

January 2, 2019

Business Cycle Index

The BCI at 262.0 is near last week's revised 261.9, and remains below the previous high for this business cycle indicated by the BCIP of 98.3. However, the 6-month smoothed annualized growth BCIg at 11.3 is below last week's 11.4. Both BCIP and BCIg are not signaling a recession.

January 3, 2019

Market Signals Summary:

The MAC-US model, iM-Low Frequency Timer, and the S&P500 Coppock are invested in the markets, as is the "3-mo Hi-Lo Index of the S&P500" which entered the market on 10/22/2018. The MAC-AU is also 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 steepening. The gold Coppock remains invested in gold, however the silver model is in cash. The iM-Gold Timer is in cash. The monthly iM-Google Trend Timer is invested since 12/1/2019.

MAC-US

The MAC-US model switched into the markets on 2/26/2019. The sell-spread (red line) is above last week's value needs to move below zero to generate a sell signal.

3-mo Hi-Lo Index

The 3-mo Hi-Lo Index of the S&P500 is below last week's level at 10.99% (last 11.21%), and is invested in the stock market since 10/22/2019.

Coppock Indicator for the S&P500

The Coppock indicator for the S&P500 entered the market on 5/9/2019 and is invested.

MAC-AU

The MAC-AU model is invested in the markets after signaling a buy on February 7, 2019. The sell-spread (red line) is below last week's value and needs to move below zero to generate a sell signal.

Recession:

COMP

Figure 3 shows the COMP below last week's level. No recession is indicated.

iM-BCIg

Figure 3.1 shows the recession indicator iM-BCIg at 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 above last week's level and is not signaling a recession.

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 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 above last week's level, general trend steepening. 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 March 2019 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

December 6, 2019 (next update January 10, 2020)

Unemployment

The unemployment rate recession model (article link), has been updated with the November UER of 3.5%. The model does not signal a recession.

The Dynamic Linearly Detrended Enhanced Aggregate Spread:

The updated level of this indicator, -259bps, near last months -261bps, confirms the January 2017 signal. Based on past history a recession could have started as early as October 2017, but not later than September 2020. The average lead time to previous recessions provided by DAGS was 15 months which had indicated a possible recession start as early as April 2019. (Note: All our other recession indicators are far from signal a recession.)

CAPE-Cycle-ID

Fig 9a depicts the CAPE-Cycle-ID and the year-on-year rate-of-change of the Shiller CAPE; the level switched from 0 to +2 end of October-2019.

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.

Estimated Forward 10-Year Returns

The estimated forward 10-year annualized real return decreased to 6.1% (previous 6.2) with a 95% confidence interval : 4.7% to 7.5 (previous 5.0% to 7.7%).

iM-GT Timer

Fig-10.-2-1-2019The iM-GT Timer, based on Google Search Trends Volume [switched into the markets on 12/02/2019.](#)

Trade Weighted USD

The trend of Trade Weighted \$ value is indeterminate and remains strong even though federal fund rates have been reduced.

TIAA Real Estate Account

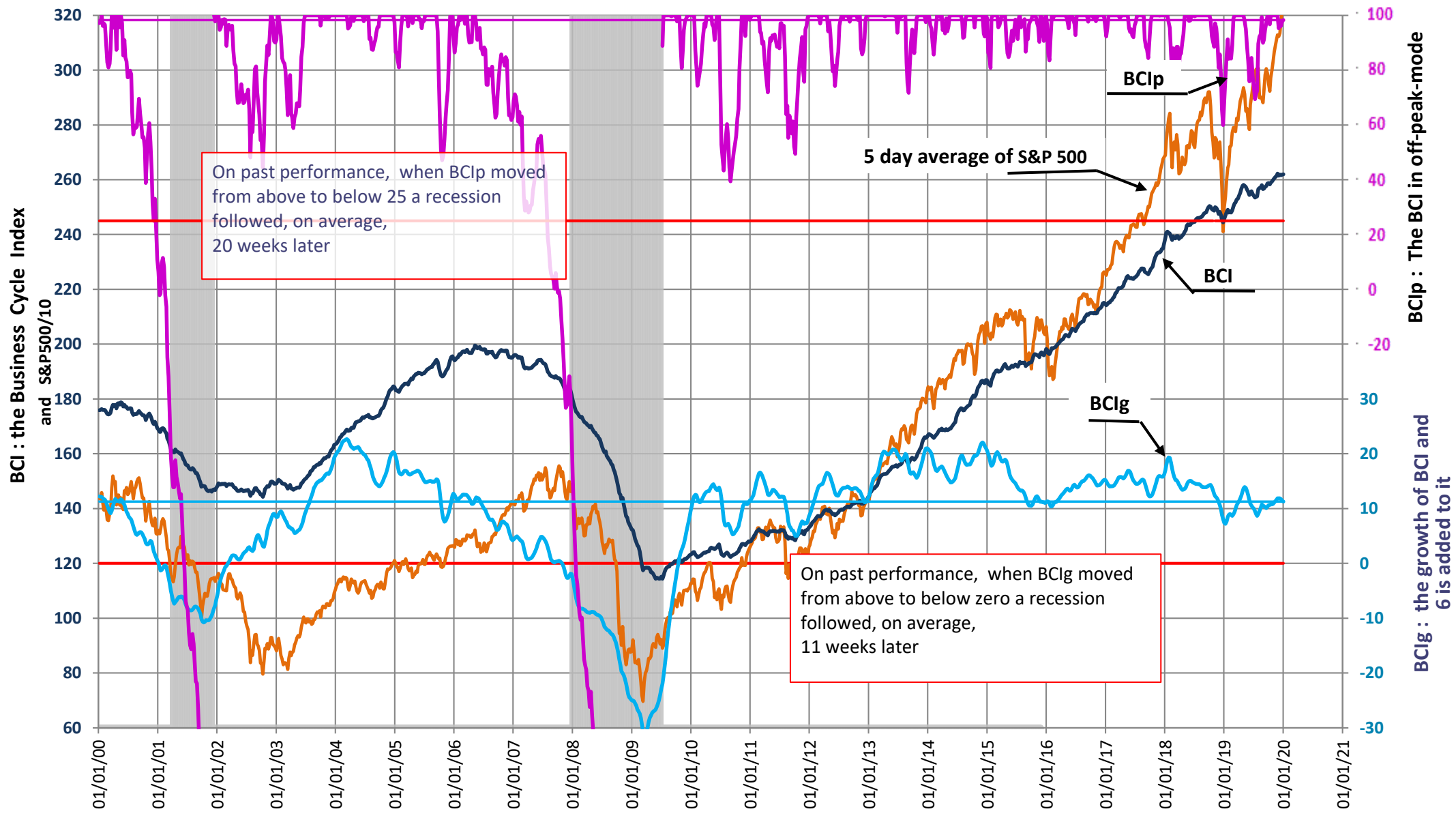
The 1-year rolling return for the end of last month is 4.94%, down from last month. A sell signal is not imminent.

iM's Business Cycle Index (BCI)

Date	12/05	12/12	12/19	12/26	01/02
BCIp	95.3	98.0	96.1	98.0	98.3
BCI	261.5	261.9	261.6	261.9	262.0
BCIg	11.9	11.9	11.7	11.4	11.3

BCIp, BCI and BCIG
updated to January 02, 2020

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



On past performance, when BCIp moved from above to below 25 a recession followed, on average, 20 weeks later

On past performance, when BCIG moved from above to below zero a recession followed, on average, 11 weeks later

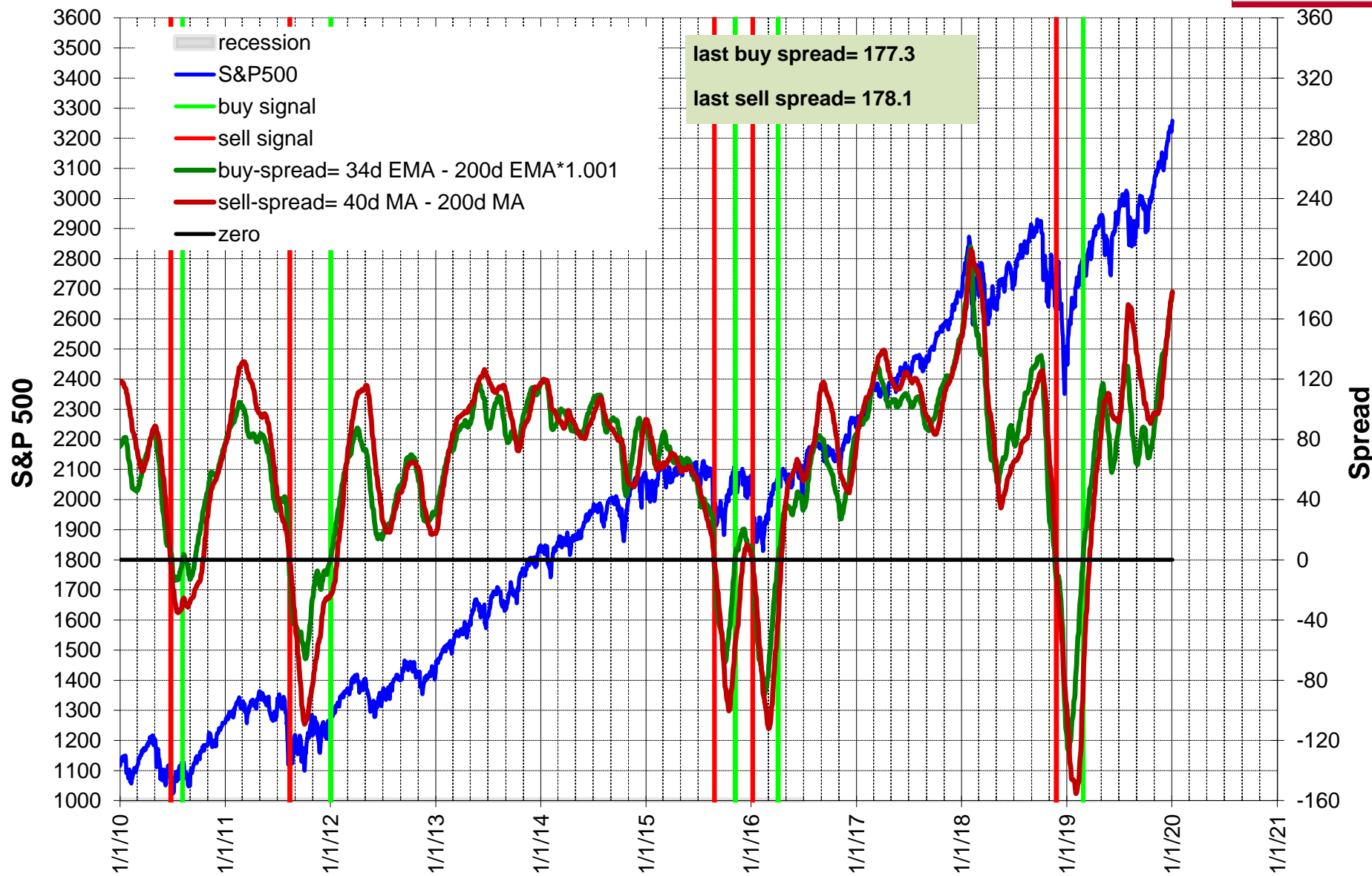
BCIp : The BCI in off-peak-mode
BCIG : the growth of BCI and 6 is added to it

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 from the modified golden-cross MAC-System



updated to... 1/2/20



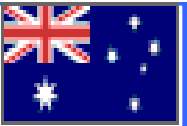


Fig 2.1: Buy and Sell signals for the Australia All Ordinaries Index from the MAC-AU System

updated to Jan-3-20

last sell spread= 270.5

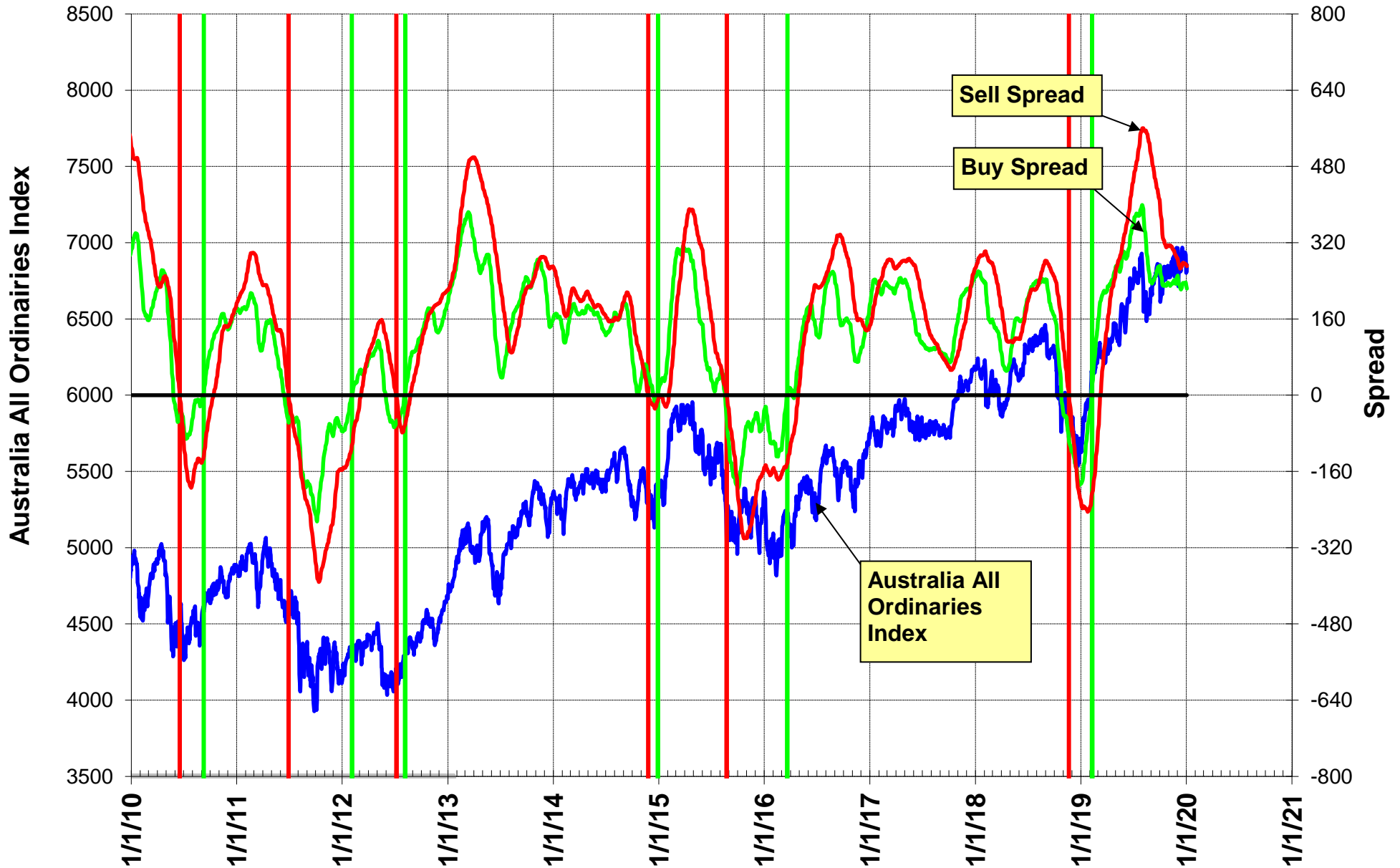


Fig 2.2 3-mo Hi-Lo Index of the S&P500 & 40-day SMA of Index

updated to 1/2/2020

last SMA:40= 10.99%

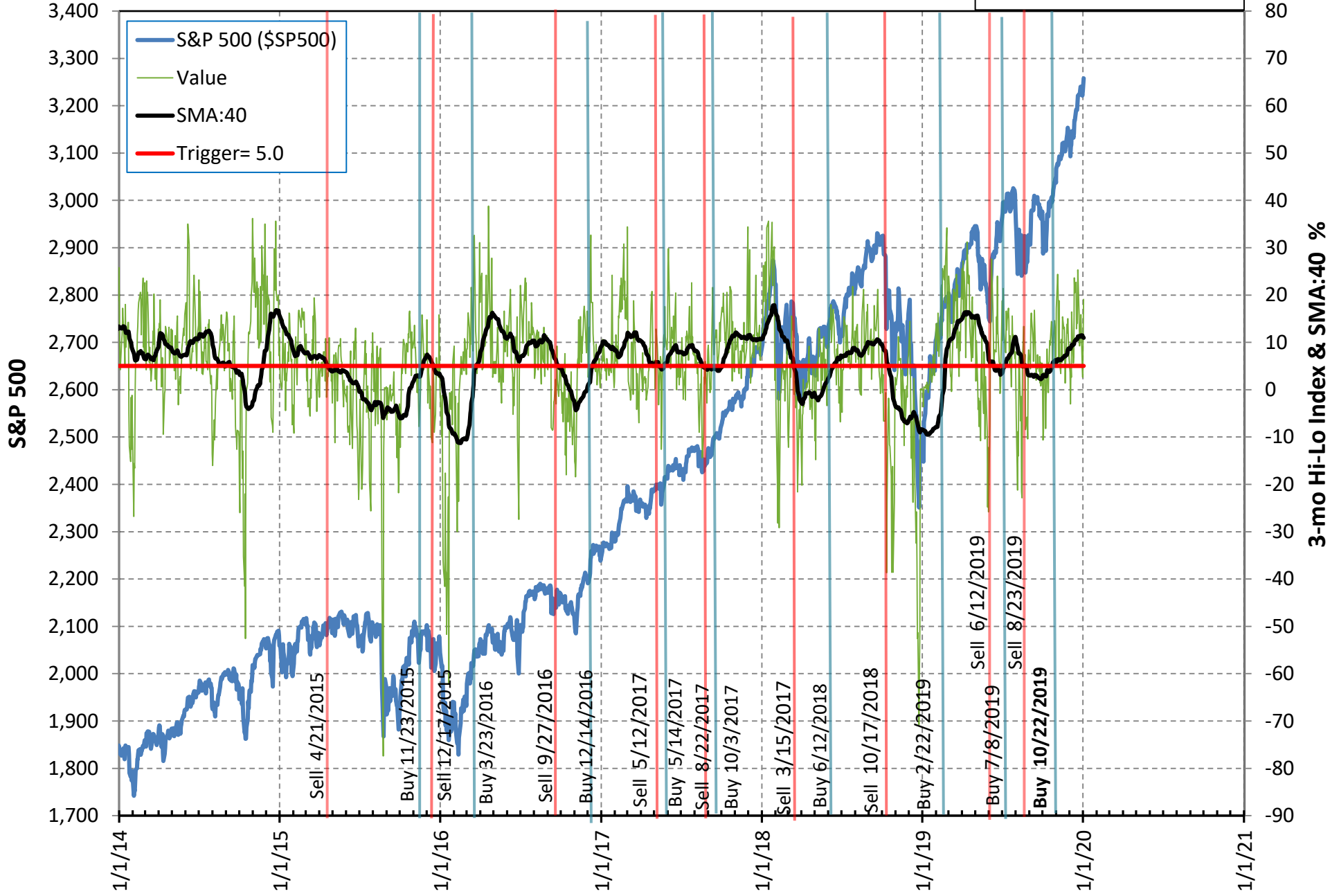


Fig-2.3 Modified Coppock Indicator for S&P500

updated to 01/02/2020

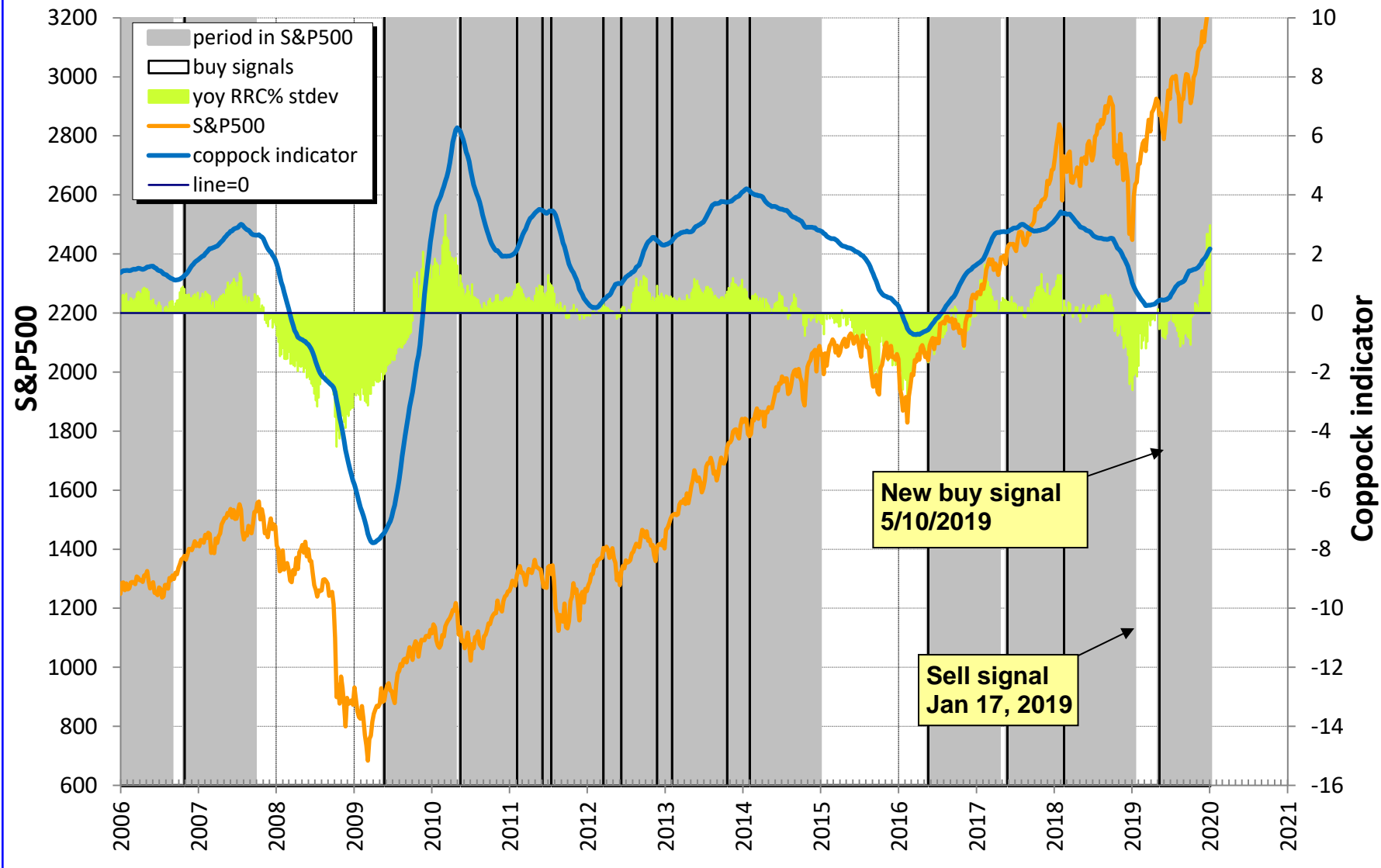


Fig. 3: COMP Leading Indicator of US Economy

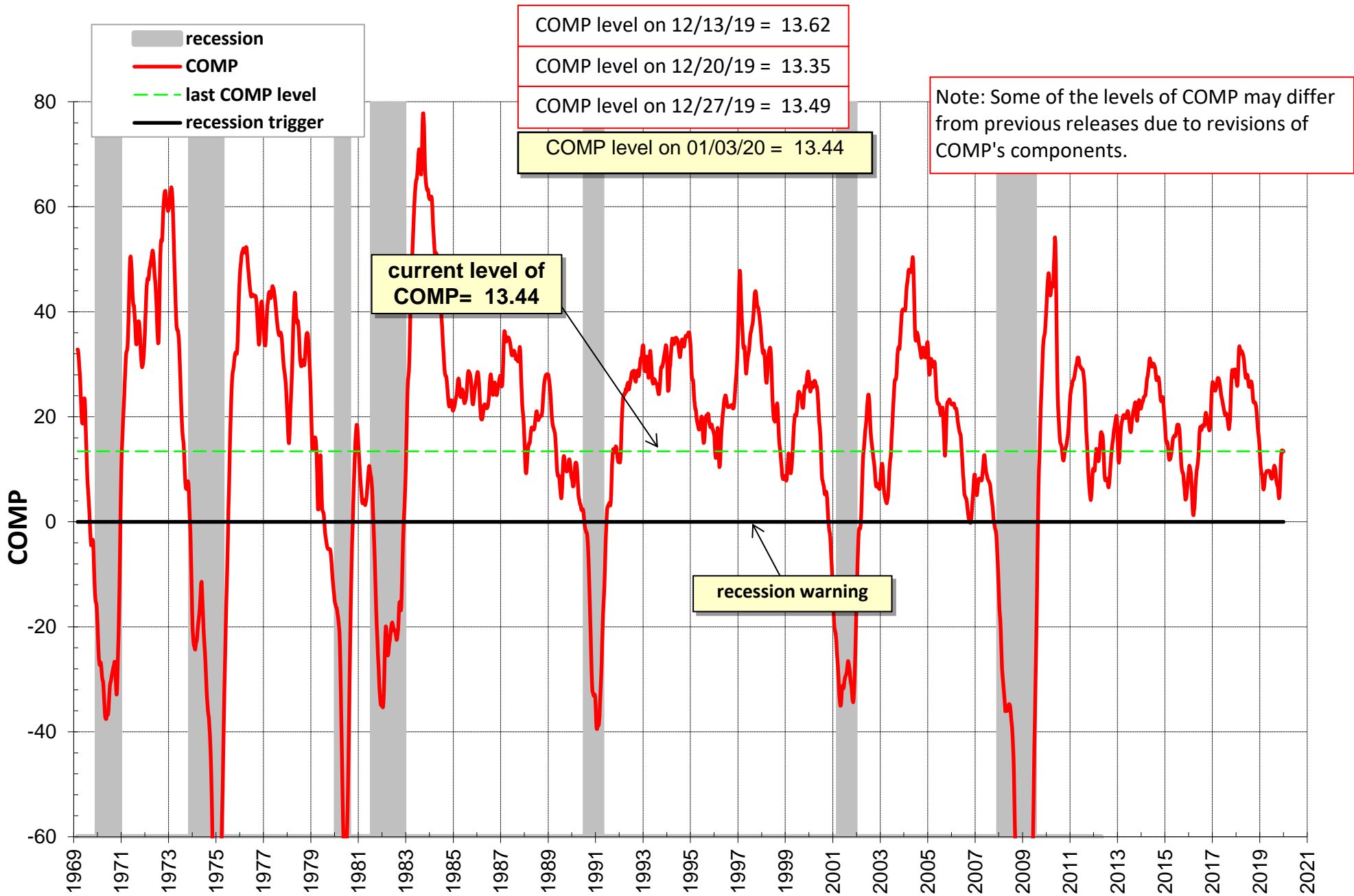


Fig 3.1: iM-BCI_g

level on 12/12/19 = 11.87
level on 12/19/19 = 11.71
level on 12/26/19 = 11.42
level on 1/2/20 = 11.27

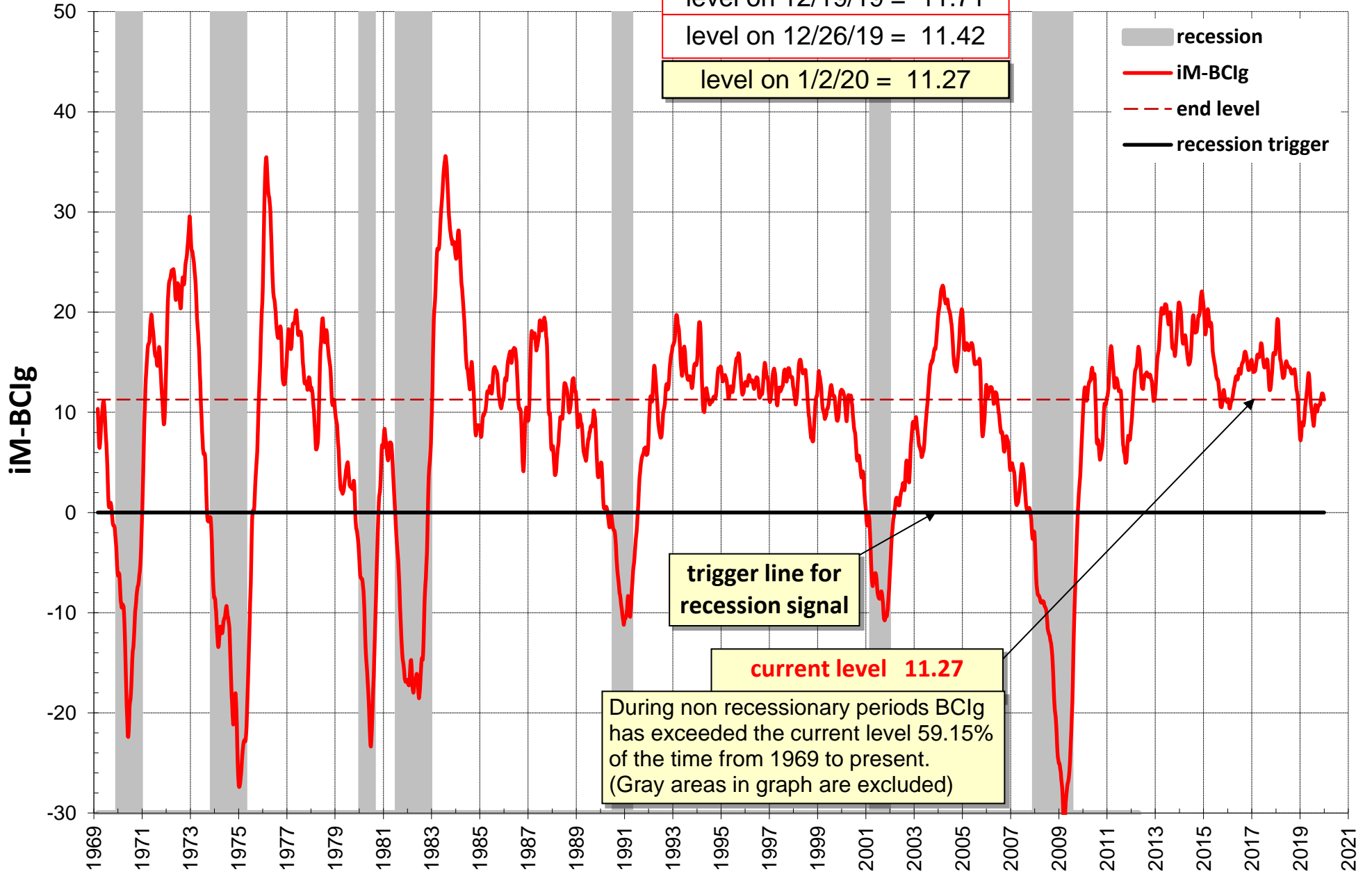


Figure 3.2: Forward Rate Ratio FRR2-10 - leads to Recessions

updated to 01/02/2020
 EMA of FRR2-10 = 1.028

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

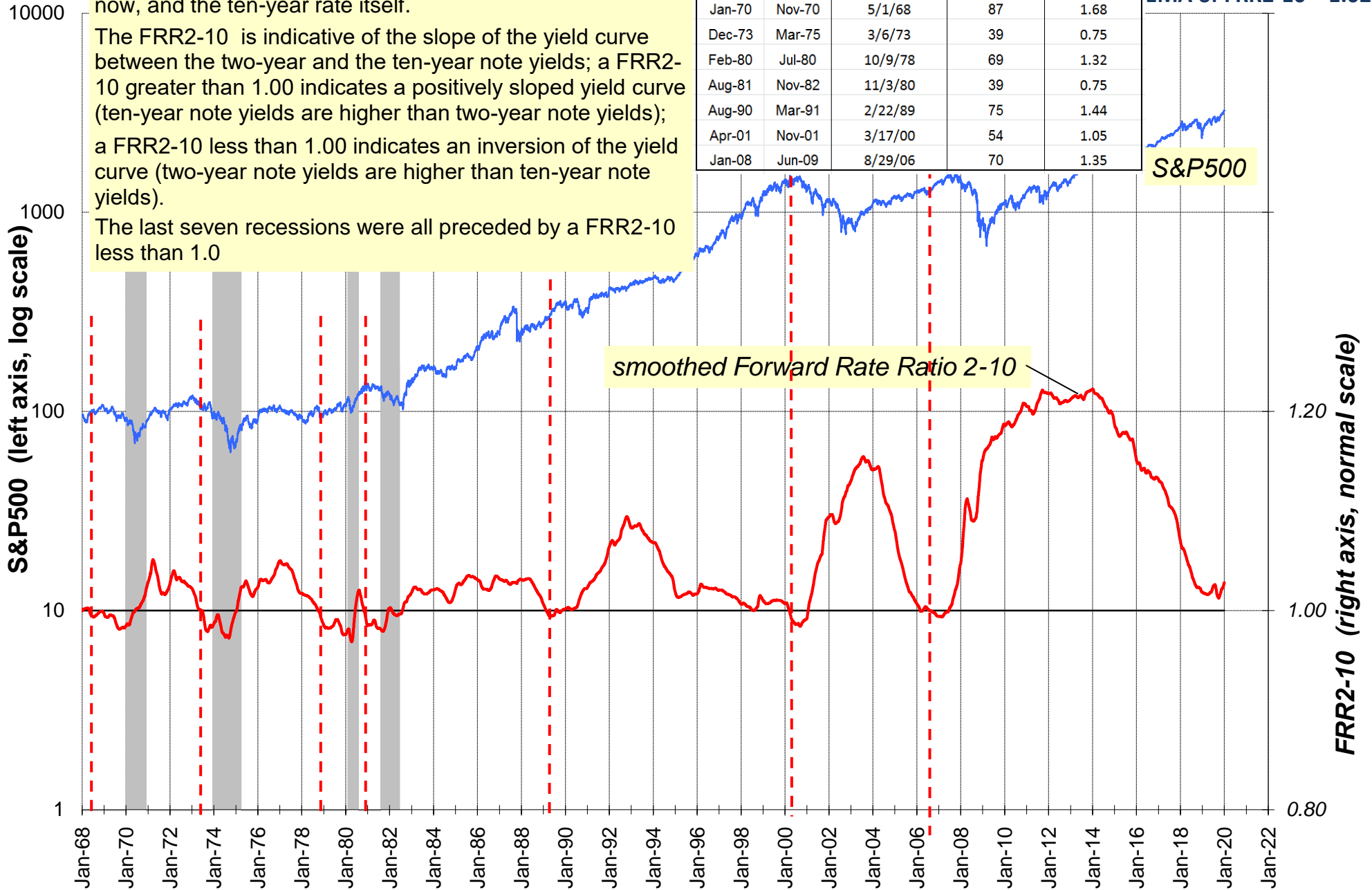


Fig.3.3 iM-Low Frequency Timer

Updated to: 1/2/2020

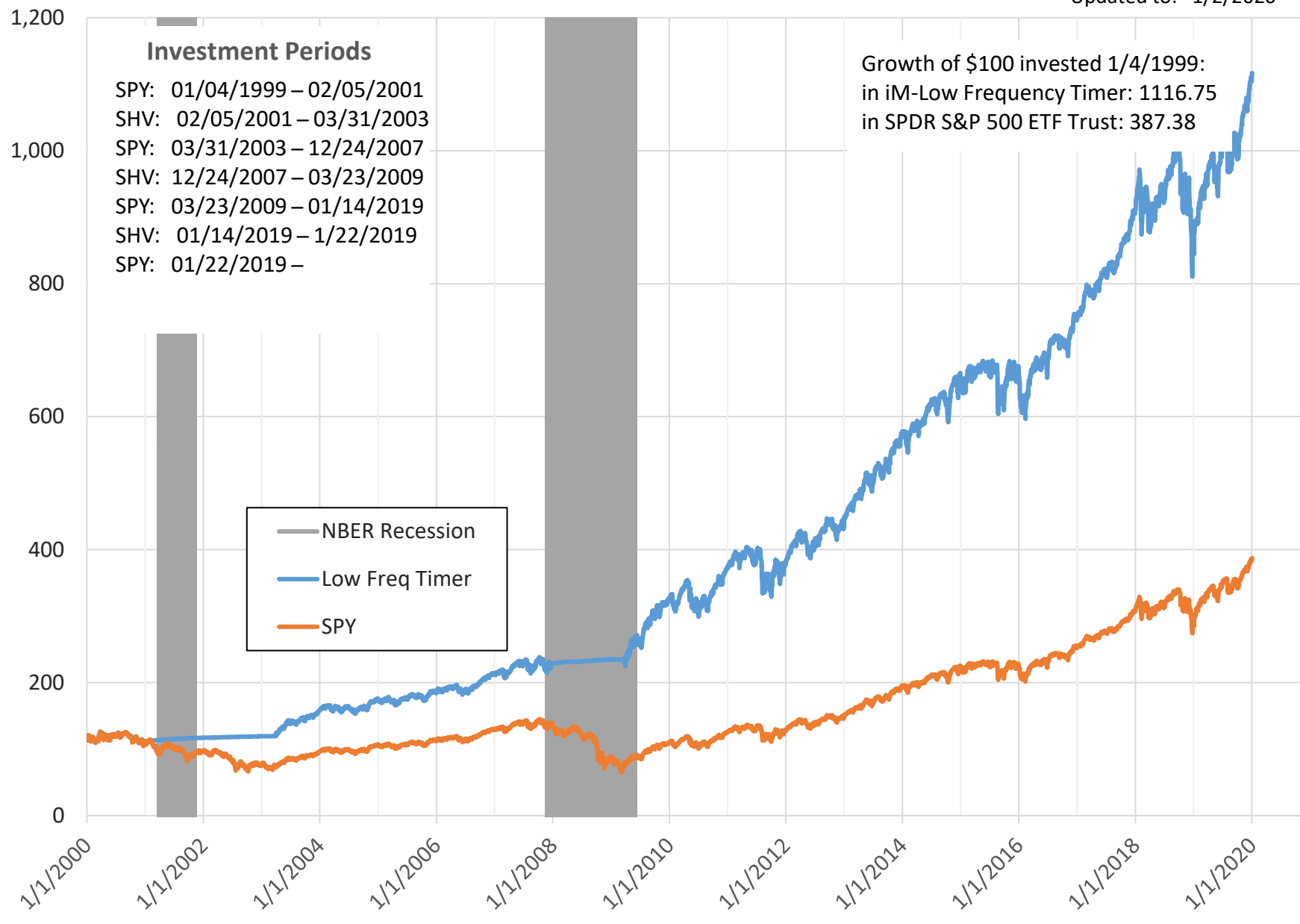


Figure 4: Bond Value Ratio (BVR)

Model updated to: 1/2/2020 BVR = 6.185

Limit lines recalibrated on 2/1/2015

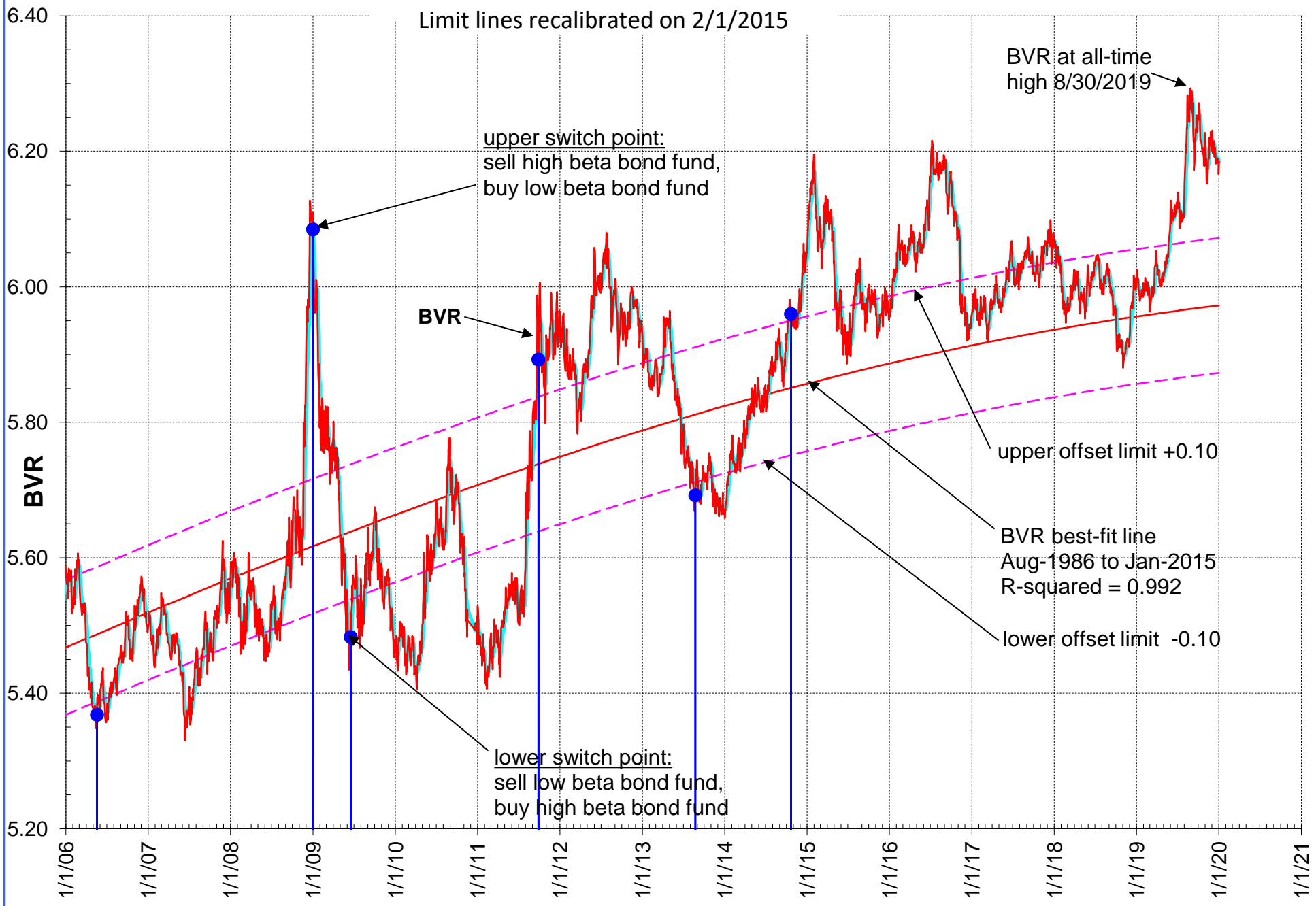


Fig. 5: Yield Curve: i10 - i2

Updated to.....1/2/2020

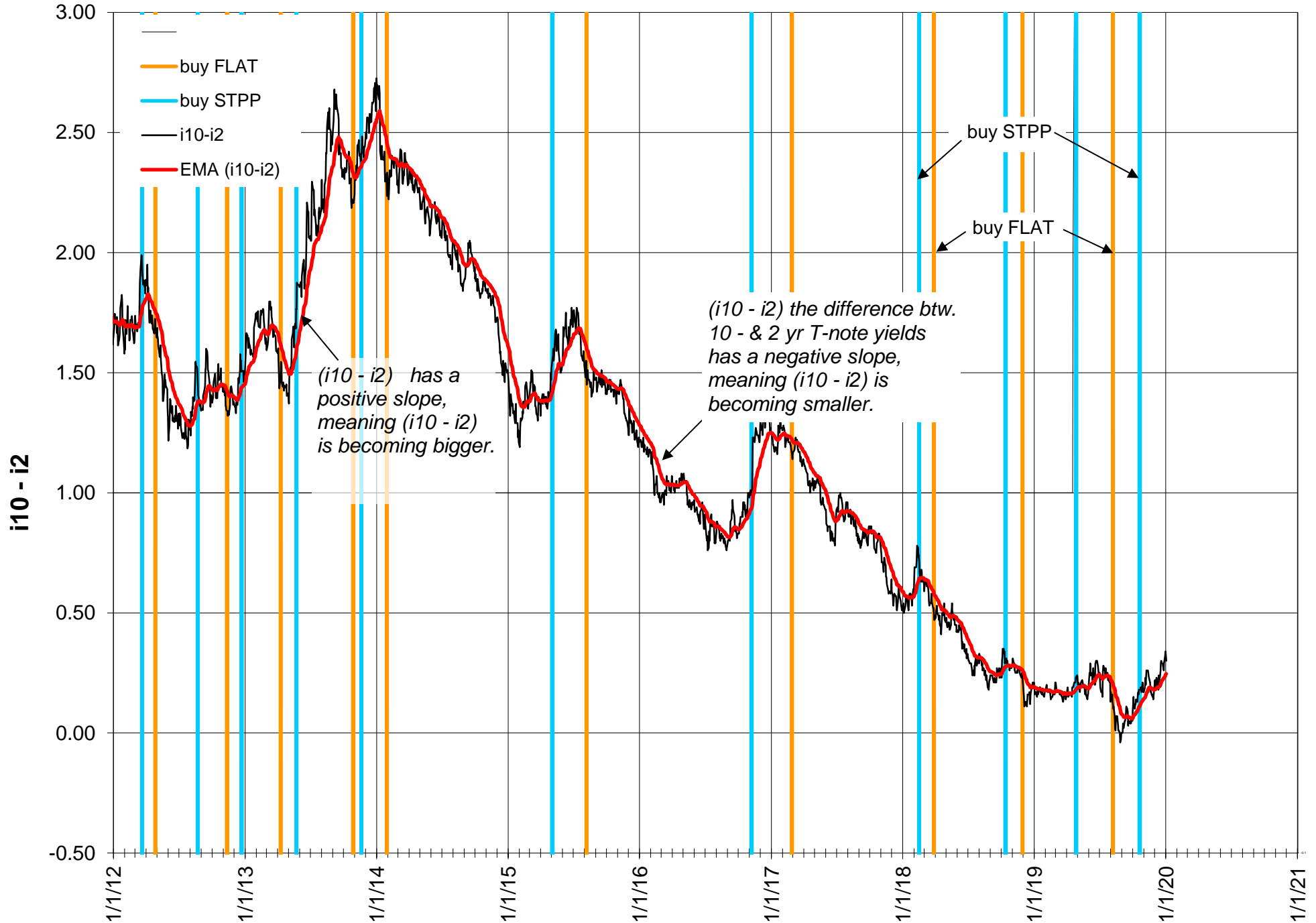


Figure 6: Modified Coppock Indicator for Gold

updated to 01/02/2020

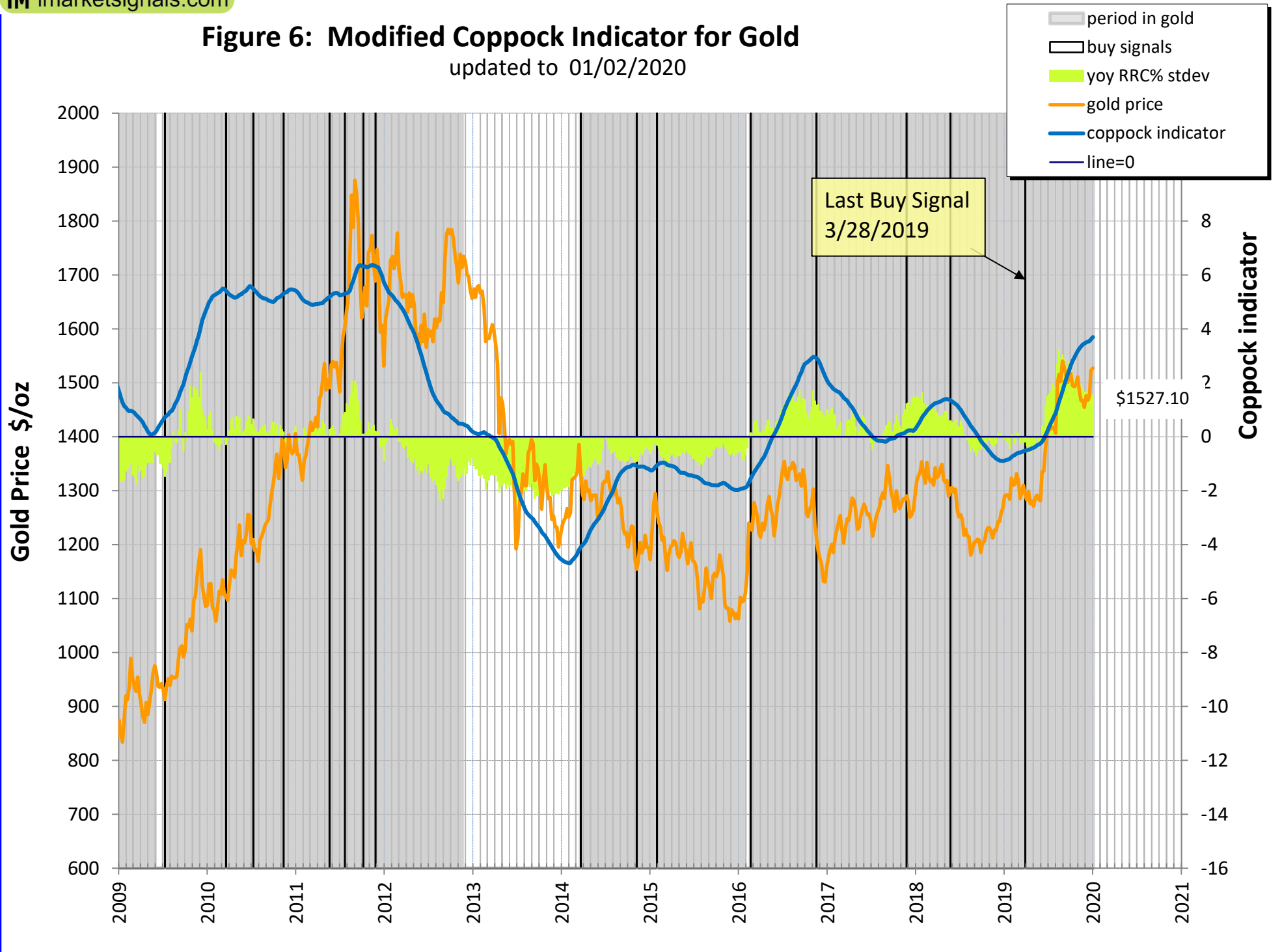


Fig. 6.1a iM GOLD-TIMER - Rev 1

Updated to: 1/2/2020

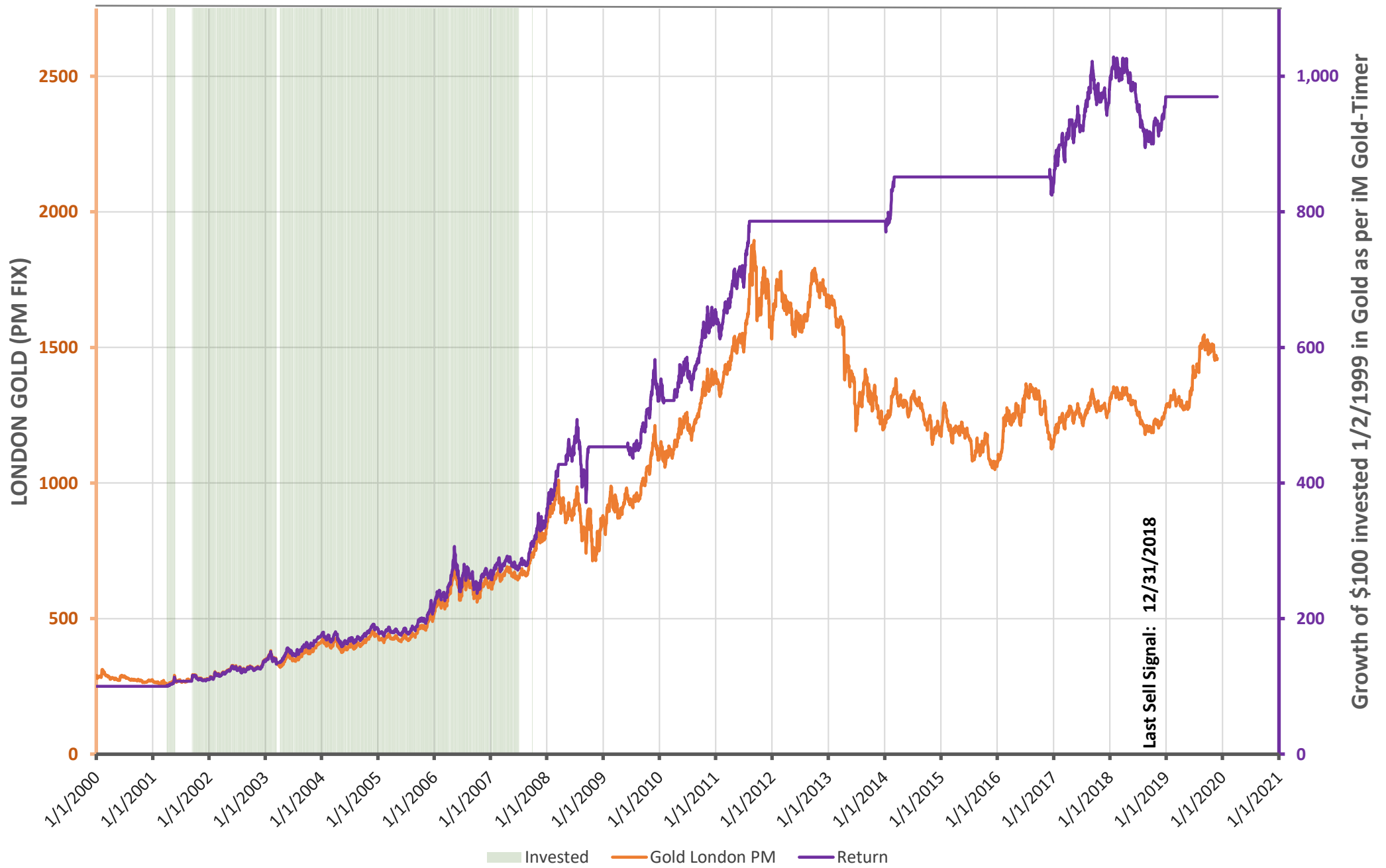


Figure 7: Modified Coppock Indicator for Silver

updated to 01/02/2020

