

March 22, 2018

Business Cycle Index

The BCI at 237.7 is above last week's 237.2, and it is below this business cycle's peak as indicated by the BCIP at 89.4. However, the 6-month smoothed annualized growth BCIG is at 13.3, which is below last week's 13.6.

No recession is signaled.

March 23, 2018

Market Signals Summary:

The MAC-US model is invested. Also, the "3-mo Hi-Lo Index of the S&P500" generated a sell signal on 15/3/2018 and is disinvested from 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 has steepened and signaled buy STPP. Both the gold and silver Coppock models are invested, and the iM-Gold Timer is in gold since 7/10/2017.

Stock-markets:

MAC-US

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 below last week's level and has to fall below zero to signal a sell.

3-mo Hi-Lo Index

The [3-mo Hi-Lo Index](#) of the S&P500 is below last week's level at 0.84% (last week 4.63%) and [is disinvested from the market since 3/15/2018](#).

MAC-Australia

The MAC-AU model is invested in the markets after it generated a buy signal on March 21, 2016. The sell-spread is below last week's level and has to fall below zero to signal a sell. This model and its application is described in [MAC-Australia: A Moving Average Crossover System for Superannuation Asset Allocations](#).

Recession:

COMP

Figure 3 shows the COMP above last week's revised 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](#).

BCIG

Figure 3.1 shows the recession indicator iM-BCIG down from last week's level. An imminent recession is not signaled. Please also refer to the [BCI page](#)

Forward Rate Ratio

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.

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 had steepened signaling a buy STPP mid-February 2018, but could be at the beginning of a flattening trend. 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 November 2017 and is invested in gold. This indicator is described in [Is it Time to Buy Gold Again? – Wait for the buy signal](#)

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 new buy signal late November 2016 and is invested in silver. This indicator is described in [Silver – Better Than Gold: A Modified Coppock Indicator for Silver.](#)

Monthly Updates (next update April 6)

March 9, 2018

Unemployment

The unemployment rate recession model ([article link](#)), has been updated with the January UER of 4.1%. 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 13.10% (last month 13.10%) and EMA spread of the UER is at minus 0.03% (last month minus 0.23%).

The Dynamic Linearly Detrended Enhanced Aggregate Spread:

The updated level of this indicator, -132bps, above last months -140bps, 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. 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 weaken.

TIAA Real Estate Account

The 1-year rolling return for the end of last month is 3.97%. A sell signal is not imminent. [Read more ...](#)

iM's Business Cycle Index (BCI)

Date	02/22	03/01	03/08	03/15	03/22
BCIp	88.9	82.6	81.5	86.2	89.4
BCI	237.6	236.7	236.5	237.2	237.7
BCIg	15.0	14.2	13.7	13.6	13.3

BCIp, BCI and BCIg
updated to March 22, 2018

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

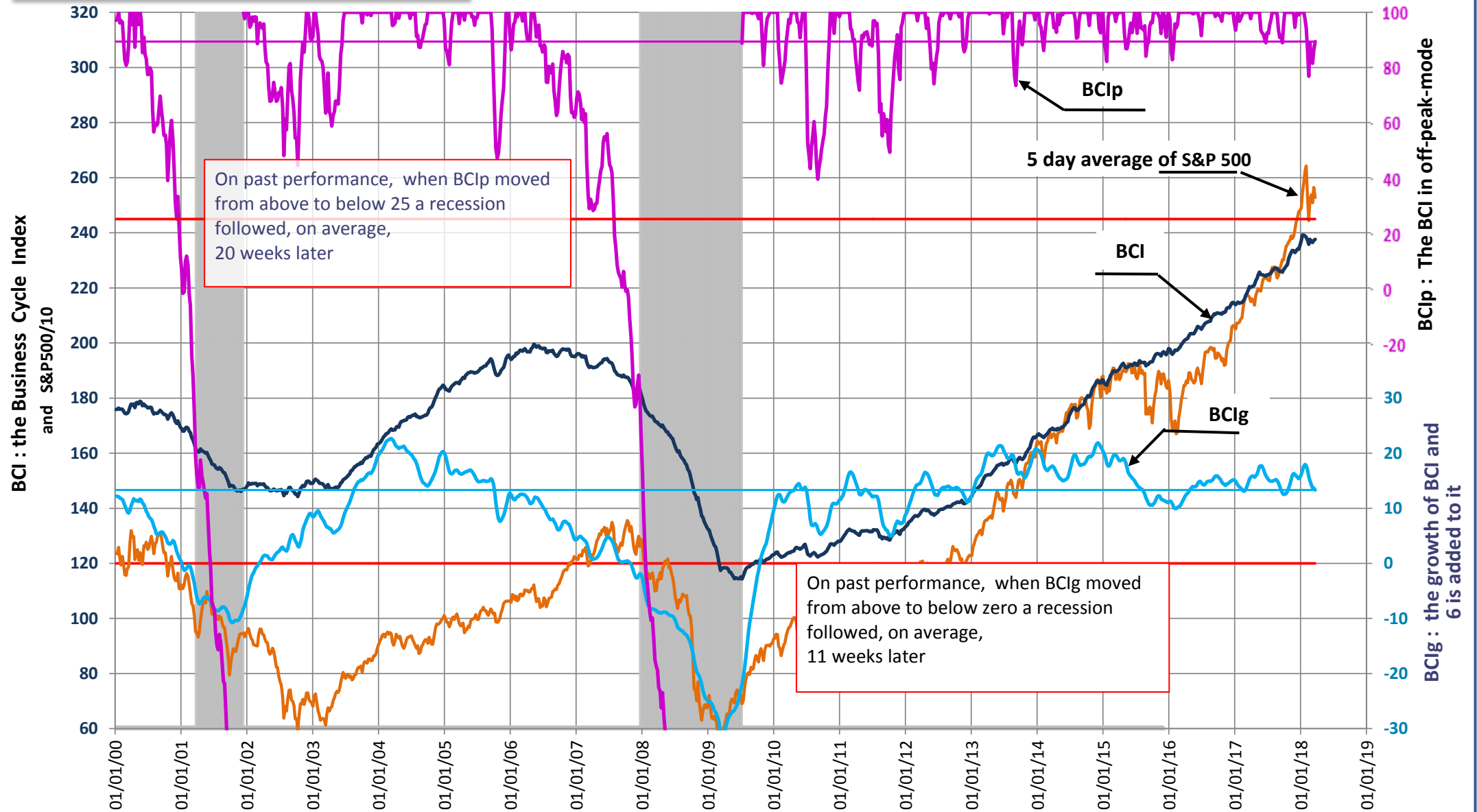
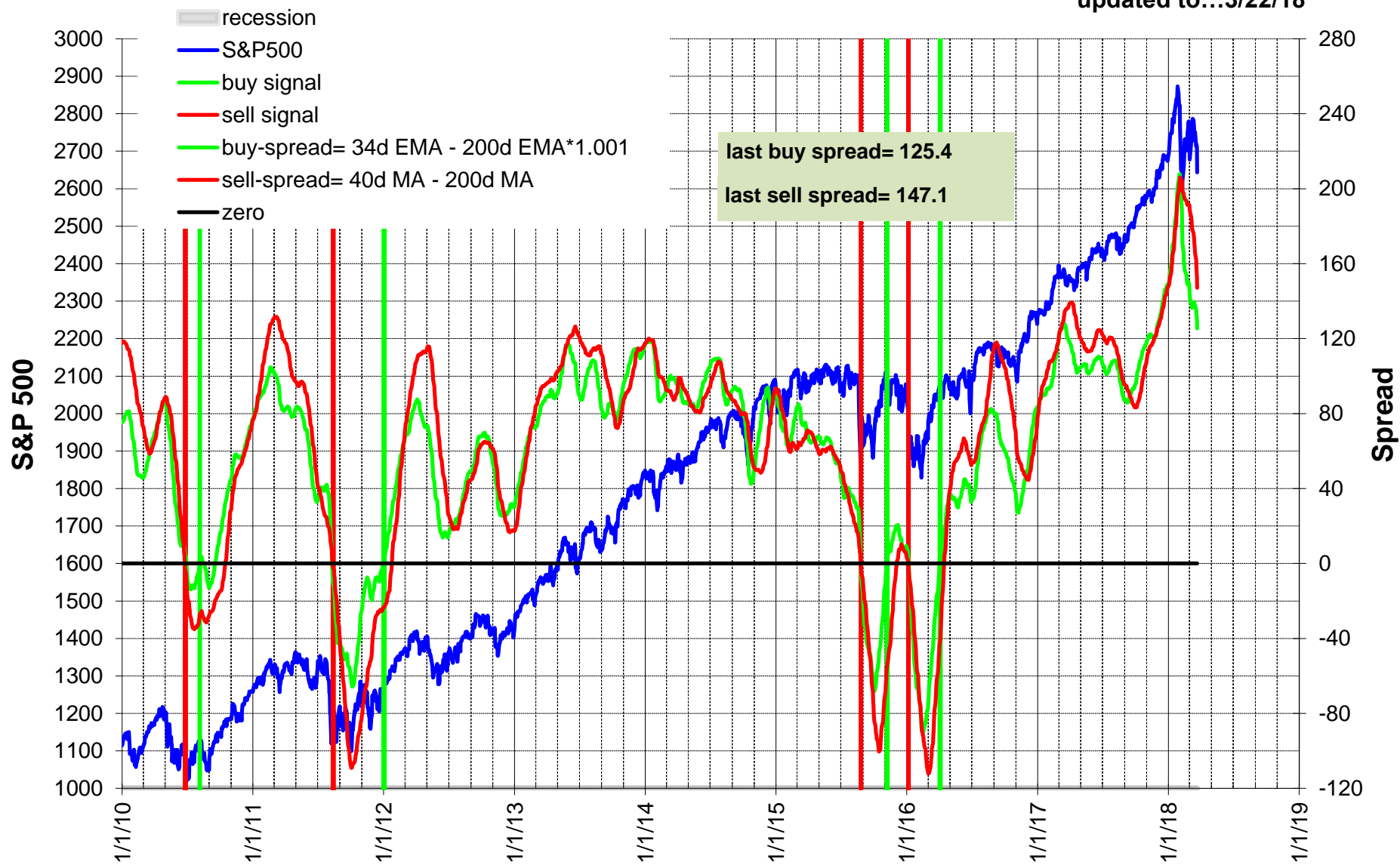


Figure 2: Buy and Sell signals for S&P 500 2010-18
from the modified golden-cross MAC-System



updated to...3/22/18





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

updated to Mar-23-18
last sell spread= 211.1

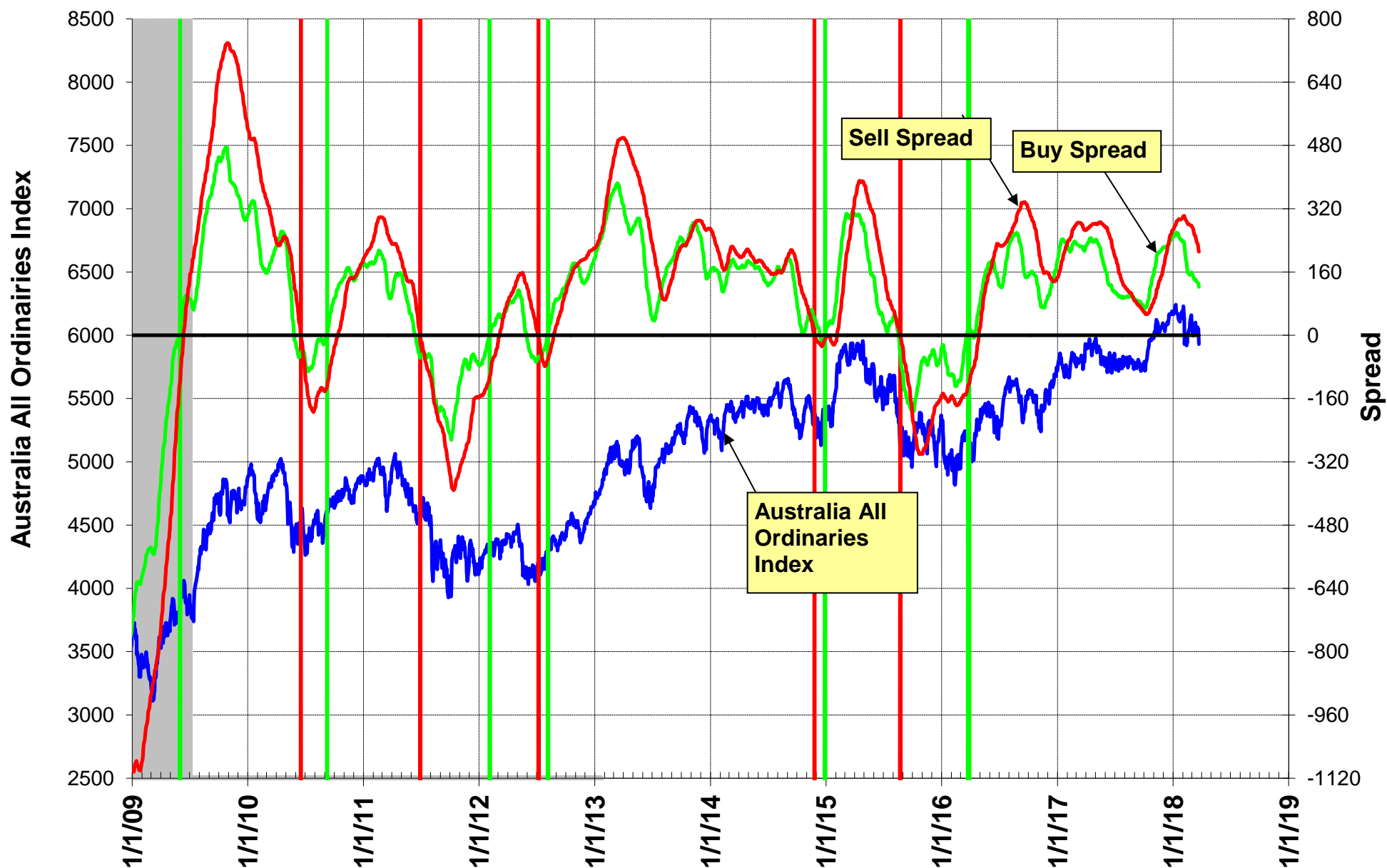


Fig 2.2 3-mo Hi-Lo Index of the S&P500 & 40-day SMA of Index

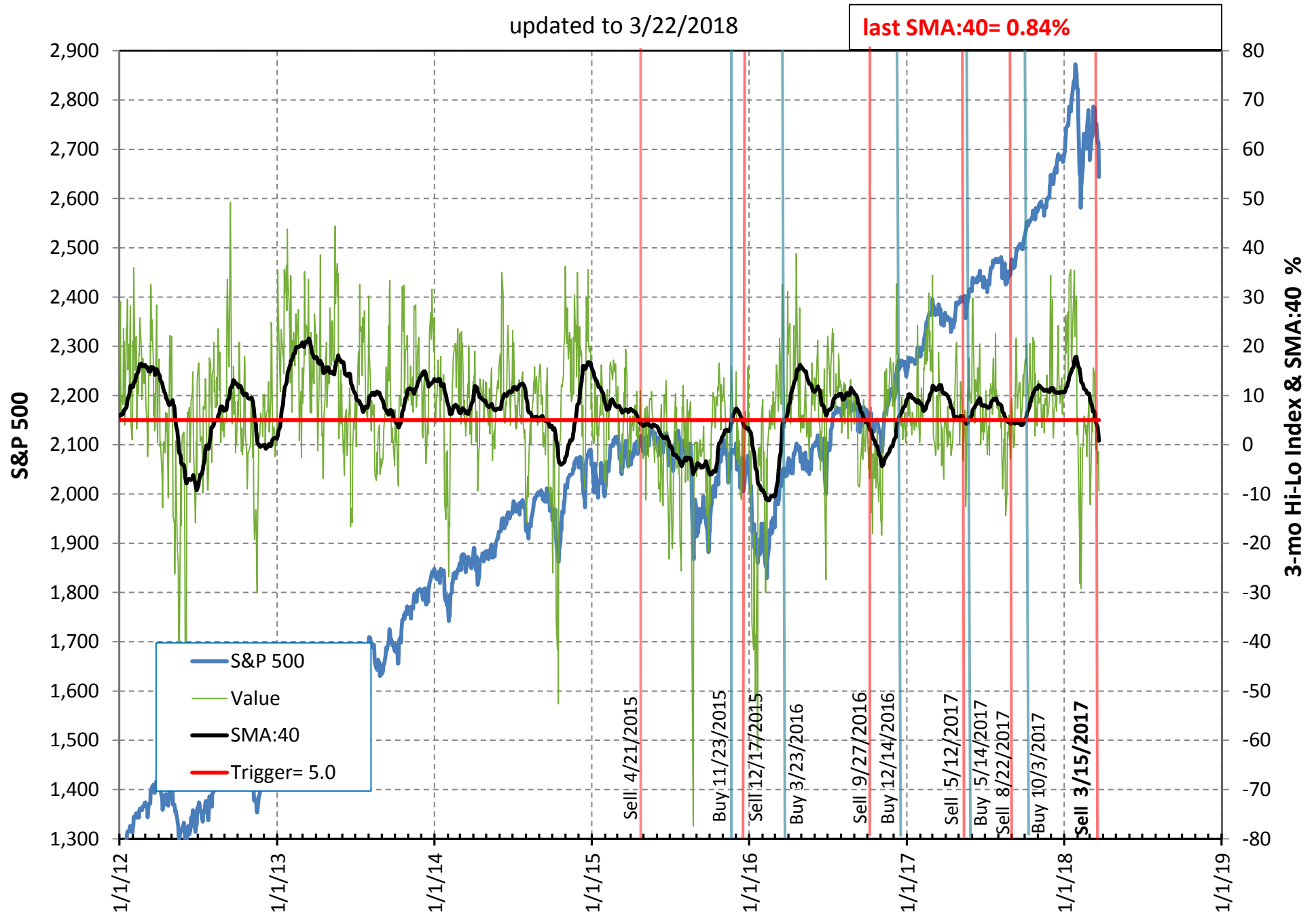


Fig. 3: COMP Leading Indicator of US Economy 1969-2018

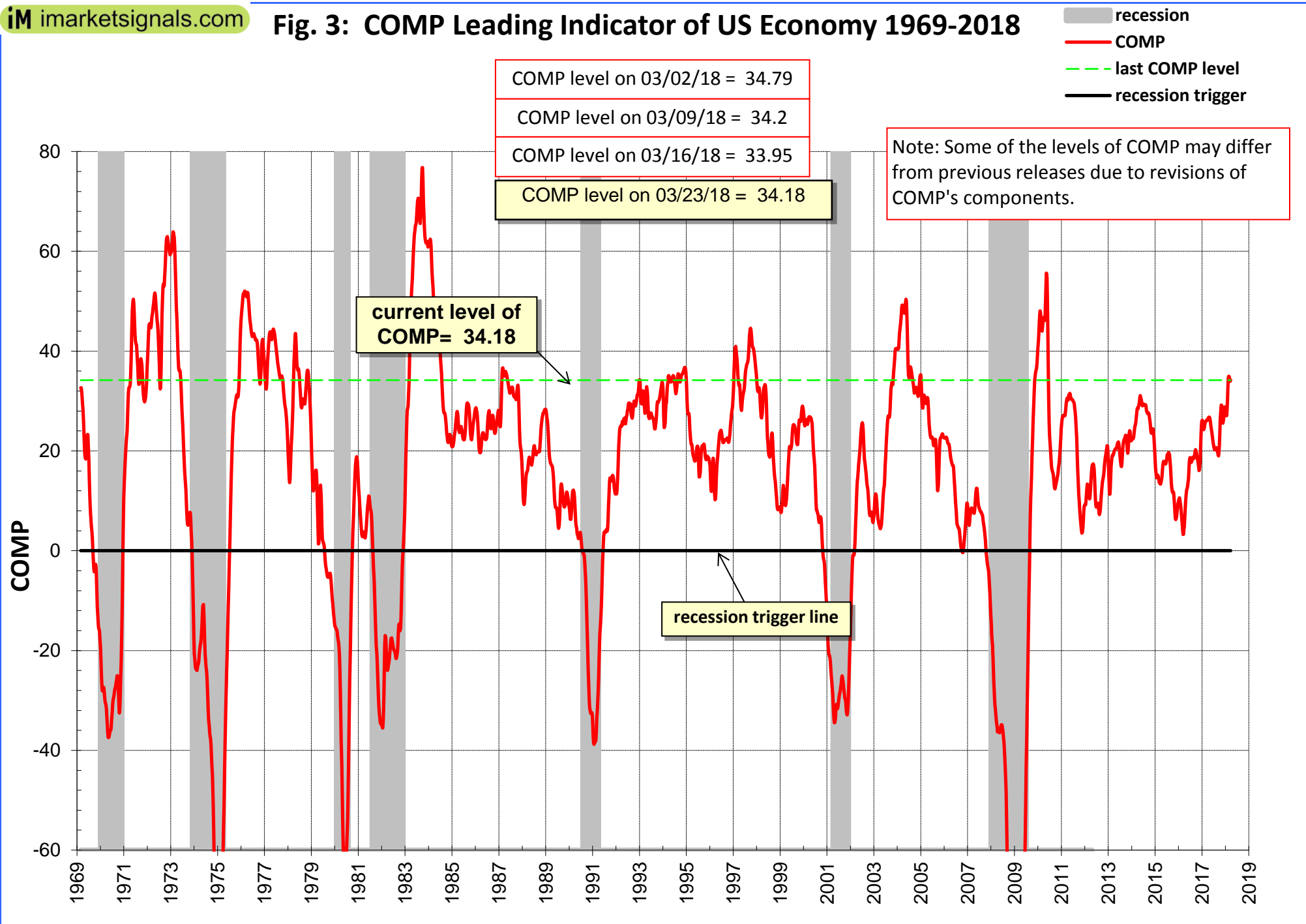


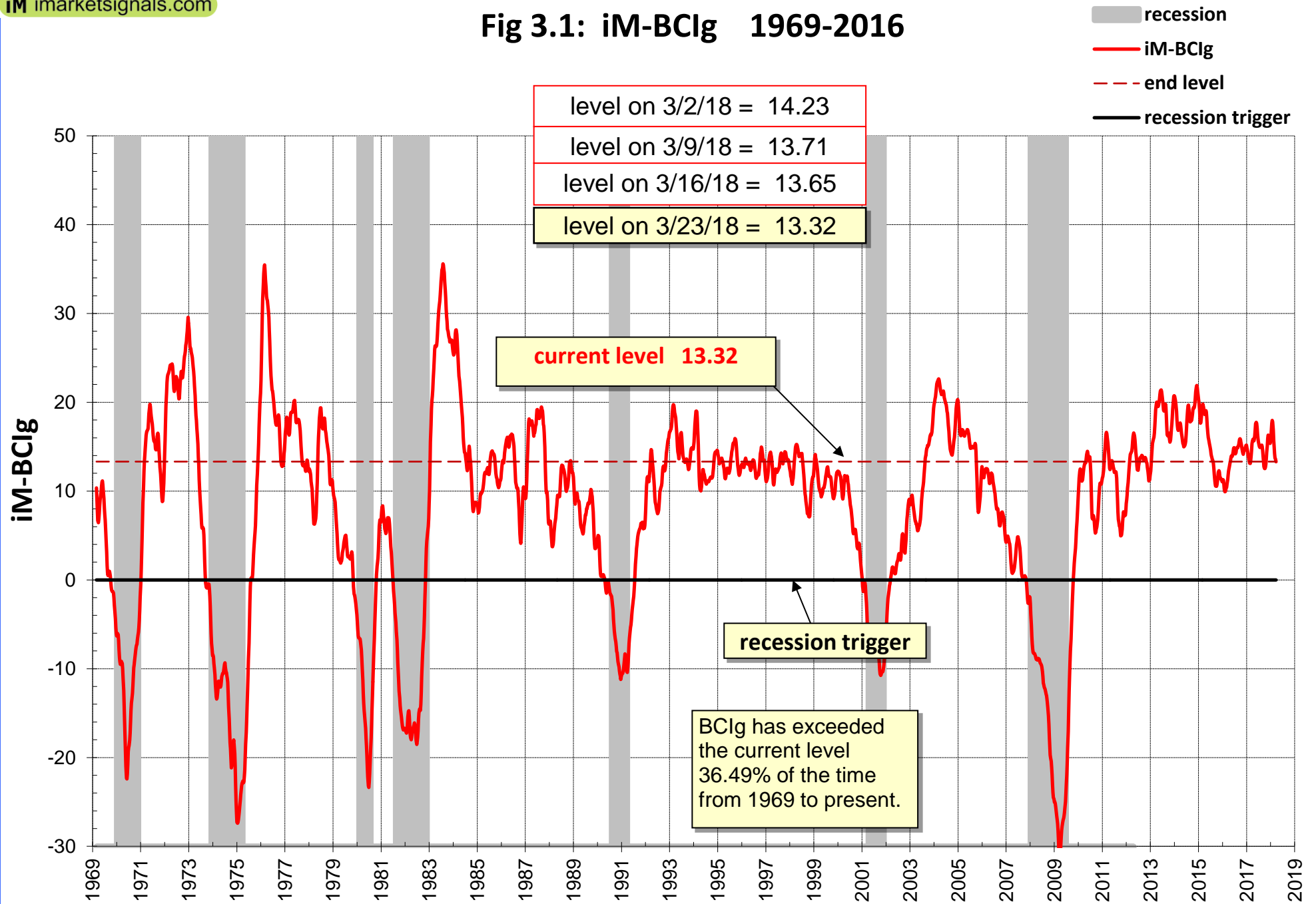
Fig 3.1: iM-BCI_g 1969-2016

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

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 Recession start (weeks)	Lead to Recession 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

updated to 03/22/2018

EMA of FRR2-10 = 1.057

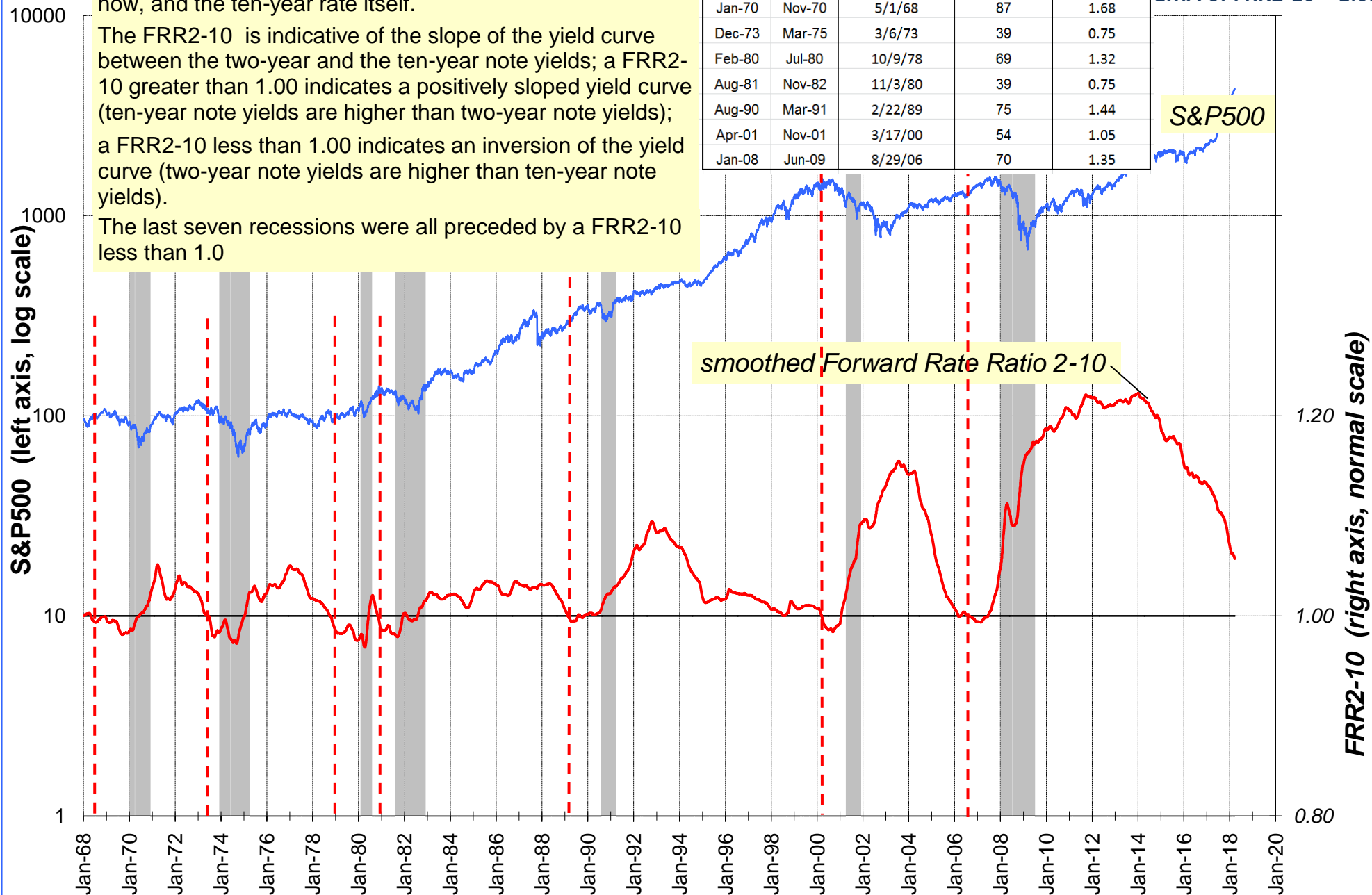


Figure 4: Bond Value Ratio (BVR) from 2005 to 2018

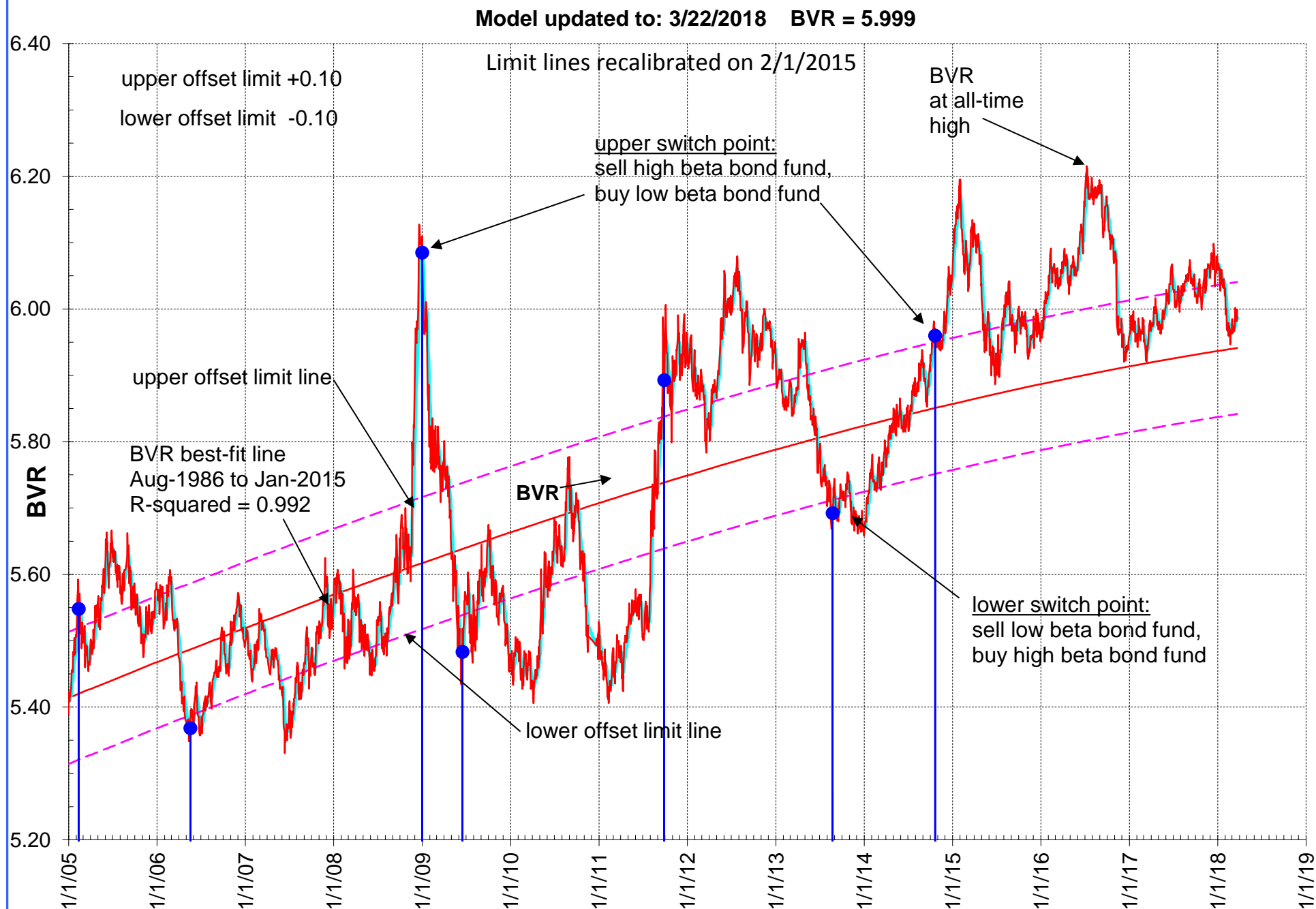


Figure 5: i10 - i2 Updated to.....3/22/18

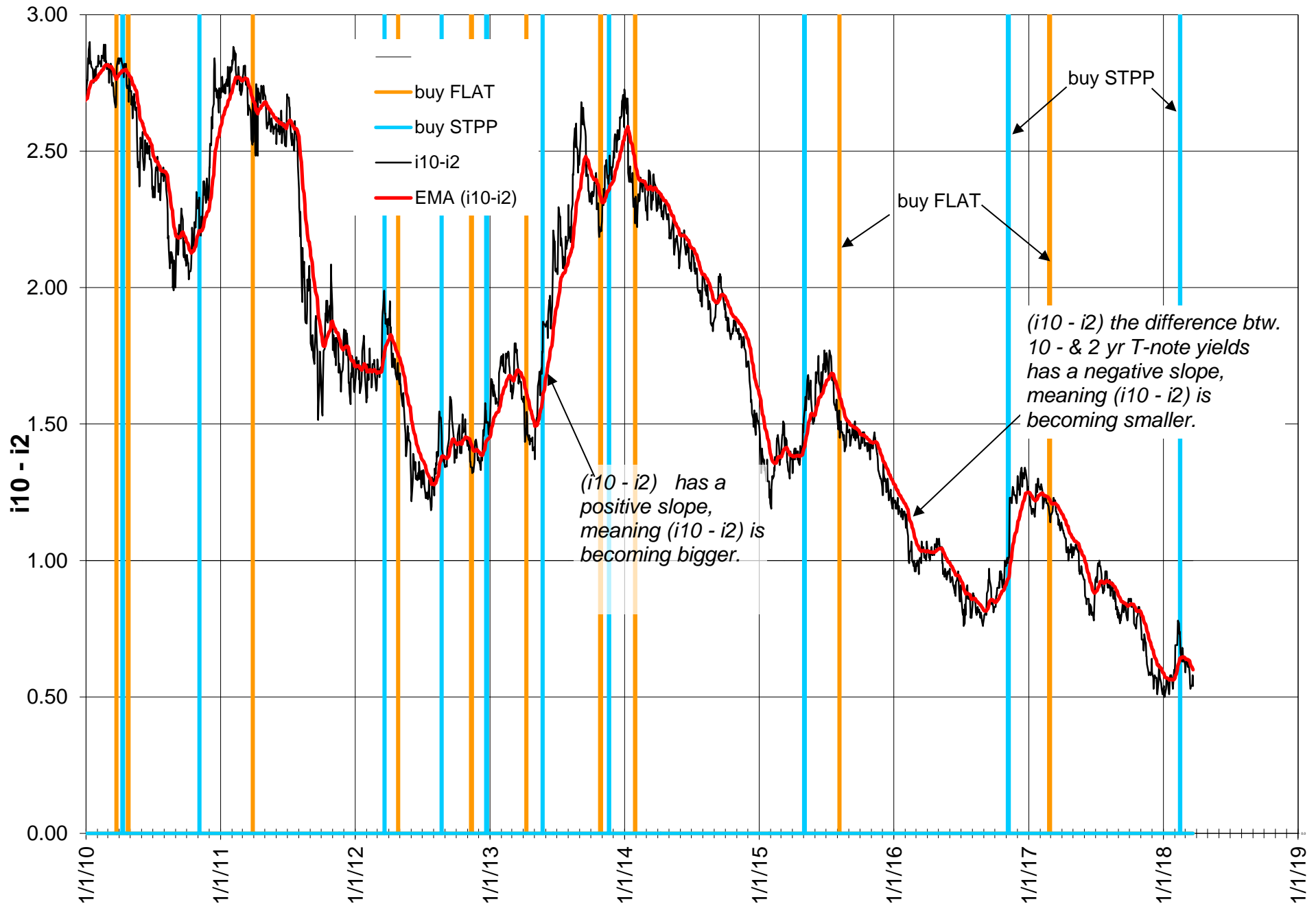


Figure 6: Modified Coppock Indicator for Gold 2009-2018

updated to 03/23/2018

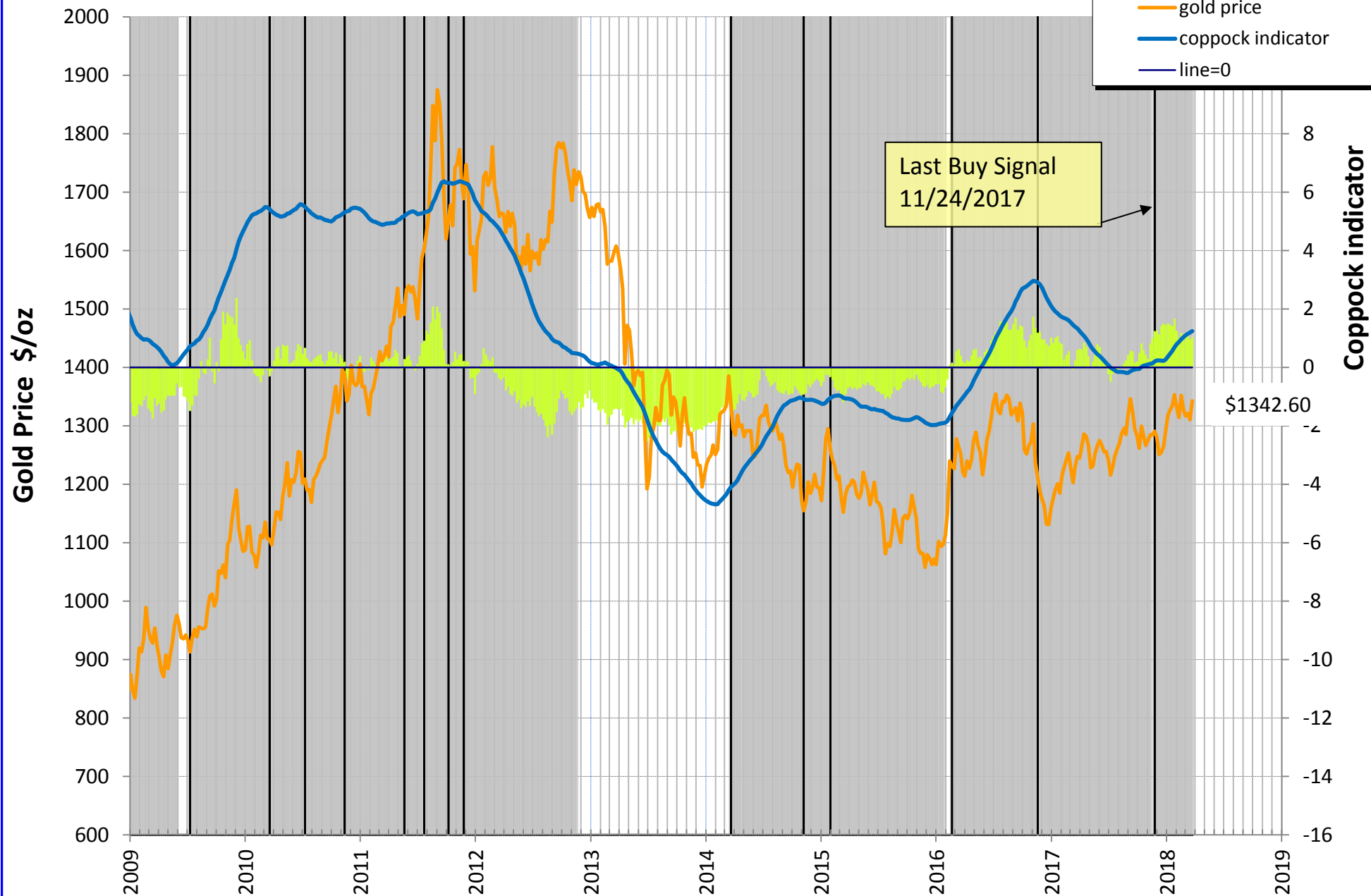


Fig. 6.1a iM GOLD-TIMER - Rev 1

Updated to: 3/22/2018

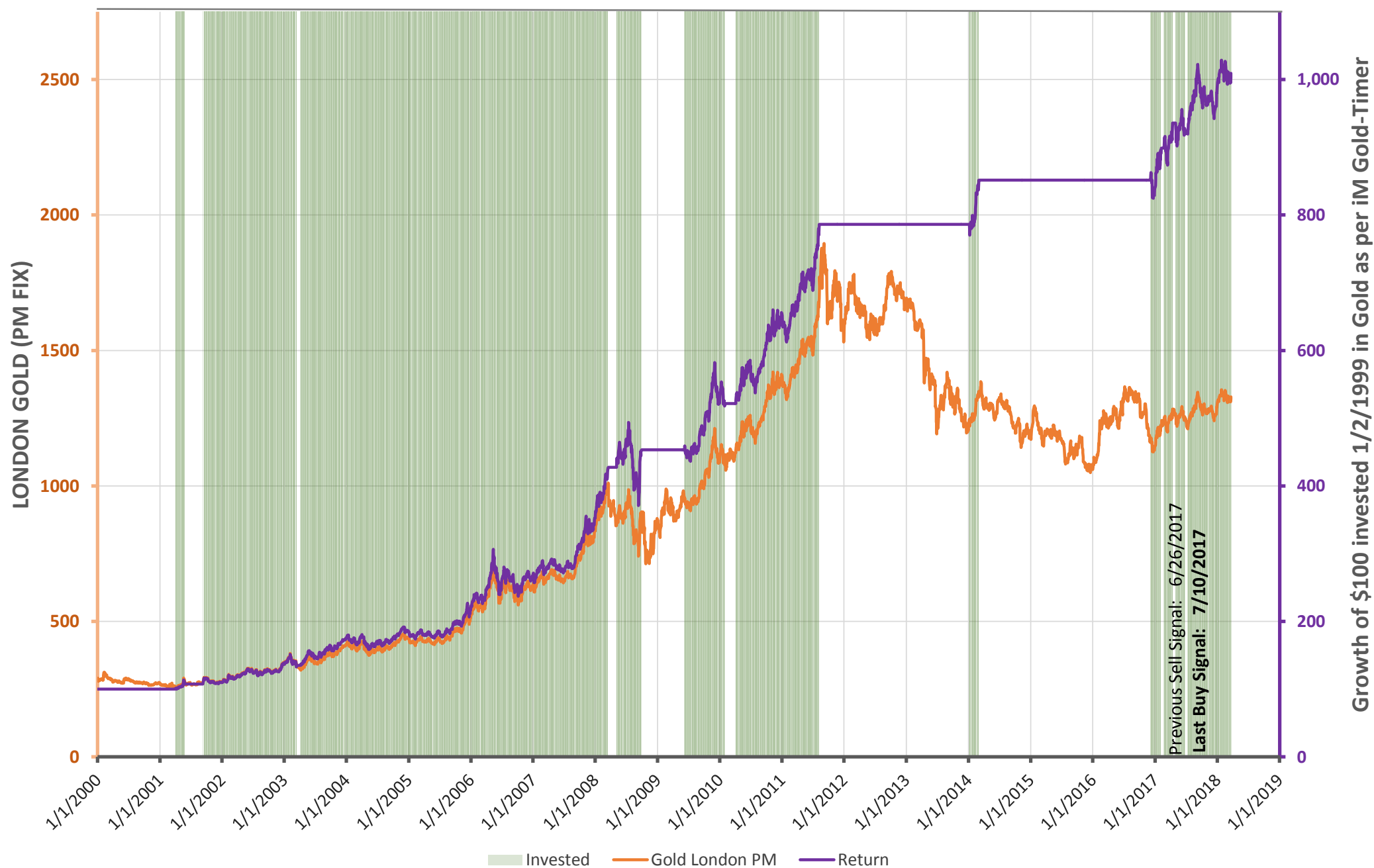


Figure 7: Modified Coppock Indicator for Silver 2009-2018

updated to 03/23/2018

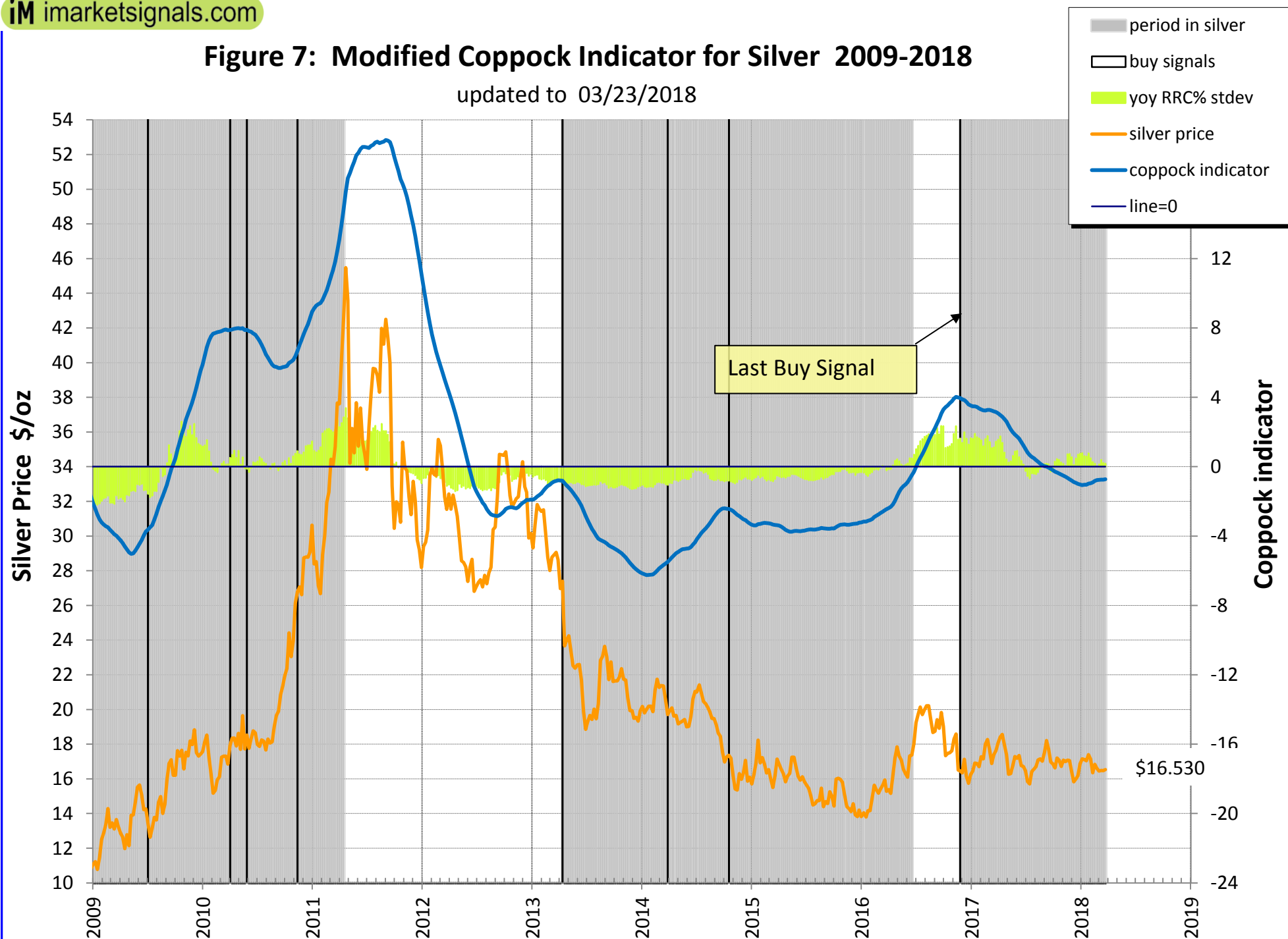


Fig-8 Unemployment Rate and Recessions (real-time) 2000-2018

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

updated to 3-30-2018 with February UER= 4.1%

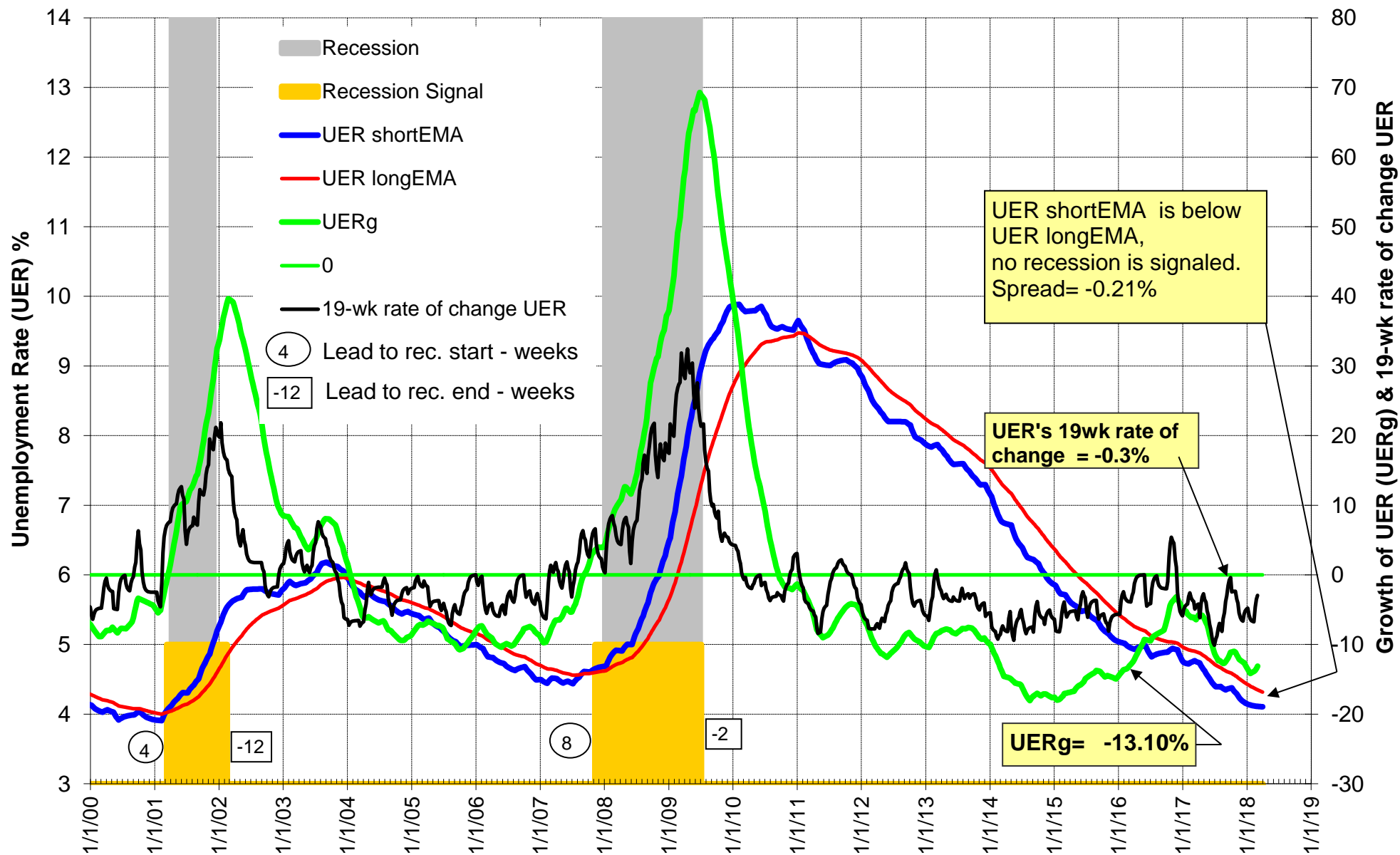
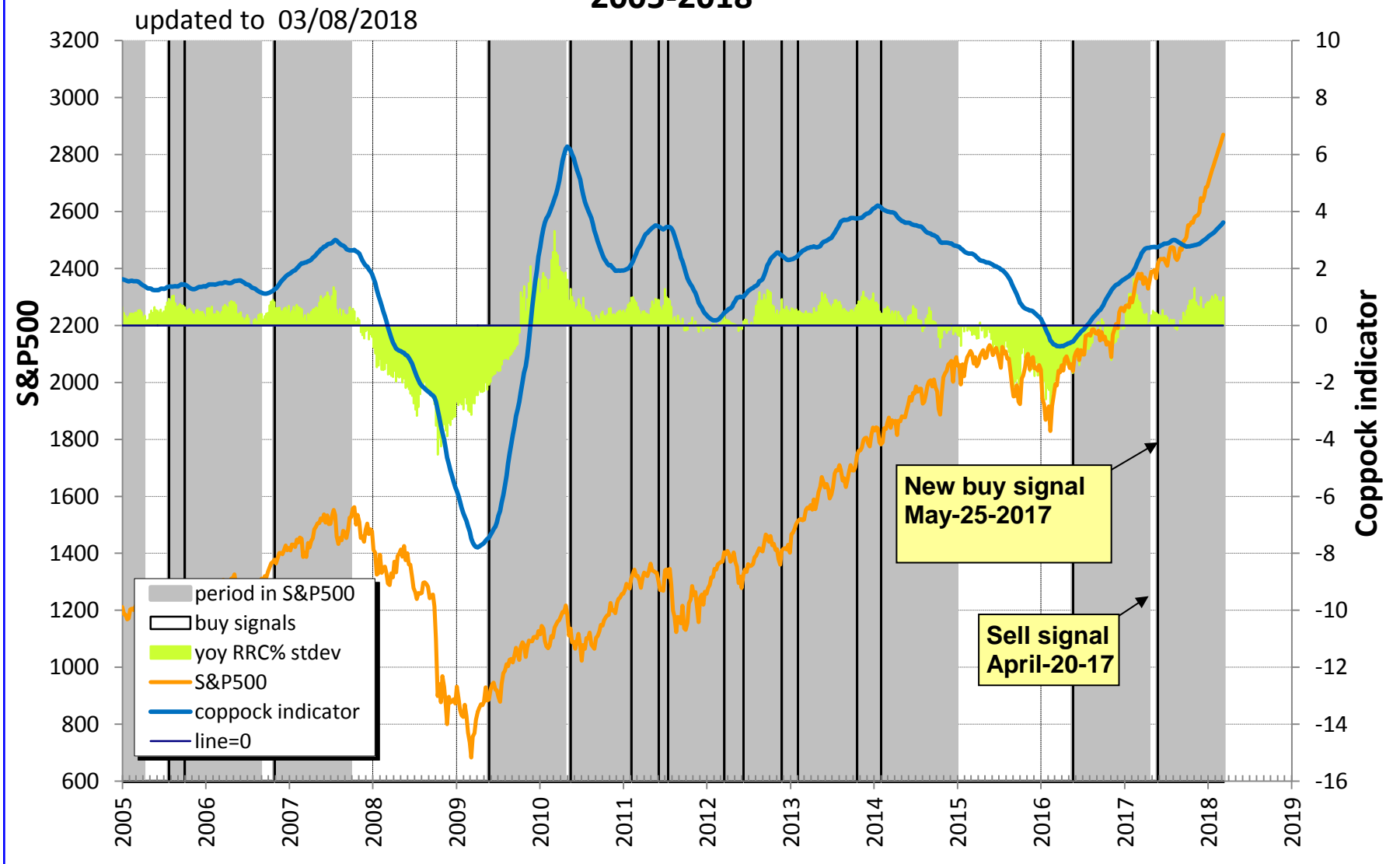


Fig-9 Modified Coppock Indicator for S&P500
2005-2018



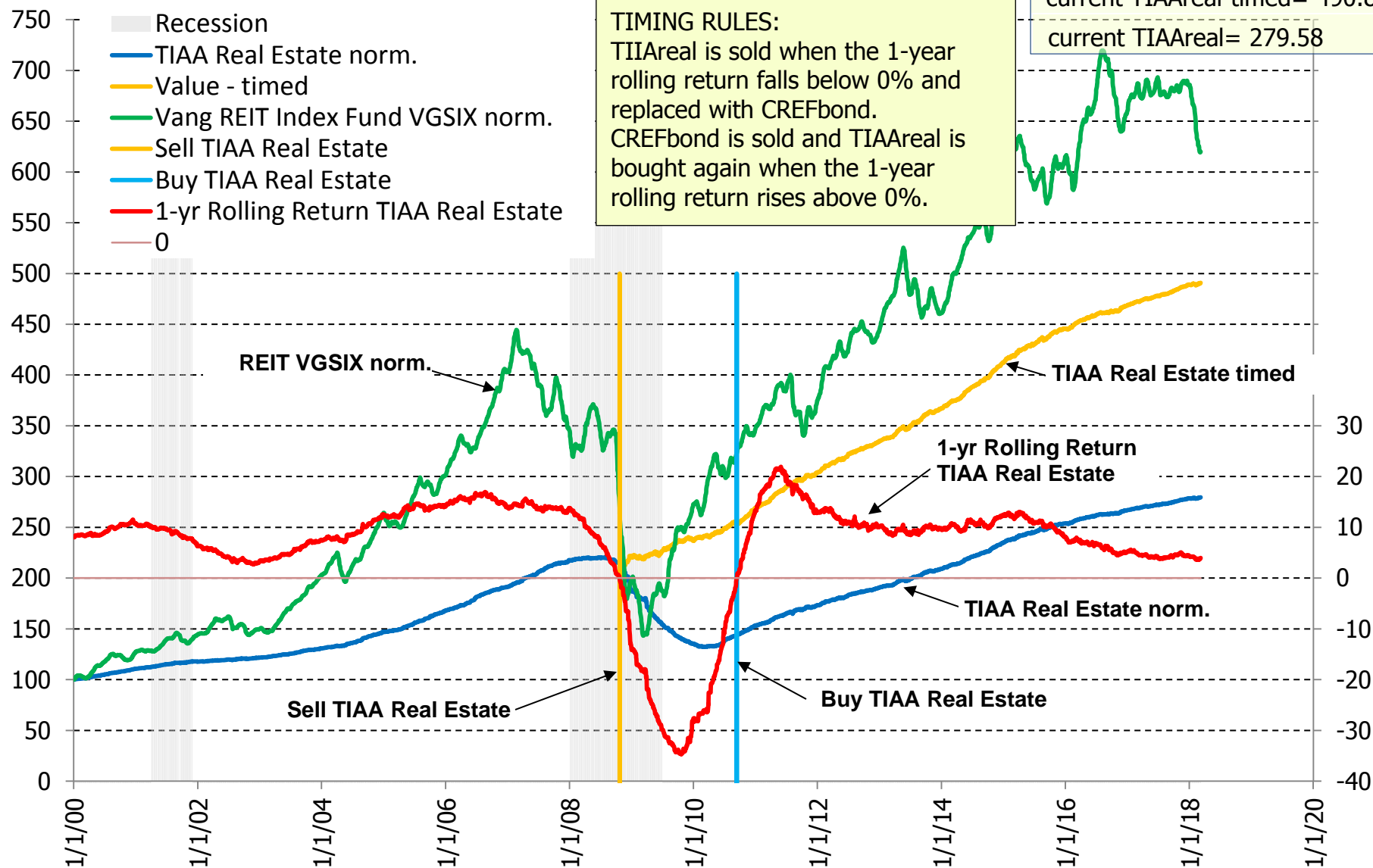
TIAA Real Estate Account vs. Vanguard REIT Index Fund (VGSIX) 2000 - 2018

updated to 3/8/18, TIAAreal current 1-year rolling return= 3.97%

current TIAAreal-timed= 490.88

current TIAAreal= 279.58

TIAA Real Estate & VGSIX normalized to 100 (1/1/2000)



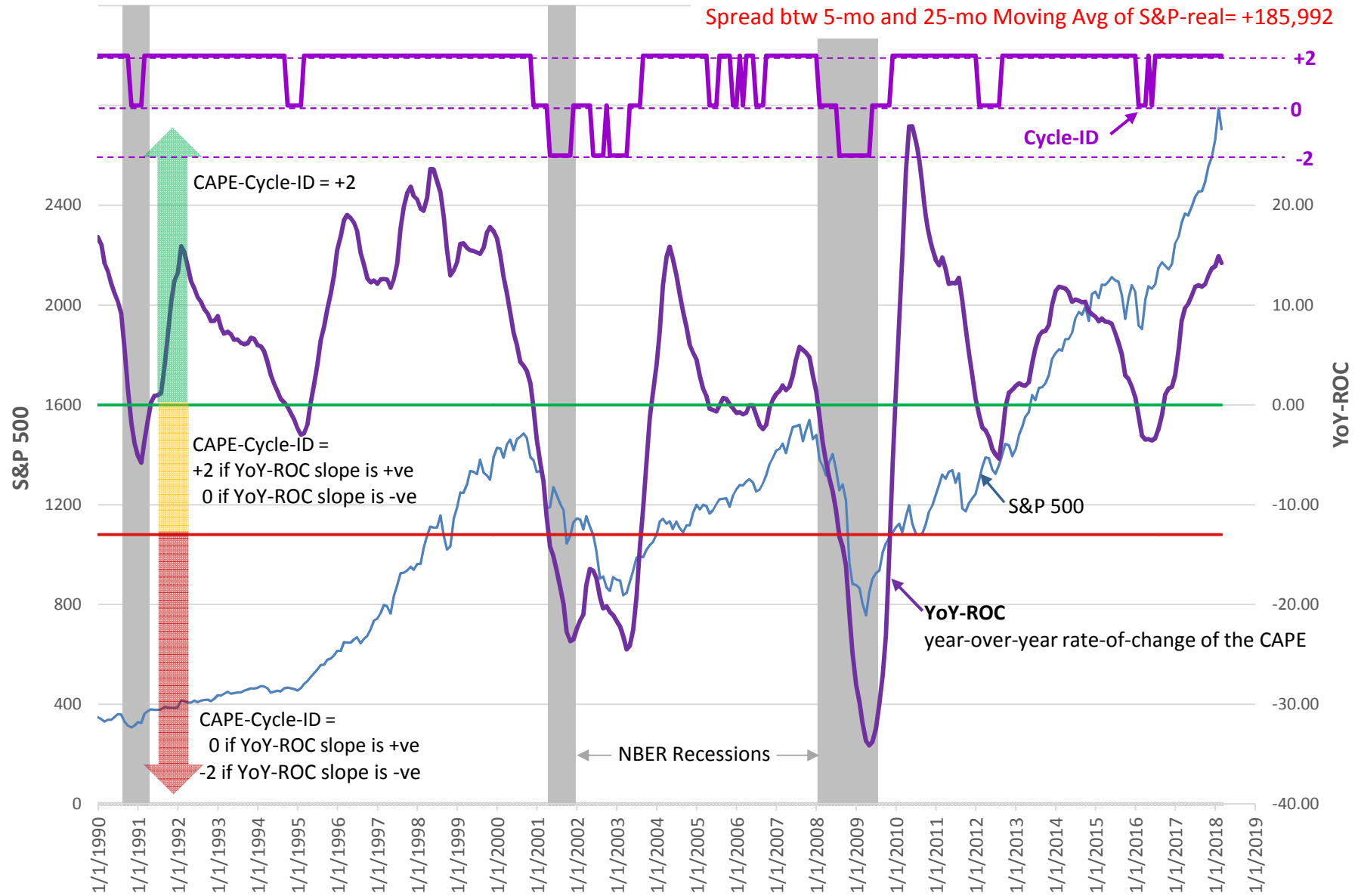
1-yr Rolling Return TIAA Real Estate %

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

updated to 2/28/2018

Shiller CAPE= 31.98

Spread btw 5-mo and 25-mo Moving Avg of S&P-real= +185,992

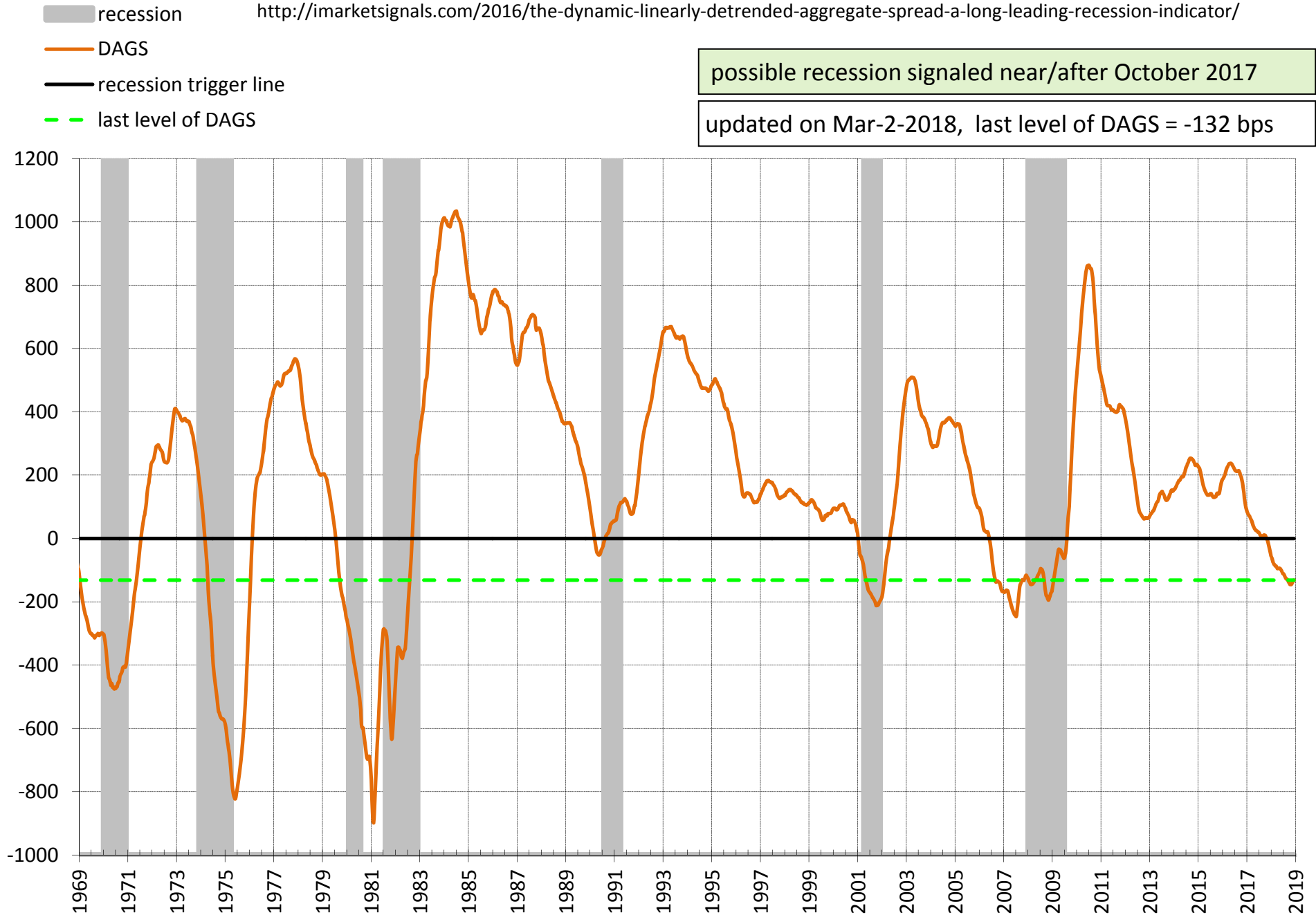


Long Leading Recession Indicator DAGS: shifted forward in time by 40 weeks

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

possible recession signaled near/after October 2017

updated on Mar-2-2018, last level of DAGS = -132 bps



Updated to Mar 8, 2018

Trade Weighted US Dollar and Interest Rates

