DECEMBER 7, 2017

BUSINESS CYCLE INDEX

The BCI at 235.2 is above last week's downward revised 233.9, and it is at a new high for this business cycle as indicated by the BCIp at 100. In addition, the 6-month smoothed annualized growth BCIg is at 16.6, which is above last week's 16.4.

No recession is signaled.

DECEMBER 8, 2017

MARKET SIGNALS SUMMARY:

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

STOCK-MARKETS:

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

The 3-mo Hi-Lo Index of the S&P500 is below last week's level at 11.06% (last week 11.48%) and is in the market since 8/22/2017.

The MAC-AU model is invested in the markets after it generated a buy signal on March 21, 2016. The sell-spread is above 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:
Figure 3 shows the COMP above 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 is up from last week's level. An imminent recession is not signaled . Please also refer to the BCI page

The Forward Rate Ratio between the 2-year and 10-year U.S. Treasury yields (FRR2-10) is below last week's level and far away from signalling a recession. The FRR2-10 is trending 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 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. A buy FLAT signal was generated on 2/8/2017.   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.

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.

MONTHLY UPDATES (Next Update January 5, 2018)

DECEMBER 8, 2017

UNEMPLOYMENT

The unemployment rate recession model (article link), has been updated with the November 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 13.56% (last month 12.39%) and EMA spread of the UER is at minus 0.28% (last month minus 0.29%).

THE DYNAMIC LINEARLY DETRENDED ENHANCED AGGREGATE SPREAD:

The updated level of this indicator, -133bps (last months -129bps), 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.

TRADE WEIGHTED USD

The continued weakening of TW$ value is seemingly halted for now.

TIAA REAL ESTATE ACCOUNT

The 1-year rolling return for the end of last month is 4.64%.   A sell signal is not imminent.

iM's Business Cycle Index (BCI)

BCIp, BCI and BCIg
updated to December 07, 2017

iM imarketsignals.com

Date	11/09	11/16	11/23	11/30	12/07
BCIp	100.0	100.0	99.5	100.0	100.0
BCI	232.7	233.5	233.4	233.9	235.2
BCIg	15.2	16.0	16.3	16.4	16.6

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

5 day average of S&P 500

BCI

BCIg

BCIp : The BCI in off-peak-mode

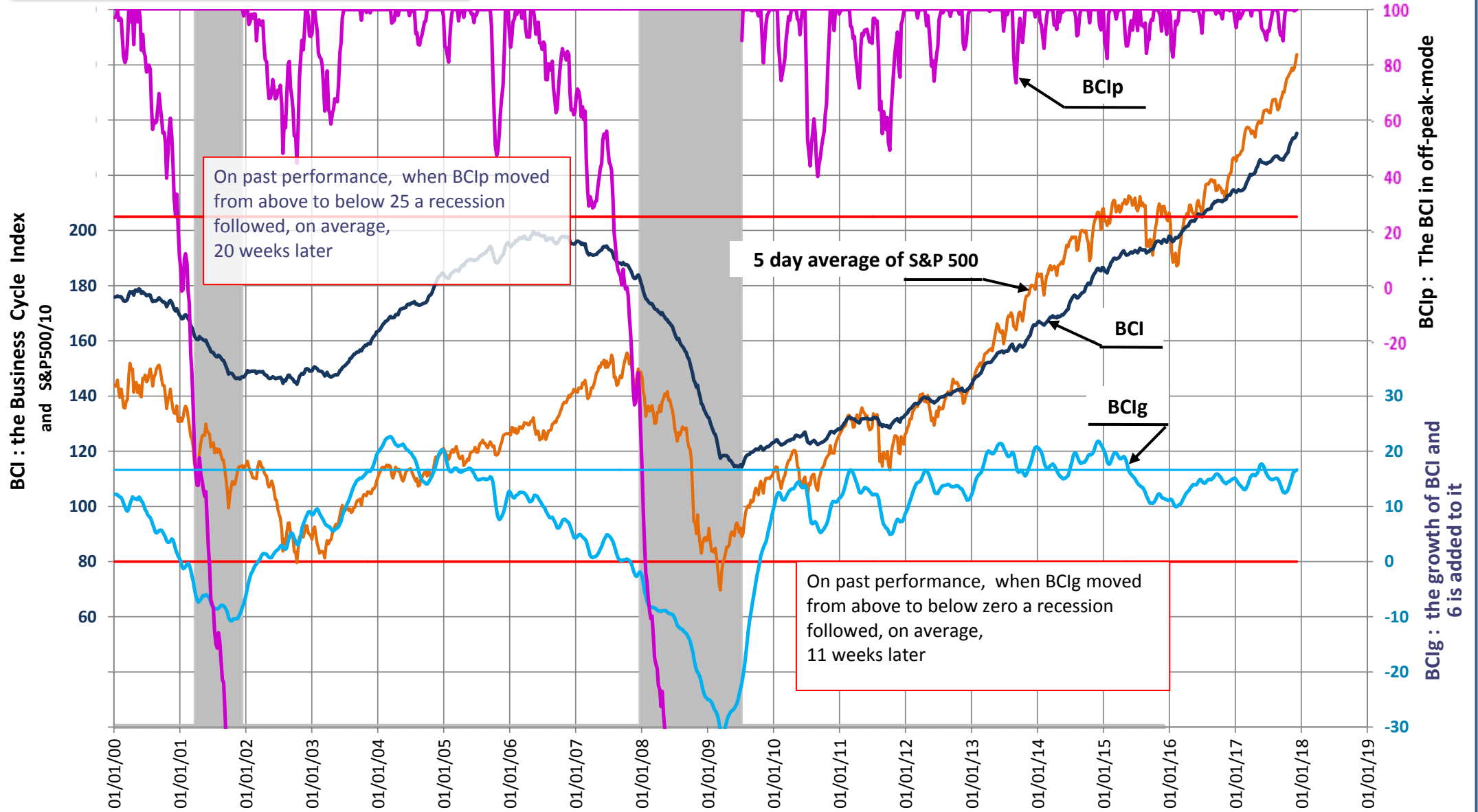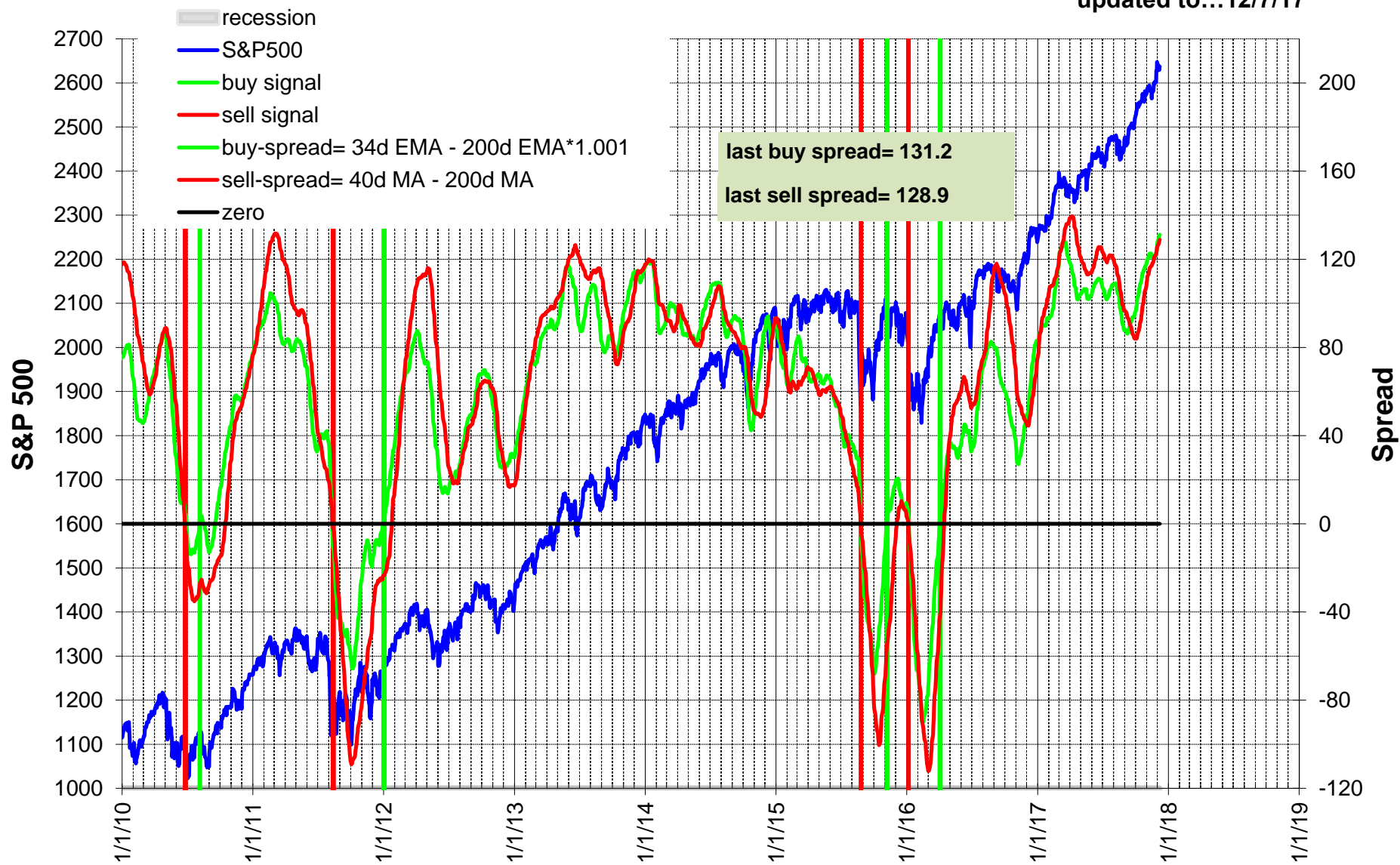BCI : the Business Cycle Index and S&P500/10

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

Figure 2: Buy and Sell signals for S&P 500 2010-16 from the modified golden-cross MAC-System

Fig 2.1: Buy and Sell signals for the Australia All Ordinaries Index from the MAC-AU System
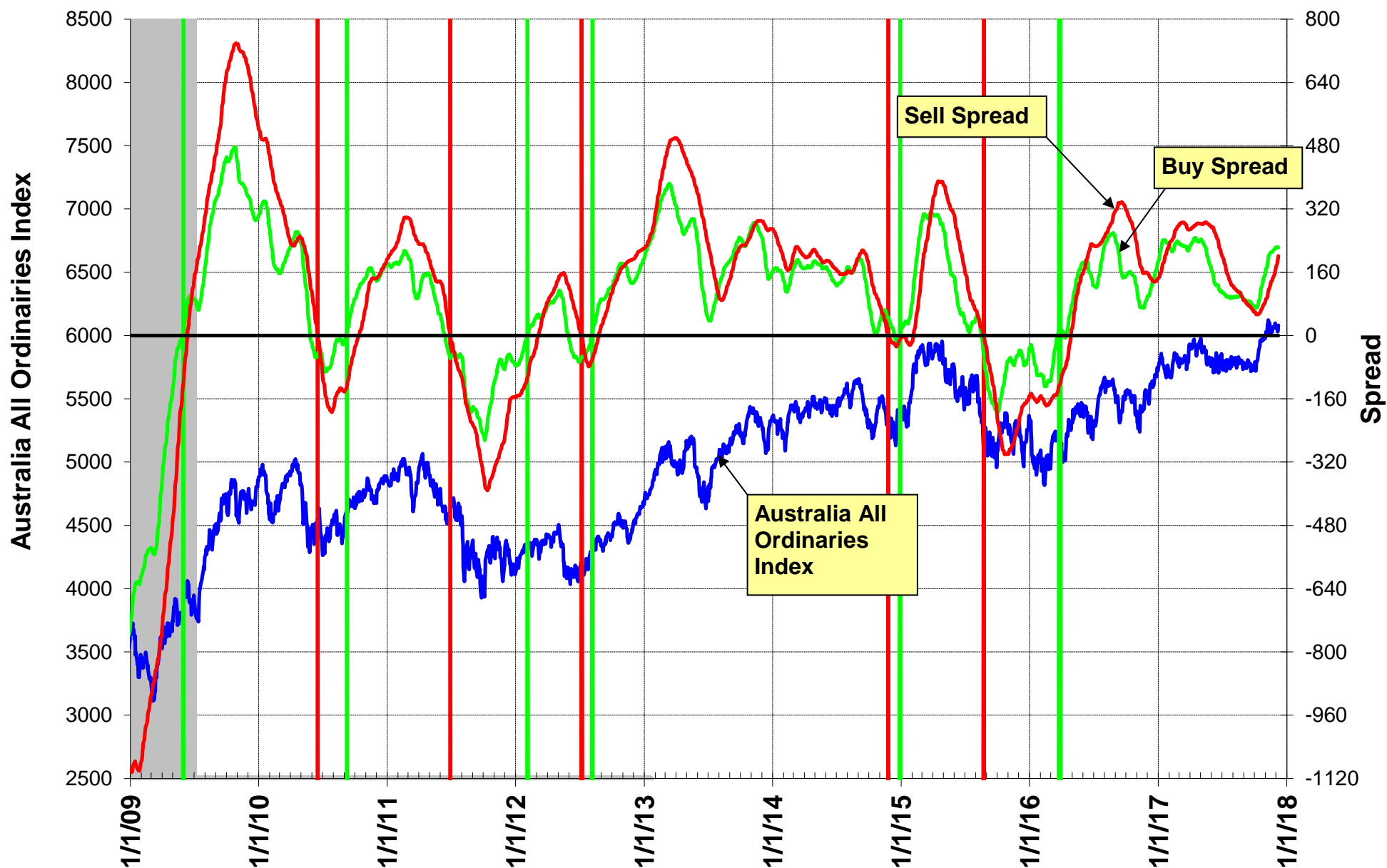
updated to Dec-8-17
last sell spread= 201.1

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
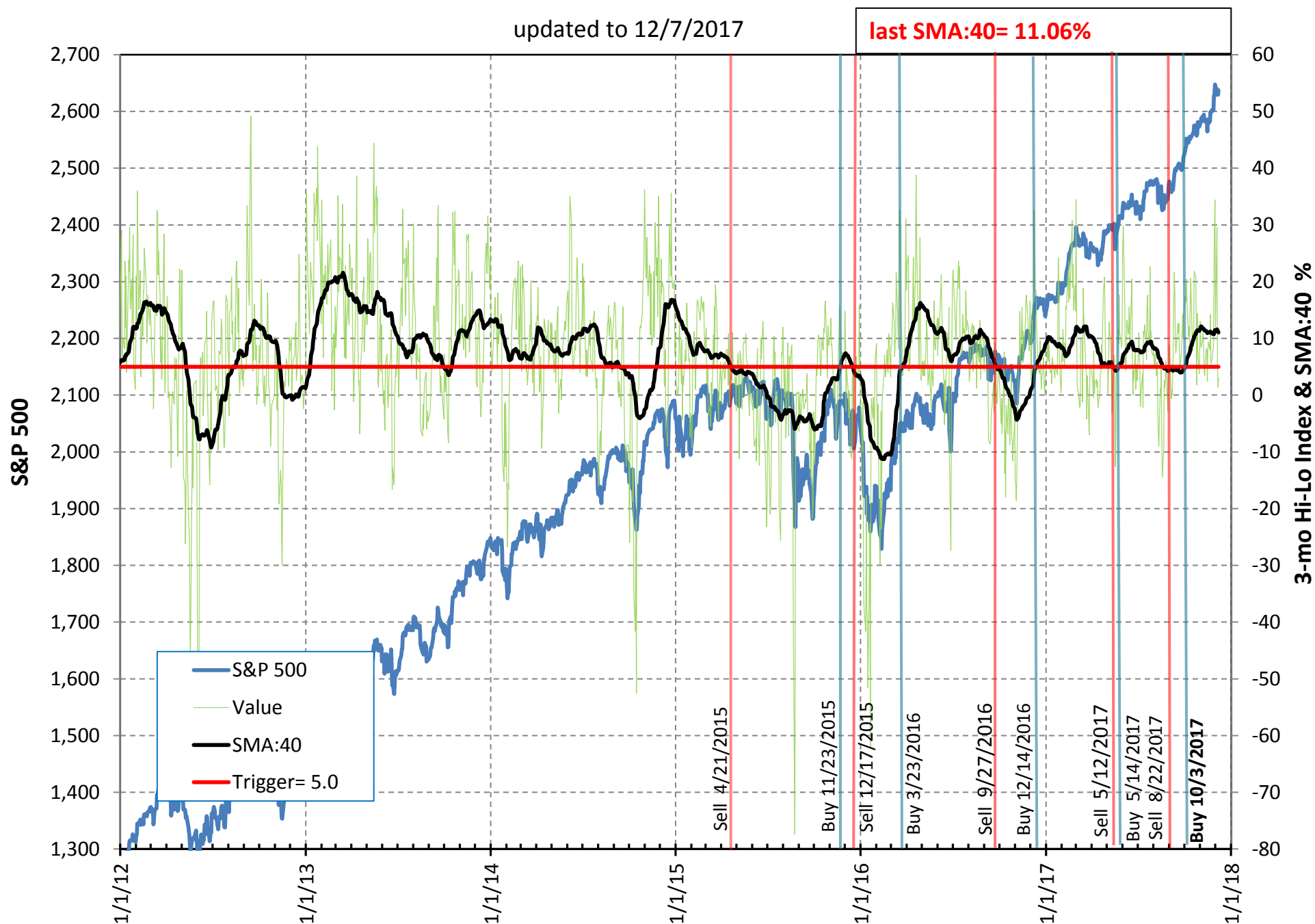
Fig. 3: COMP Leading Indicator of US Economy 1969-2016

COMP level on 11/17/17 = 25.42
COMP level on 11/24/17 = 25.0
COMP level on 12/01/17 = 25.79
COMP level on 12/08/17 = 26.77

Note: Some of the levels of COMP may differ from previous releases due to revisions of COMP's components.

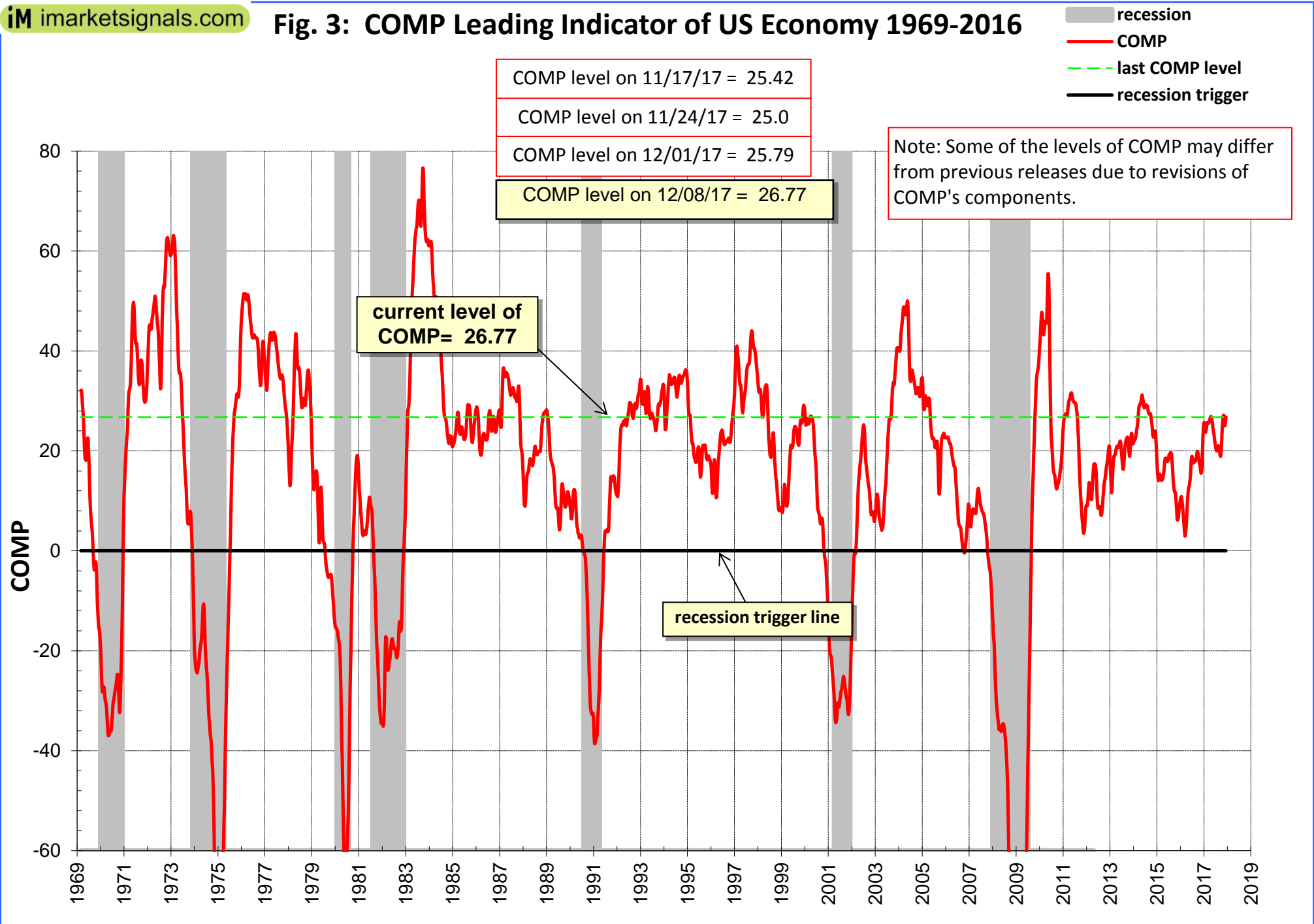current level of COMP= 26.77

recession trigger line

Legend:
recession
COMP
last COMP level
recession trigger

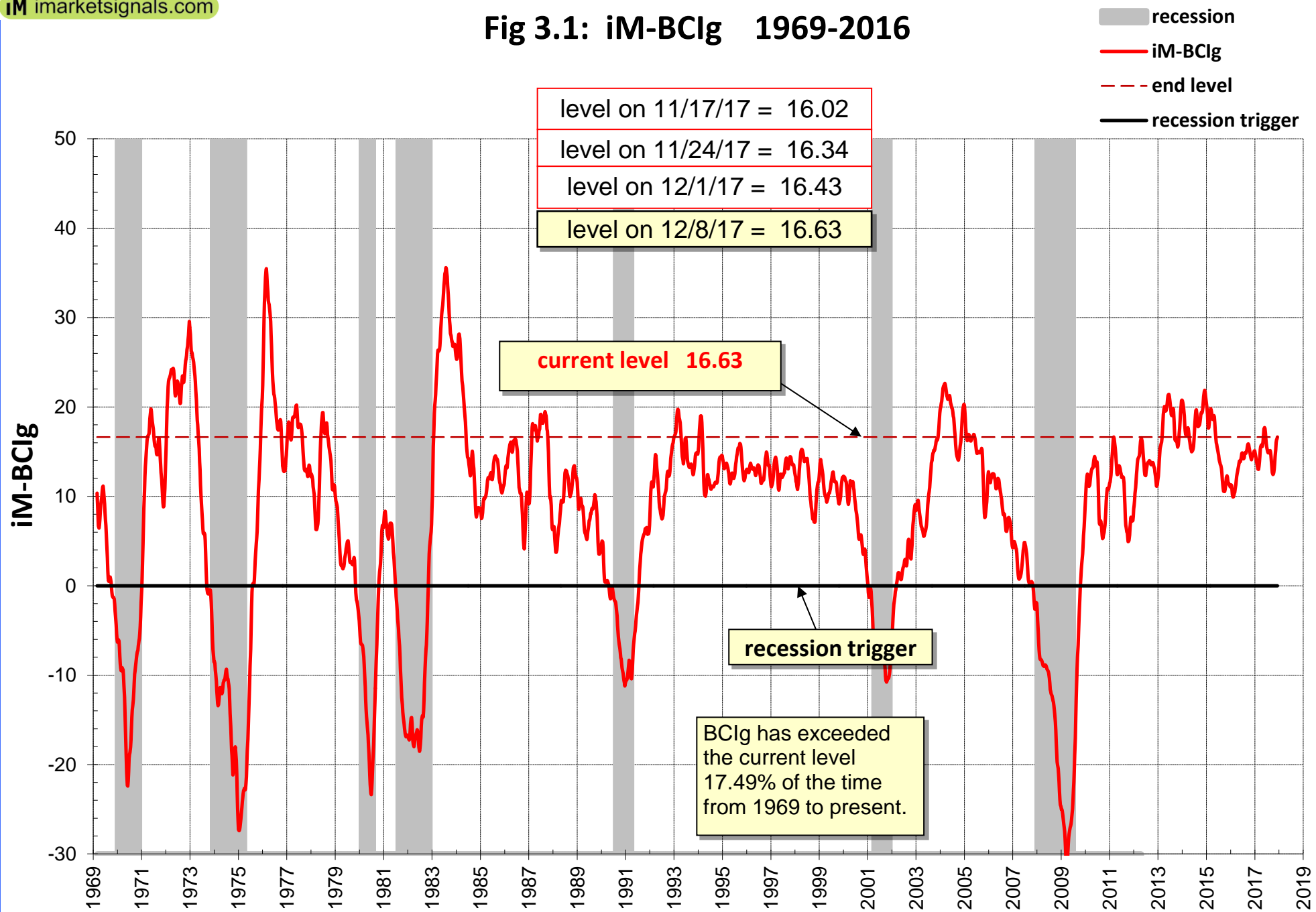3-COMP.xlsm

Fig 3.1: iM-BCIg 1969-2016

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

iM imarketsignals.com

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 12/07/2017
EMA of FRR2-10 = 1.078

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-Fig3.2 3.2 FRR2-10.xlsm Page 1
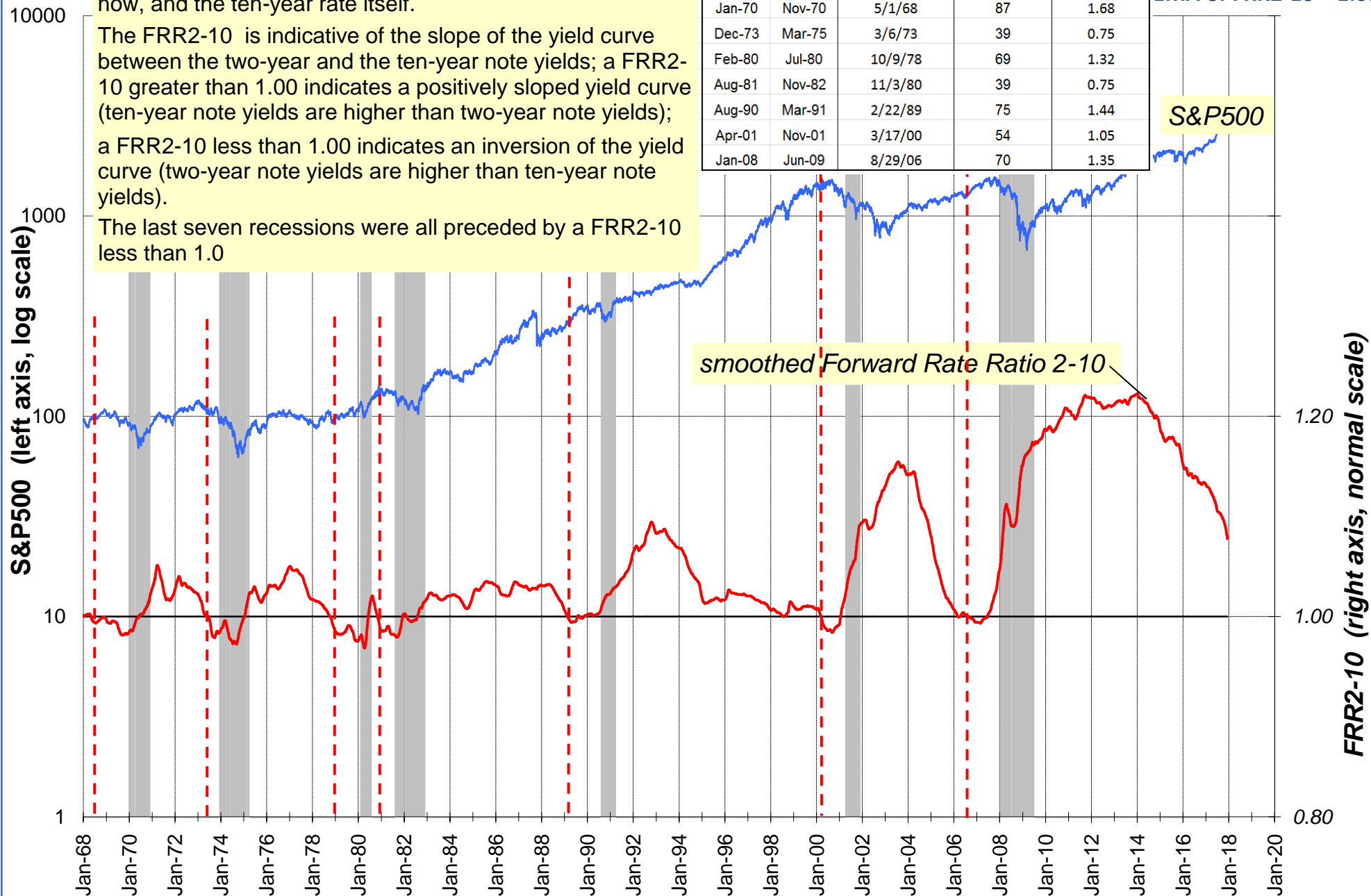
Figure 4: Bond Value Ratio (BVR) from 2005 to 2017

Figure 5: i10 - i2   Updated to…..12/7/17

Note: Past performance does not guarantee future returns, investments may increase or decrease in value and you may lose money using this model.

iM imarketsignals.com

Legend:
- buy FLAT (orange)
- buy STPP (cyan)
- i10-i2 (black)
- EMA (i10-i2) (red)

buy STPP

buy FLAT

buy STPP

buy FLAT

(i10 - i2) has a positive slope, meaning (i10 - i2) is becoming bigger.

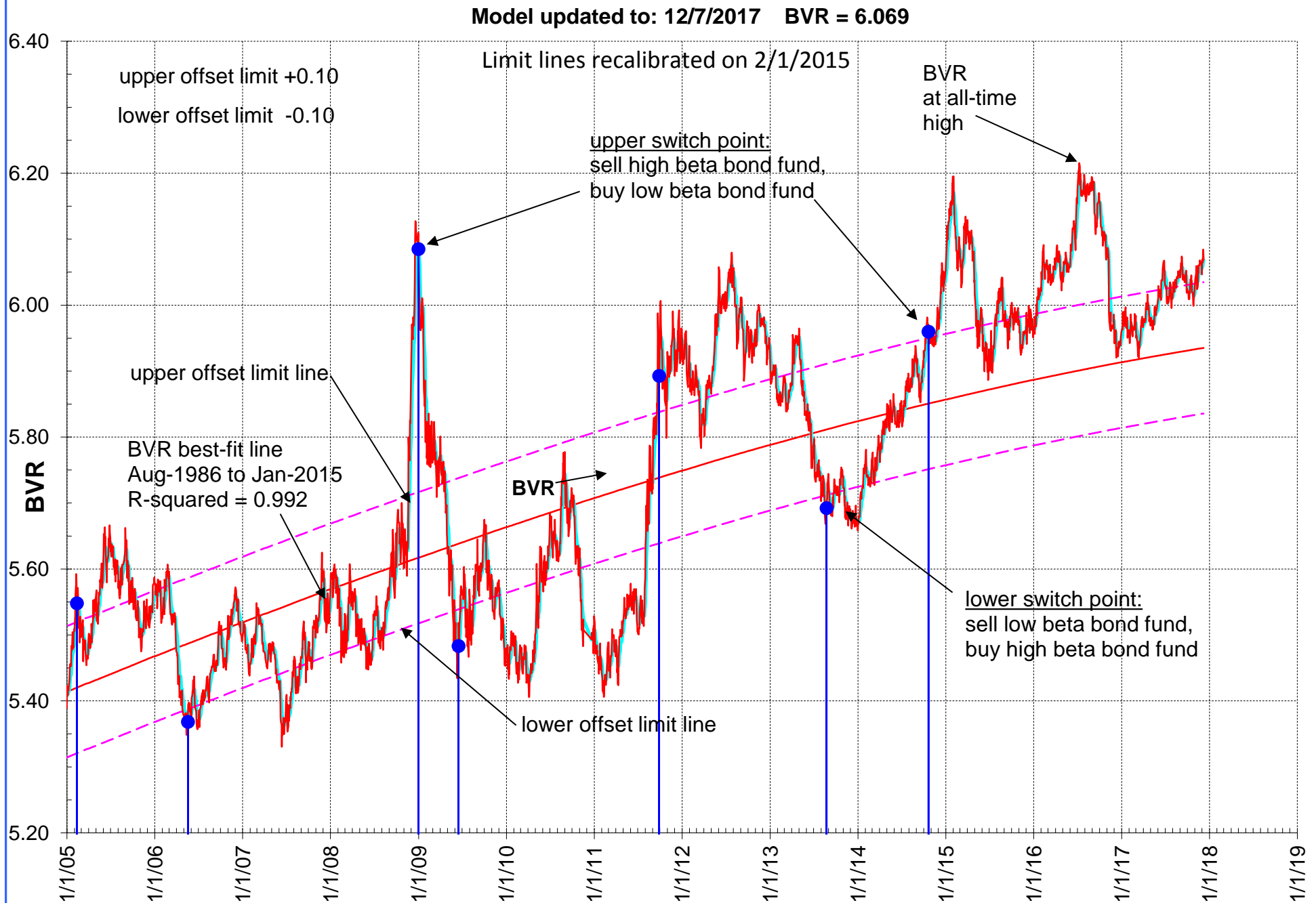(i10 - i2) the difference btw. 10 - & 2 yr T-note yields has a negative slope, meaning (i10 - i2) is becoming smaller.
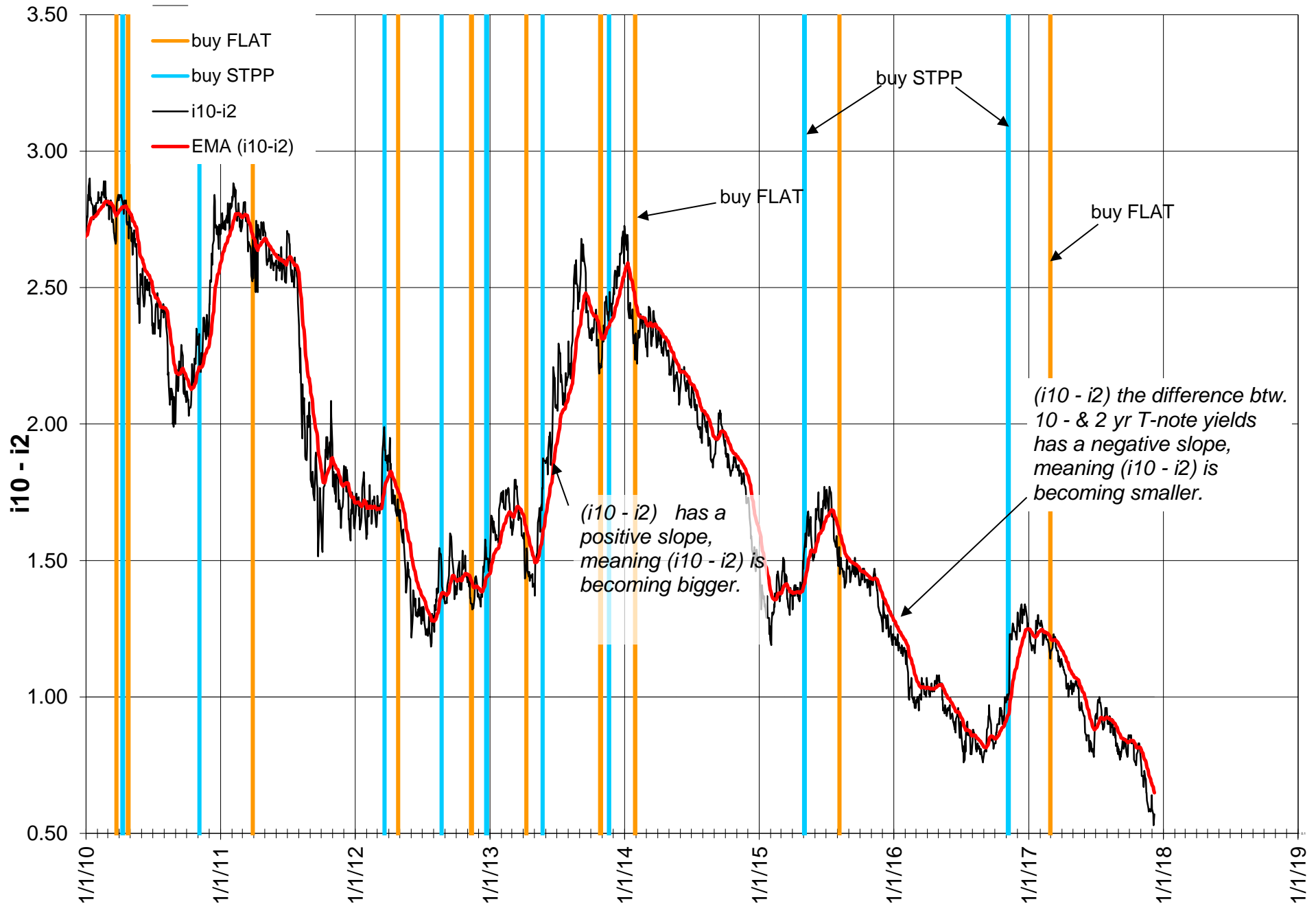
5-Yield Curve.xlsm 09-15

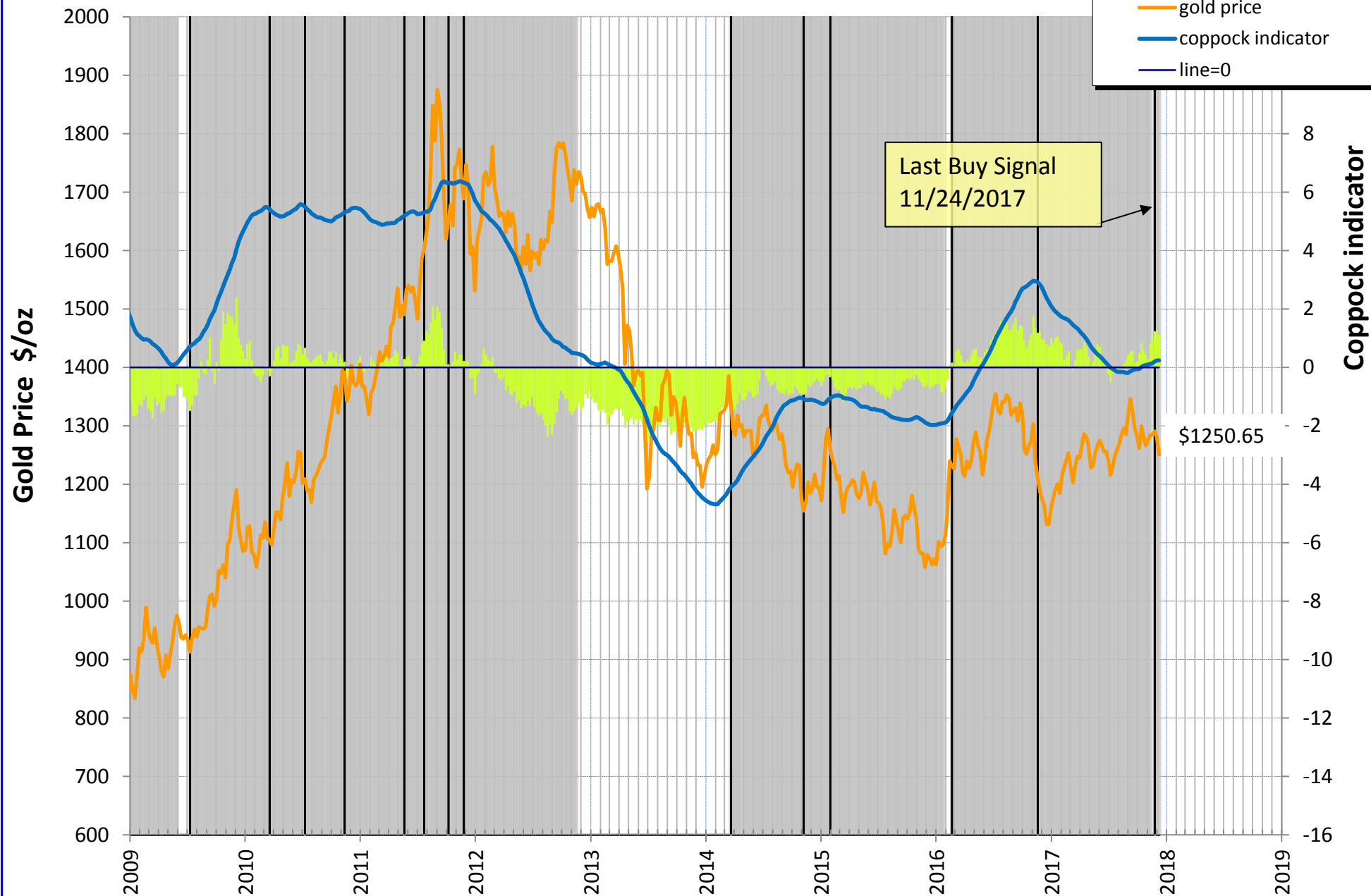Figure 6: Modified Coppock Indicator for Gold 2009-2017
updated to 12/08/2017

Fig. 6.1a   iM GOLD-TIMER - Rev 1

Updated to: 12/7/2017

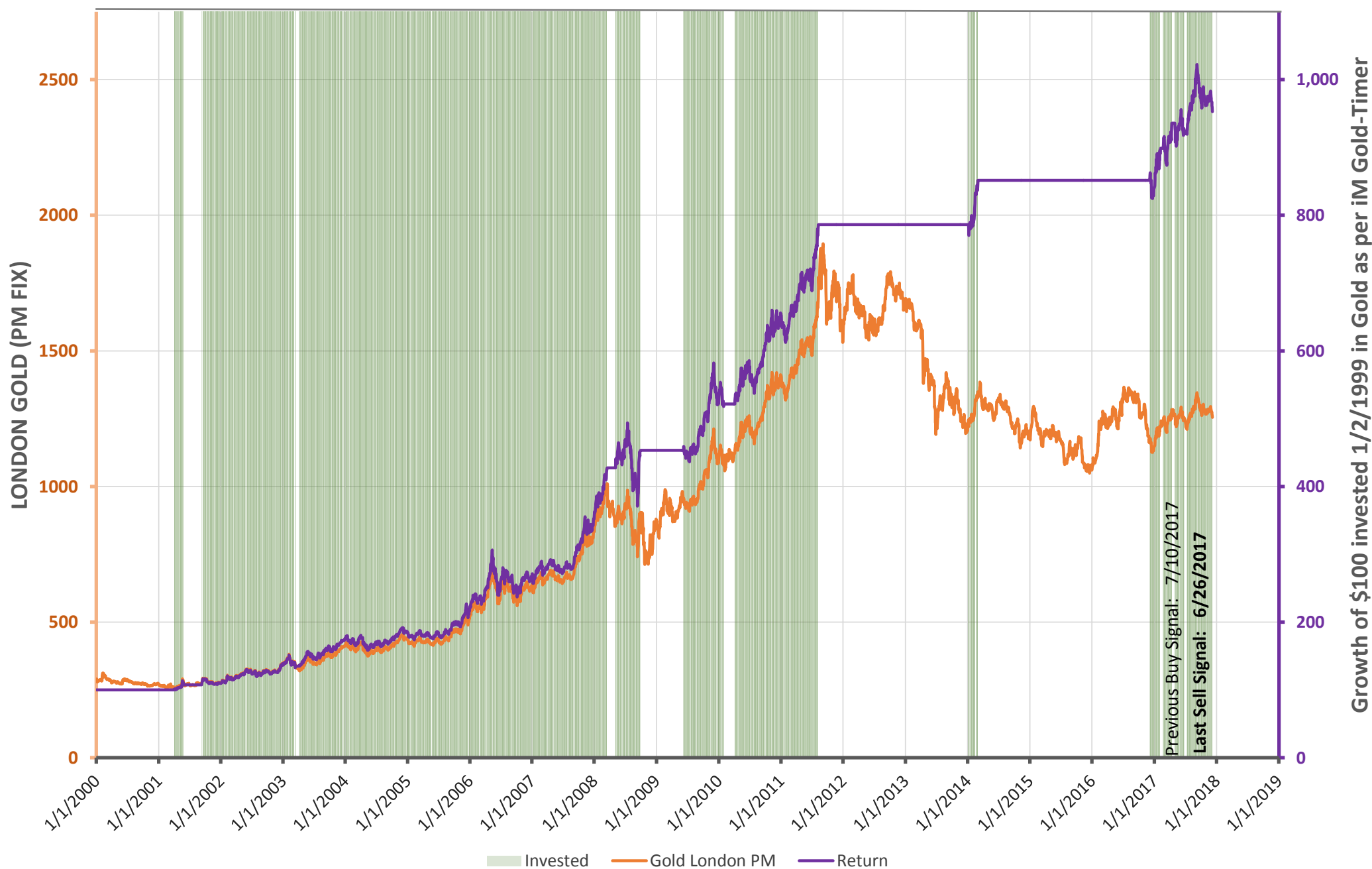Figure 7: Modified Coppock Indicator for Silver 2009-2017
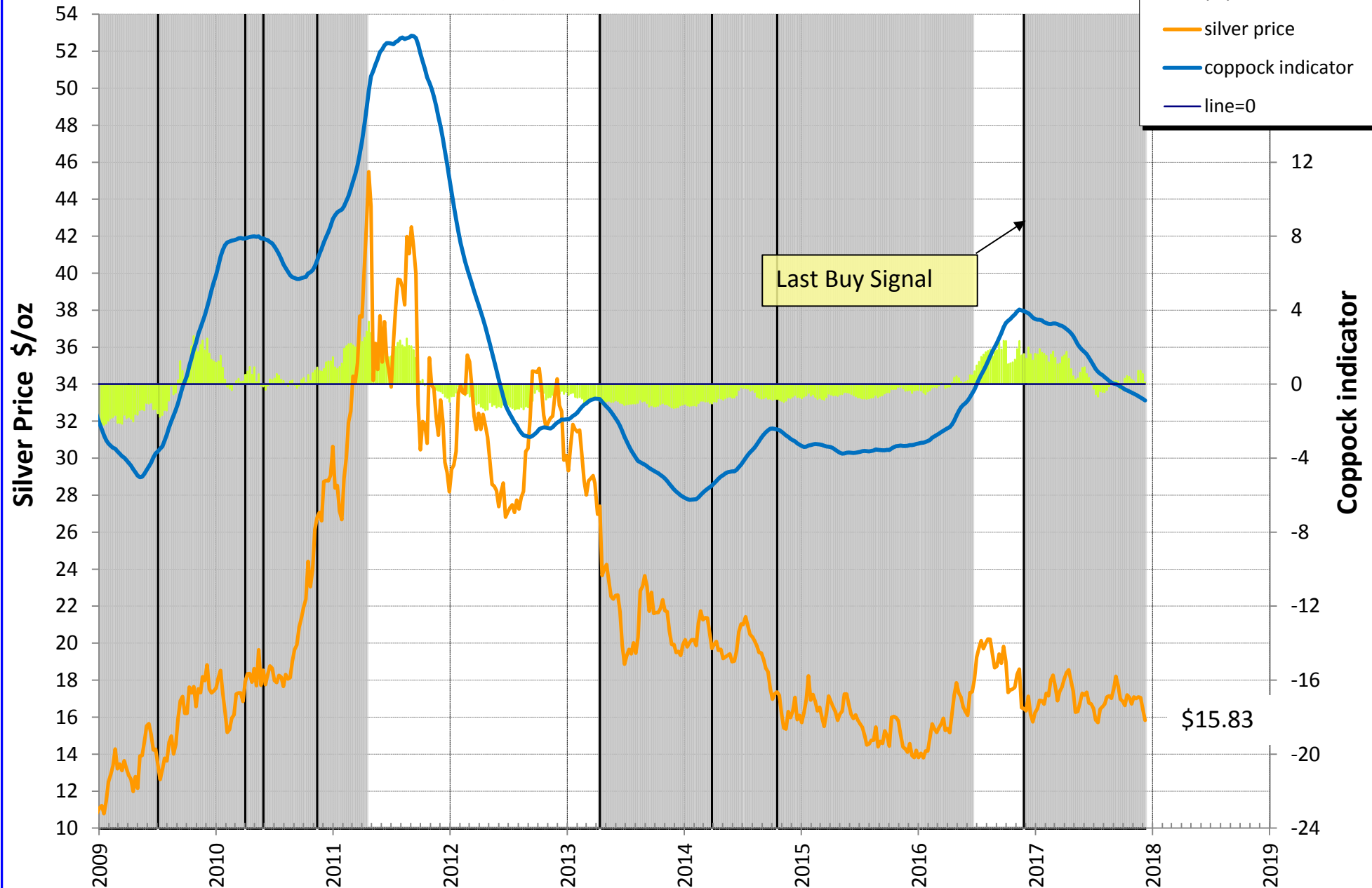updated to 12/08/2017

iM imarketsignals.com

Fig-8 Unemployment Rate and Recessions (real-time) 2000-2017

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

updated to 1-5-2018 with November UER= 4.1%

Legend:
- Recession
- Recession Signal
- UER shortEMA
- UER longEMA
- UERg
- 0
- 19-wk rate of change UER
- ④ Lead to rec. start - weeks
- [-12] Lead to rec. end - weeks

UER shortEMA is below UER longEMA, no recession is signaled. Spread= -0.28%

UER's 19wk rate of change = -4.8%

UERg= -13.56%

Y-axis (left): Unemployment Rate (UER) %

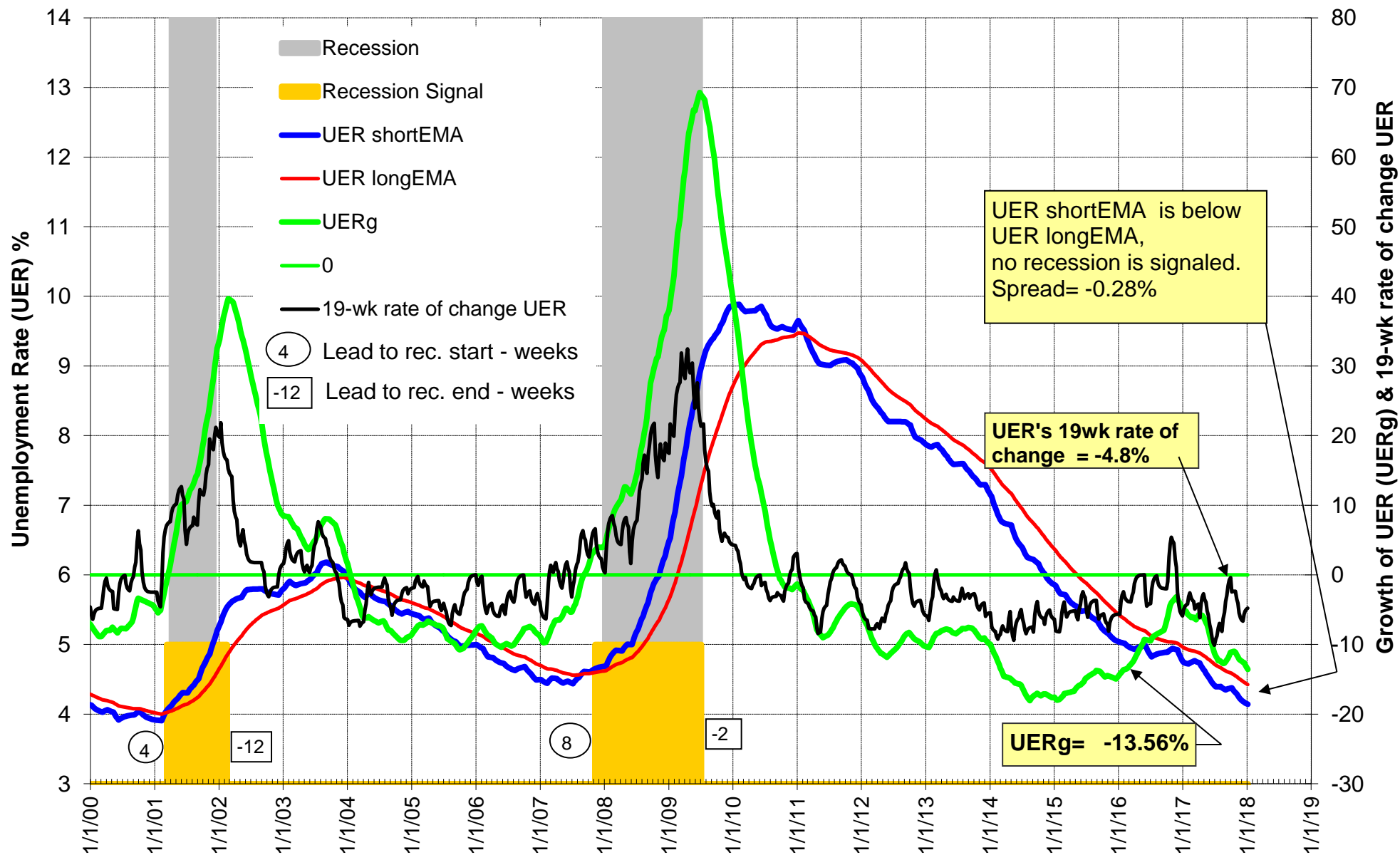Y-axis (right): Growth of UER (UERg) & 19-wk rate of change UER

12/8/2017

Fig-9 Modified Coppock Indicator for S&P500 2005-2017
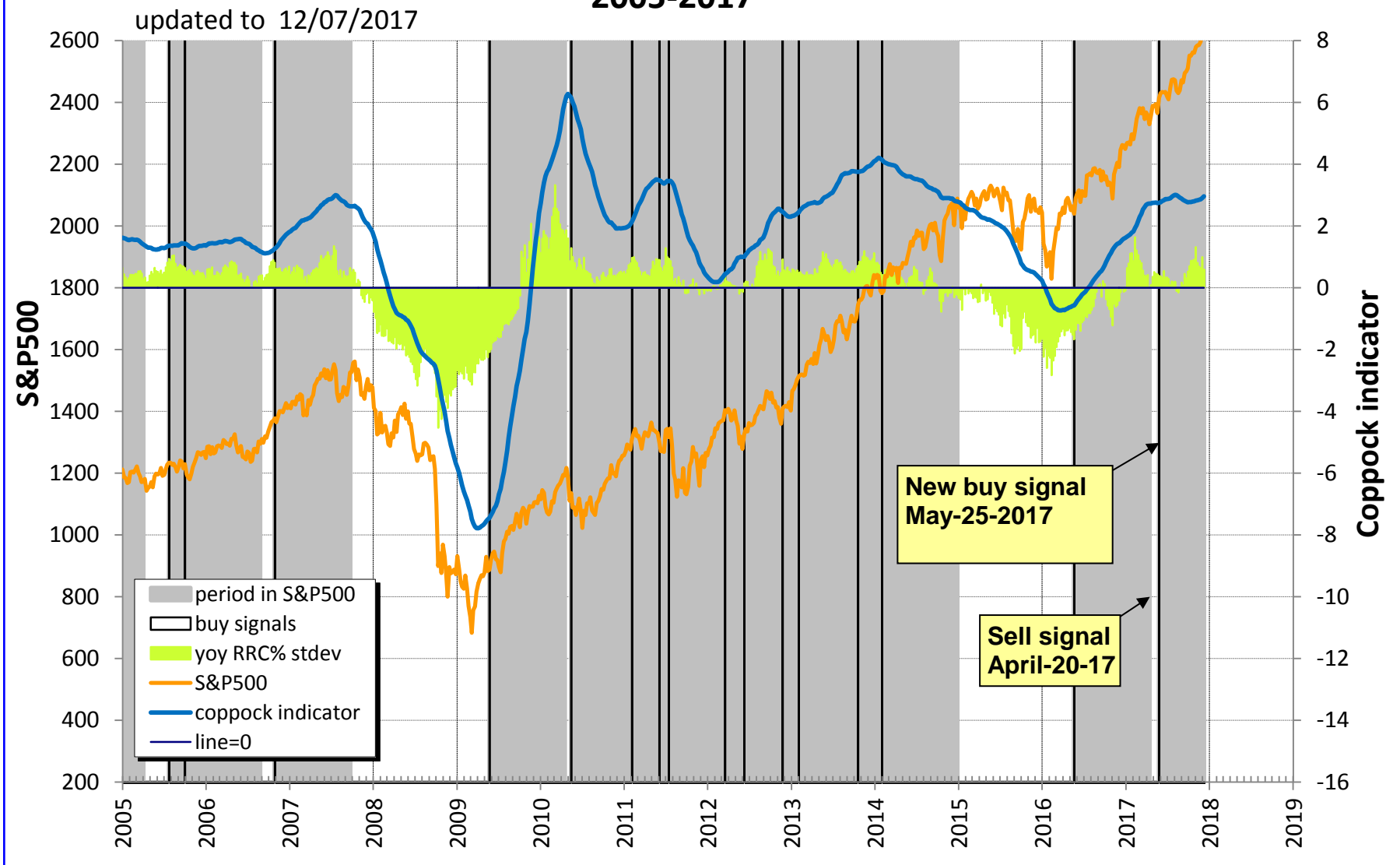
Fig. 9a   CAPE-Cycle-ID and the YoY-ROC from 1990

imarketsignals.com

updated to 11/30/2017
Shiller CAPE= 31.31

CAPE-Cycle-ID = +2

CAPE-Cycle-ID =
 +2 if YoY-ROC slope is +ve
 0 if YoY-ROC slope is -ve

CAPE-Cycle-ID =
 0 if YoY-ROC slope is +ve
 -2 if YoY-ROC slope is -ve

Cycle-ID

S&P 500

YoY-ROC
year-over-year rate-of-change of the CAPE
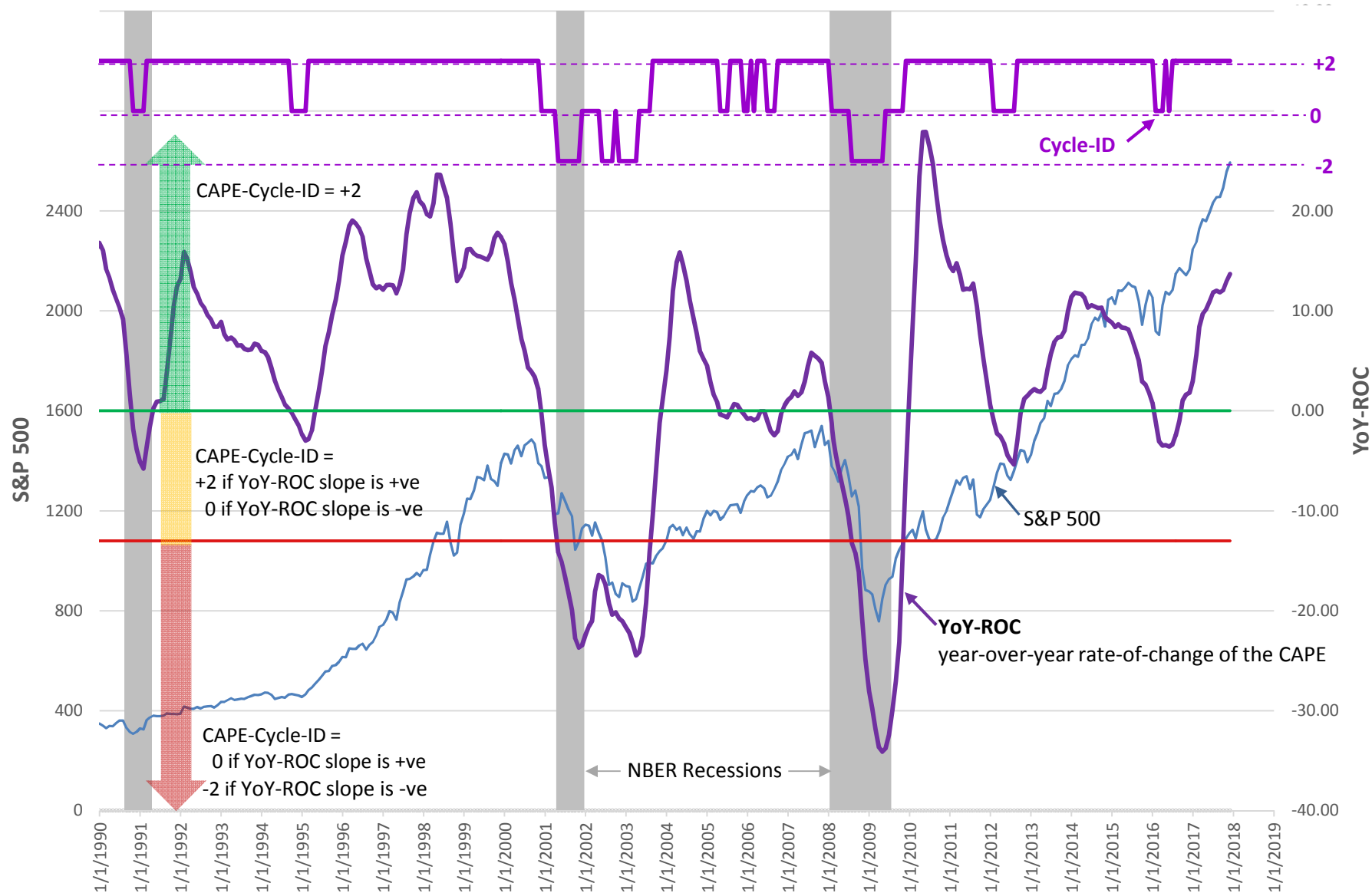
← NBER Recessions →

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/

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

possible recession signaled near/after October 2017

updated on Dec-1-2017, last level of DAGS = -133 bps

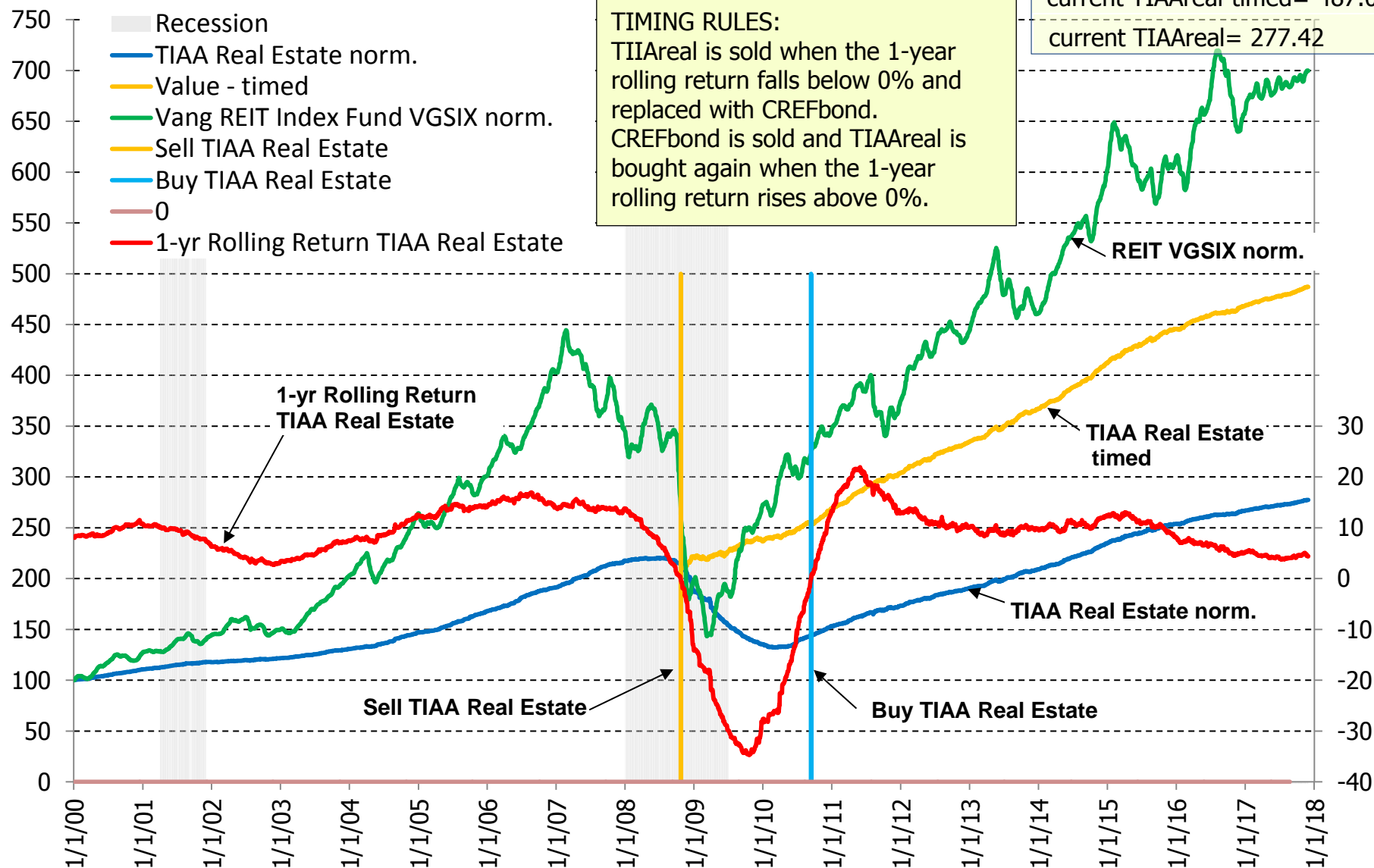iM-DAGS.xlsm

iM imarketsignals.com
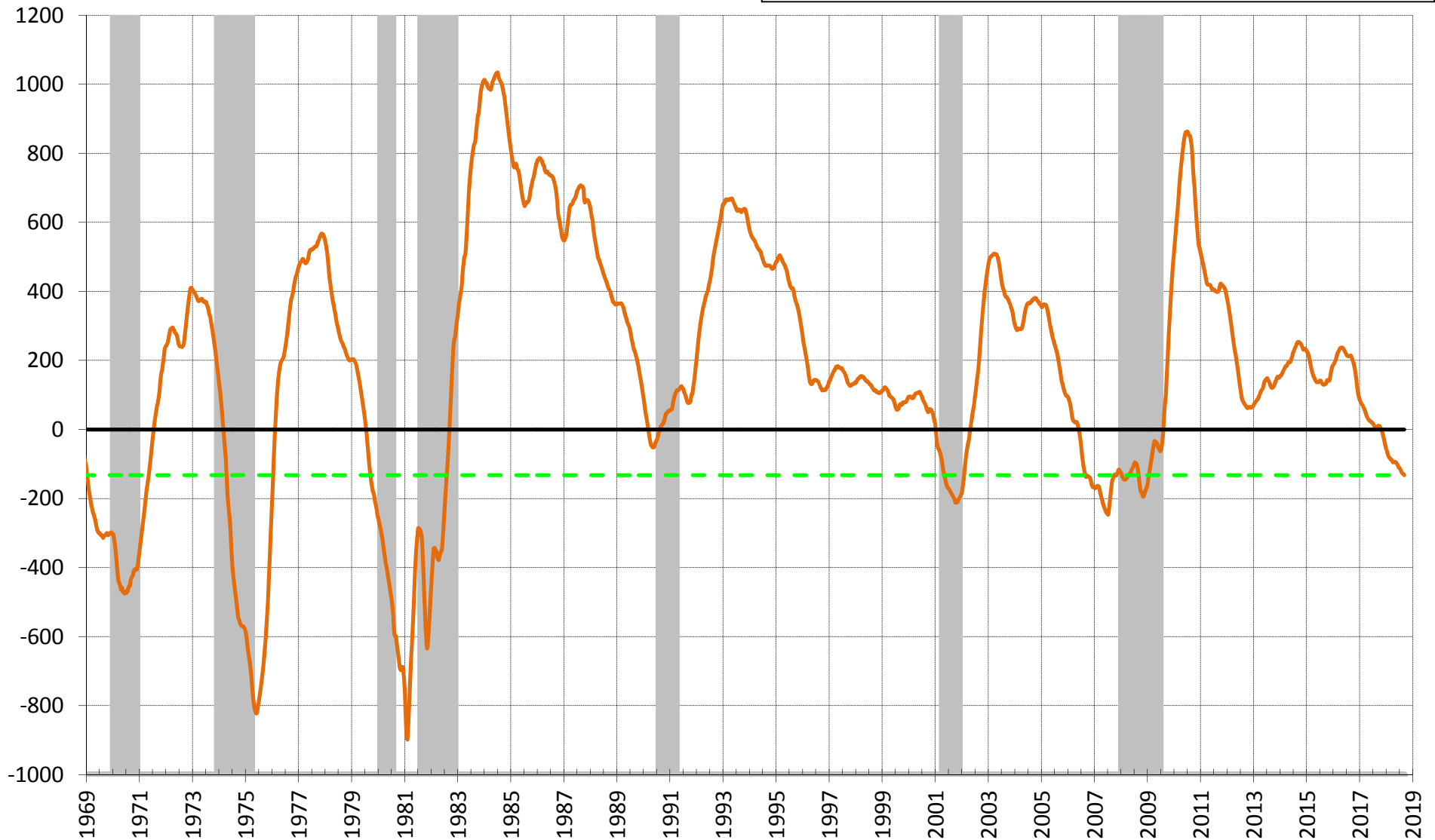
TIAA Real Estate Account vs. Vanguard REIT Index Fund (VGSIX) 2000 - 2016

updated to 11/30/17, TIAAreal current 1-year rolling return= 4.42%

current TIAAreal-timed= 487.09

current TIAAreal= 277.42

Legend:
- Recession
- TIAA Real Estate norm.
- Value - timed
- Vang REIT Index Fund VGSIX norm.
- Sell TIAA Real Estate
- Buy TIAA Real Estate
- 0
- 1-yr Rolling Return TIAA Real Estate

TIMING RULES:
TIIAreal is sold when the 1-year rolling return falls below 0% and replaced with CREFbond. CREFbond is sold and TIAAreal is bought again when the 1-year rolling return rises above 0%.

REIT VGSIX norm.

1-yr Rolling Return TIAA Real Estate

TIAA Real Estate timed

TIAA Real Estate norm.

Sell TIAA Real Estate

Buy TIAA Real Estate

Y-axis (left): TIAA Real Estate & VGSIX normalized to 100 (1/1/2000): 0, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750

Y-axis (right): 1-yr Rolling Return TIAA Real Estate %: -40, -30, -20, -10, 0, 10, 20, 30

X-axis: 1/1/00, 1/1/01, 1/1/02, 1/1/03, 1/1/04, 1/1/05, 1/1/06, 1/1/07, 1/1/08, 1/1/09, 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

Trade Weighted US Dollar and Interest Rates