

April 6, 2017

Business Cycle Index

The BCI at 219.2 above last week's value, and for this Business Cycle it is at a new high as indicated by the BCIp at 100. Also, the 6-month smoothed annualized growth BCIg at 14.6 is above last week's 14.2.

No recession is signaled.

April 7, 2017

Market Signals Summary:

The MAC-US model is invested. Also invested is the "VMNFX vs. SPY Timer" as well as the "3-mo Hi-Lo Index of the S&P500". The monthly updated S&P500 Coppock indicator is also invested. The MAC-AU is also invested. The recession indicators COMP and iM-BCI_g do not signal a recession. The bond market model avoids high beta (long) bonds, and a possible downward trend is emerging in the yield curve. Both the gold and silver Coppock models are invested, as is the iM-Gold Timer. **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 up from 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 and at 9.74% (last week 11.09%) and is in the market since 12/14/2016 when it crossed the 5% threshold.

The [VMNFX vs. SPY Timer](#) signaled an entry into the stock markets on 3/28/2016. For this model to exit the markets the indicator has to rise above the 2% trigger line, the indicator is above last week's level.

The MAC-AU model is invested in the markets after it generated a buy signal on March 21, 2016. The sell-spread is up from 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 below 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-BCI_g which is above 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 near the previous week's level and far away from signaling a recession.

A description of this indicator can be [found here](#).

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) showing that a downward trend is again emerging. 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 early November 2016 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 generated a buy signal earlier this week, and thus the model is back in gold.

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: April, 2017 (next update May 5, 2017)

Unemployment

The unemployment rate recession model (article link), has been updated with the March UER of 4.5%. 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 decreased to -6.04% (previous at -5.74%) and EMA spread of the UER is -0.21% (previous at -0.14). Here is the link to [the full update](#).

The Dynamic Linearly Detrended Enhanced Aggregate Spread:

The updated level of this indicator, -68bps, confirms the January 20, 2017 signal. Based on past history a recession could start at the earliest in Aug-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.

Coppock Indicator for the S&P500

The Coppock indicator for the S&P500 generated a buy signal on May 19, 2016. This model is now in the market. 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 rise of the TW\$ value seems to be halted for now, the 6 month moving average is increasing.

TIAA Real Estate Account

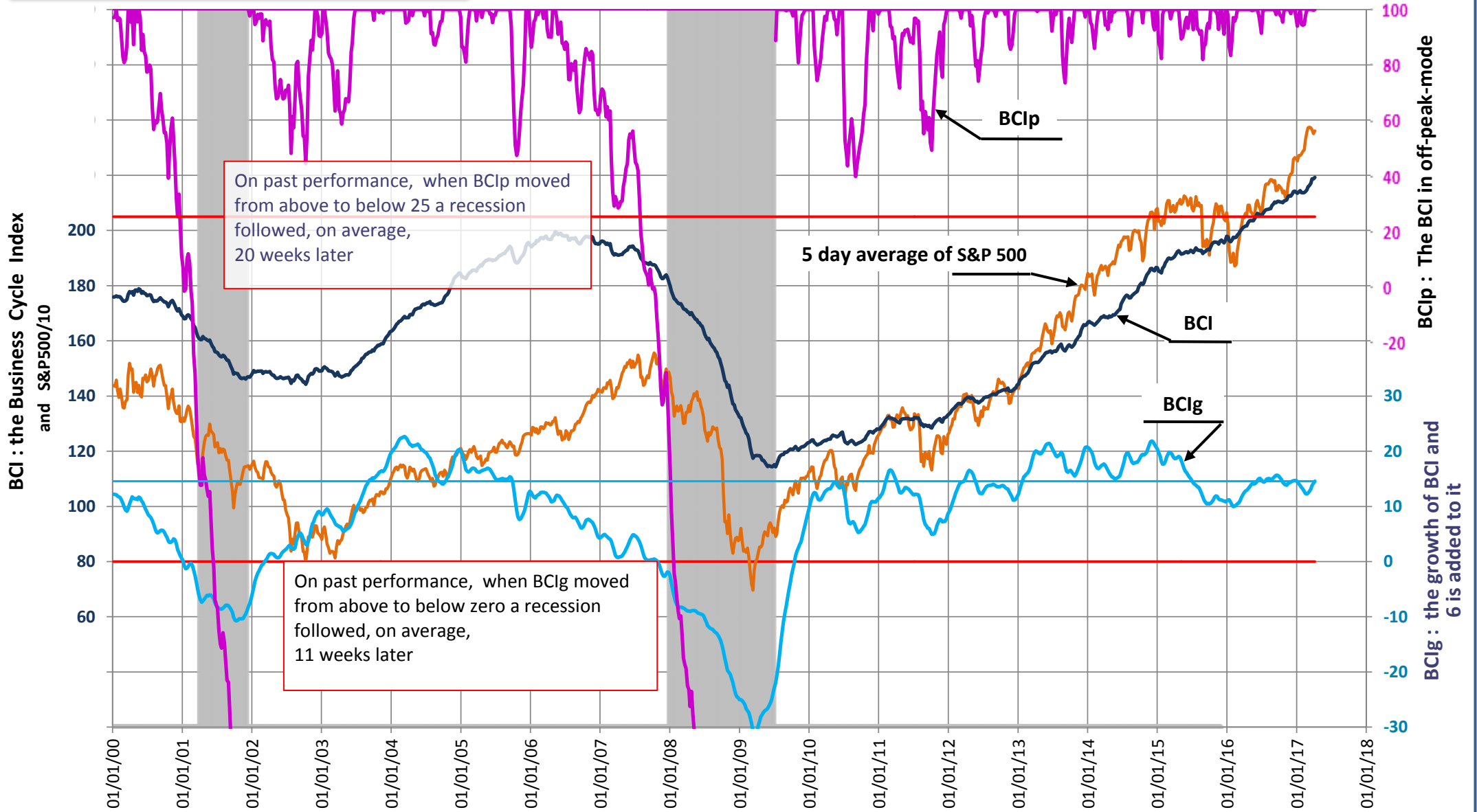
The 1-year rolling return for the end of last month is 4.42%. A sell signal is not imminent.

iM's Business Cycle Index (BCI)

| Date | 03/09 | 03/16 | 03/23 | 03/30 | 04/06 |
|------|-------|-------|-------|-------|-------|
| BCIp | 100.0 | 100.0 | 100.0 | 99.8 | 100.0 |
| BCI | 216.3 | 217.1 | 218.7 | 218.7 | 219.2 |
| BCIg | 12.7 | 13.1 | 13.8 | 14.2 | 14.6 |

BCIp, BCI and BCIG
updated to April 06, 2017

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 2010-16 from the modified golden-cross MAC-System

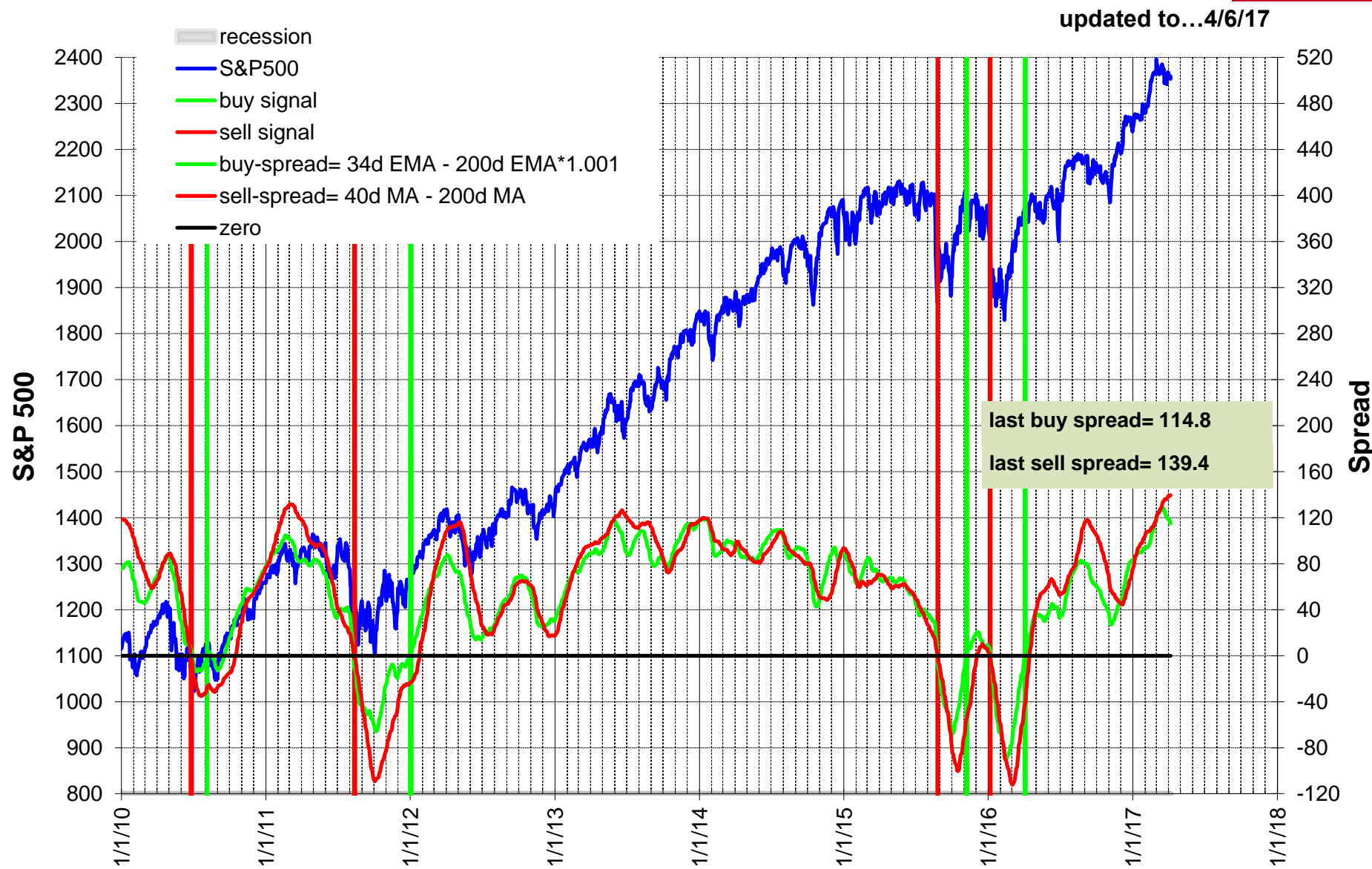


Fig 2.1: Buy and Sell signals for the Australia All Ordinaries Index from the MAC-AU System



updated to Apr-7-17

last sell spread= 273.2

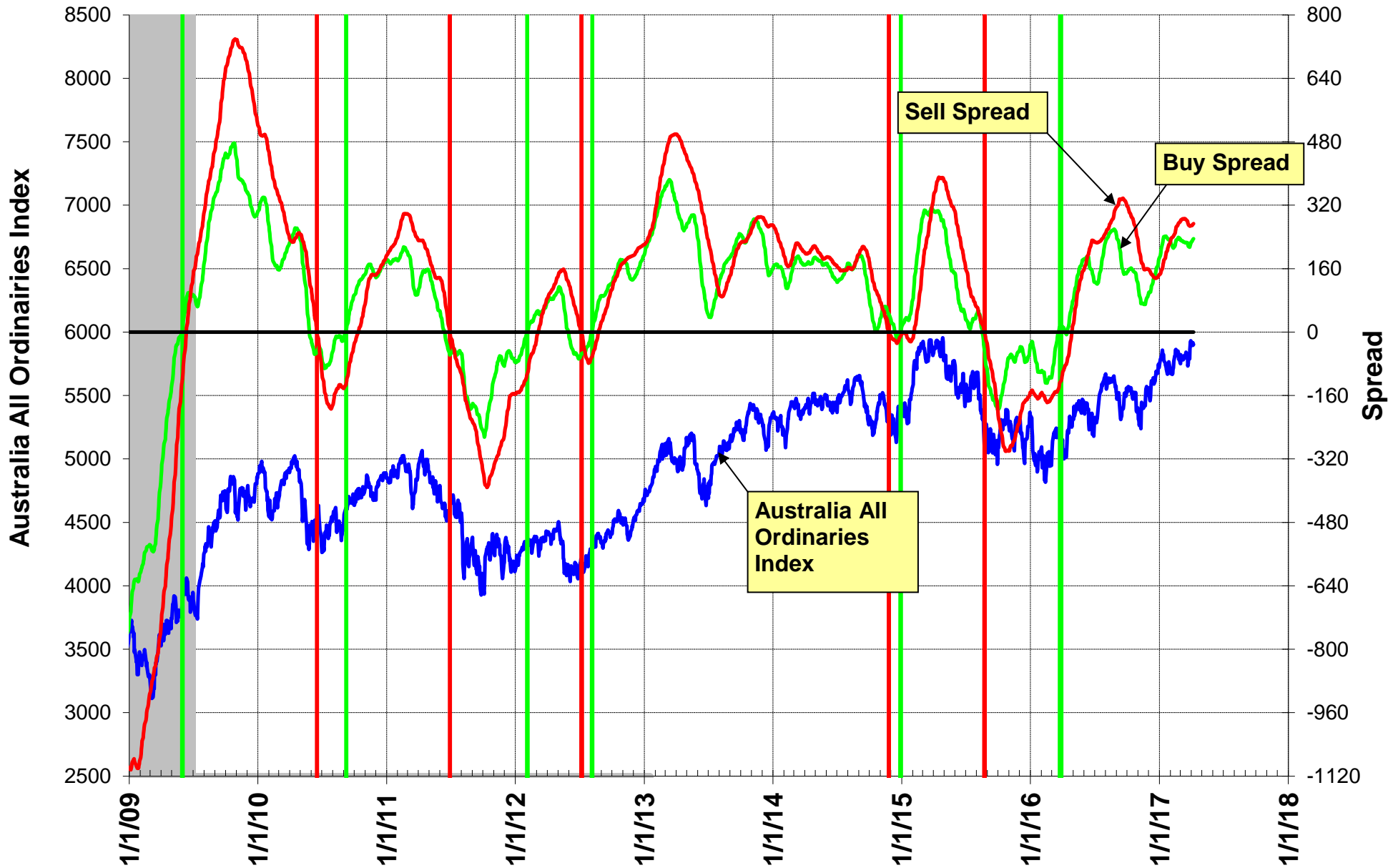
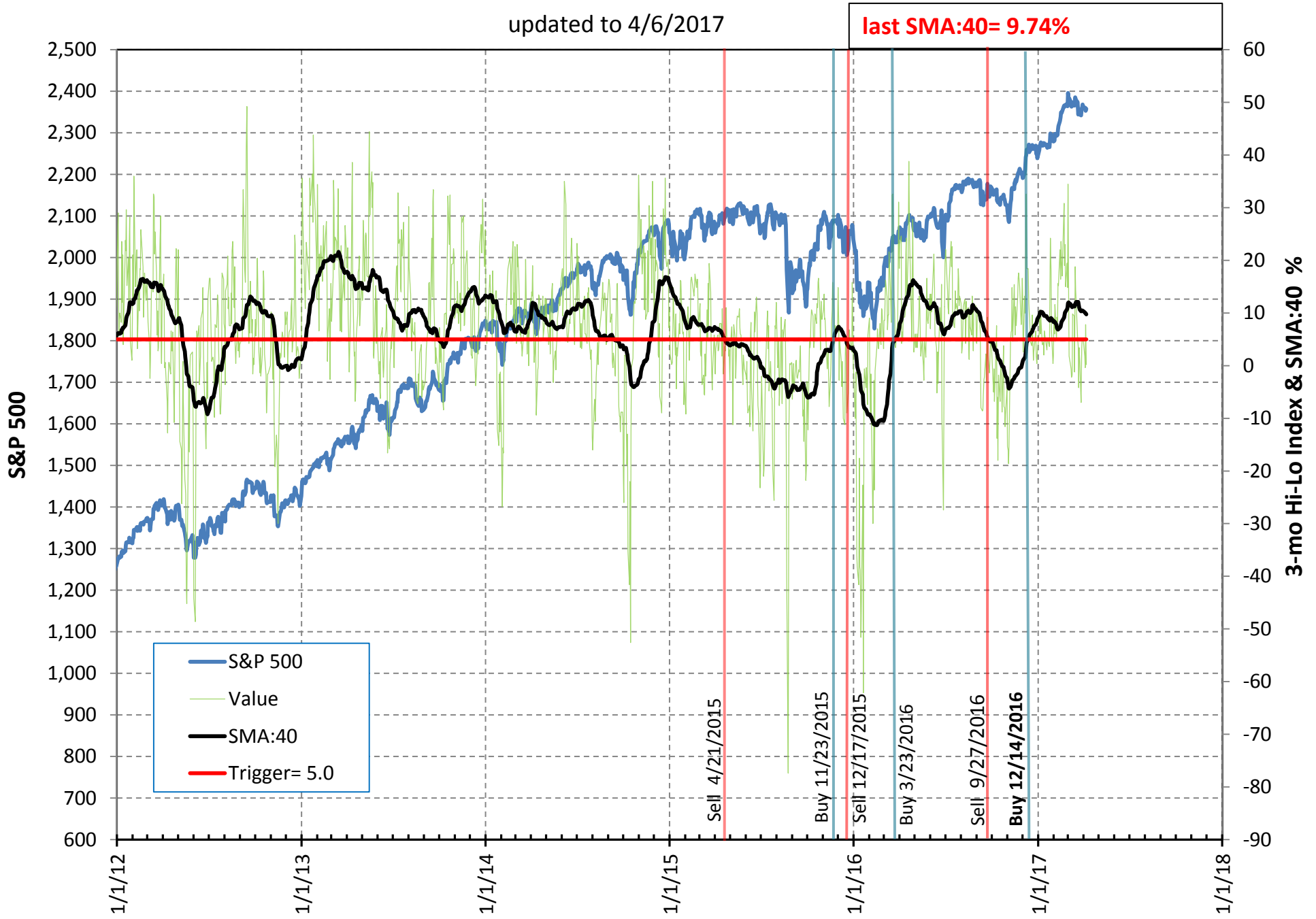


Fig 2.2 3-mo Hi-Lo Index of the S&P500 & 40-day SMA of Index

updated to 4/6/2017



Market Timer based on Performance of Vanguard Market Neutral Fund VMNFX vs. SPY

updated to 4/03/2017

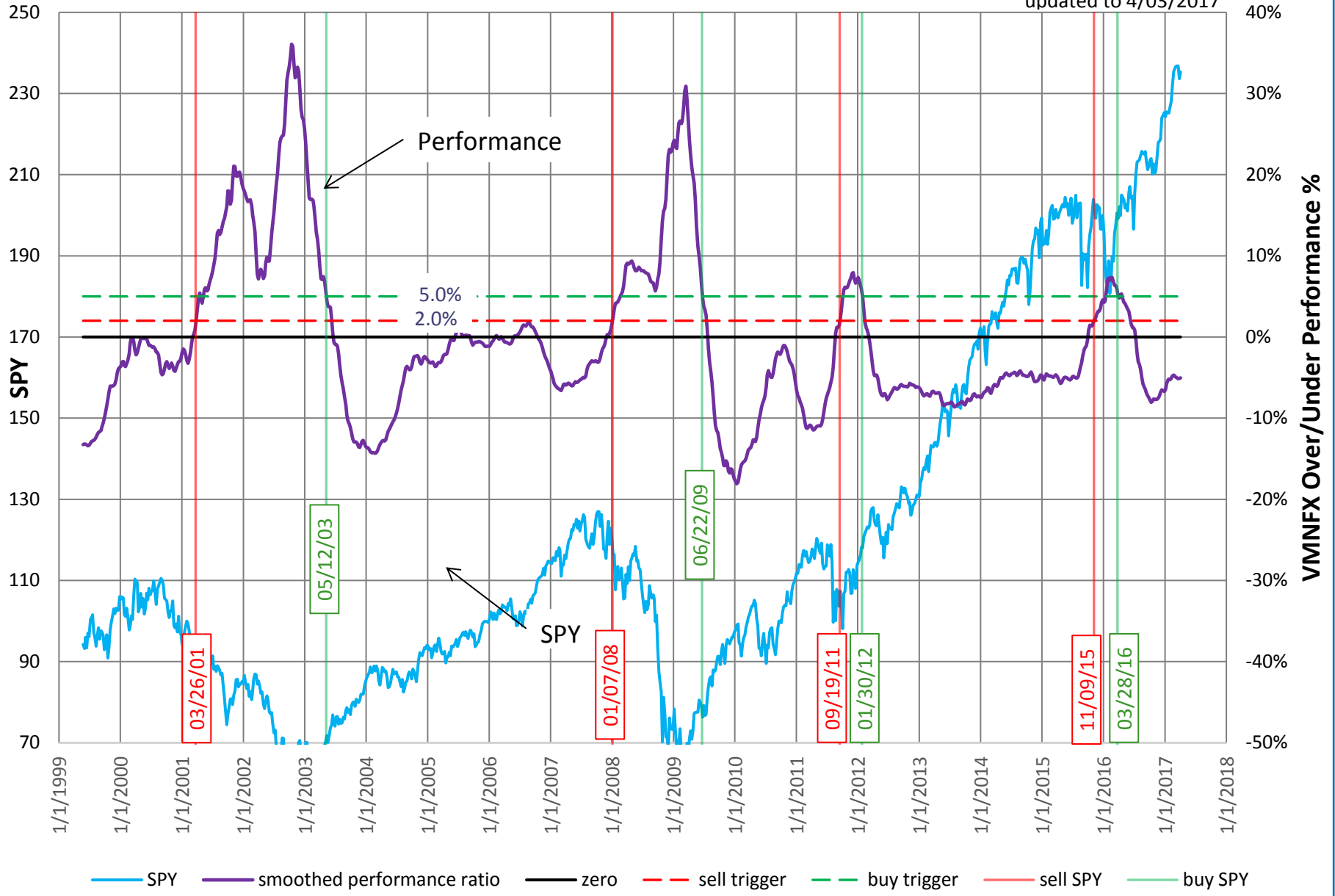


Fig. 3: COMP Leading Indicator of US Economy 1969-2016

- recession
- COMP
- last COMP level
- recession trigger

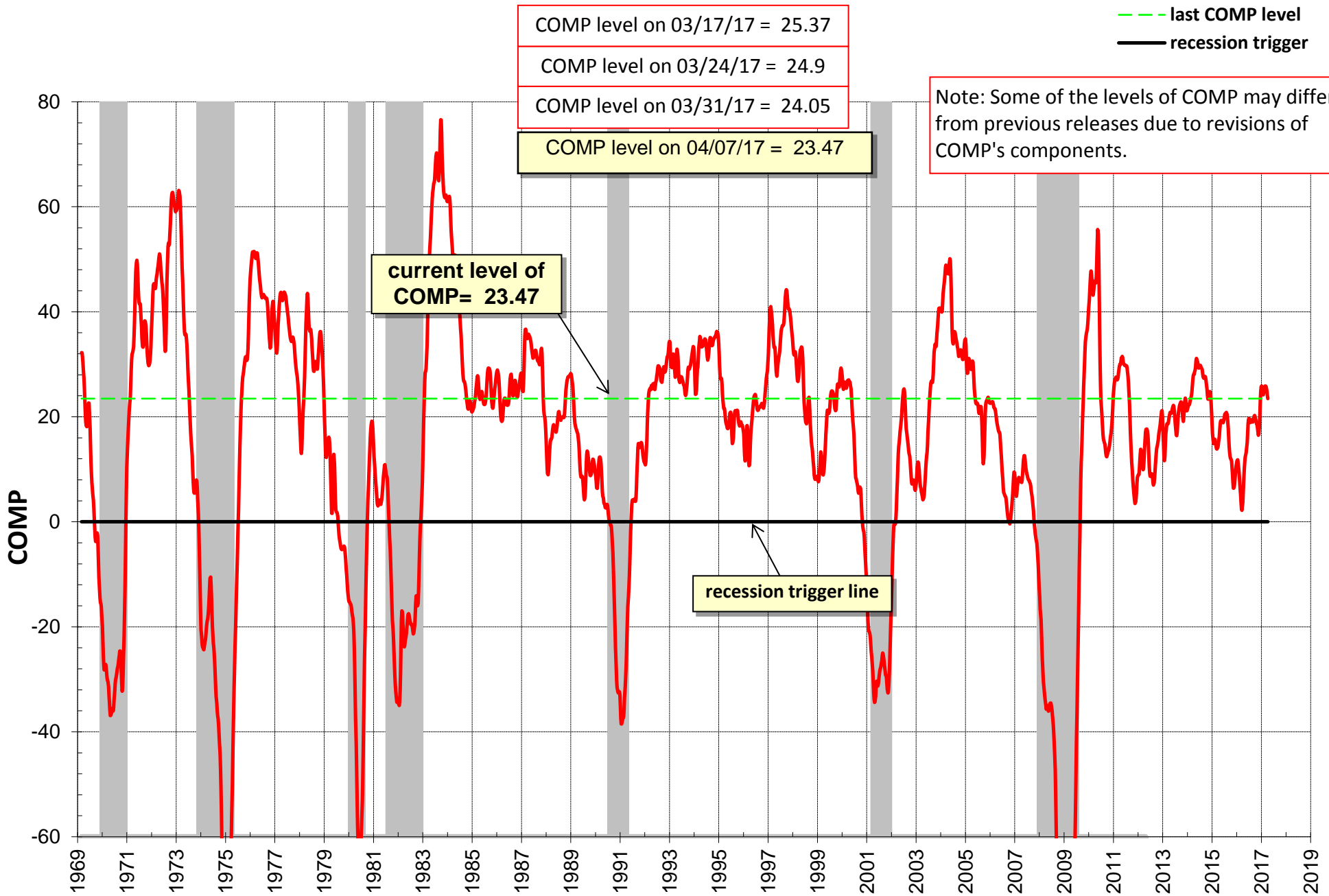


Fig 3.1: iM-BCI_g 1969-2016

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

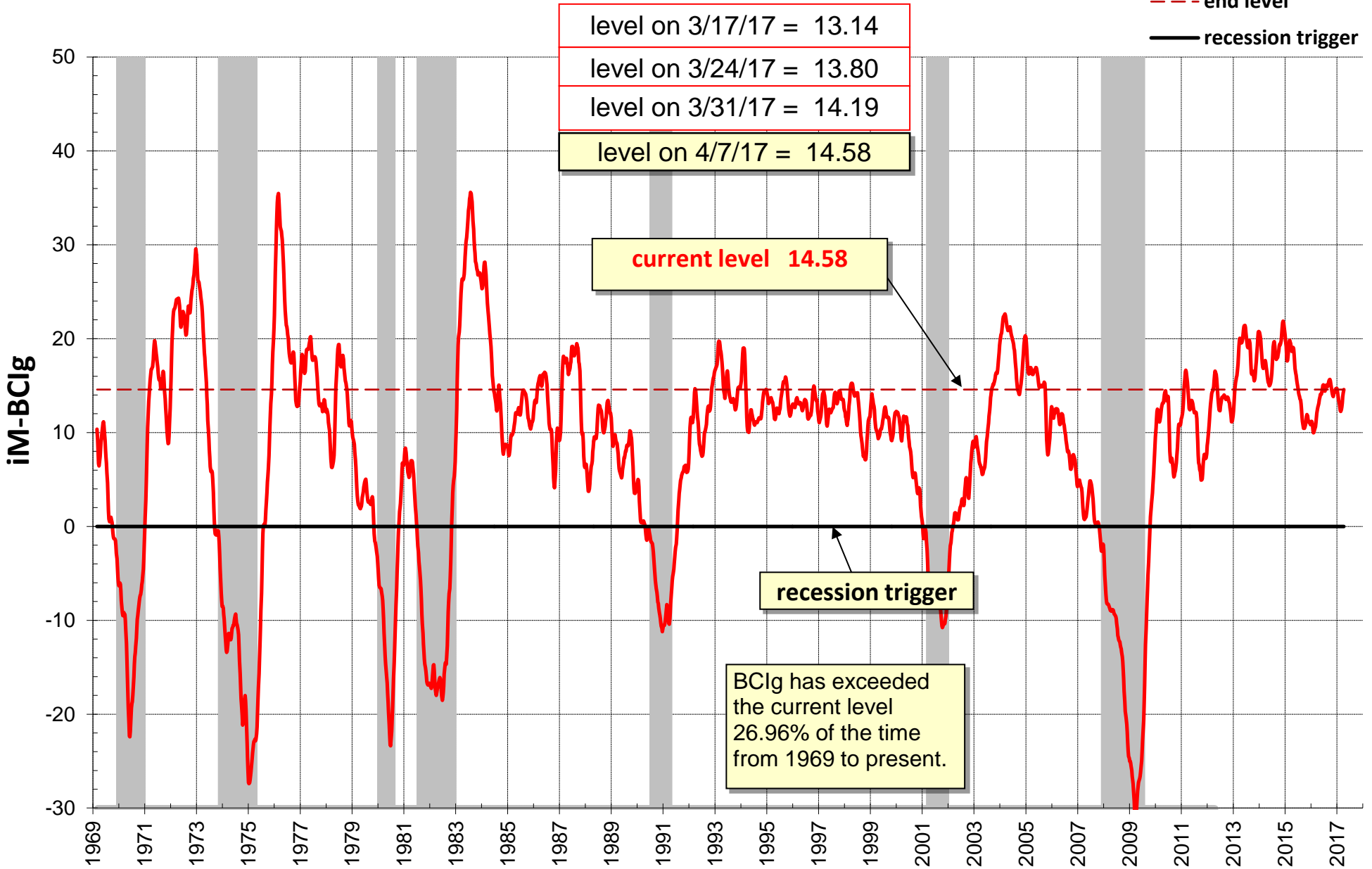


Figure 3.2: Forward Rate Ratio FRR2-10 - leads to Recessions

updated to 04/06/2017
EMA of FRR2-10 = 1.12

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 |

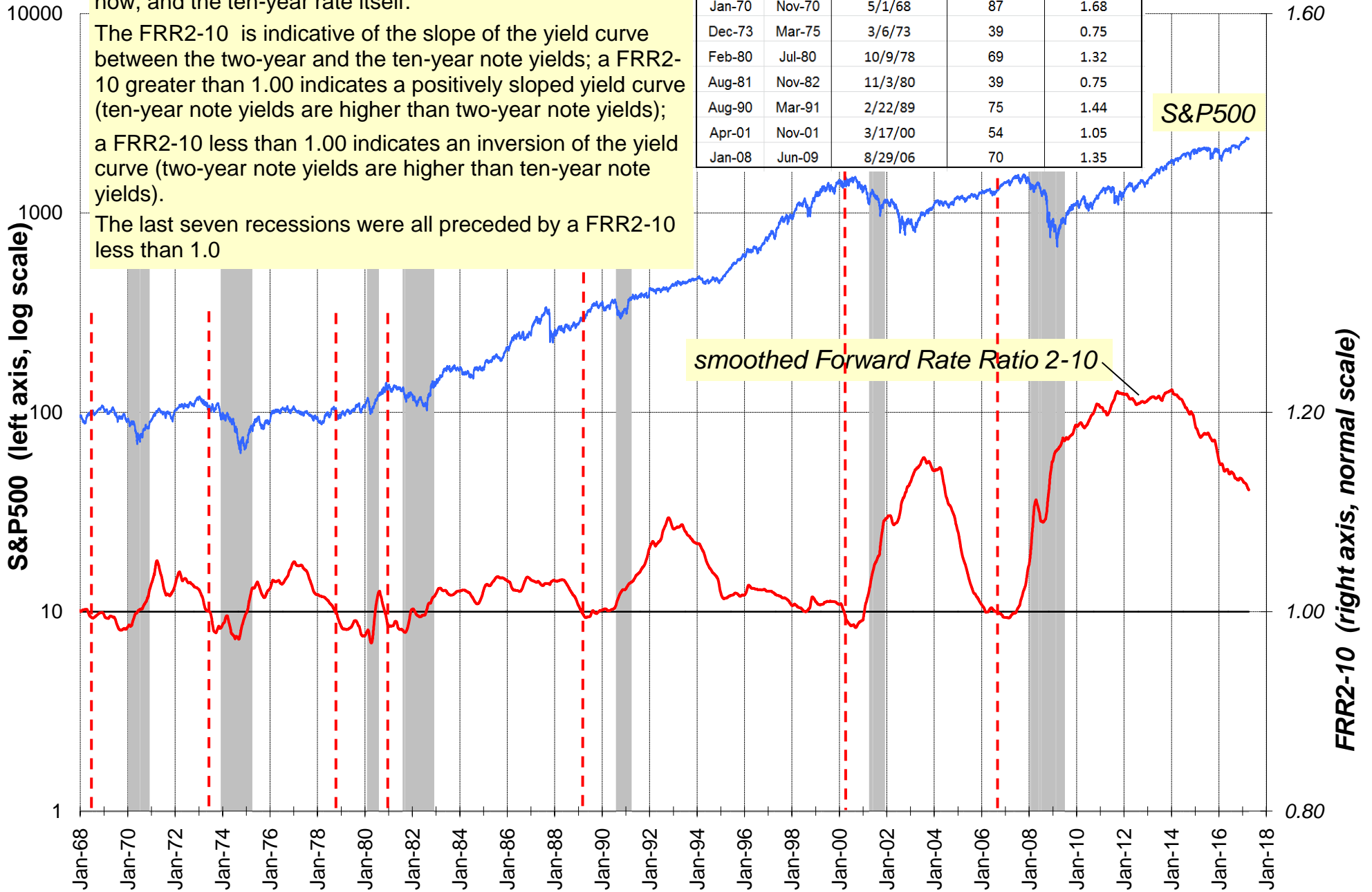


Figure 4: Bond Value Ratio (BVR) from 2005 to 2017

Model updated to: 4/7/2017 BVR = 5.974

Limit lines recalibrated on 2/1/2015

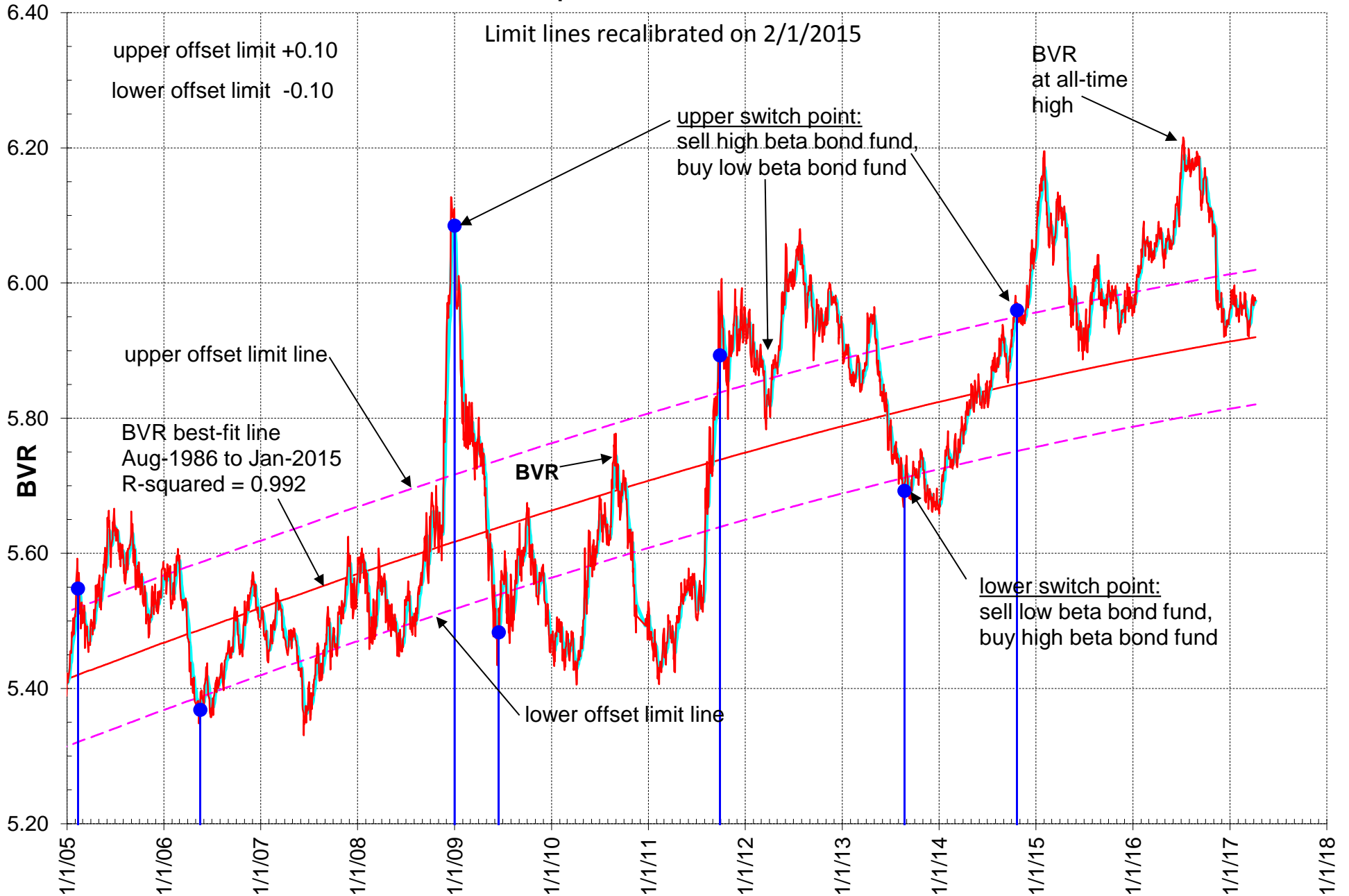


Figure 5: i10 - i2 Updated to.....4/7/17

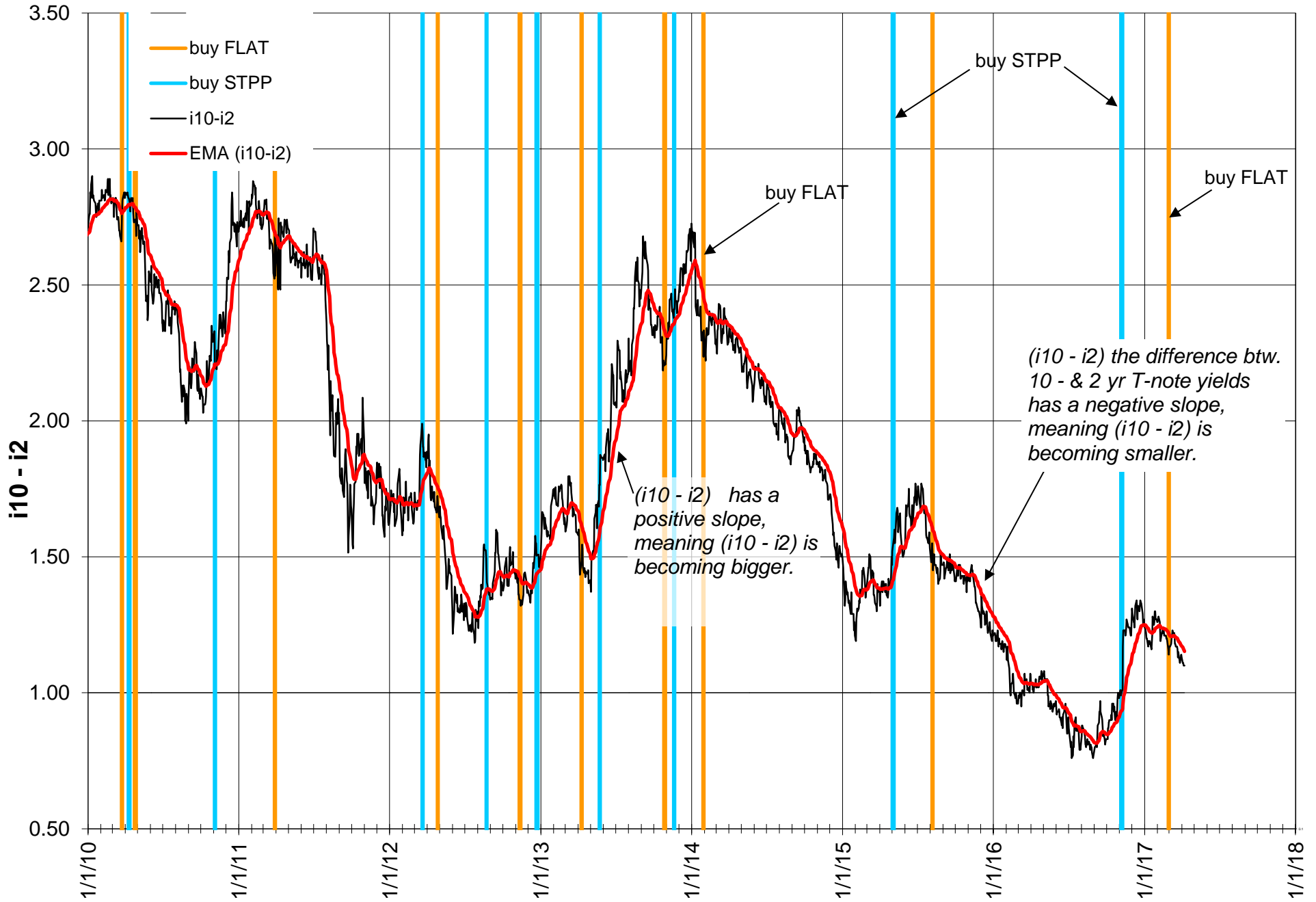


Figure 6: Modified Coppock Indicator for Gold 2009-2017

updated to 04/07/2017

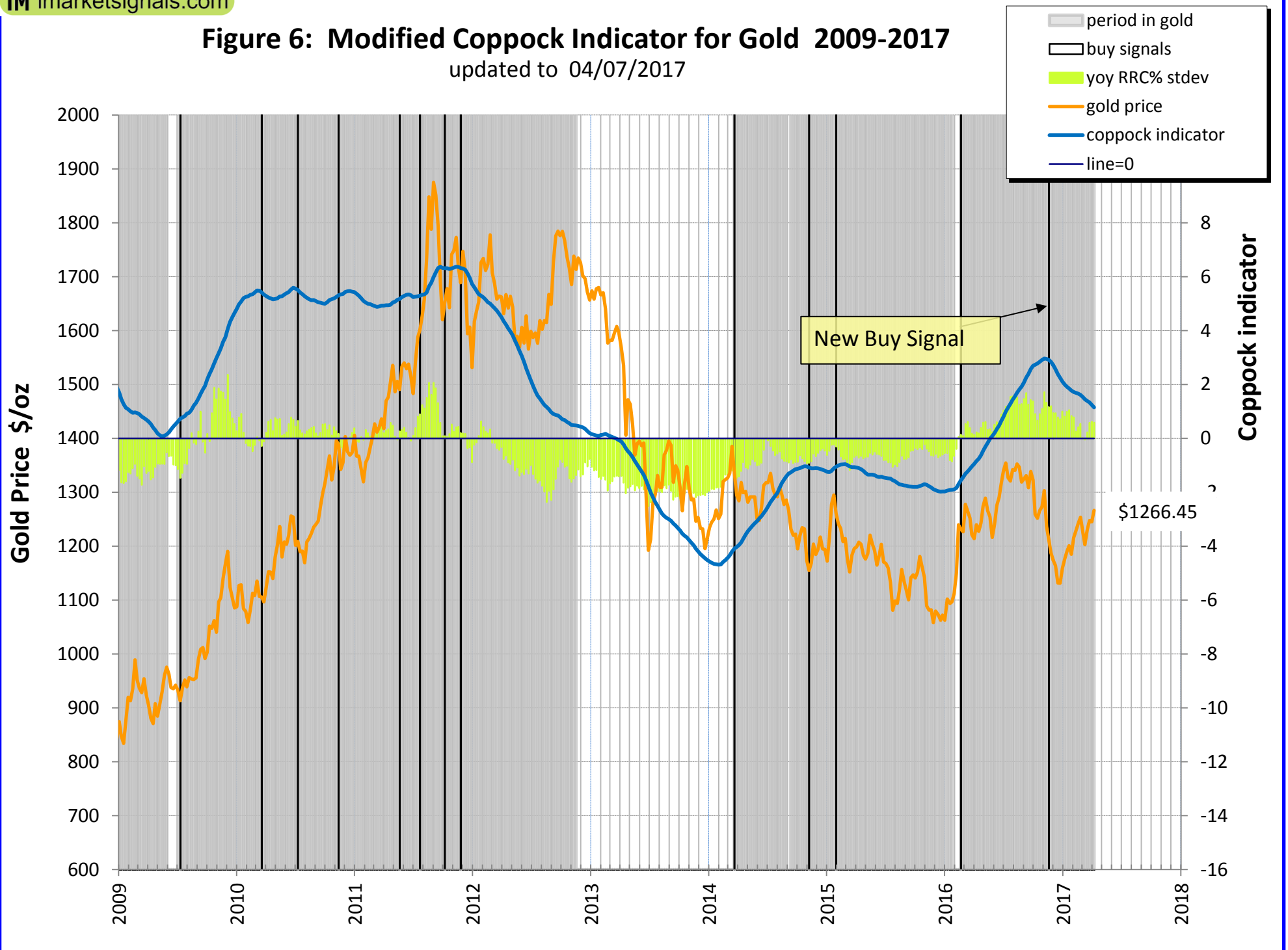


Fig. 6.1a iM GOLD-TIMER - Rev 1

Updated to: 4/6/2017

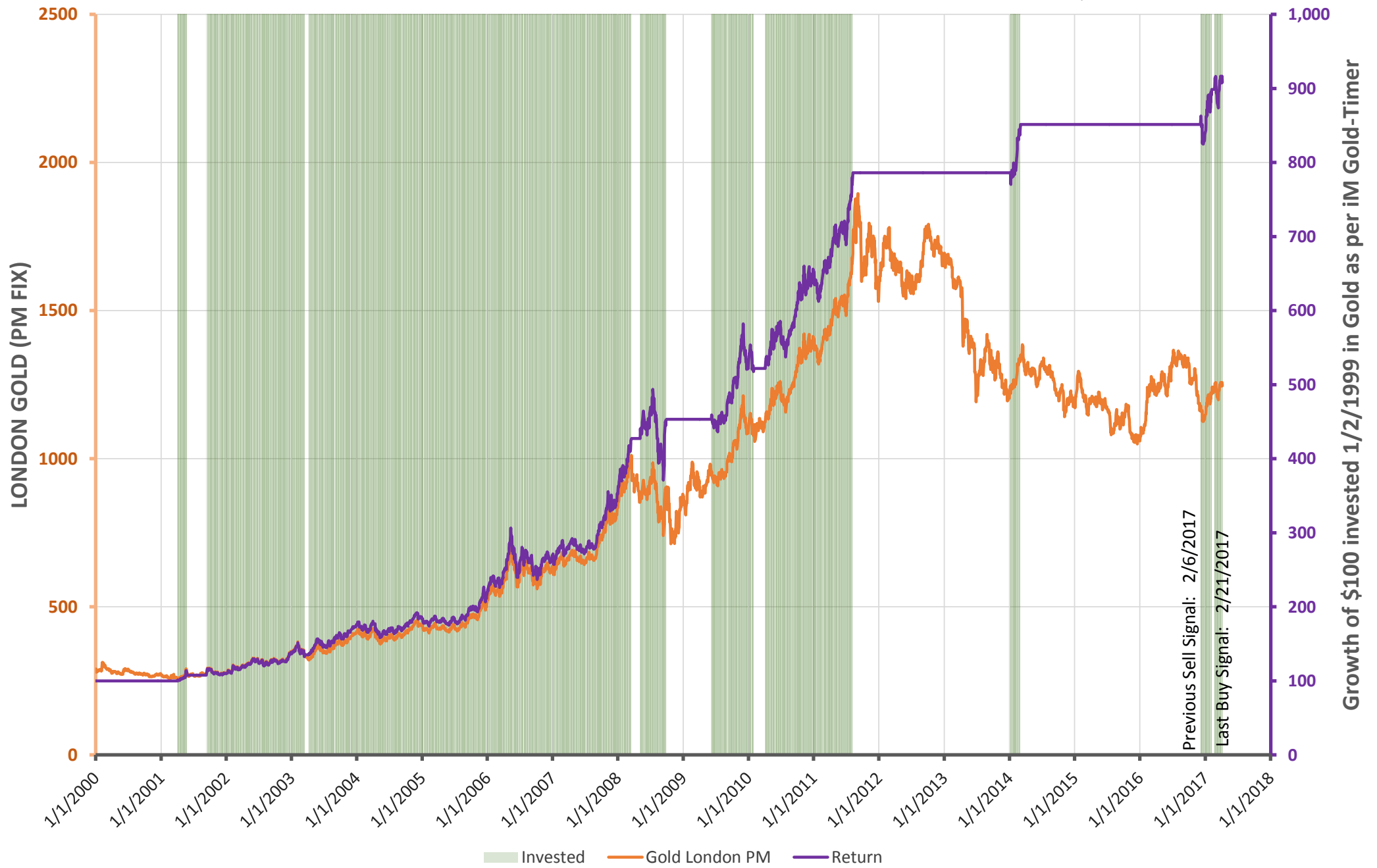


Figure 7: Modified Coppock Indicator for Silver 2009-2017

updated to 04/07/2017

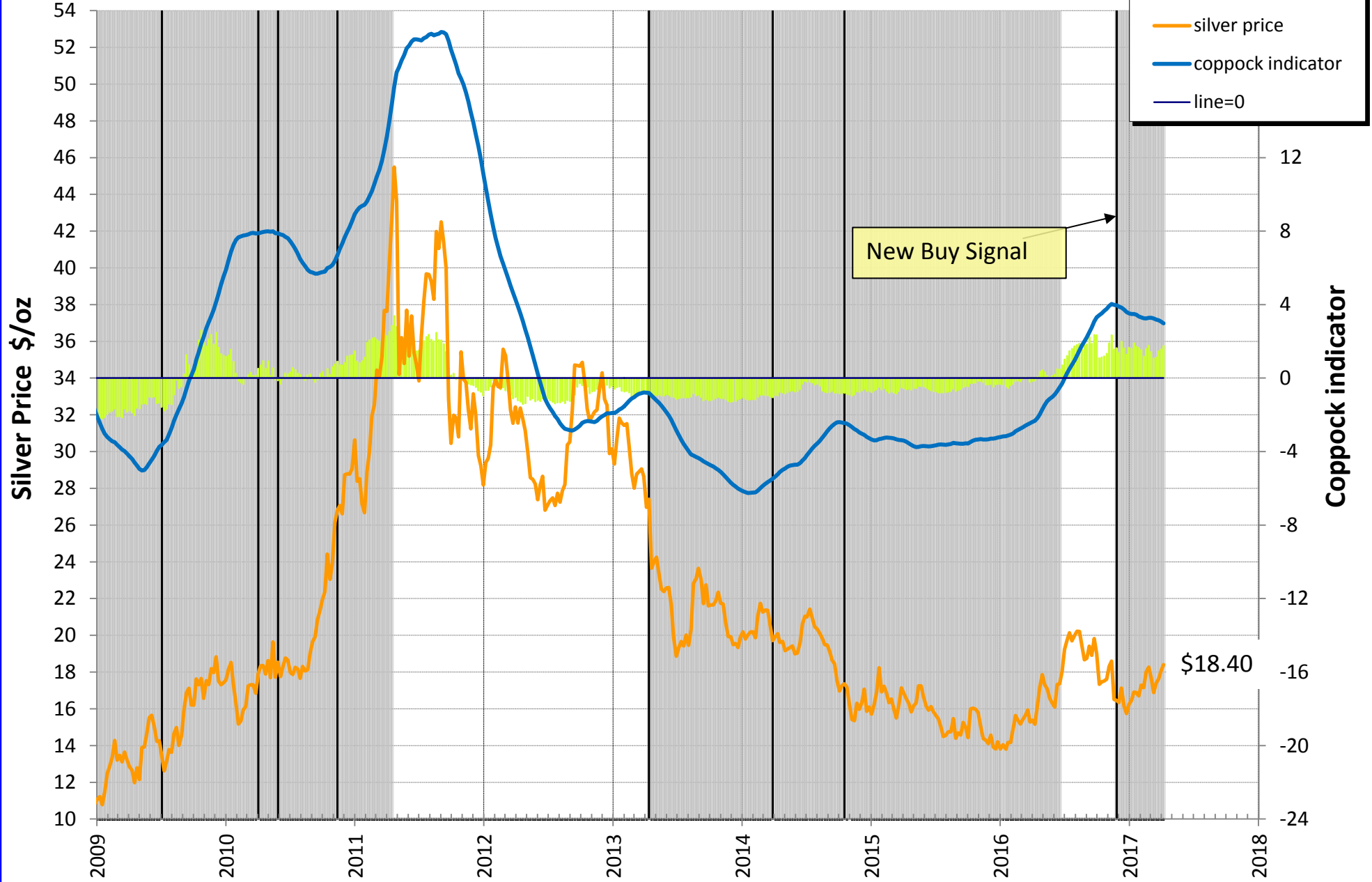


Fig-8 Unemployment Rate and Recessions (real-time) 2000-2016

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

updated to 4-28-2017 with March UER= 4.5%

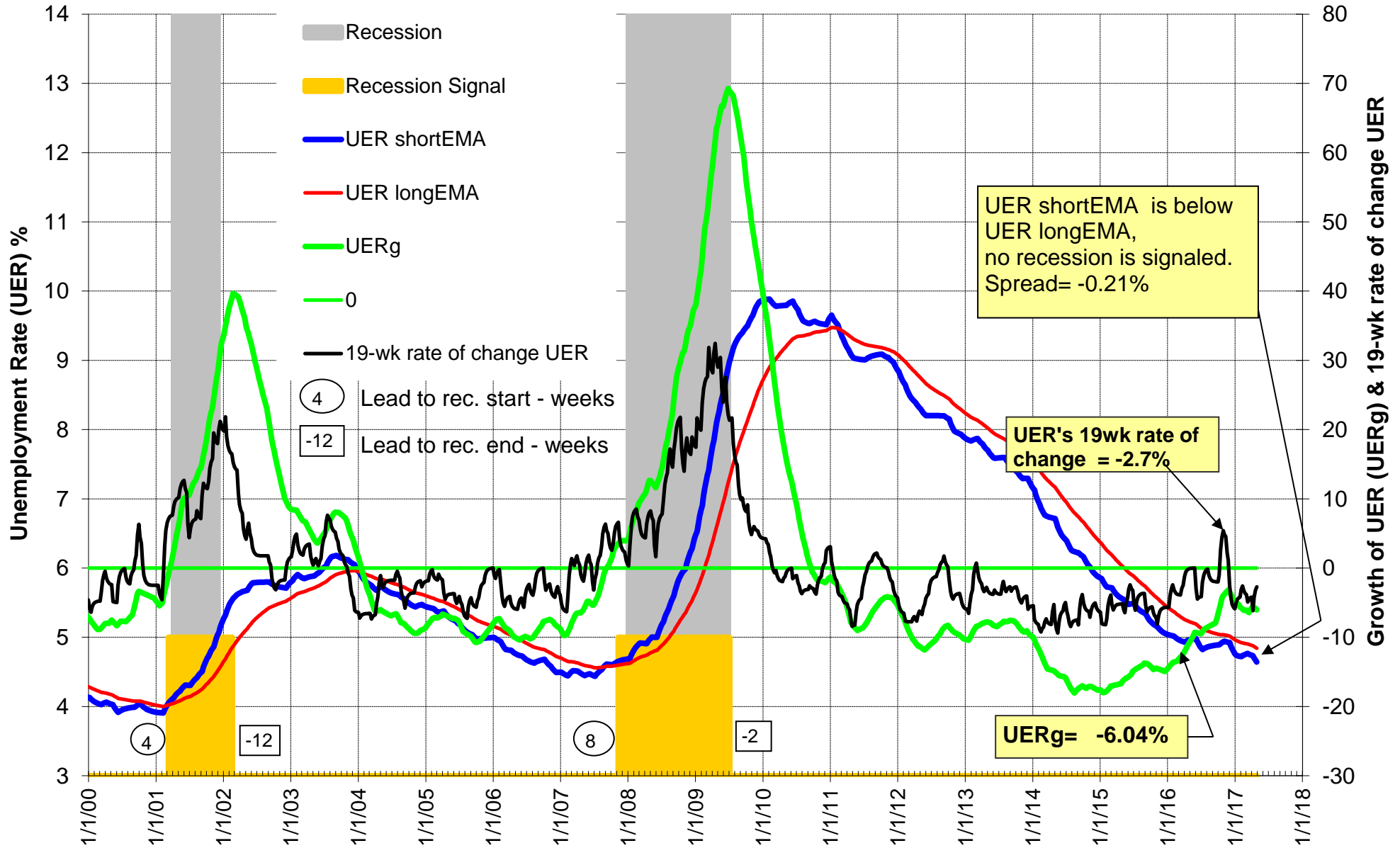
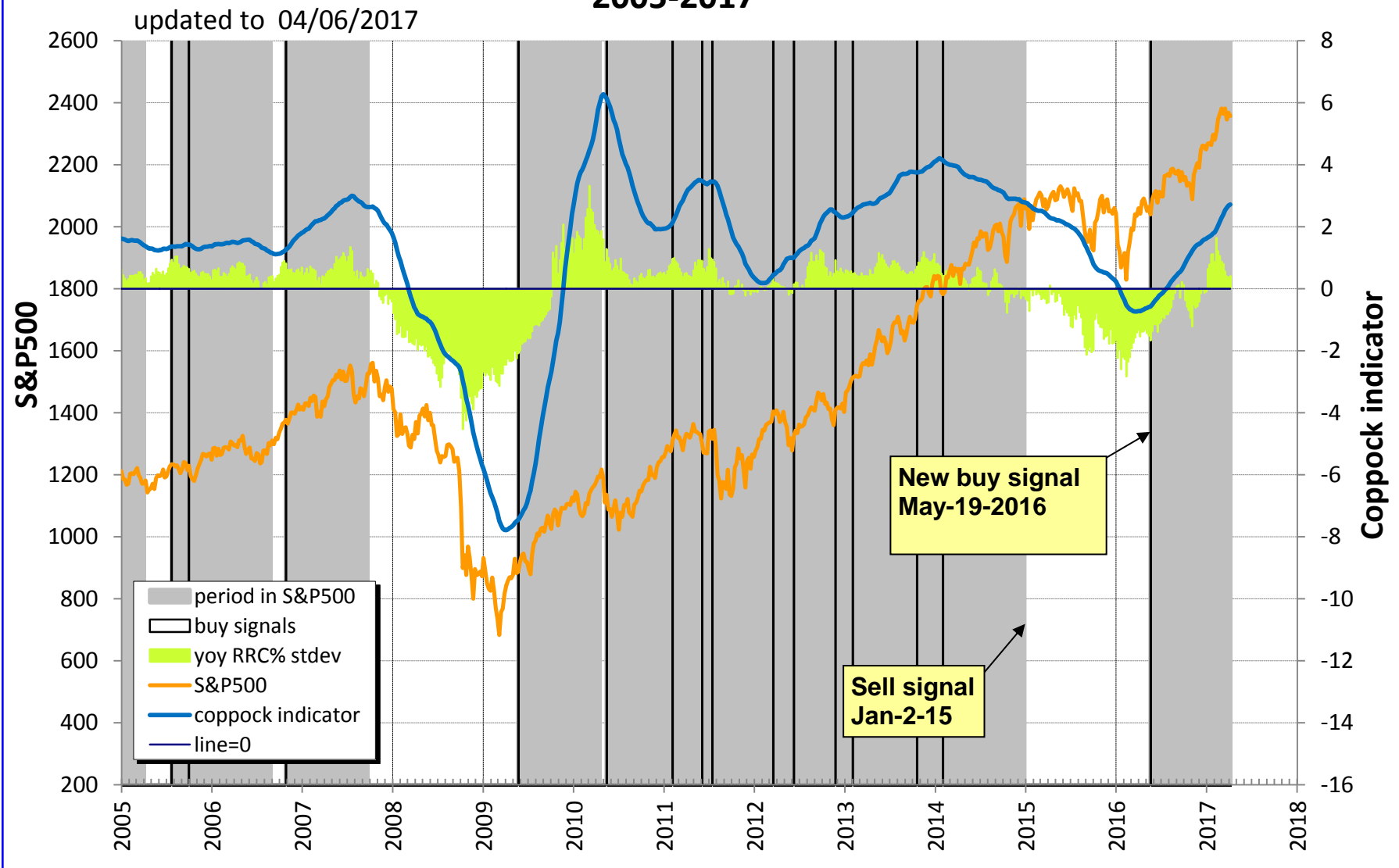


Fig-9 Modified Coppock Indicator for S&P500 2005-2017



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

updated to 3/31/17, TIAAreal current 1-year rolling return= 4.42%

current TIAAreal-timed= 473.98

current TIAAreal= 269.95

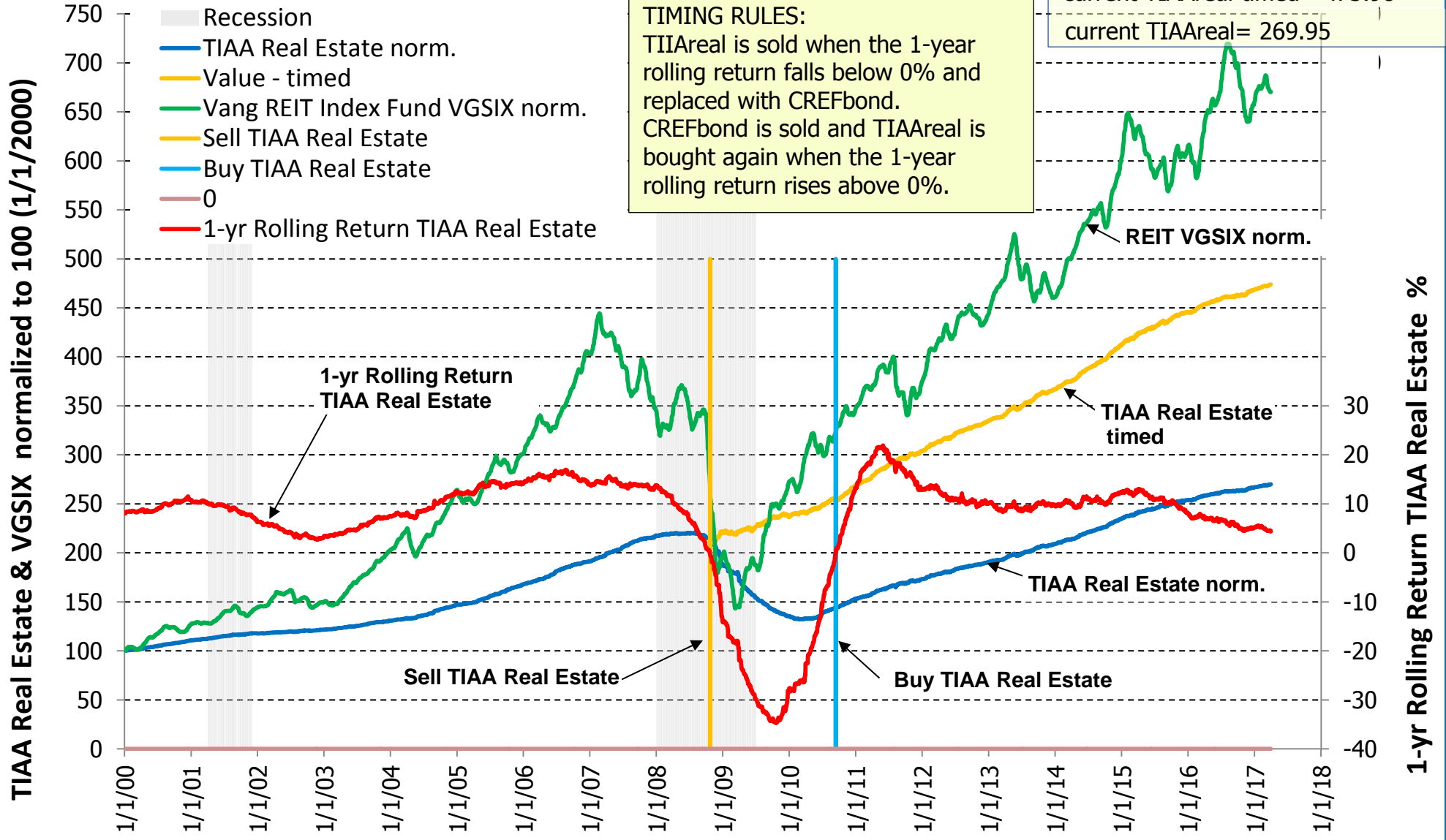
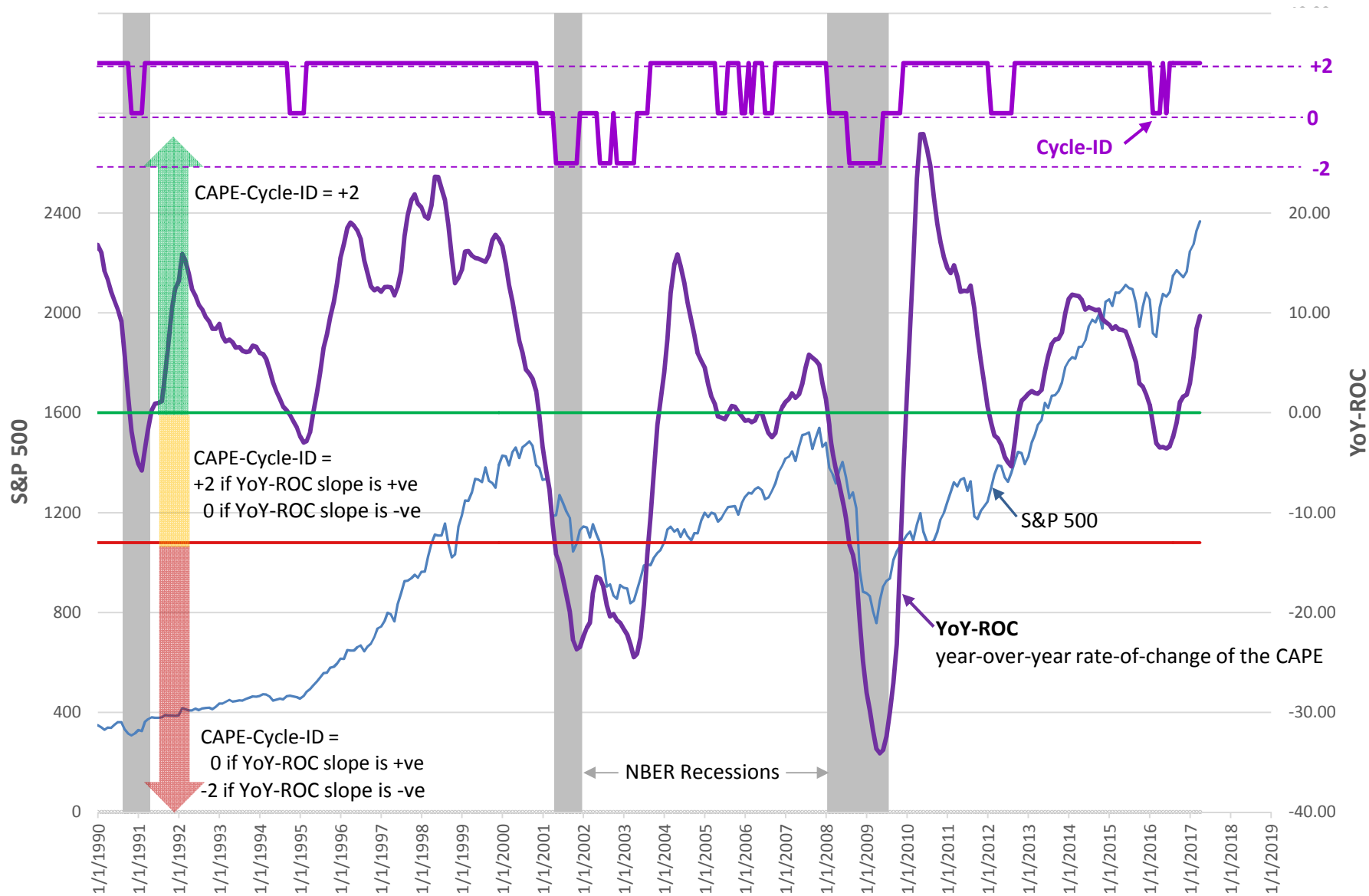


Fig. 9a CAPE-Cycle-ID and the YoY-ROC from 1990

updated to 4/3/2017



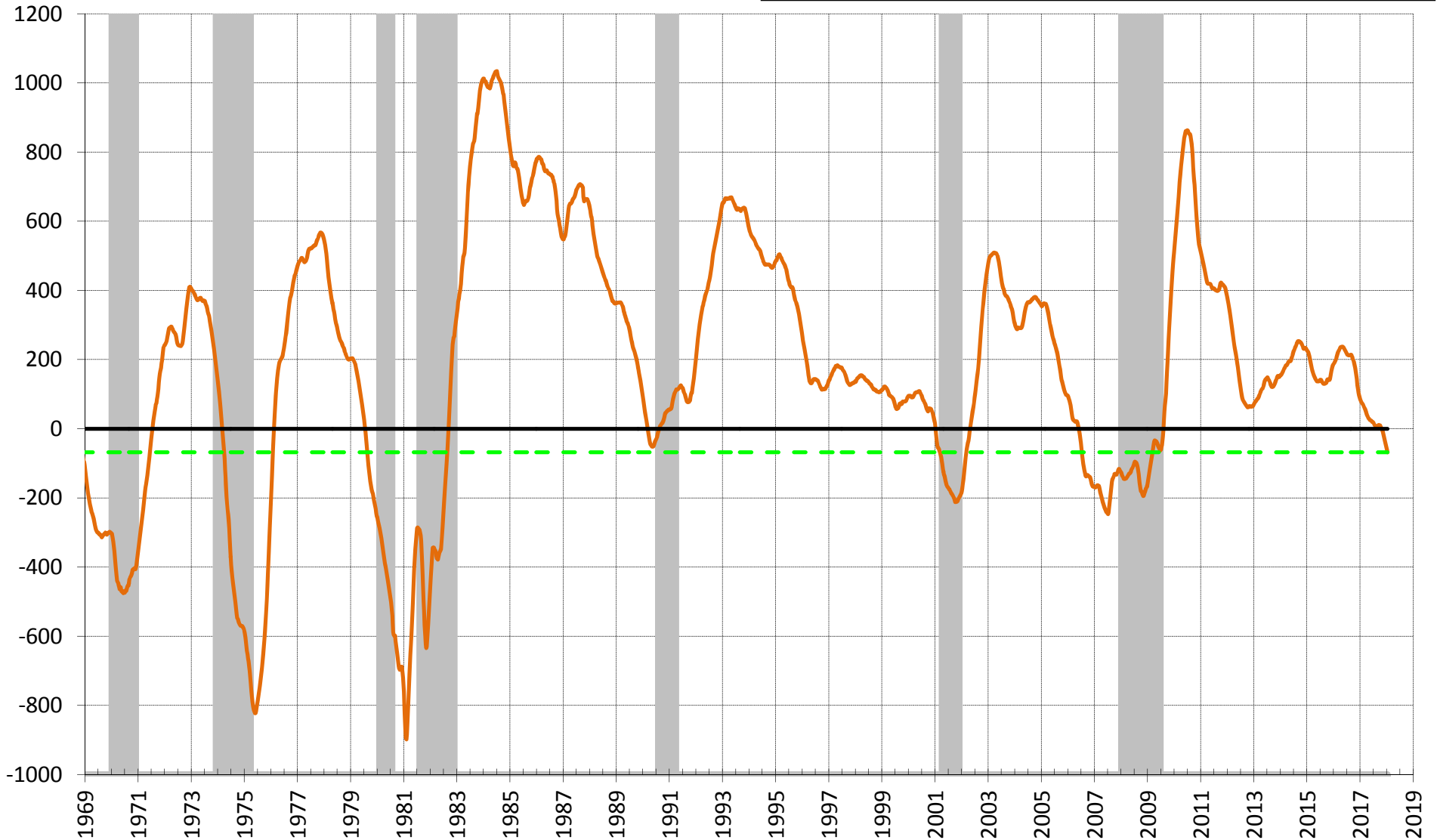
Long Leading Recession Indicator DAGS: shifted forward in time by 40 weeks

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

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

possible recession signaled near/after October 2017

updated on April-7-2017, last level of DAGS = -68 bps



Updated to Mar 30, 2017

Trade Weighted US Dollar and Interest Rates

