March 14, 2019

Business Cycle Index

The BCI at 249.2 is below last week's 249.9, and remains below this business cycle's peak as indicated by the BCIp at 80.3. Also, the 6-month smoothed annualized growth BCIg at 9.5 is below last week's 10.1. Both BCIp and BCIg are not signaling a recession.

March 15, 2019

Market Signals Summary:

The MAC-US model, iM-Low Frequency Timer and "3-mo Hi-Lo Index of the S&P500" are invested in the Markets., but the S&P500 Coppock is out of the market. 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 indeterminate and invested in FLAT. The iM-Gold Timer sold gold on 12/31/2018, the gold Coppock model is invested in gold, however the silver model is in cash. The monthly iM-GT-Timer, which is based on Google trend is out of the markets.

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 12.17% (last week 10.73%), 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.

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 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'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

March 5, 2019 (next update April 5, 2019)

Unemployment

The unemployment rate recession model (article link), has been updated with the February UER of 3.8%. The model does not signal a recession.

The Dynamic Linearly Detrended Enhanced Aggregate Spread:

The updated level of this indicator, -192bps, above last months -218bps, confirms the January 20, 2017 signal. Based on past history a recession could have started as early as 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 2019. (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.

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 are estimated at 6.0% with a 95% confidence interval : 4.6% to 7.4%

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

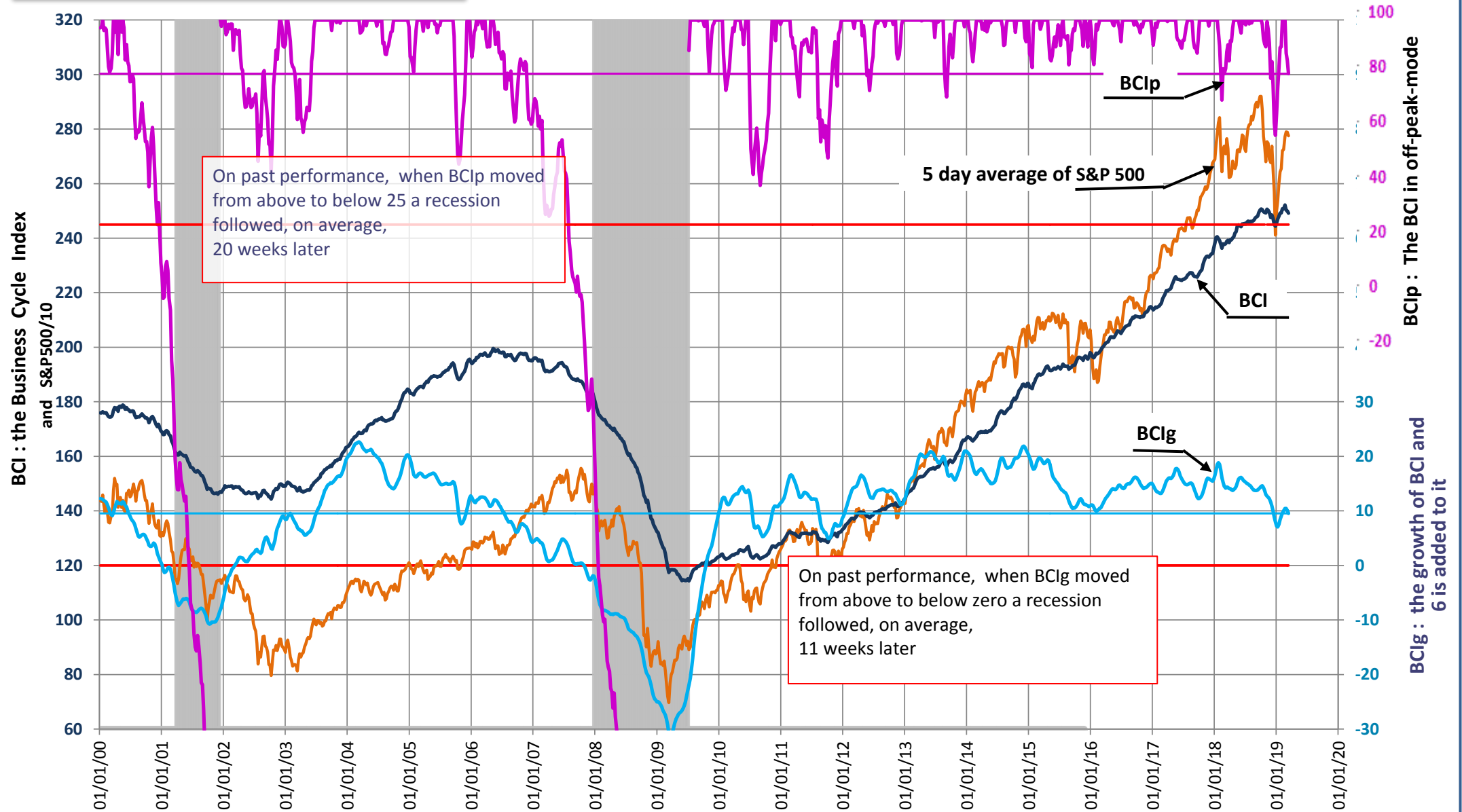The Trade Weighted $ value remains strong near its past value.

TIAA Real Estate Account

The 1-year rolling return for the end of last month is 5.97%.   A sell signal is not imminent.

iM's Business Cycle Index (BCI)

iM imarketsignals.com

BCIp, BCI and BCIg
updated to March 14, 2019

Date	02/14	02/21	02/28	03/07	**03/14**
BCIp	99.7	100.0	87.8	85.1	**80.3**
BCI	250.7	252.1	250.3	249.9	**249.2**
BCIg	10.0	10.4	10.4	10.1	**9.5**

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

BCI : the Business Cycle Index and S&P500/10

BCIg : the growth of BCI and 6 is added to it

BCIp

5 day average of S&P 500

BCI

BCIg

iM imarketsignals.com

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

updated to…3/14/19

last buy spread= 30.3

last sell spread= -18.4

Legend:
- recession
- S&P500
- buy signal
- sell signal
- buy-spread= 34d EMA - 200d EMA*1.001
- sell-spread= 40d MA - 200d MA
- zero

S&P 500 (left axis): 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 2500, 2600, 2700, 2800, 2900, 3000

Spread (right axis): -160, -120, -80, -40, 0, 40, 80, 120, 160, 200, 240, 280

X-axis: 1/1/10, 1/1/11, 1/1/12, 1/1/13, 1/1/14, 1/1/15, 1/1/16, 1/1/17, 1/1/18, 1/1/19, 1/1/20

2-MAC rev8-27-15.xlsm

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

updated to Mar-15-19
last buy spread= 208.7

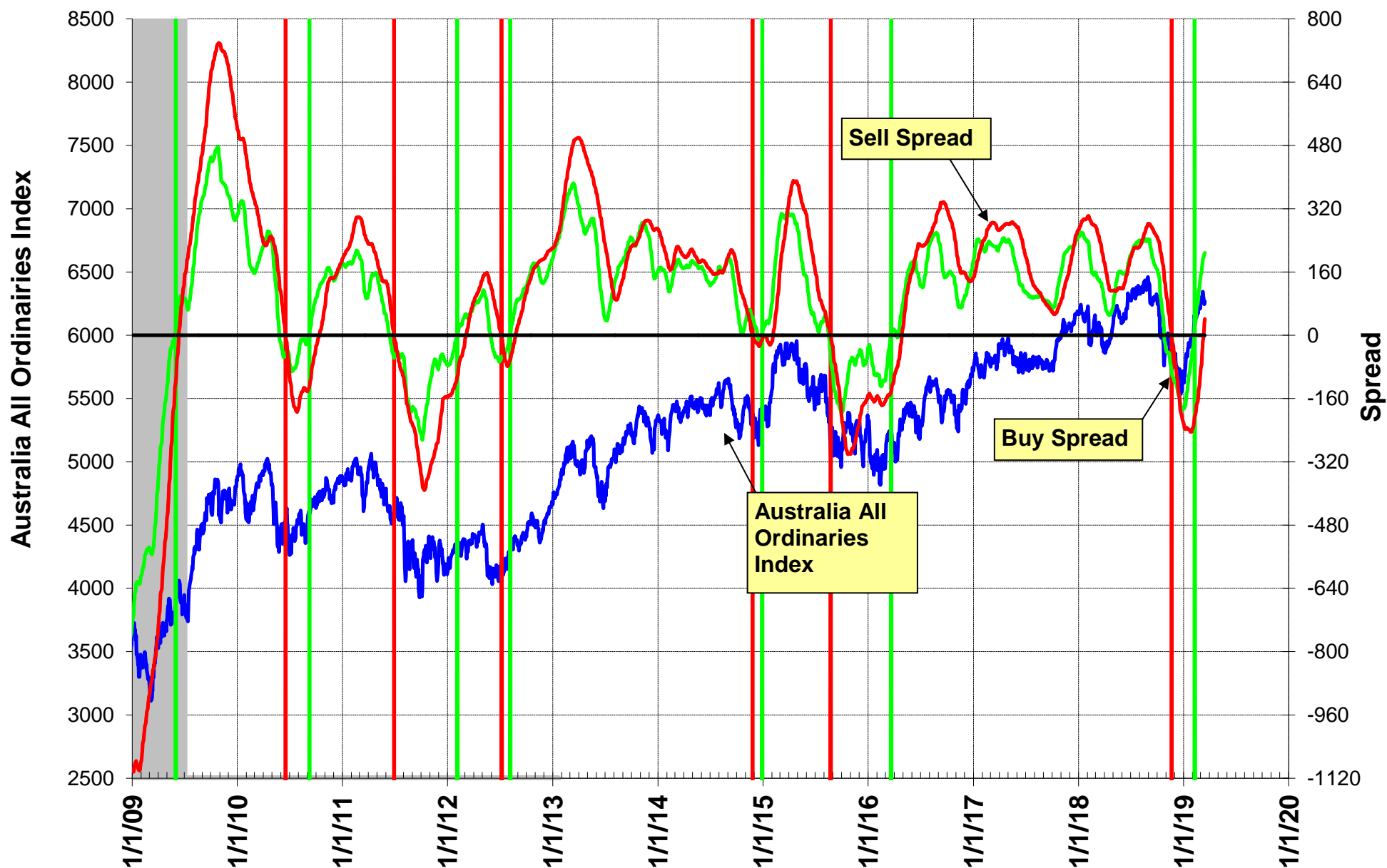Sell Spread

Buy Spread

Australia All Ordinaries Index

Fig 2.2   3-mo Hi-Lo Index of the S&P500 & 40-day SMA of Index
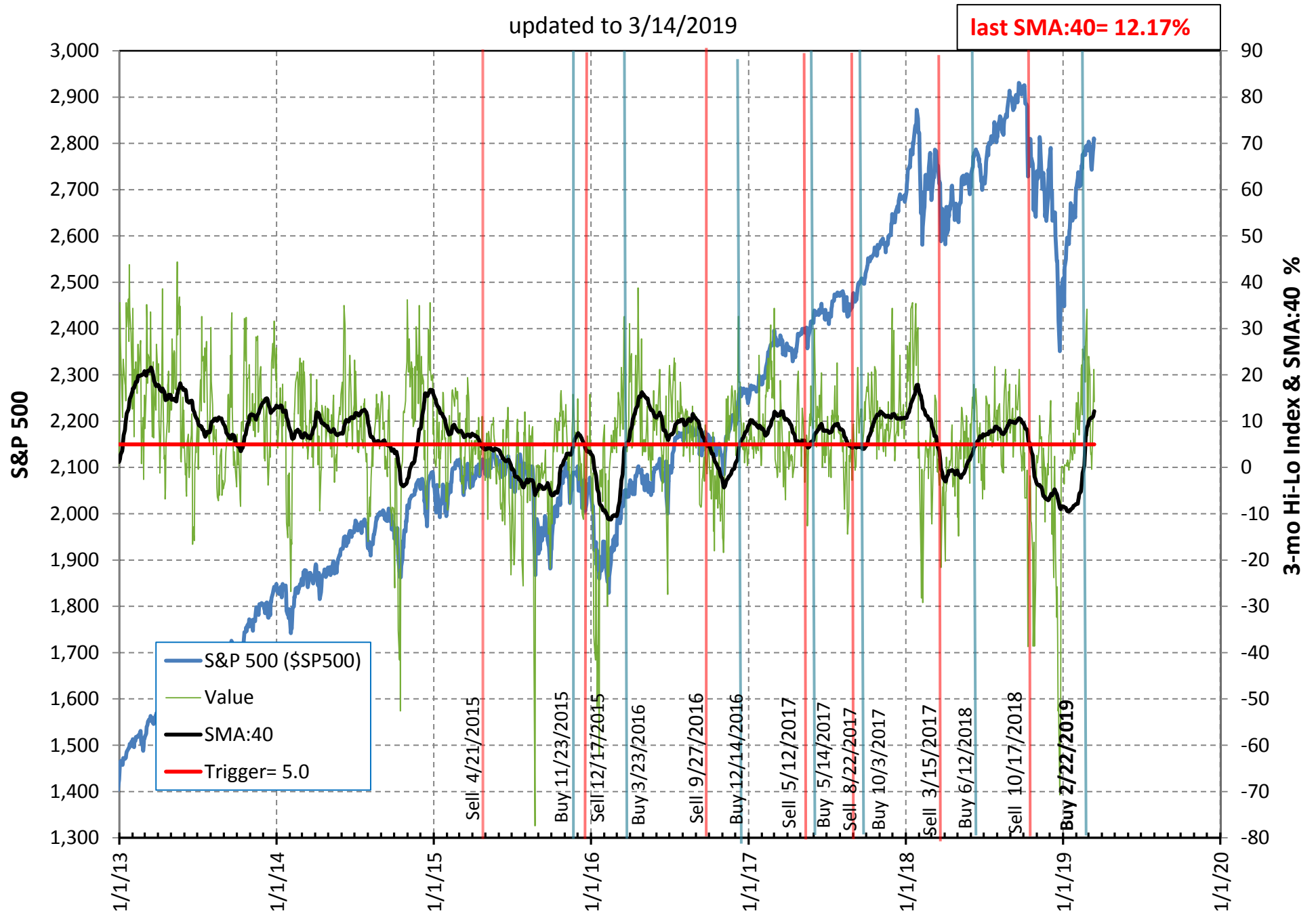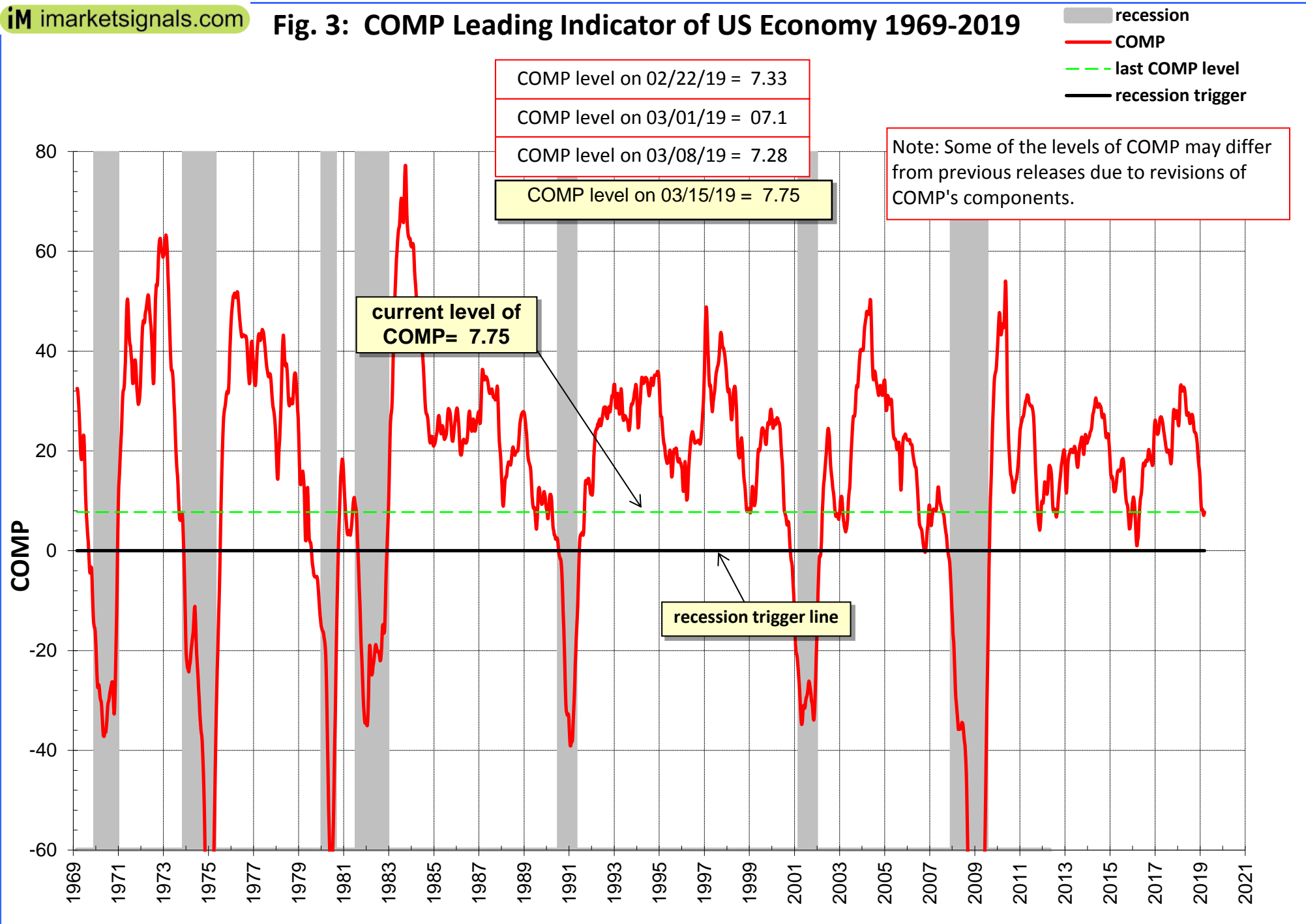
Fig. 3: COMP Leading Indicator of US Economy 1969-2019

Fig 3.1: iM-BCIg 1969-2019

level on 2/21/19 = 10.43
level on 2/28/19 = 10.44
level on 3/7/19 = 10.05
level on 3/14/19 = 9.53

recession trigger

current level 9.53

During non recessionary periods BCIg has exceeded the current level 69.02% of the time from 1969 to present. (Gray areas in graph are excluded)

recession
iM-BCIg
end level
recession trigger
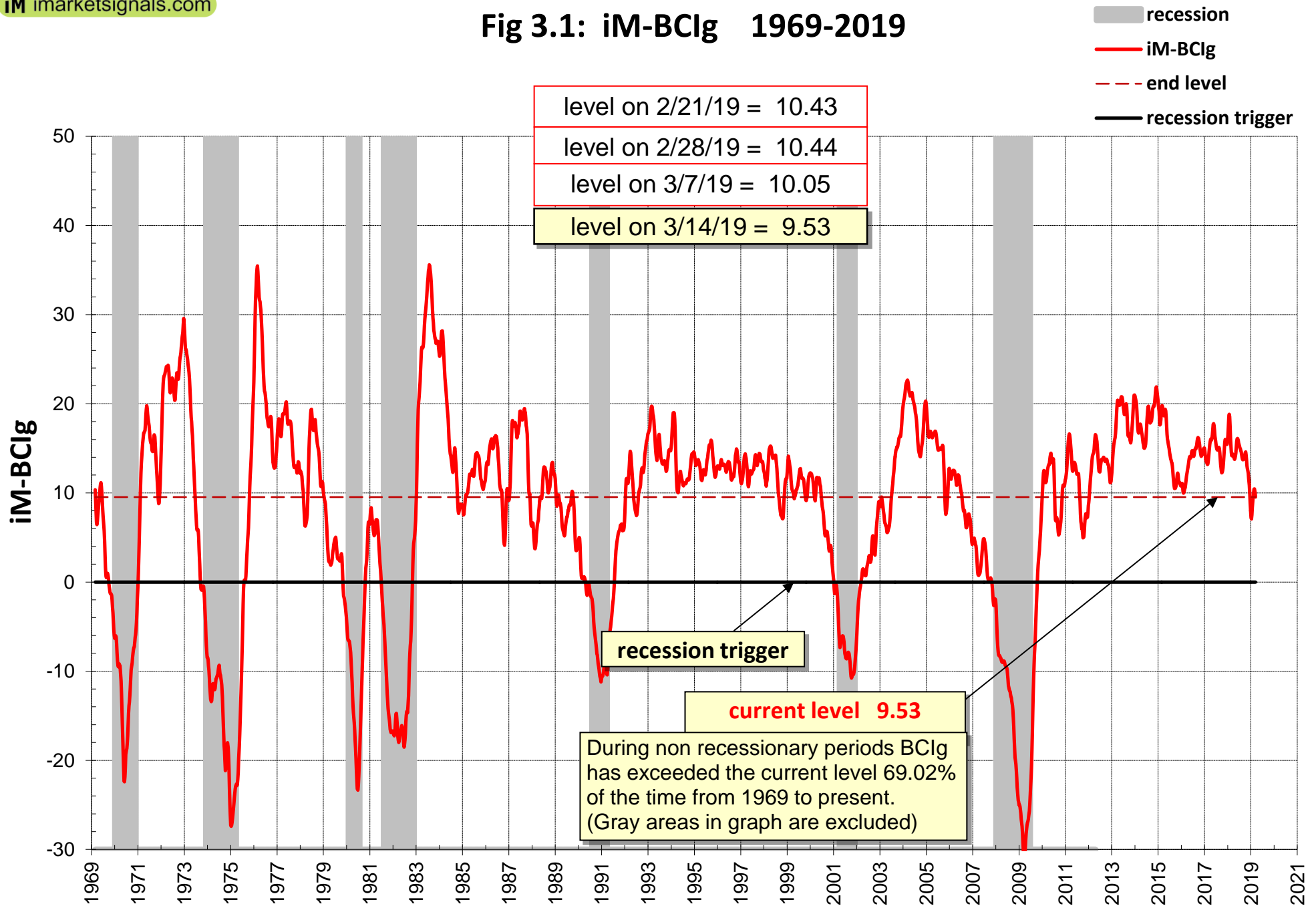
imarketsignals.com

BCIg Toni.xlsm

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

updated to 03/14/2019
EMA of FRR2-10 = 1.017

Recessions start	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

S&P500

smoothed Forward Rate Ratio 2-10

iM imarketsignals.com
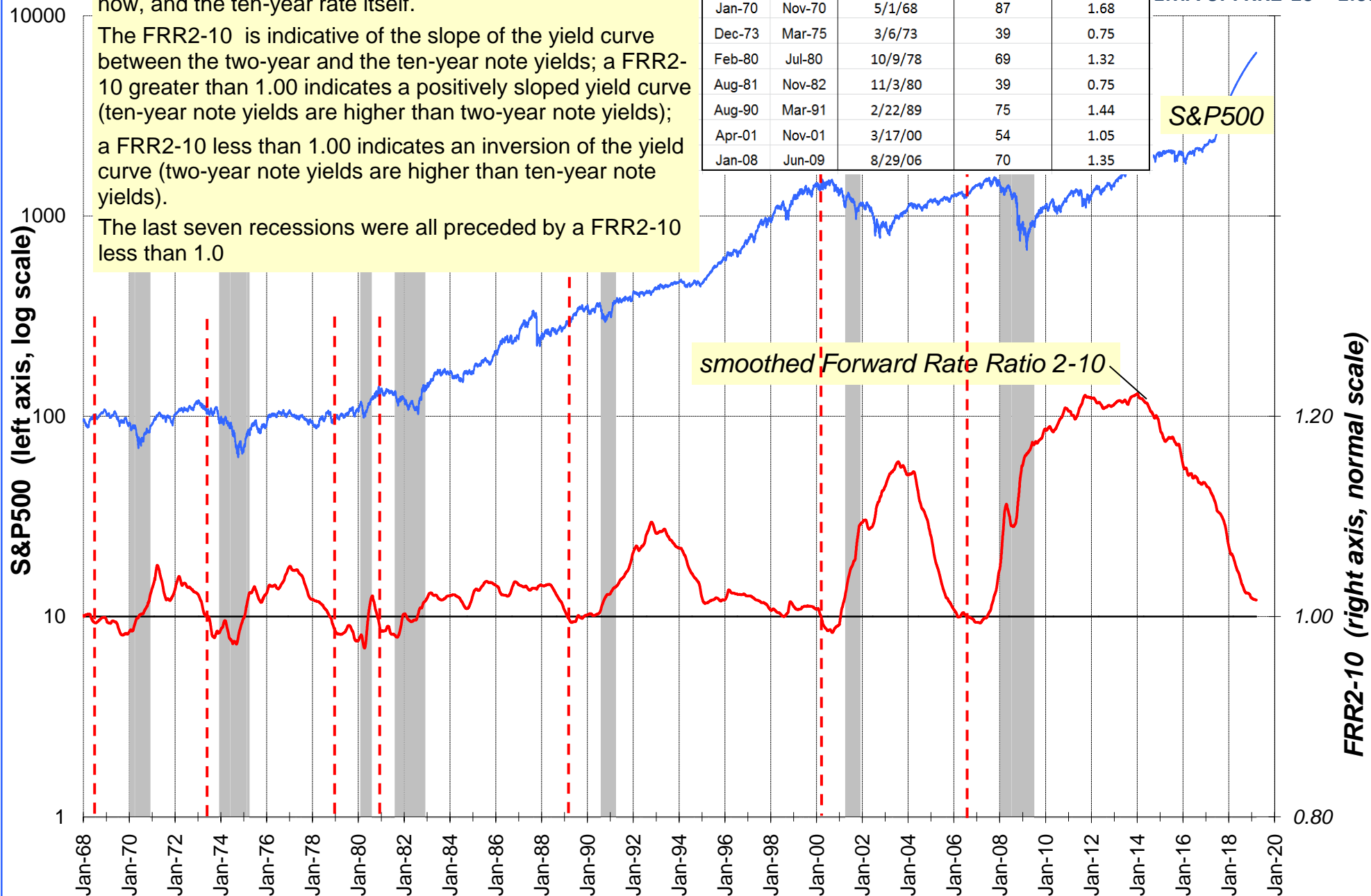
Fig.3.3   iM-Low Frequency Timer

Updated to: 3/14/2019

Investment Periods

SPY: 01/04/1999 – 02/05/2001
SHV: 02/05/2001 – 03/31/2003
SPY: 03/31/2003 – 12/24/2007
SHV: 12/24/2007 – 03/23/2009
SPY: 03/23/2009 – 01/14/2019
SHV: 01/14/2019 – 1/22/2019
SPY: 01/22/2019 –

Growth of $100 invested 1/4/1999:
in iM-Low Frequency Timer: 949.63
in SPDR S&P 500 ETF Trust: 329.03

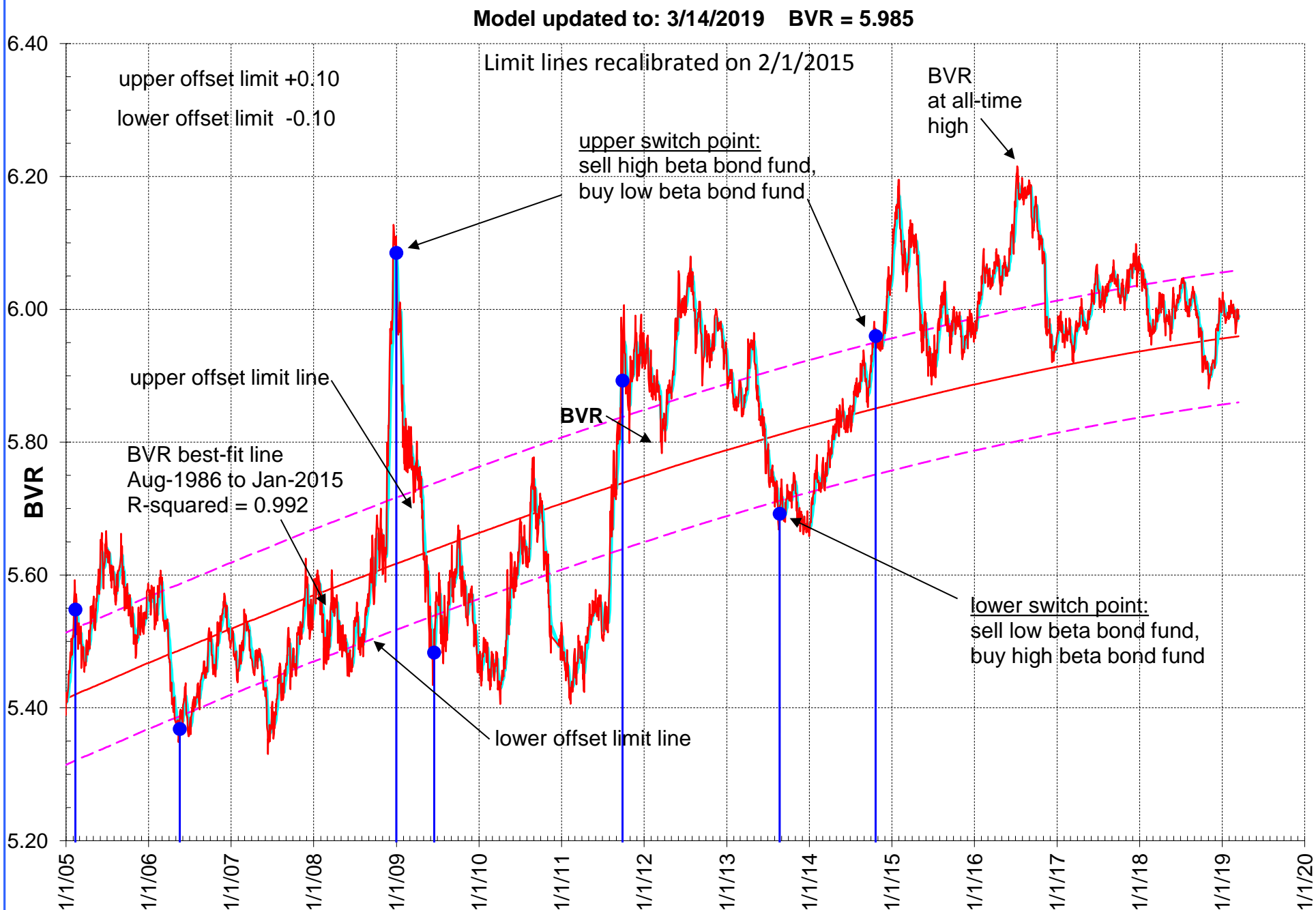NBER Recession
Low Freq Timer
SPY
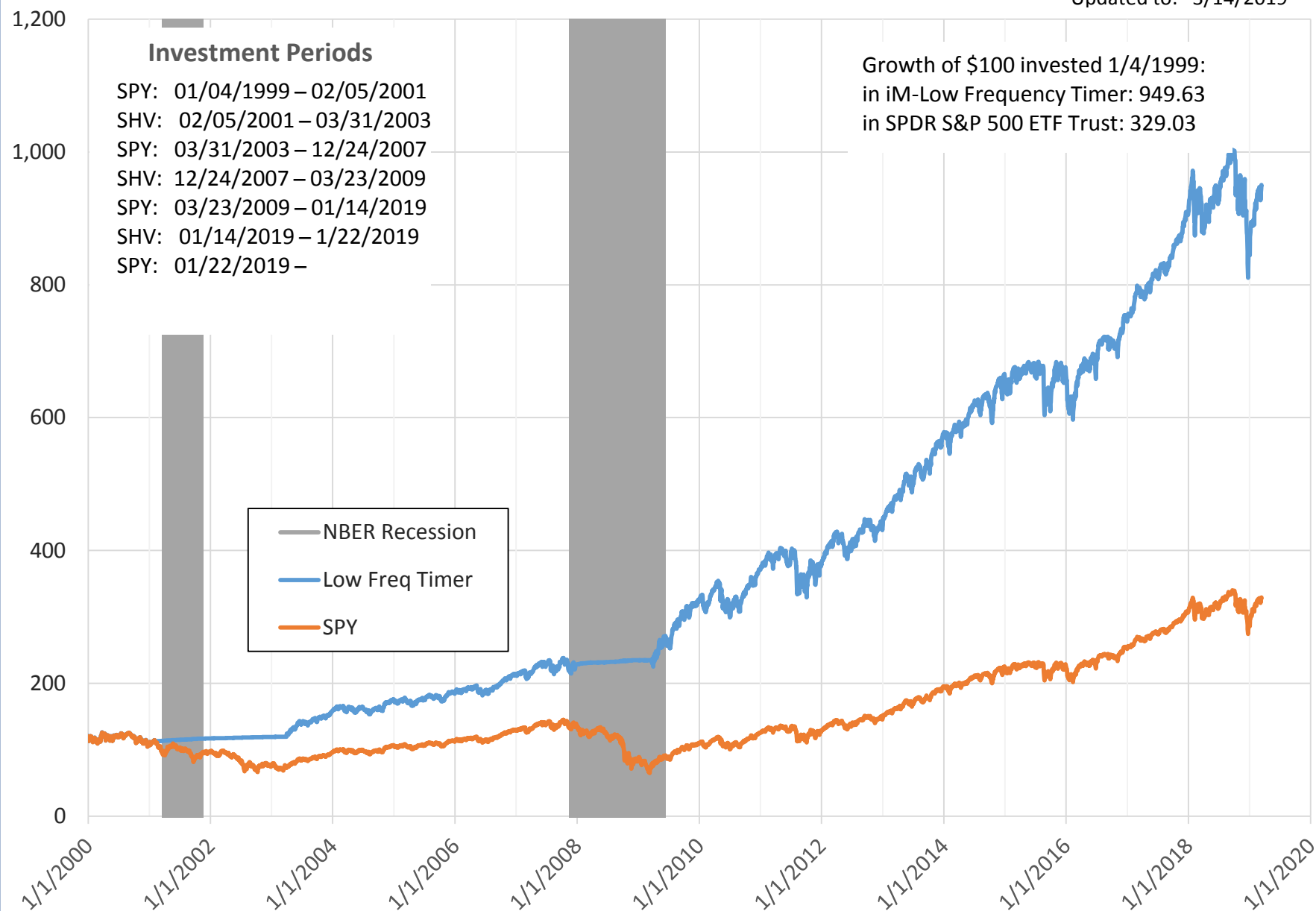
Figure 4: Bond Value Ratio (BVR) from 2005 to 2018

Figure 5: i10 - i2   Updated to…..3/14/2019
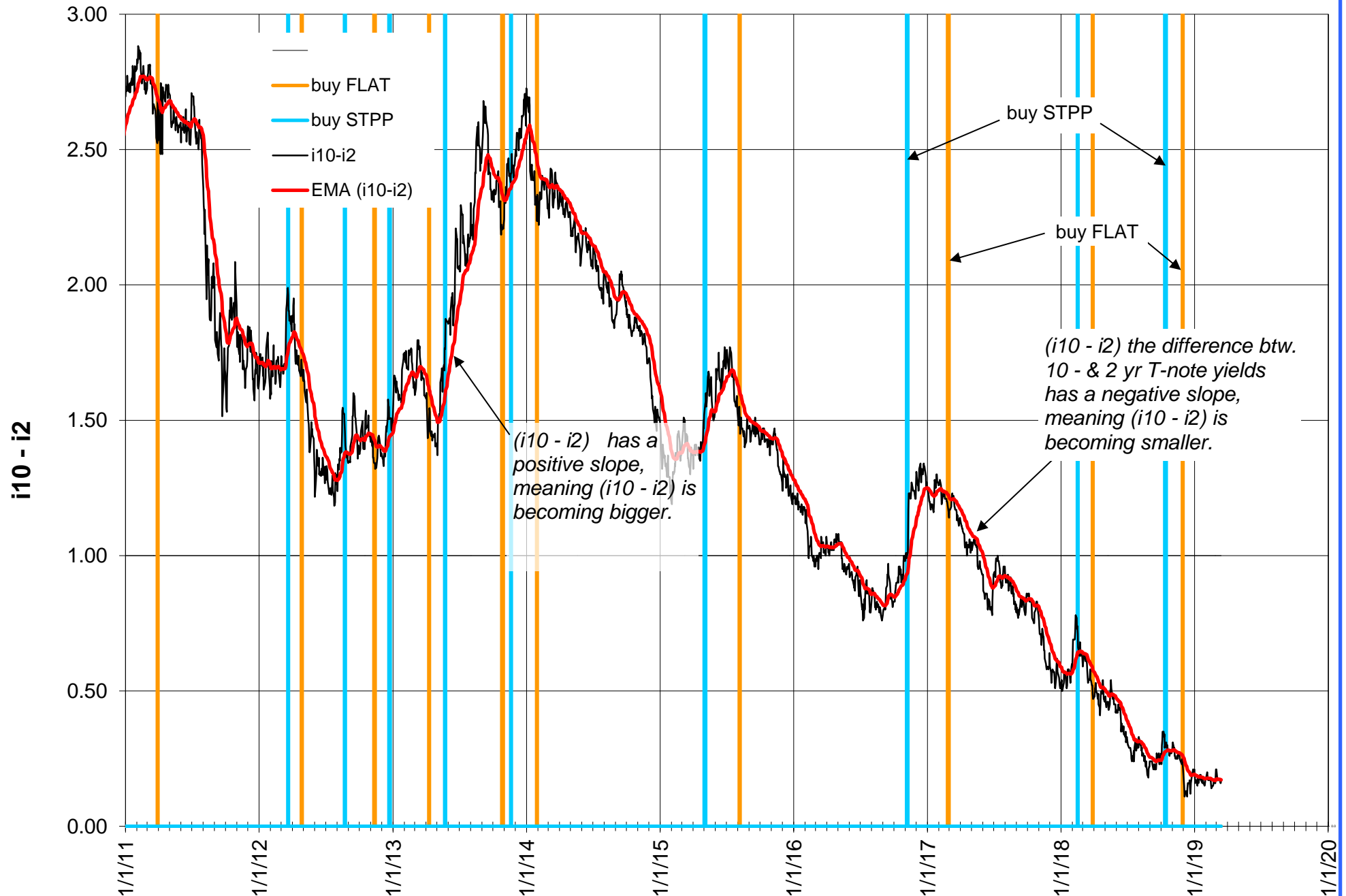
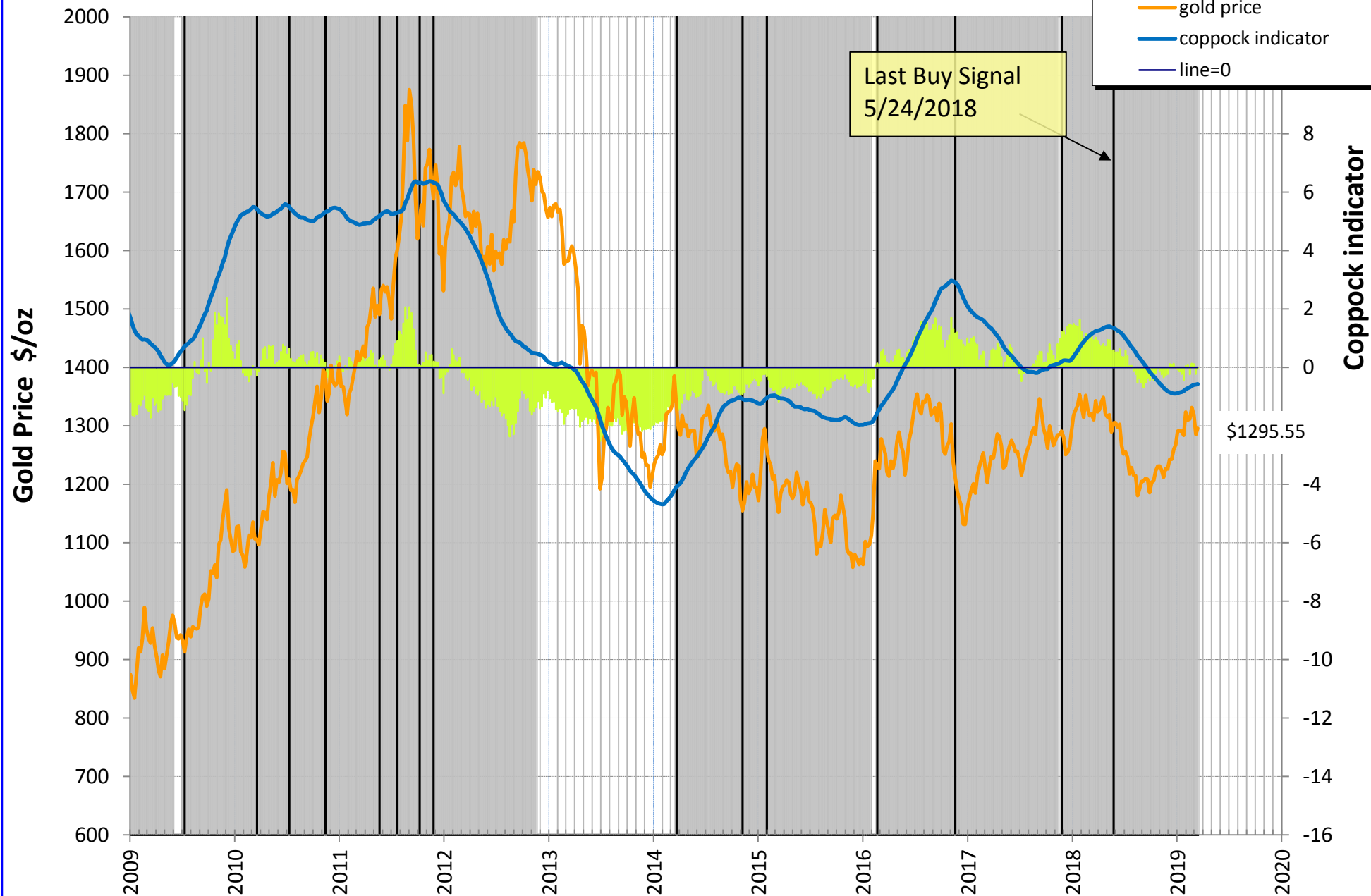Figure 6: Modified Coppock Indicator for Gold 2009-2018
updated to 03/14/2019

Last Buy Signal
5/24/2018

$1295.55

imarketsignals.com

Legend:
- period in gold
- buy signals
- yoy RRC% stdev
- gold price
- coppock indicator
- line=0

6-COPPOCK GOLD for updates.xlsm
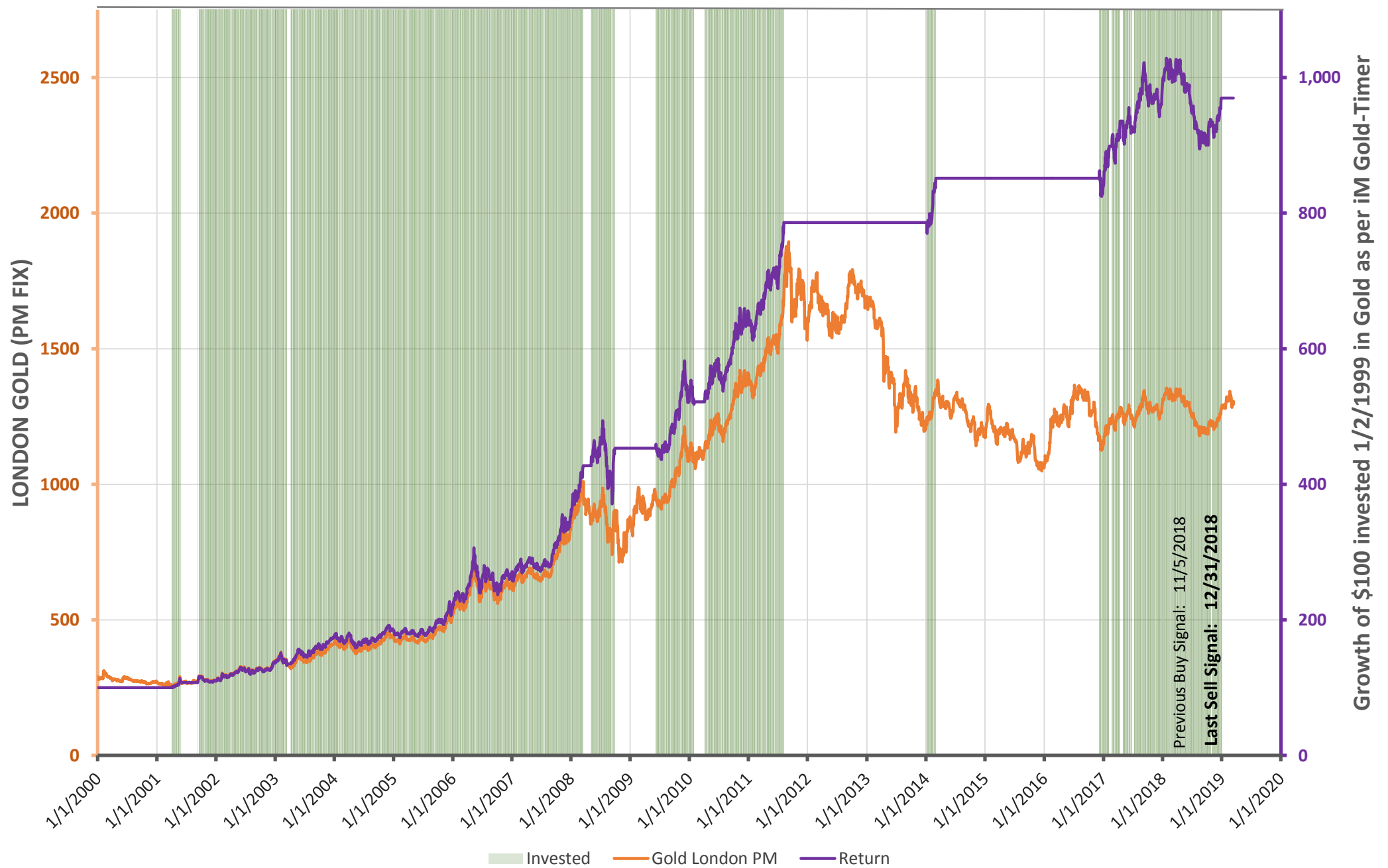
Fig. 6.1a   iM GOLD-TIMER - Rev 1

Figure 7: Modified Coppock Indicator for Silver 2009-2018
updated to 03/14/2019

iM imarketsignals.com

Legend:
- period in silver
- buy signals
- yoy RRC% stdev
- silver price
- coppock indicator
- line=0

Last Buy Signal

Last Sell Signal

$15.235