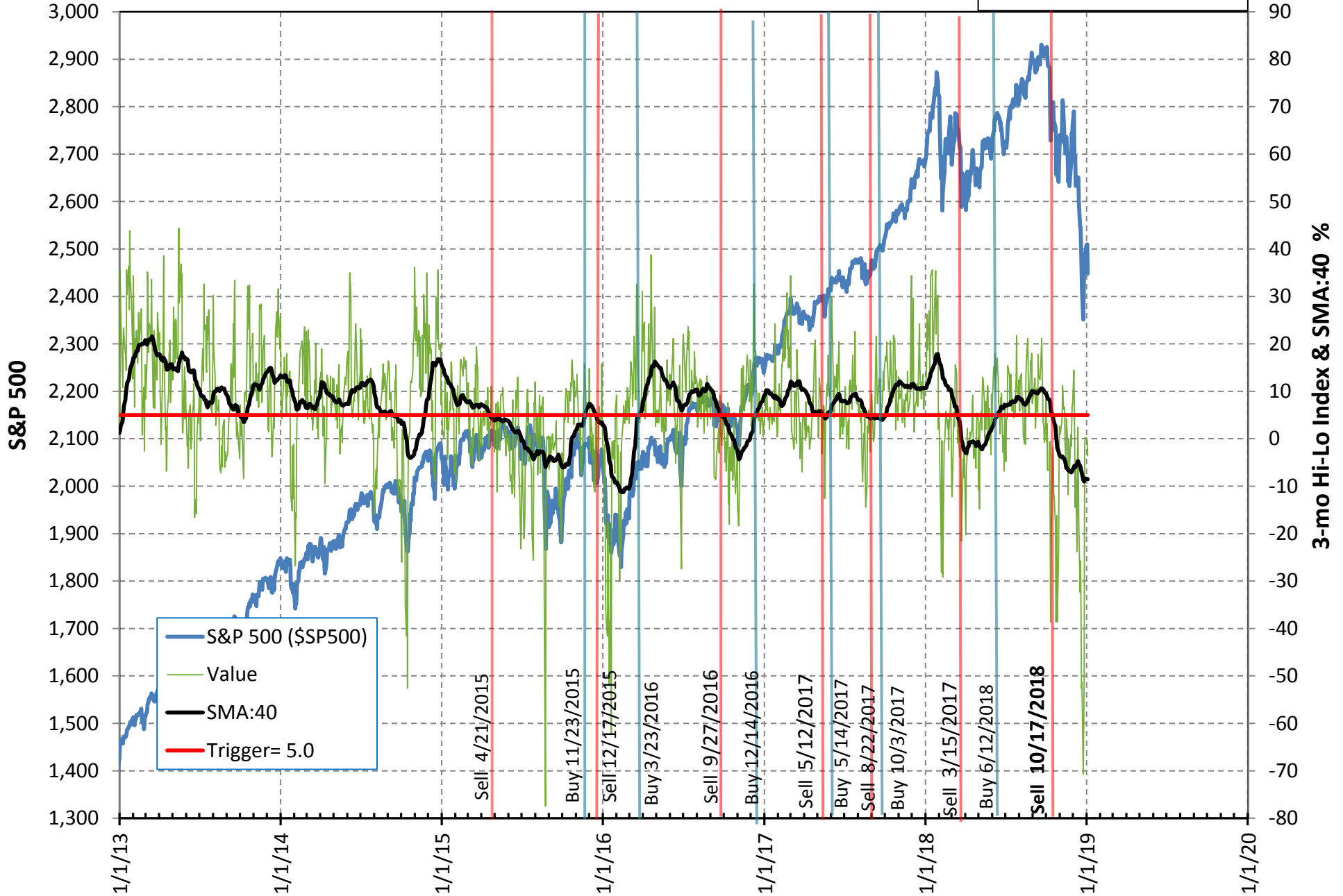


Fig. 3: COMP Leading Indicator of US Economy 1969-2018

- recession
- COMP
- last COMP level
- recession trigger

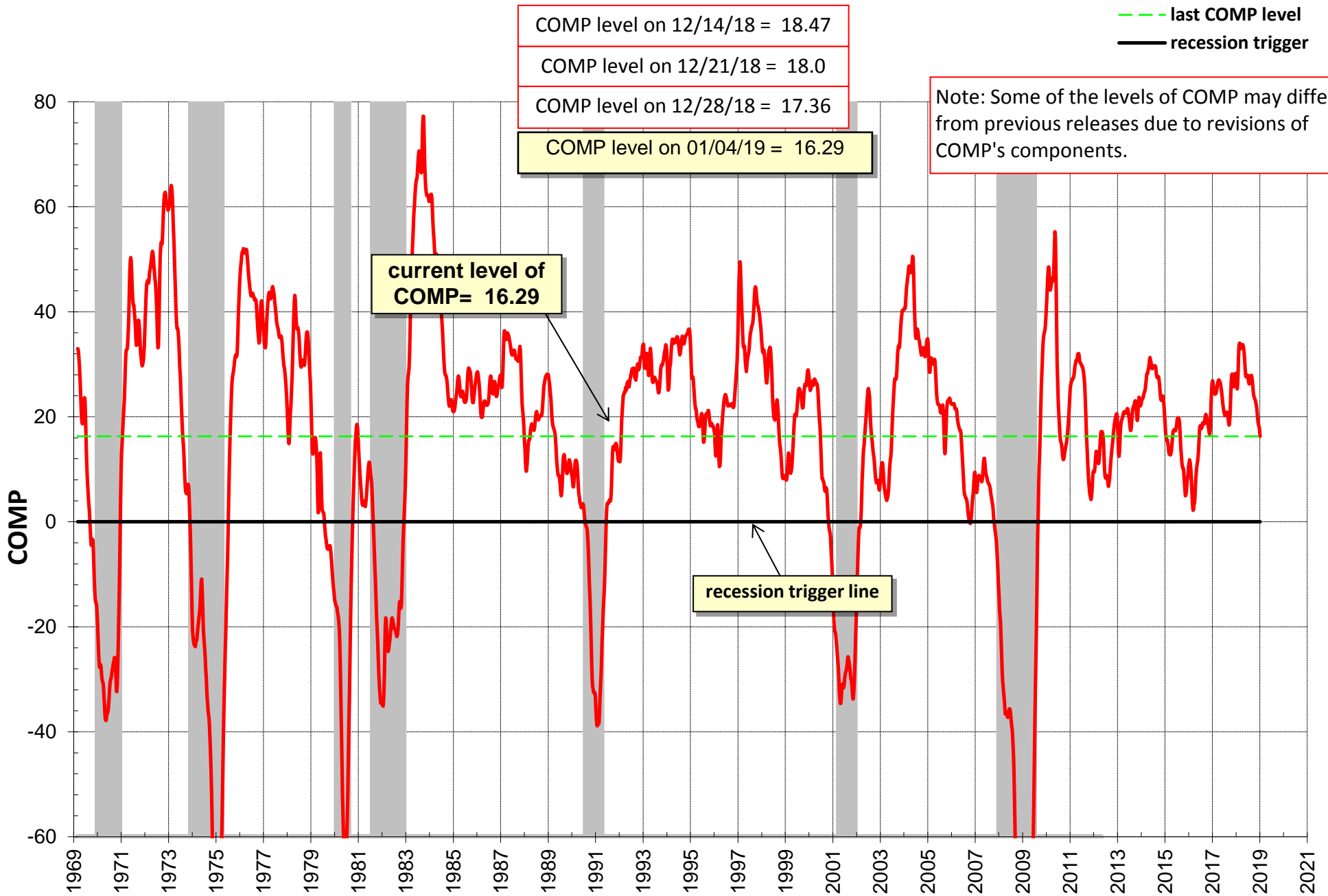


Fig 3.1: iM-BCI_g 1969-2016

- recession
- iM-BCI_g
- end level
- recession trigger

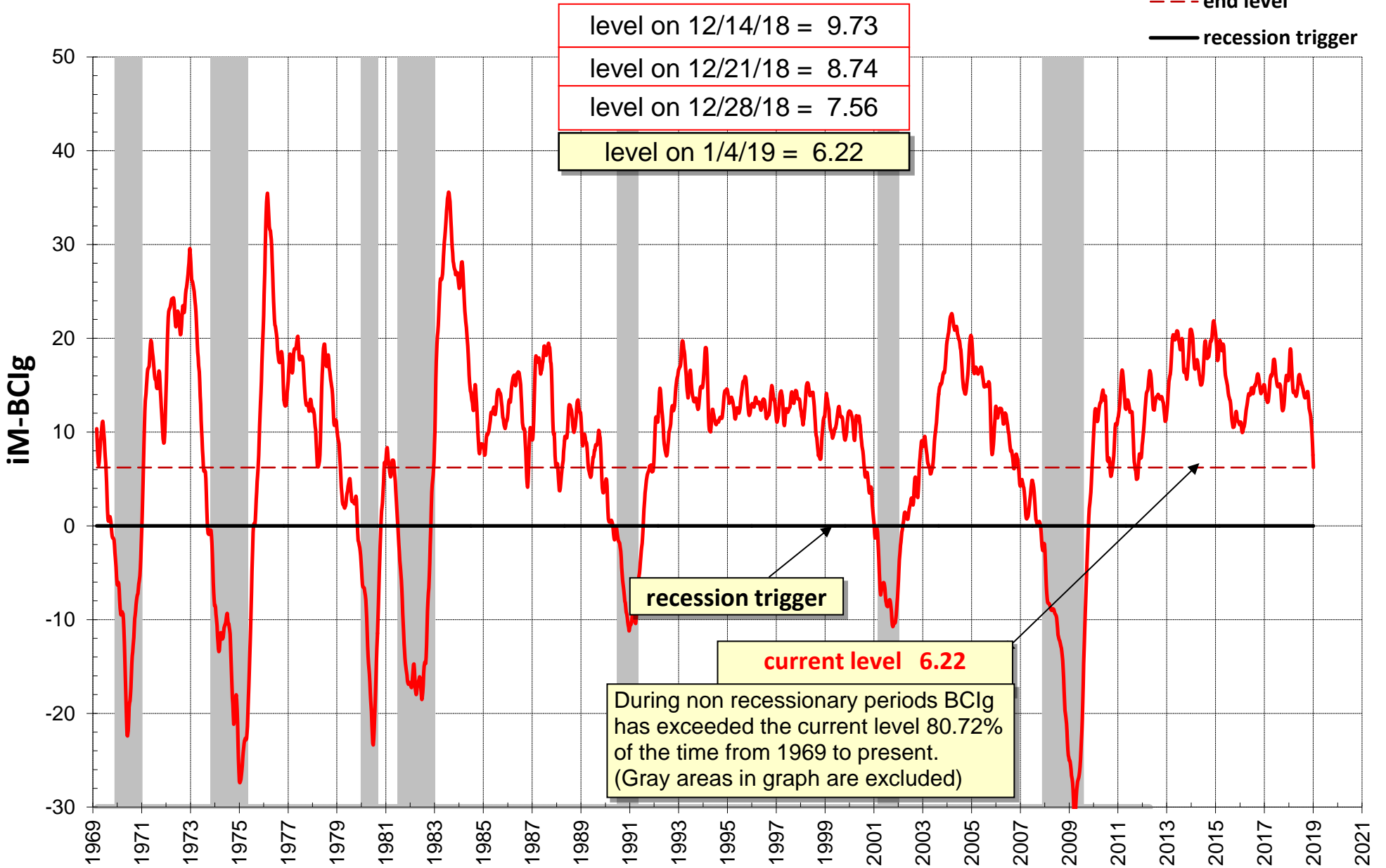


Figure 3.2: Forward Rate Ratio FRR2-10 - leads to Recessions

updated to 01/03/2019

EMA of FRR2-10 = 1.018

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

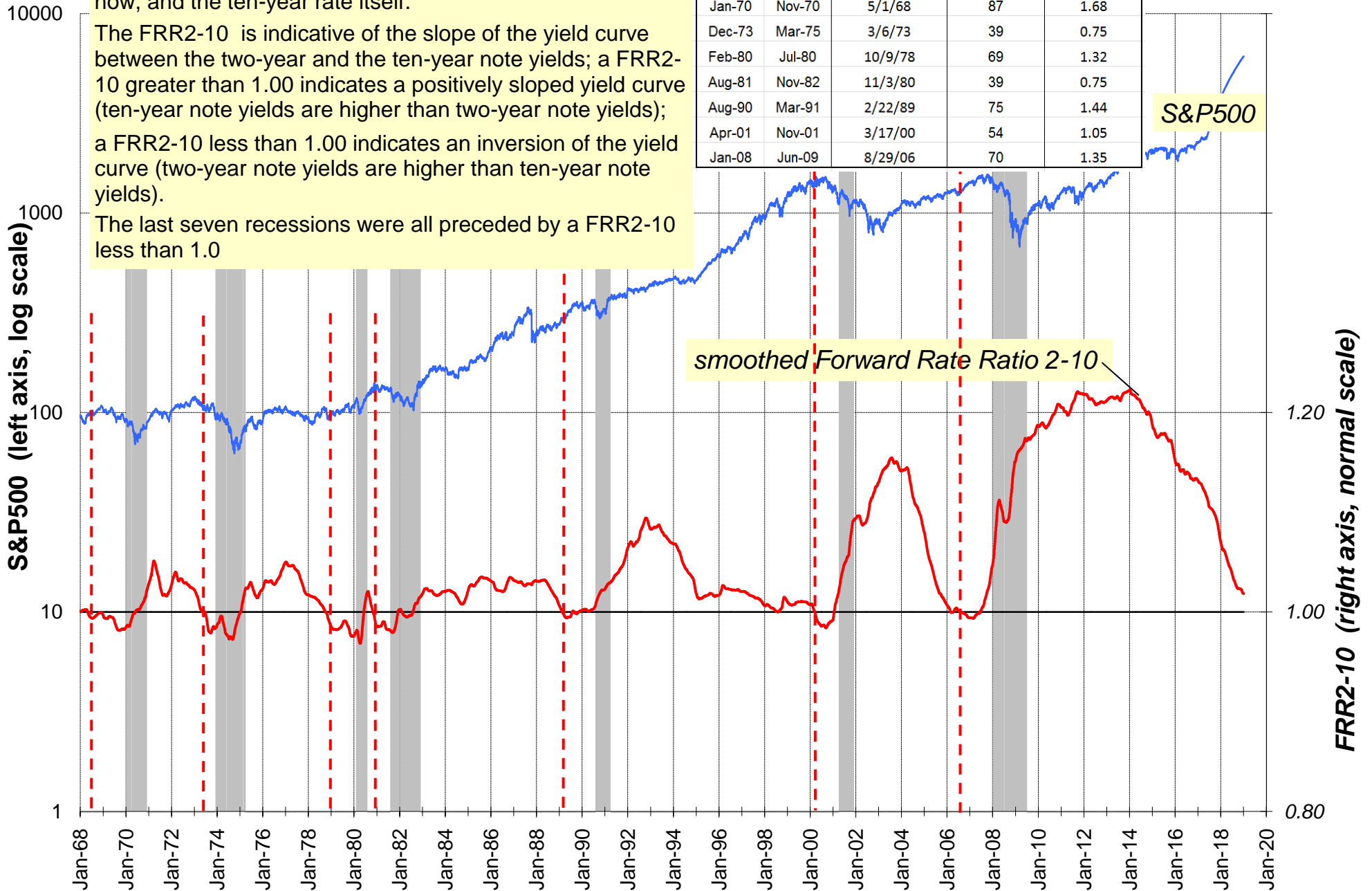


Fig.3.3 iM-Low Frequency Timer

Updated to: 1/3/2019

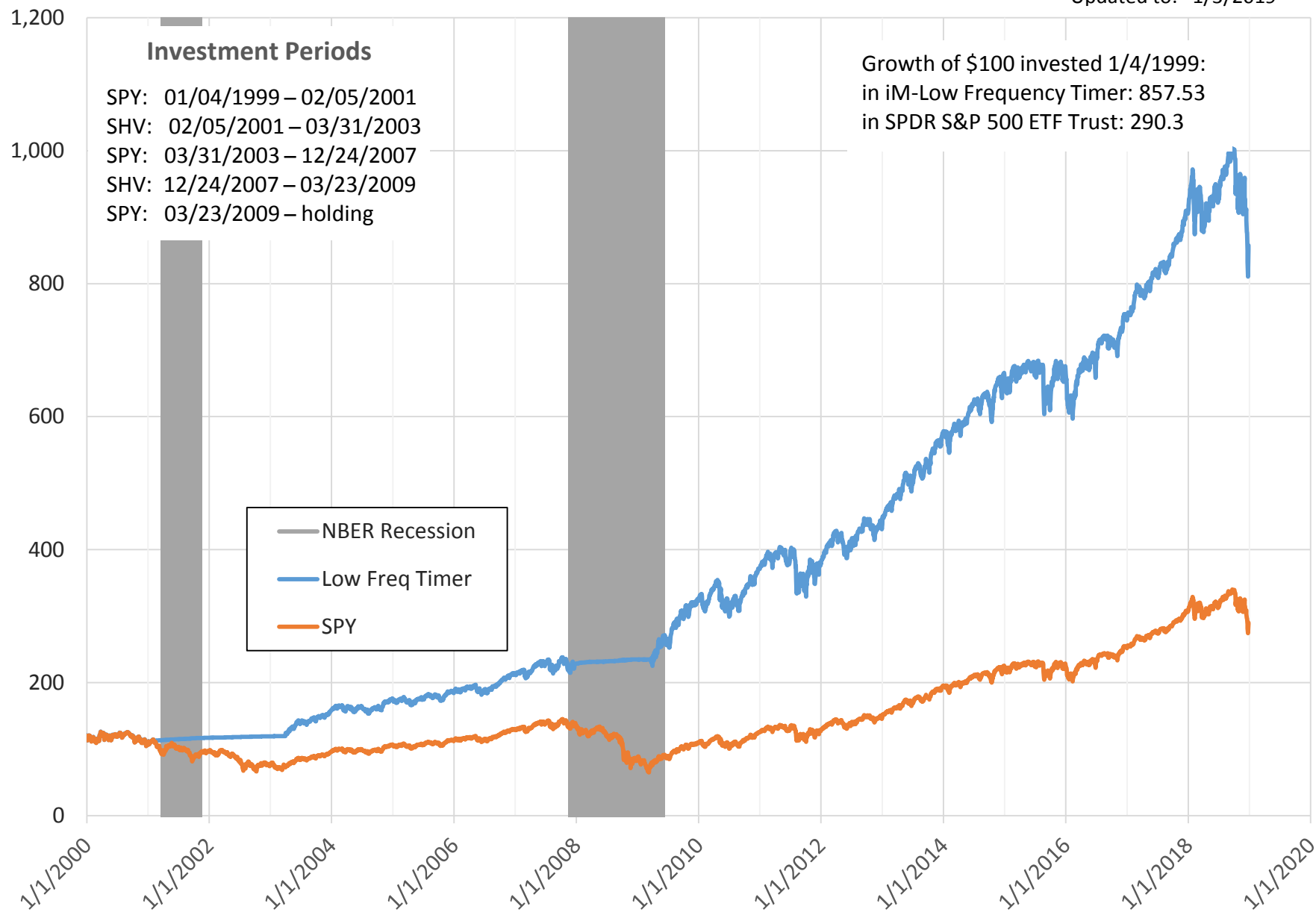


Figure 4: Bond Value Ratio (BVR) from 2005 to 2018

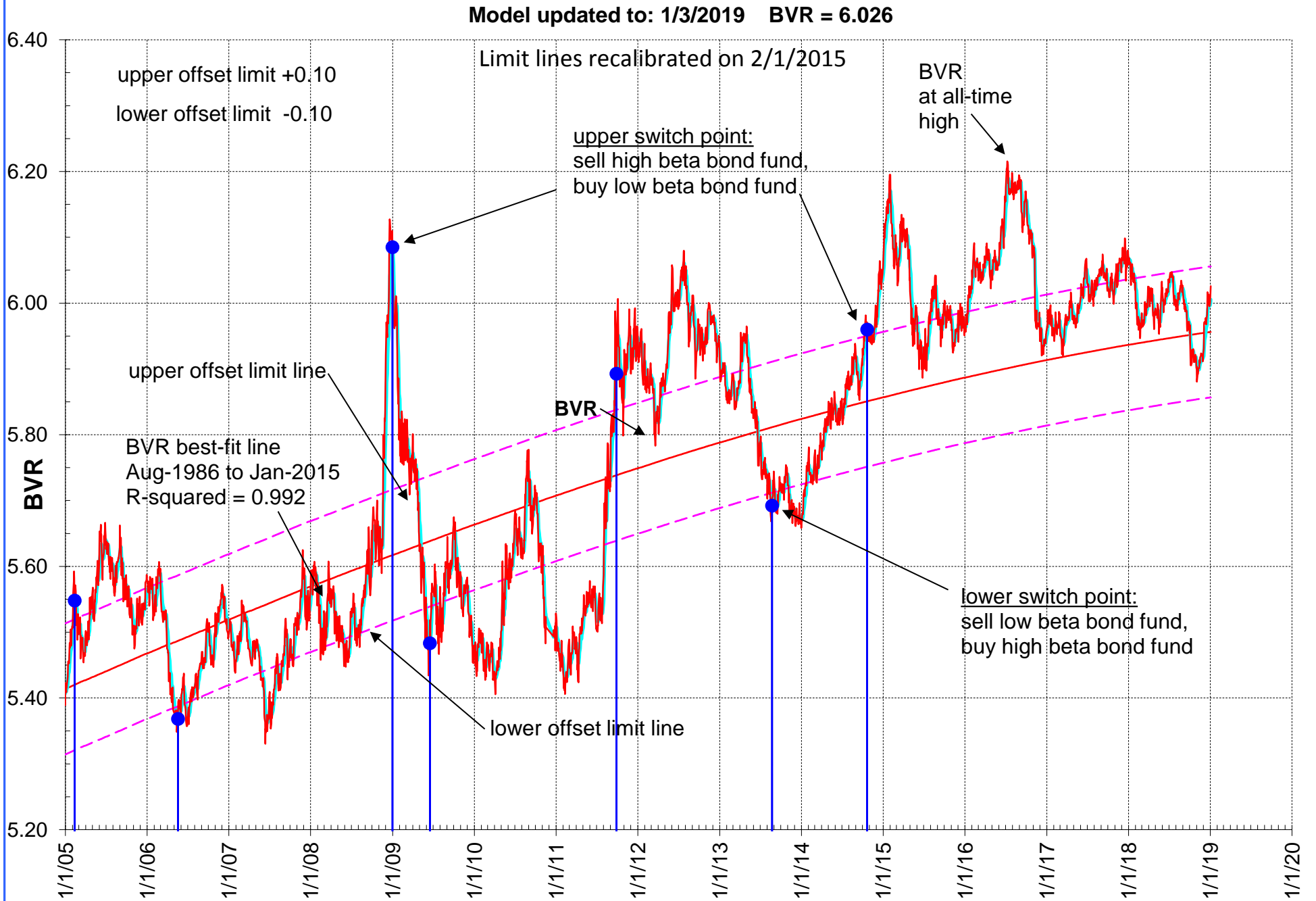


Figure 5: i10 - i2 Updated to.....1/3/2019

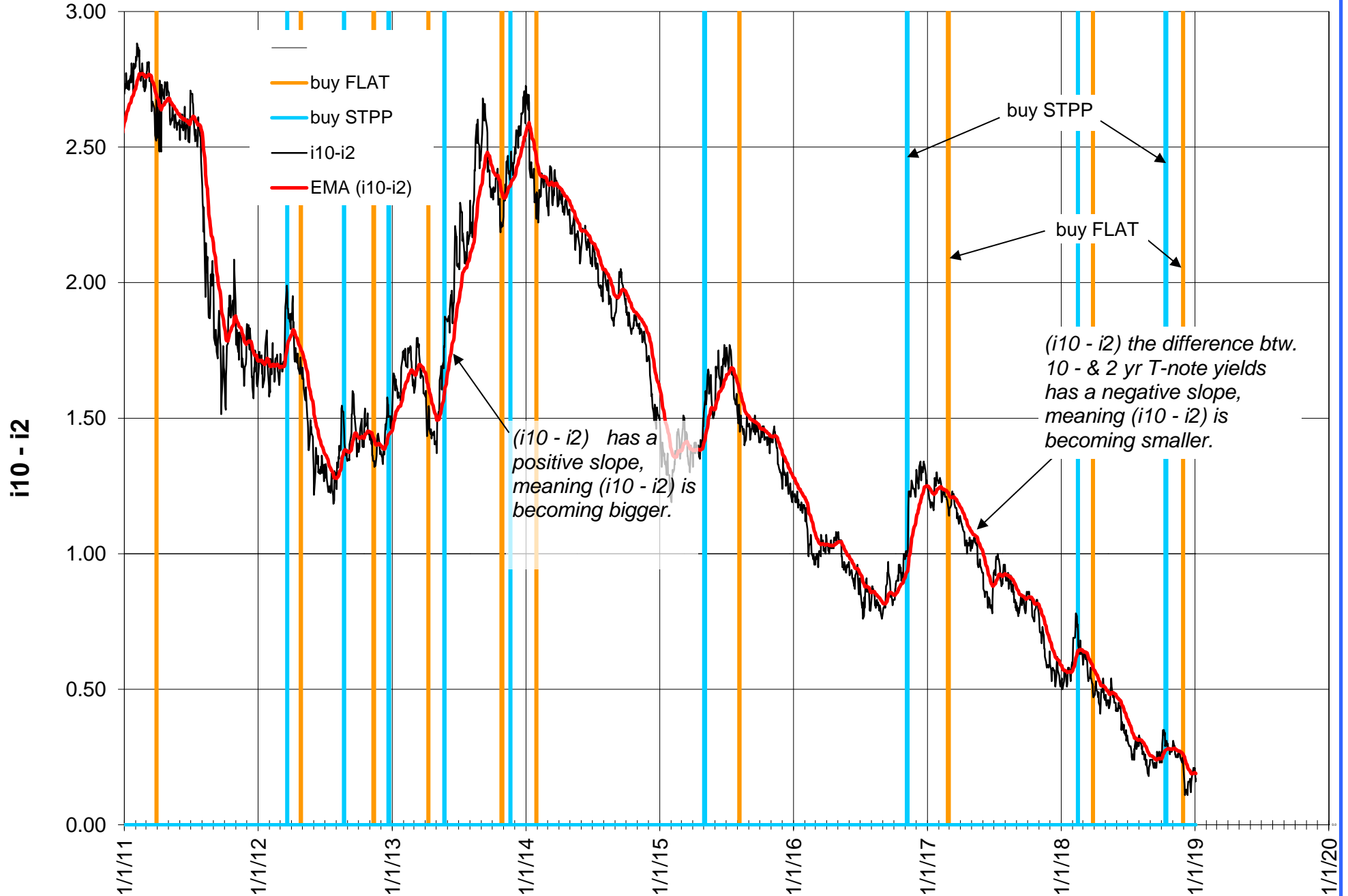


Figure 6: Modified Coppock Indicator for Gold 2009-2018

updated to 01/03/2019

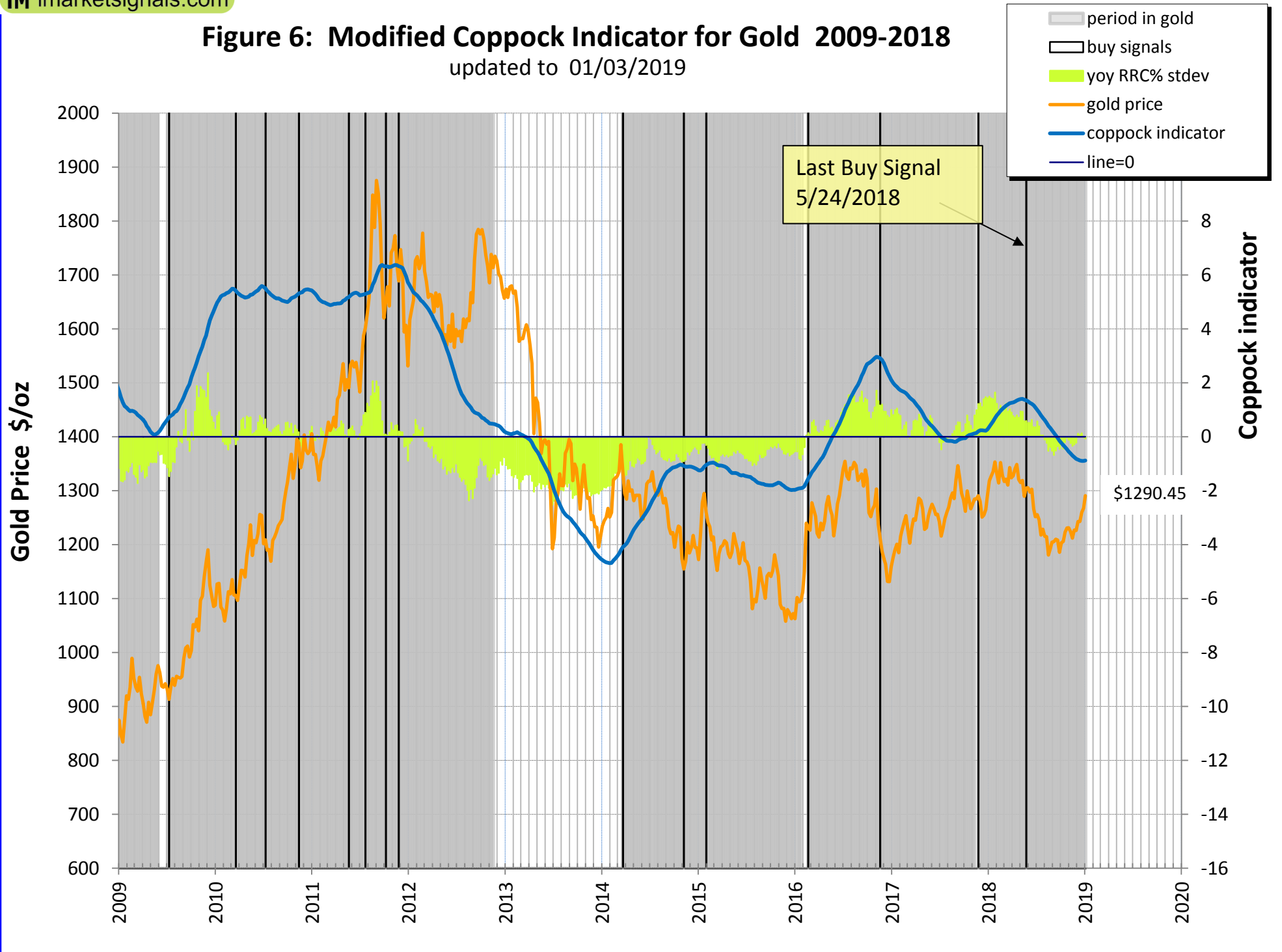


Fig. 6.1a iM GOLD-TIMER - Rev 1

Updated to: 1/3/2019

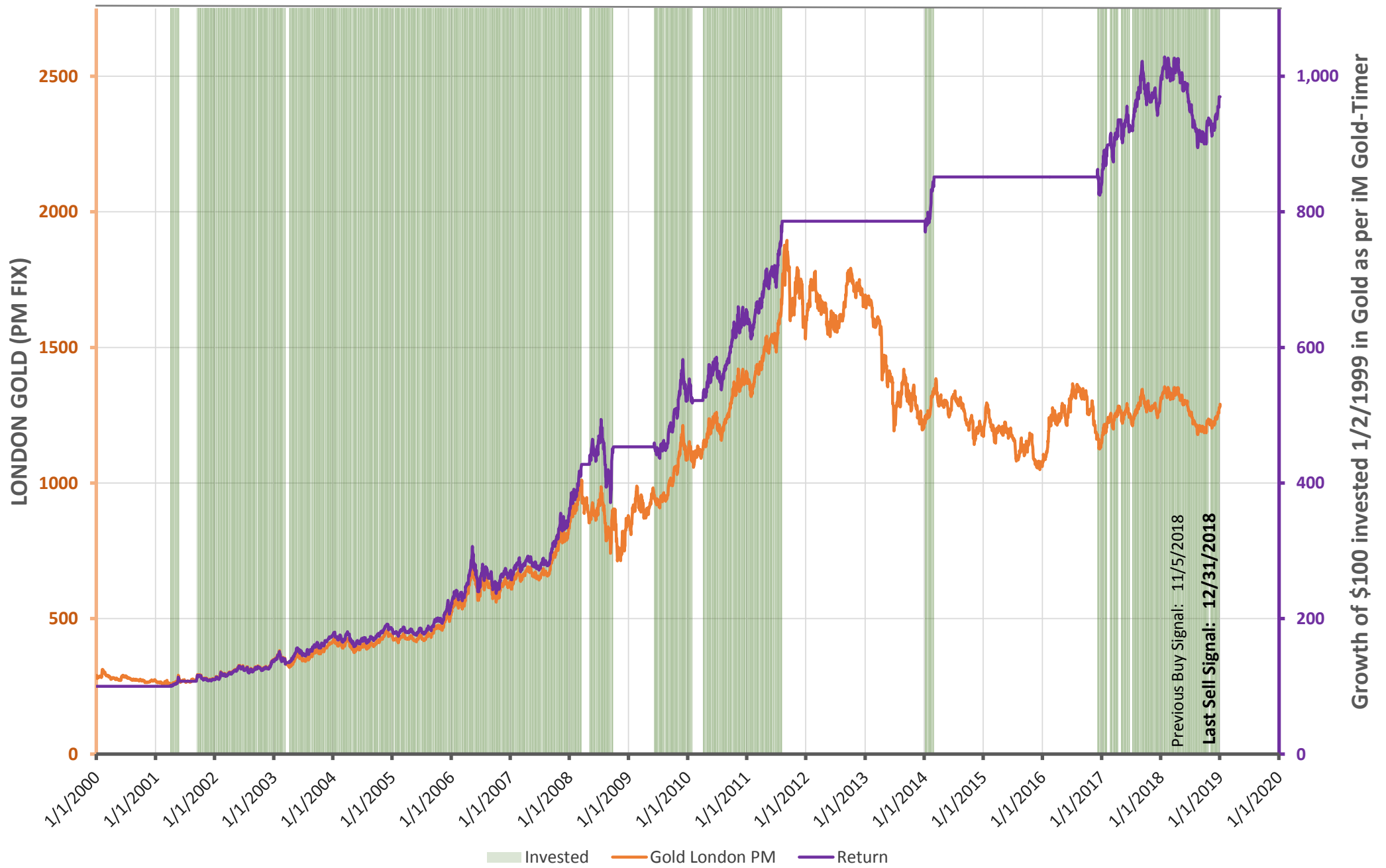


Figure 7: Modified Coppock Indicator for Silver 2009-2018

updated to 01/03/2019

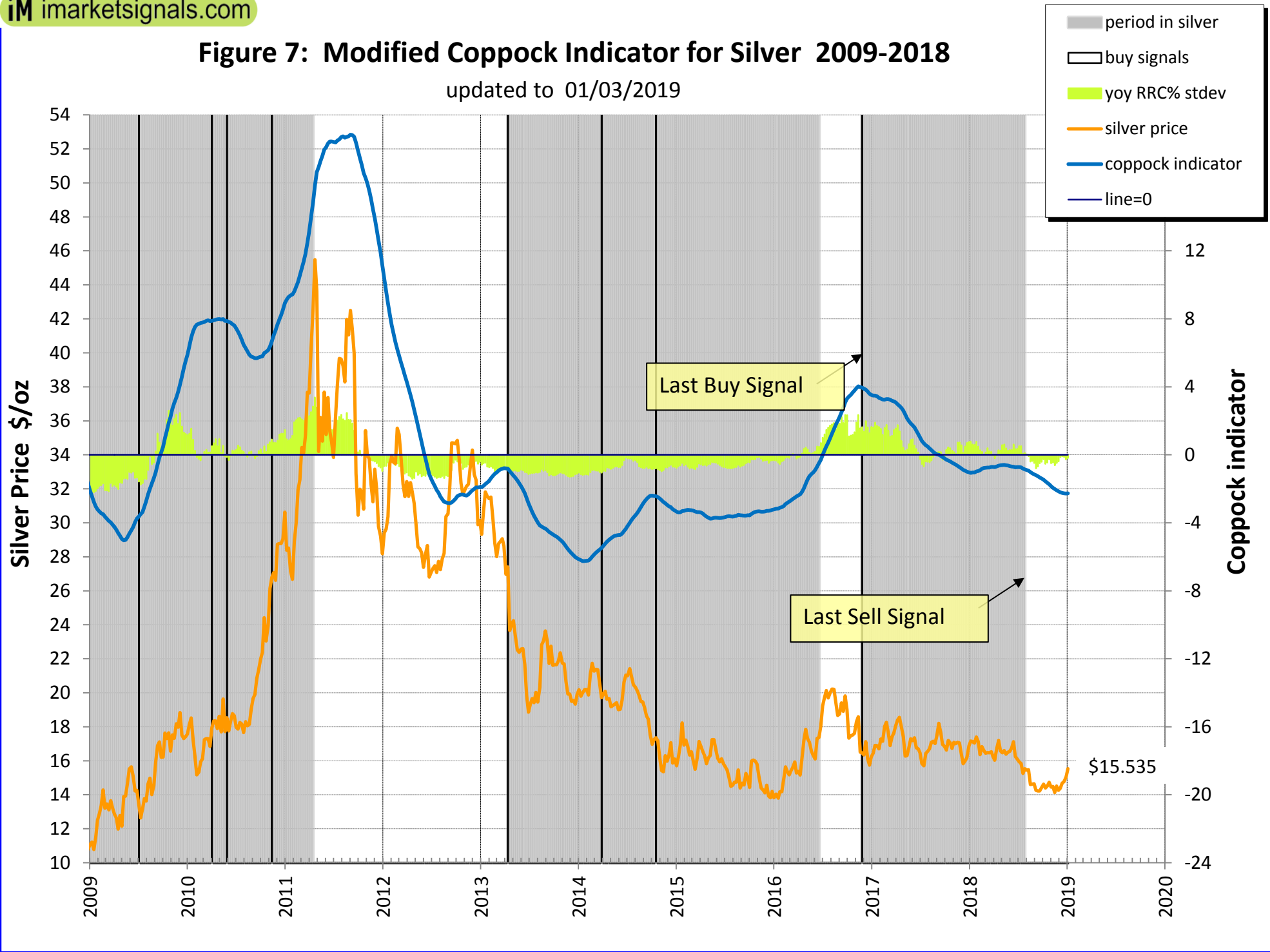


Fig-8 Unemployment Rate and Recessions (real-time) 2000-2018

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

updated to 1-25-2019 with December UER= 3.9%

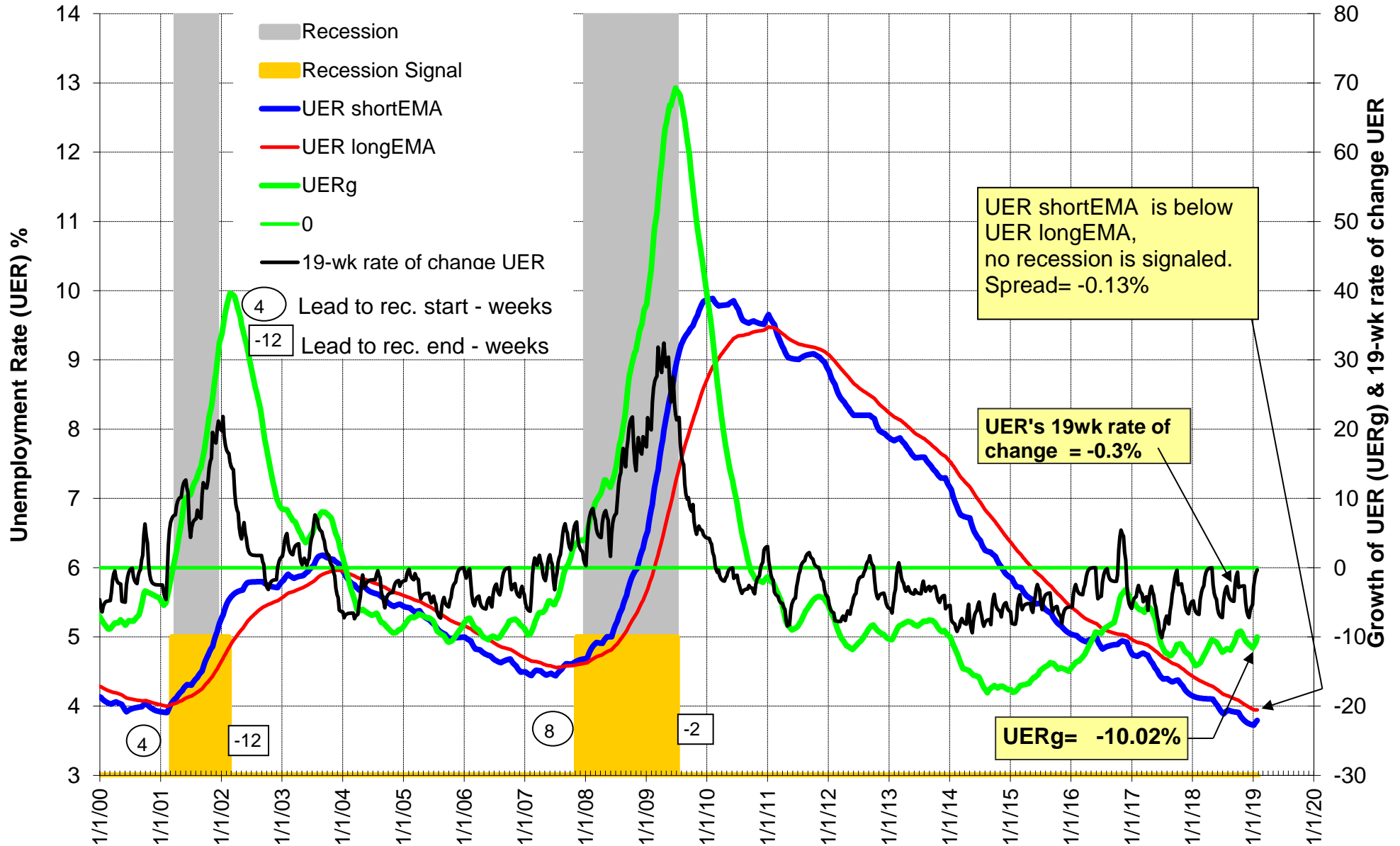


Fig-9 Modified Coppock Indicator for S&P500 2005-2019

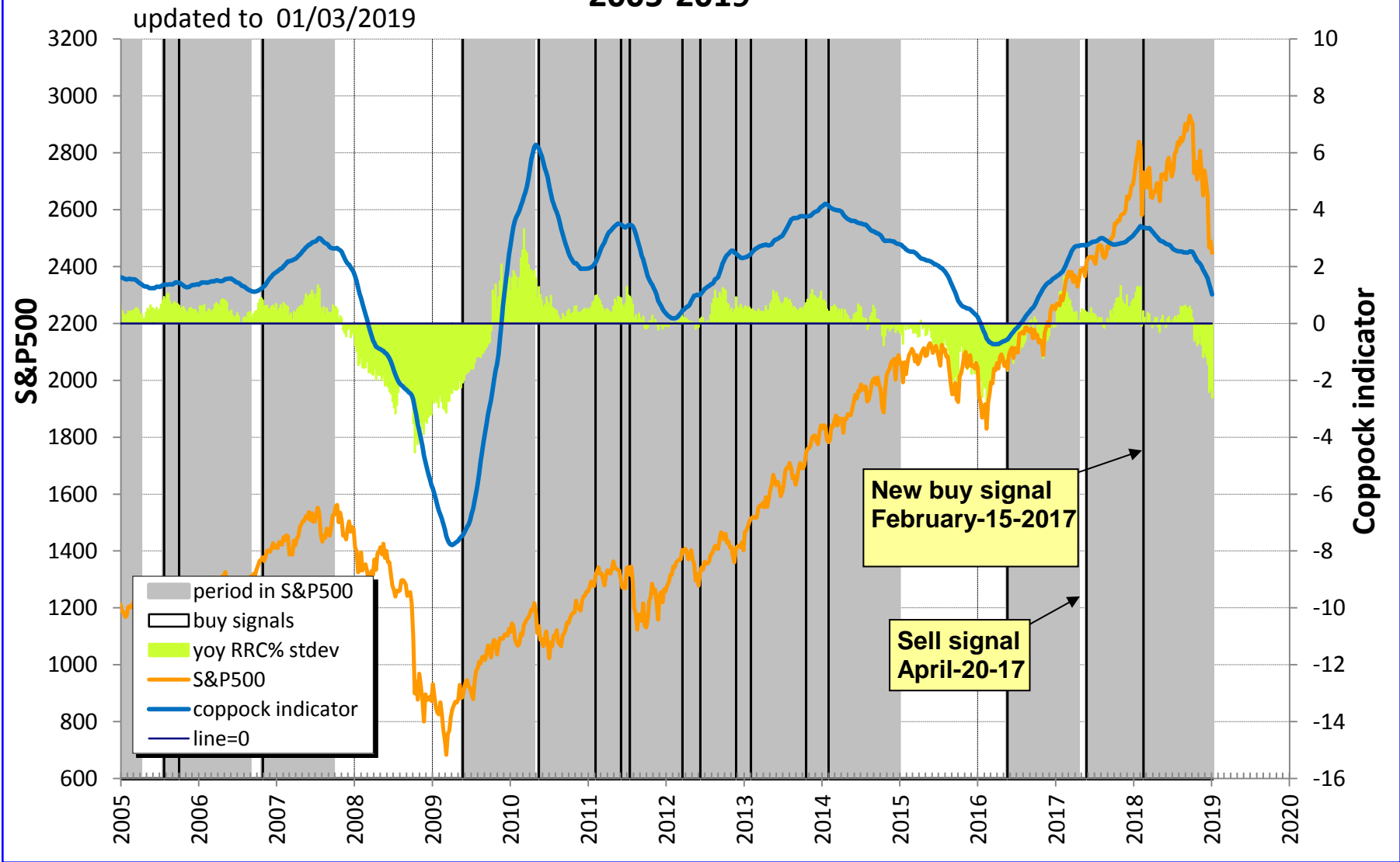
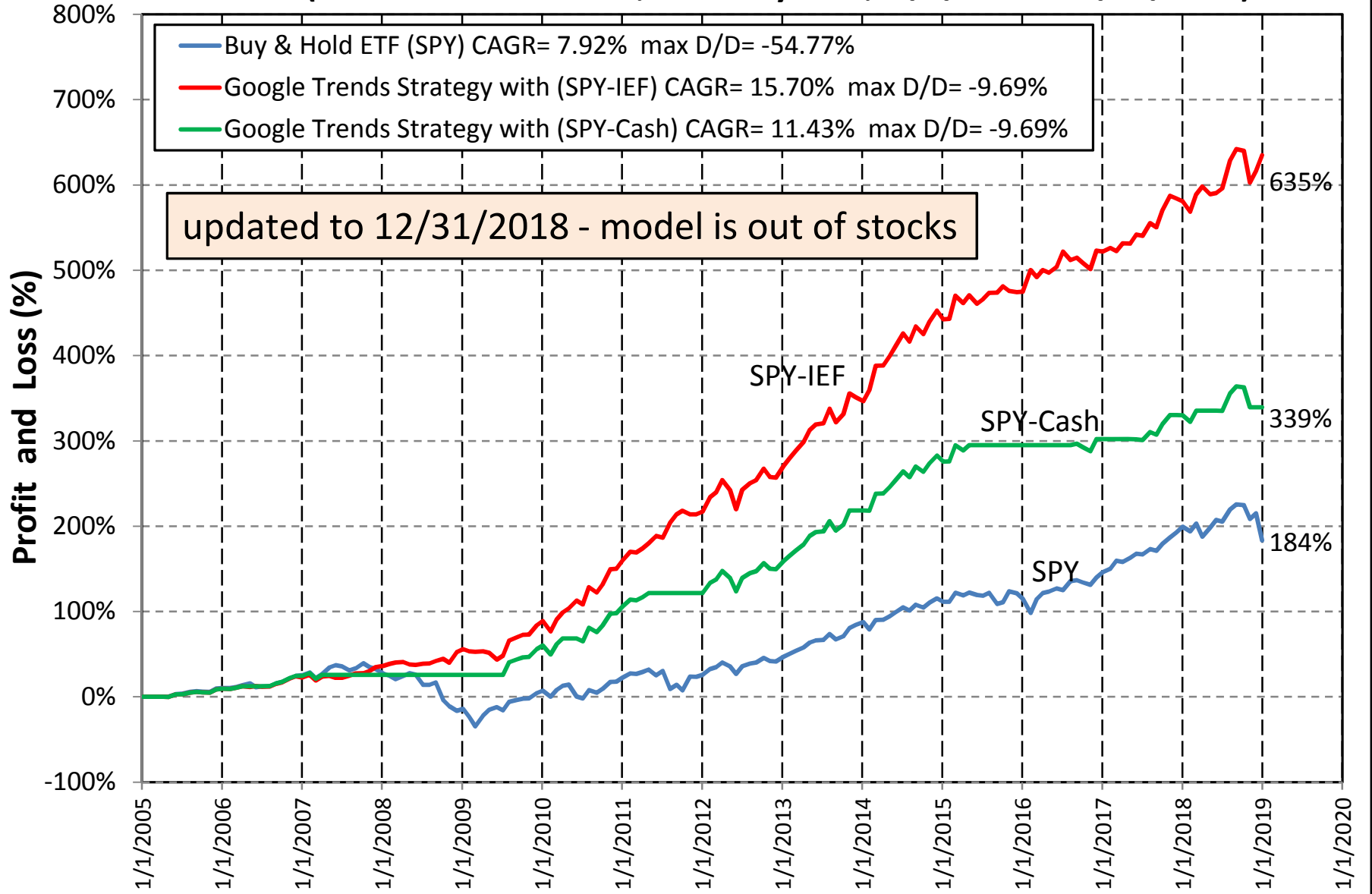


Fig 9b: Cumulative Performance iM-GT Timer
(Search Term = "debt", monthly data, 5/2/2005 - 12/31/2018)

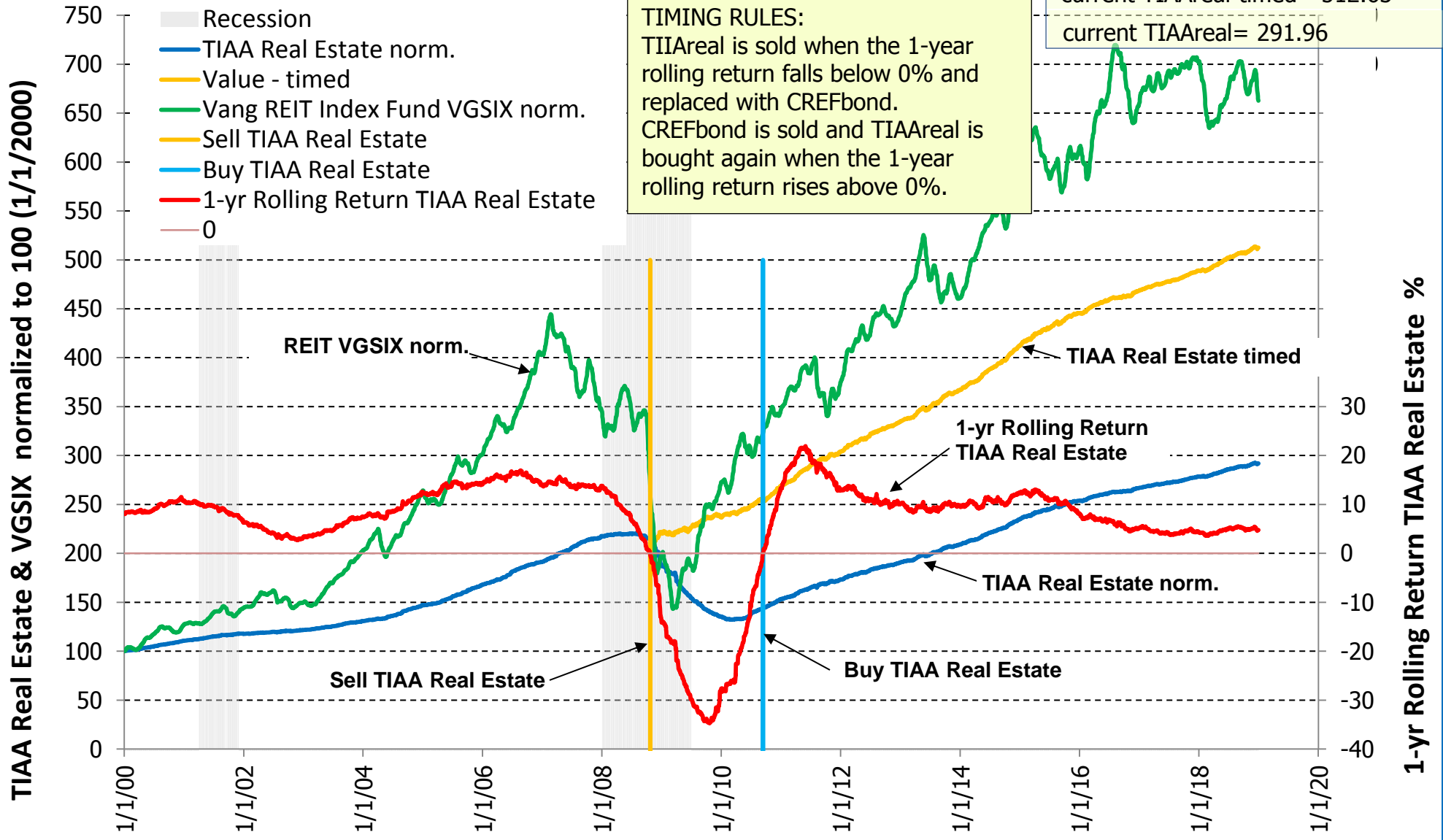


TIAA Real Estate Account vs. Vanguard REIT Index Fund (VGSIX) 2000 - 2018

updated to 12/31/18, TIAAreal current 1-year rolling return= 4.79%

current TIAAreal-timed= 512.63

current TIAAreal= 291.96



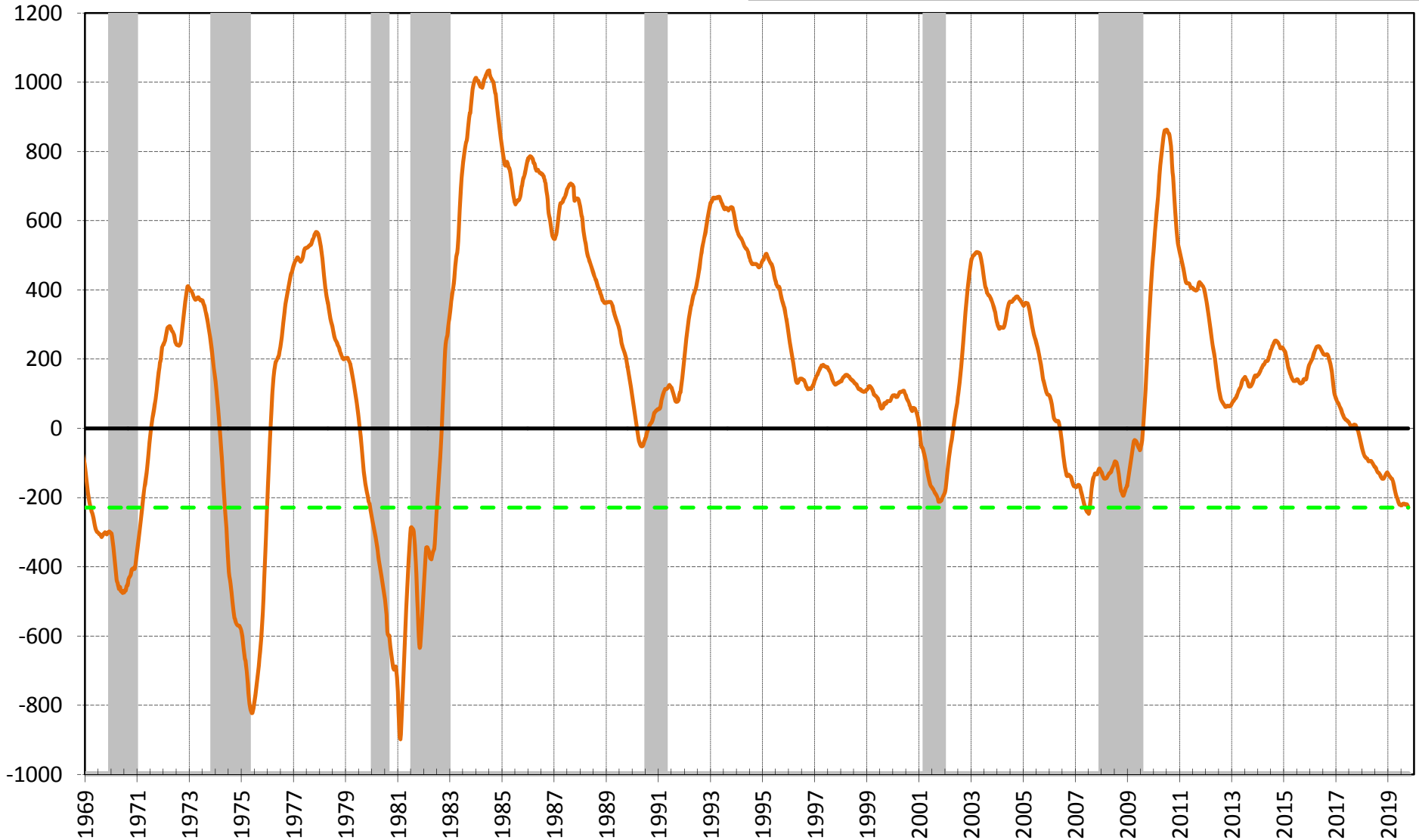
Long Leading Recession Indicator DAGS: shifted forward in time by 40 weeks

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

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

recession eligible months Oct-2017 to Oct-2019

updated on Jan-4-2019, last level of DAGS = -229 bps



Updated to Dec 27, 2018

Trade Weighted US Dollar and Interest Rates

