December 20 2018

Business Cycle Index

The BCI at 245.3 is below last week's 247.1, and remains below this business cycle's peak as indicated by the BCIp at 66.5. Also, the 6-month smoothed annualized growth BCIg at 8.8, is below last week's 9.7. Both BCIp and BCIg are not signaling a recession.

December 21, 2018

Market Signals Summary:

The MAC-US model is in cash after signaling a sell on 11/26/2018. The "3-mo Hi-Lo Index of the S&P500" generated a sell signal on 10/17/2018 and is in cash. The monthly updated S&P500 Coppock indicator remains invested. The MAC-AU has signaled a sell on 11/20/2018. 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 and signaled buy FLAT end November 2018. The gold Coppock model, as well as the iM-Gold Timer, is invested in gold, however the silver model is in cash since early August 2018.

Stock-markets:

The MAC-US model **generated a sell-signal 11/26/2018** and thus is in cash. The buy-spread (green graph) is below last week's level needs to rise above zero to signal a buy.

The 3-mo Hi-Lo Index of the S&P500 is below last week's level at -6.89% (last week -4.85%), generated the sell signal on 10/17/2018 and is in cash.

The MAC-AU model is in cash after it generated a sell signal on November 20, 2018.

Recession:

Figure 3 shows the **COMP** down from 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** below last week's level. An imminent recession is not signaled.

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.

The **iM-Low Frequency Timer** is invested in the markets

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. It signaled a buy FLAT end 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:

The modified Coppock Gold indicator shown in Fig 6. This model generated a new buy signal end May 2018 and is invested in gold.

The iM GOLD-TIMER Rev-1 is invested in gold.

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 (next update 1/4/2019)

December 7, 2018

Unemployment

The unemployment rate recession model (article link), has been updated with the November UER of 3.7%. 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 11.57% (last month minus 10.94%) and EMA spread of the UER is at minus 0.22% (last month minus 0.24%).

The Dynamic Linearly Detrended Enhanced Aggregate Spread:

The updated level of this indicator, -223bps, is above last months -184bps, 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 September 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 and generated a new buy signal in mid February 2018 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.

iM GT Timer

The iM-GT Timer, based on Google Search Trends volume switched to cash on 11/1/2018. This indicator is described here.

Trade Weighted USD

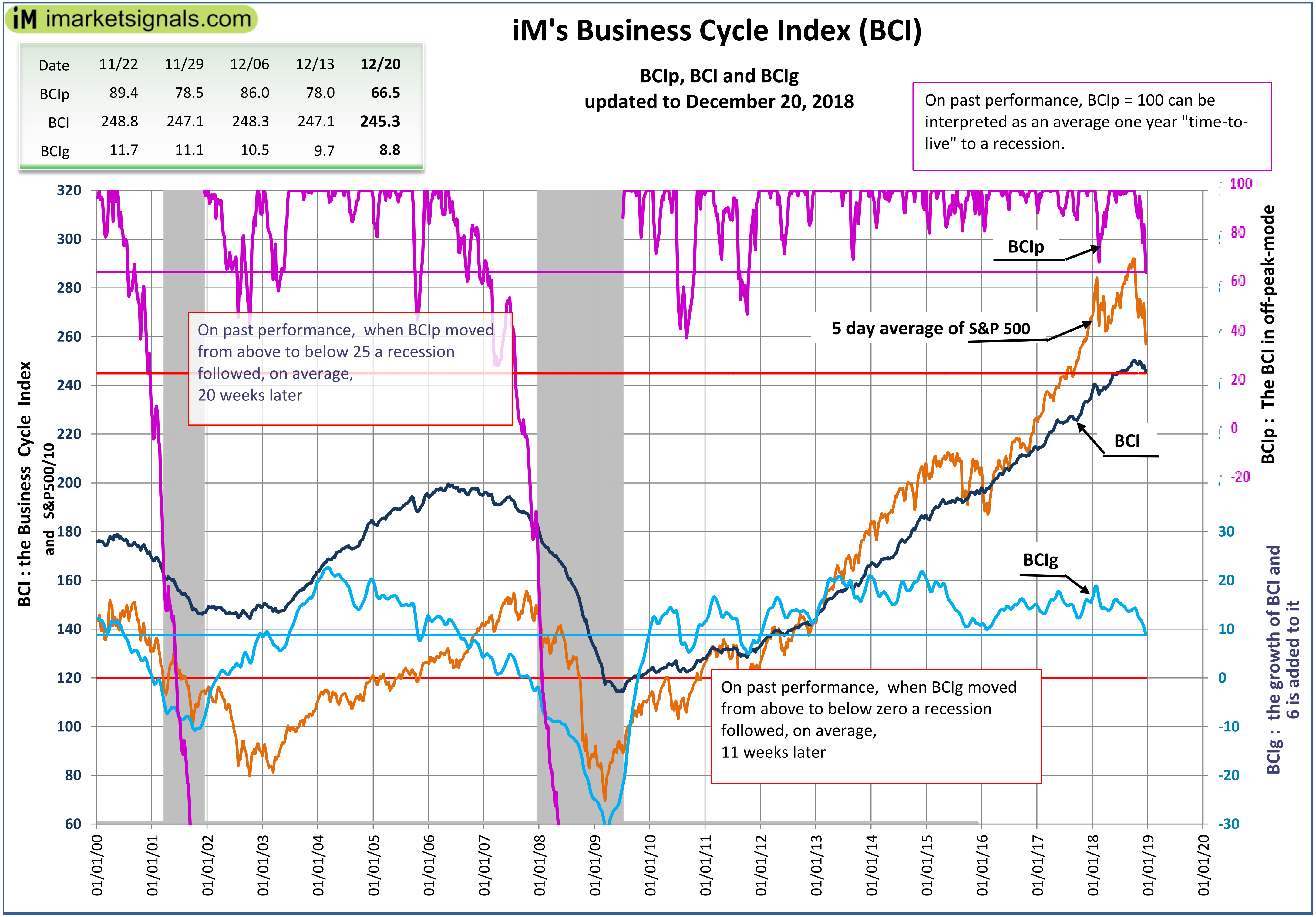
The Trade Weighted $ value continues to strengthen.

TIAA Real Estate Account

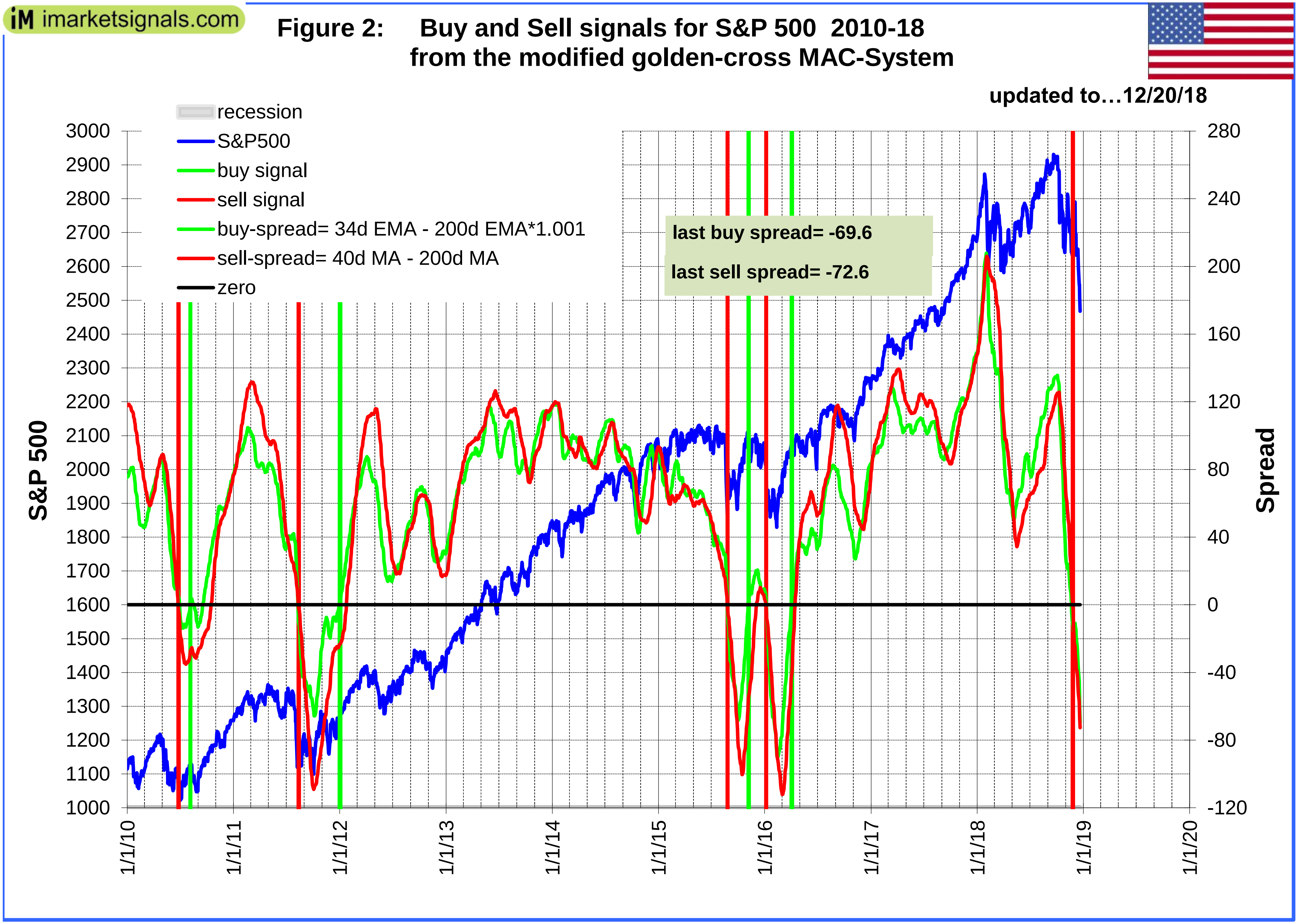
The 1-year rolling return for the end of last month is 5.27%. A sell signal is not imminent.

iM's Business Cycle Index (BCI)

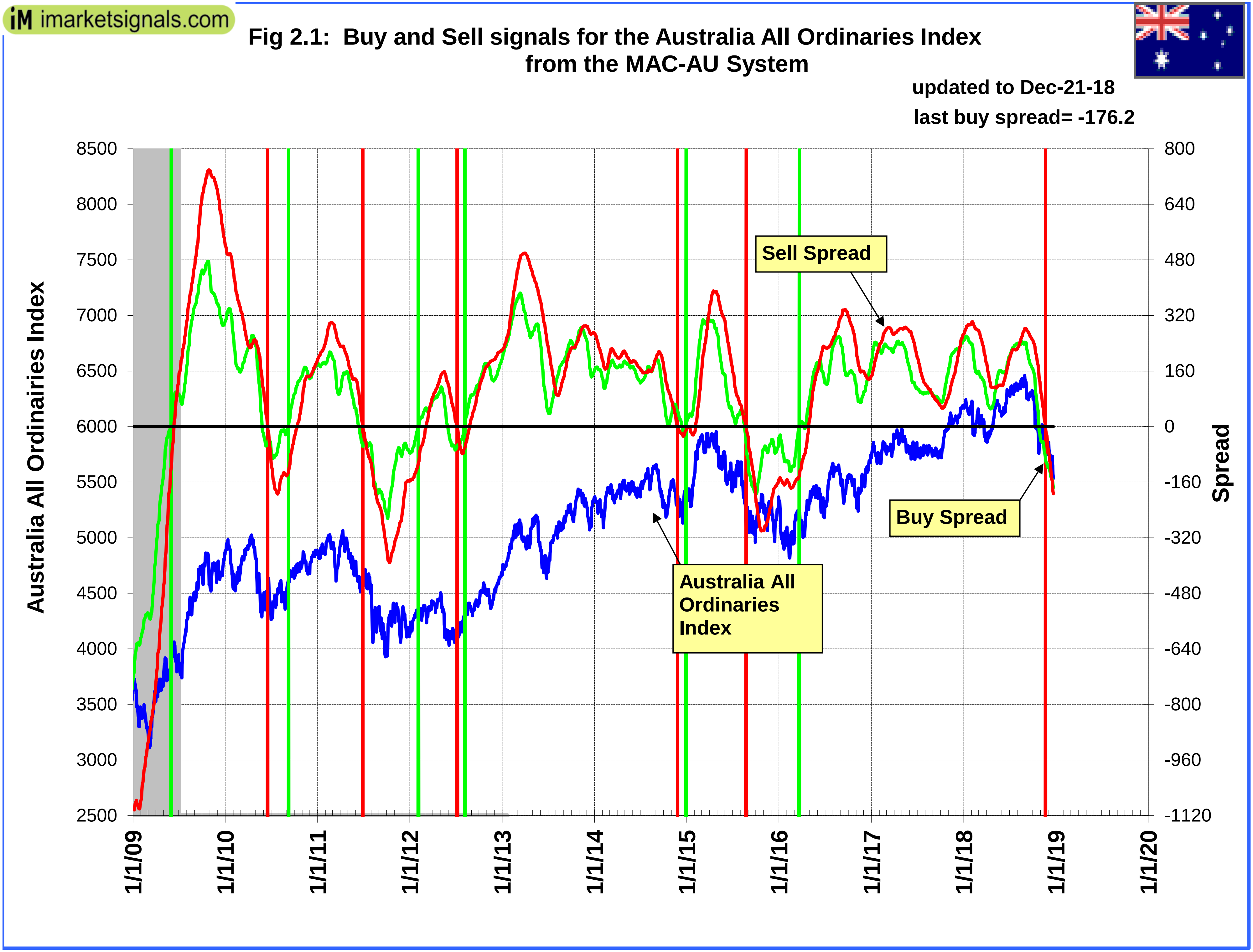
Date	11/22	11/29	12/06	12/13	**12/20**
BCIp	89.4	78.5	86.0	78.0	**66.5**
BCI	248.8	247.1	248.3	247.1	**245.3**
BCIg	11.7	11.1	10.5	9.7	**8.8**



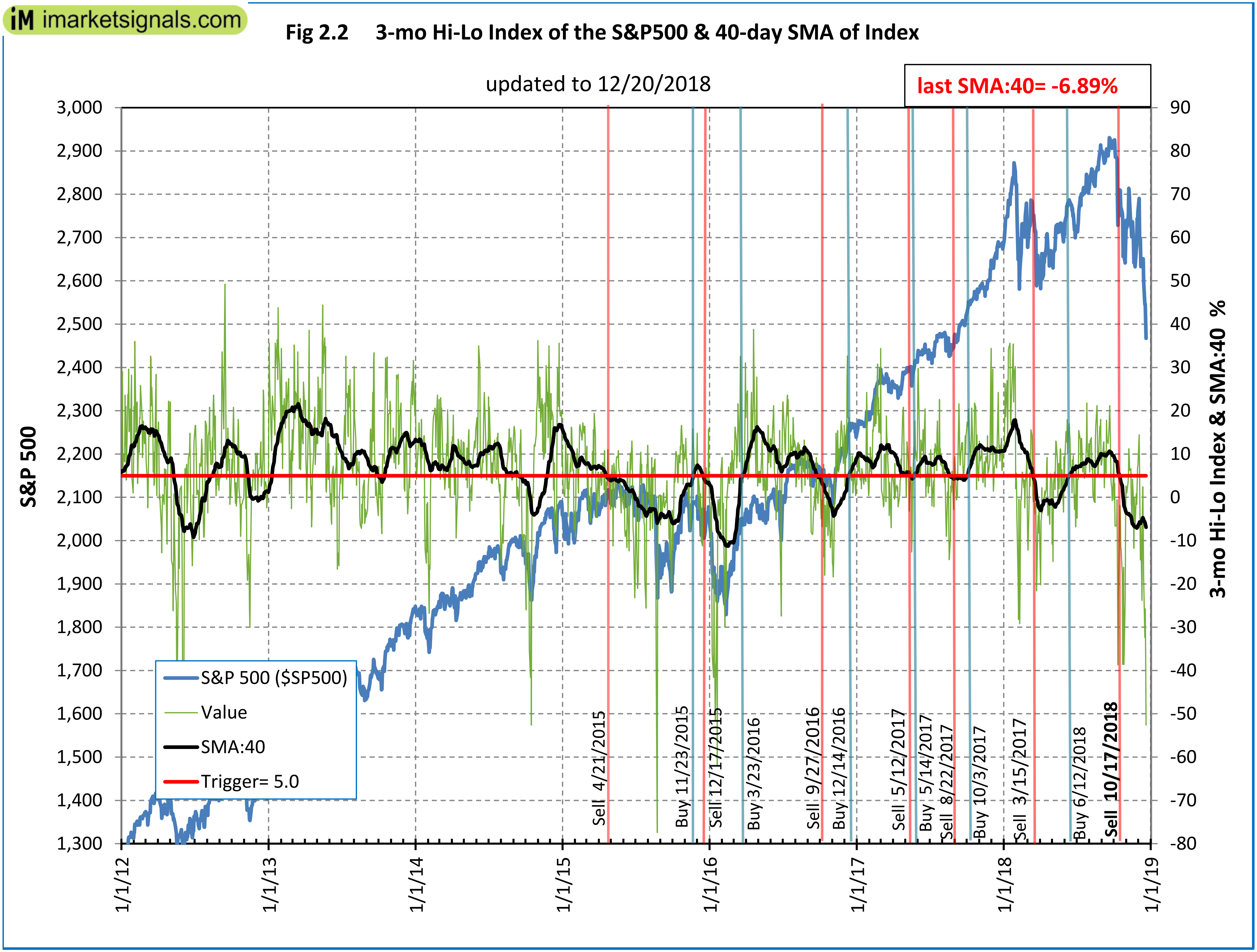
Please note: Past performance does not guarantee future returns, investments may increase or decrease in value and you may lose money using this model.



2-MAC rev8-27-15.xlsm



iM imarketsignals.com
Fig 2.1: Buy and Sell signals for the Australia All Ordinaries Index
from the MAC-AU System
updated to Dec-21-18
last buy spread= -176.2
Australia All Ordinairies Index
Spread
Sell Spread
Buy Spread
Australia All Ordinaries Index
8500
8000
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
800
640
480
320
160
0
-160
-320
-480
-640
-800
-960
-1120
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
1/1/19
1/1/20



iM imarketsignals.com
Fig 2.2 3-mo Hi-Lo Index of the S&P500 & 40-day SMA of Index
updated to 12/20/2018
last SMA:40= -6.89%
S&P 500
3-mo Hi-Lo Index & SMA:40 %
S&P 500 ($SP500)
Value
SMA:40
Trigger= 5.0
Sell 4/21/2015
Buy 11/23/2015
Sell 12/17/2015
Buy 3/23/2016
Sell 9/27/2016
Buy 12/14/2016
Sell 5/12/2017
Buy 5/14/2017
Sell 8/22/2017
Buy 10/3/2017
Sell 3/15/2017
Buy 6/12/2018
Sell 10/17/2018
1/1/12
1/1/13
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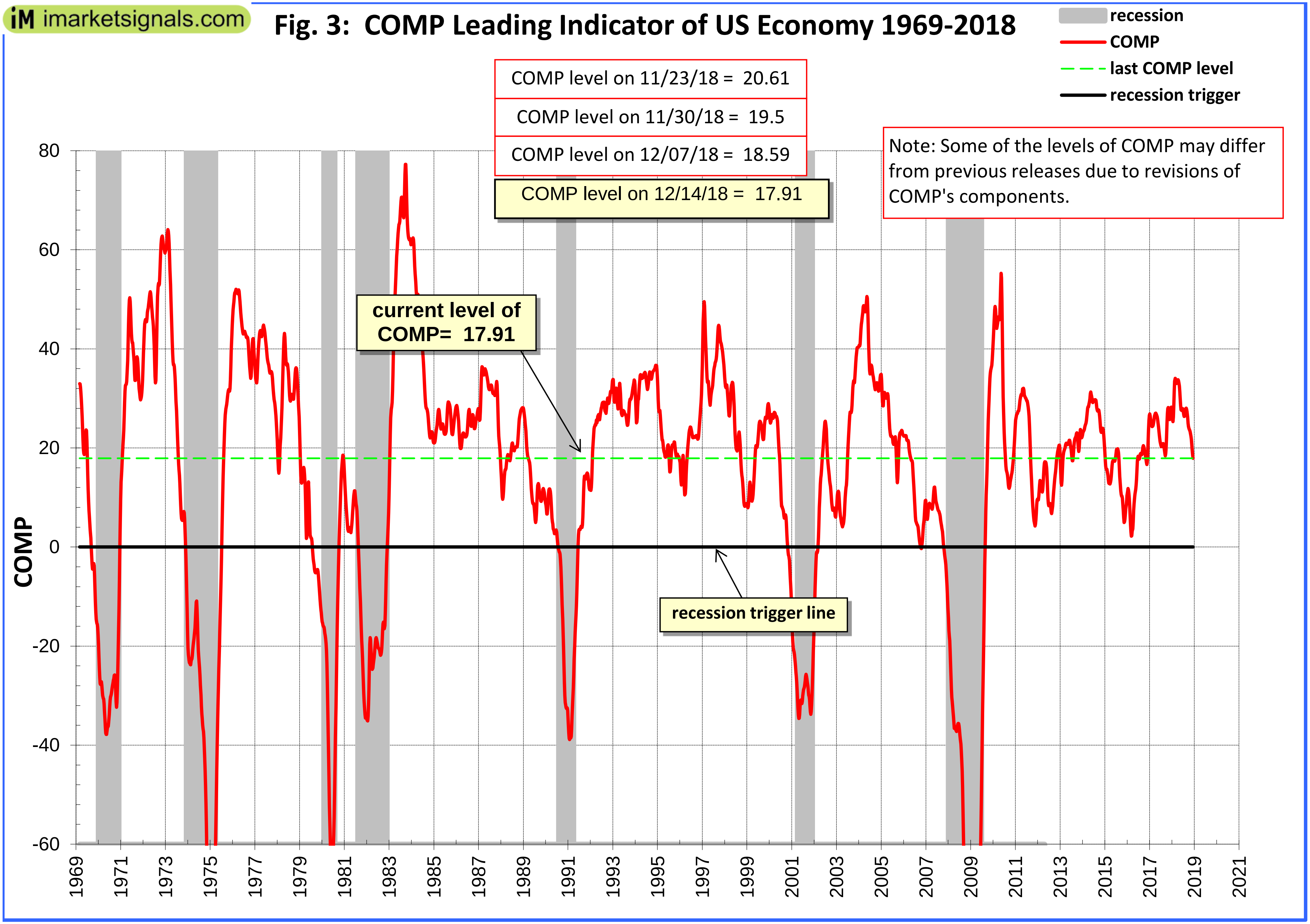
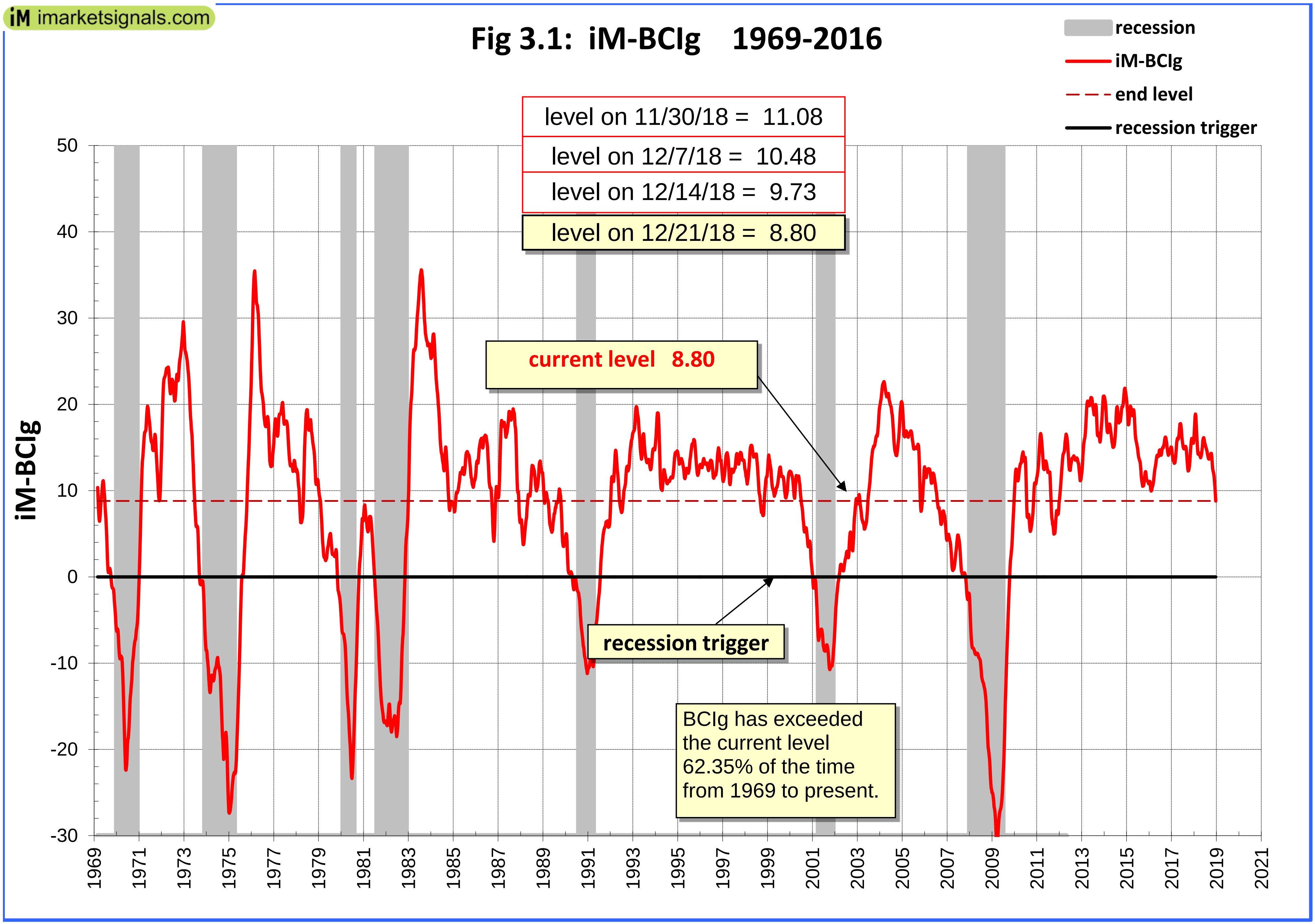
1/1/17
1/1/18
1/1/19


iM imarketsignals.com
Fig. 3: COMP Leading Indicator of US Economy 1969-2018
recession
COMP
last COMP level
recession trigger
COMP level on 11/23/18 = 20.61
COMP level on 11/30/18 = 19.5
COMP level on 12/07/18 = 18.59
COMP level on 12/14/18 = 17.91
Note: Some of the levels of COMP may differ from previous releases due to revisions of COMP's components.
current level of COMP= 17.91
recession trigger line
COMP
80
60
40
20
0
-20
-40
-60
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2021

3-COMP.xlsm



BCIg Toni.xlsm

iM imarketsignals.com

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);

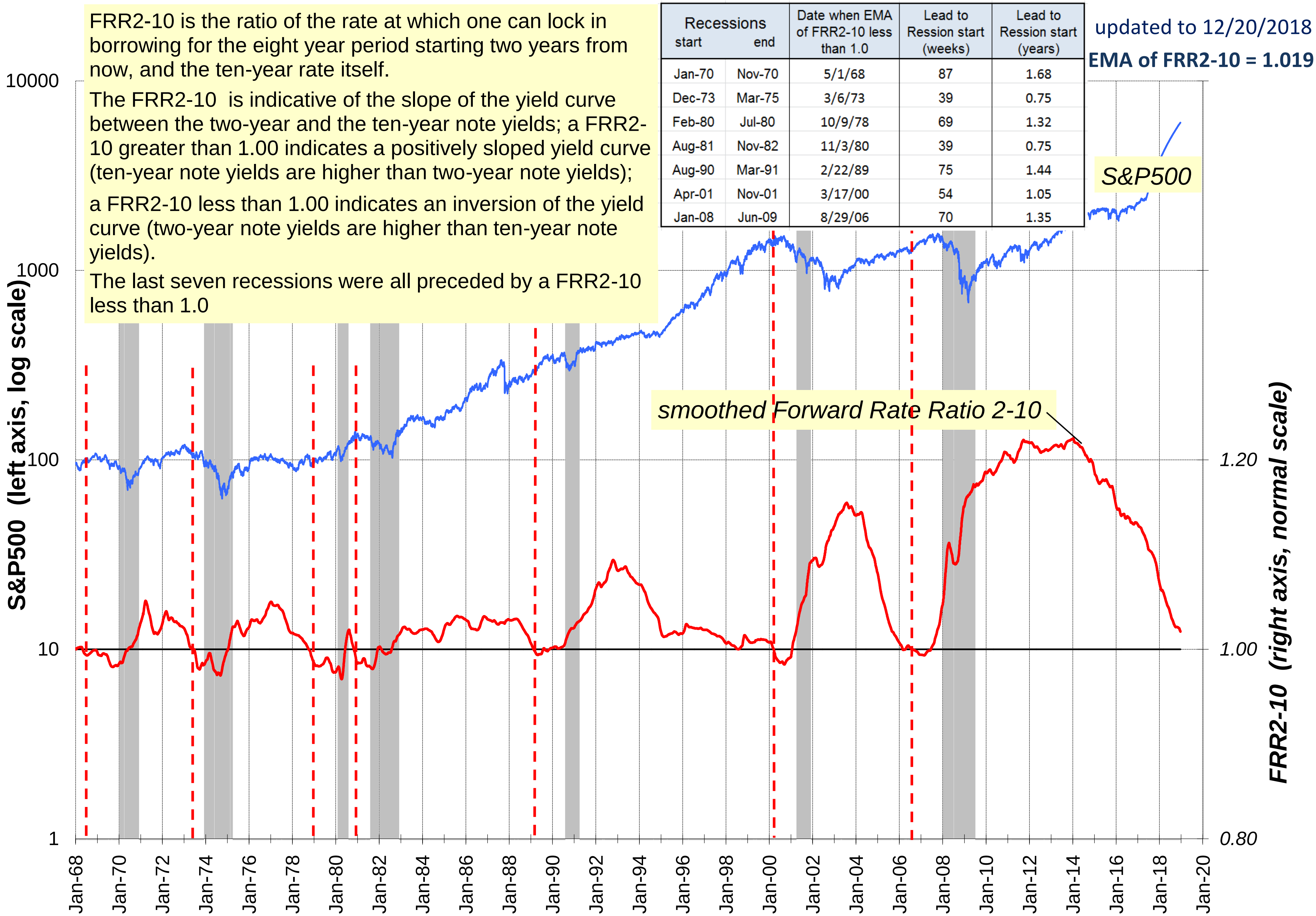
a FRR2-10 less than 1.00 indicates an inversion of the yield curve (two-year note yields are higher than ten-year note yields).

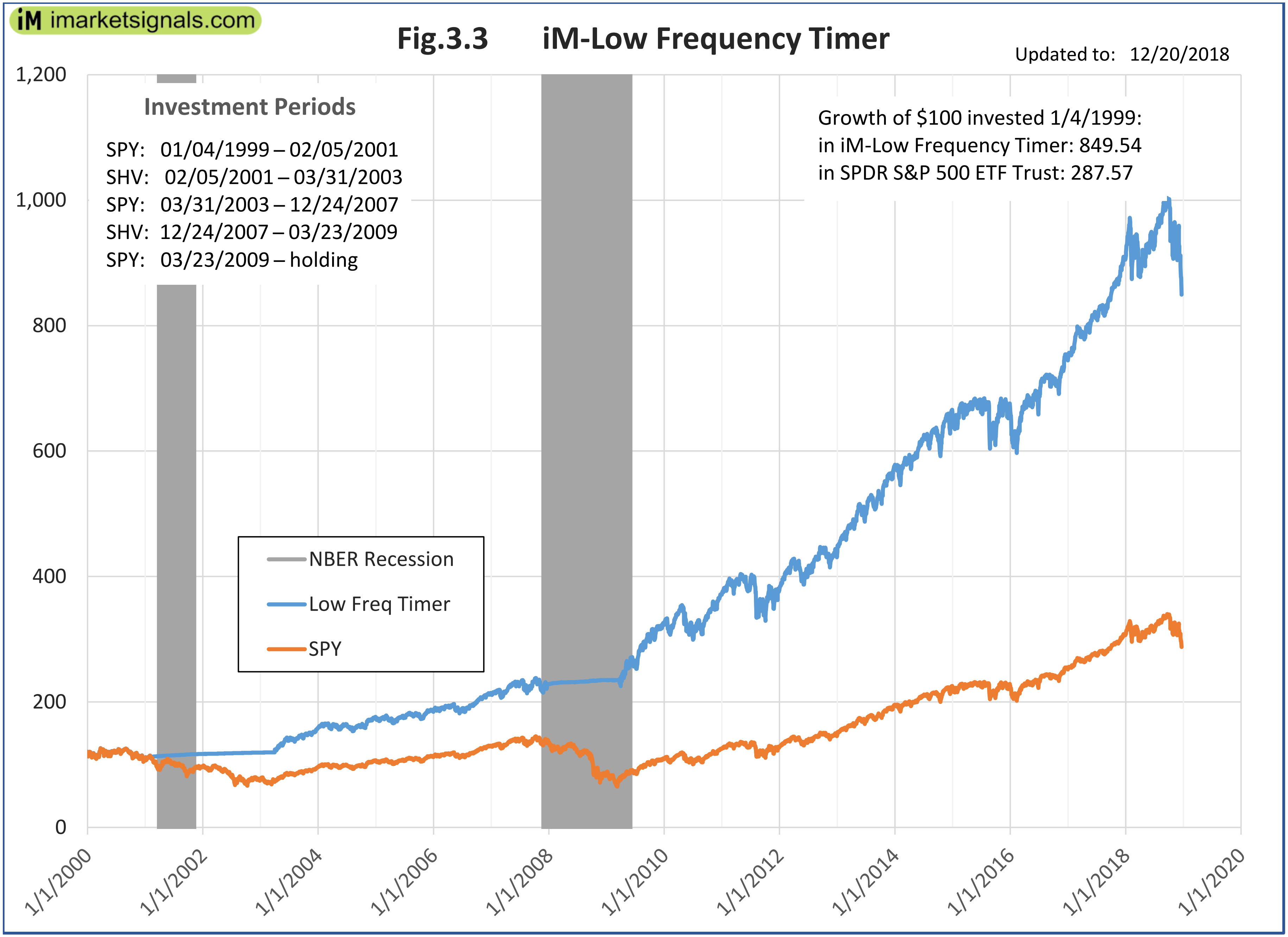
The last seven recessions were all preceded by a FRR2-10 less than 1.0

Recessions start	Recessions end	Date when EMA of FRR2-10 less than 1.0	Lead to 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

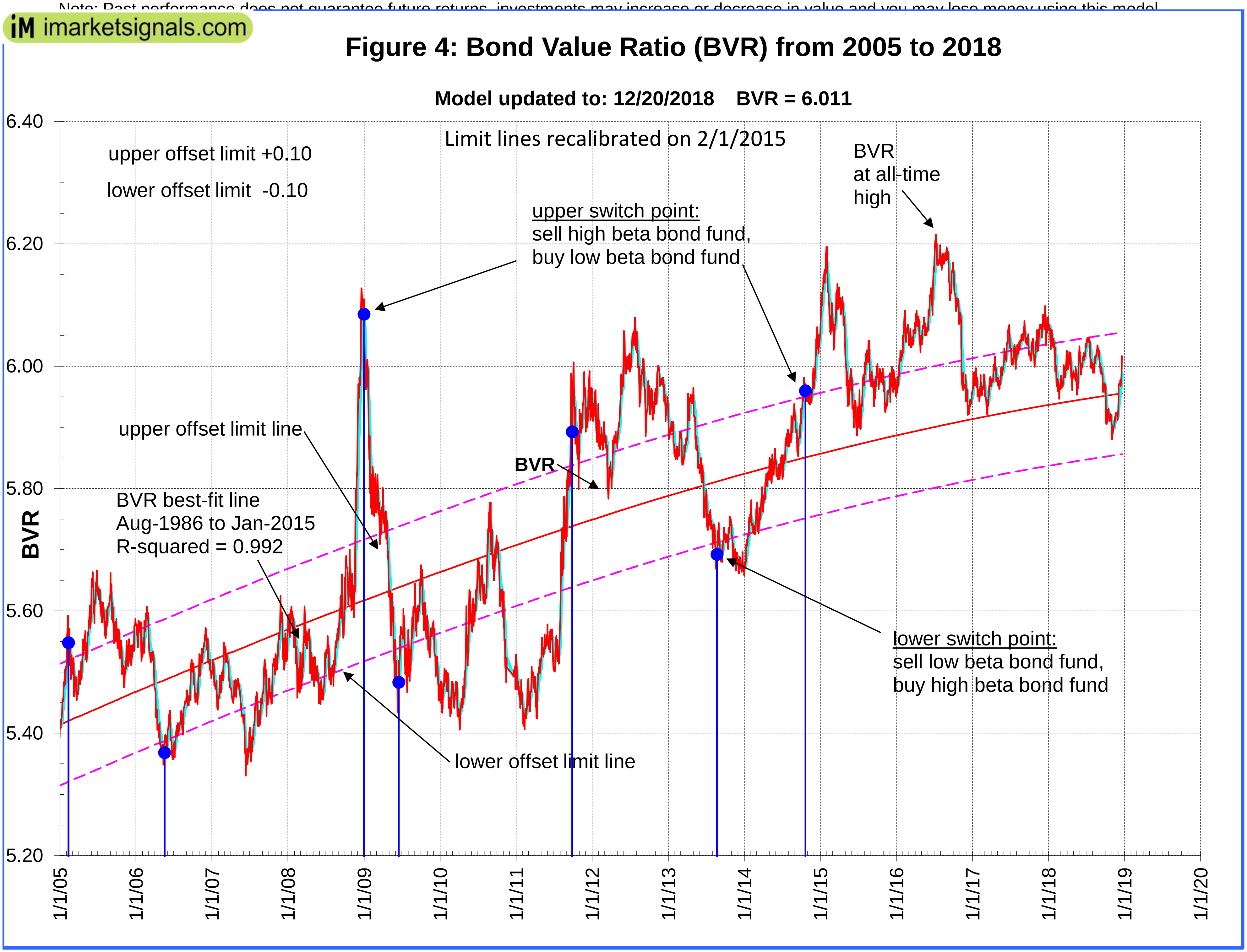
updated to 12/20/2018

EMA of FRR2-10 = 1.019




iM imarketsignals.com
Fig.3.3 iM-Low Frequency Timer
Updated to: 12/20/2018
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 – holding
Growth of $100 invested 1/4/1999:
in iM-Low Frequency Timer: 849.54
in SPDR S&P 500 ETF Trust: 287.57
NBER Recession
Low Freq Timer
SPY
1,200
1,000
800
600
400
200
0
1/1/2000
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020

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

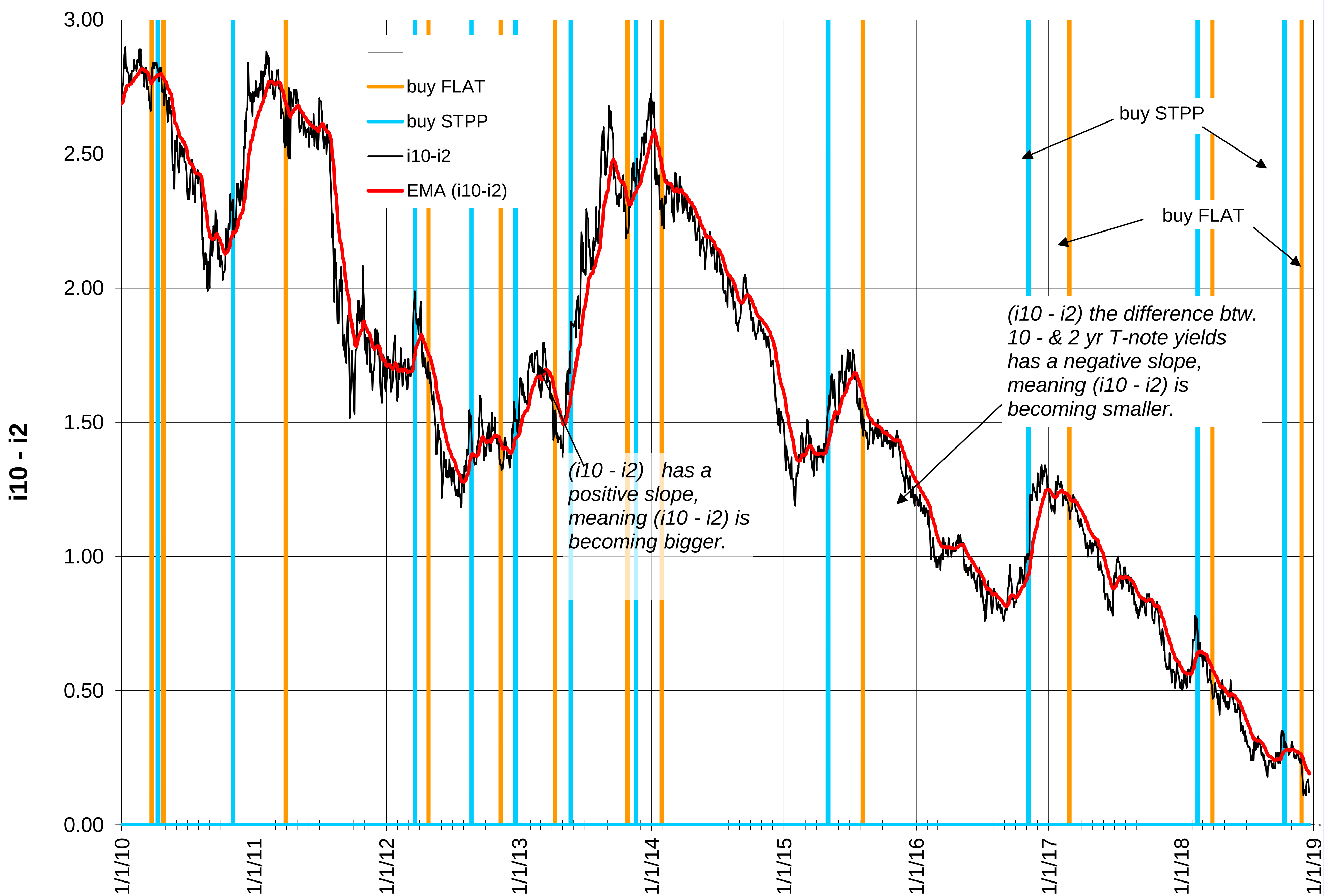


4-BVR recalibrated.xlsm fig4BVR06-14

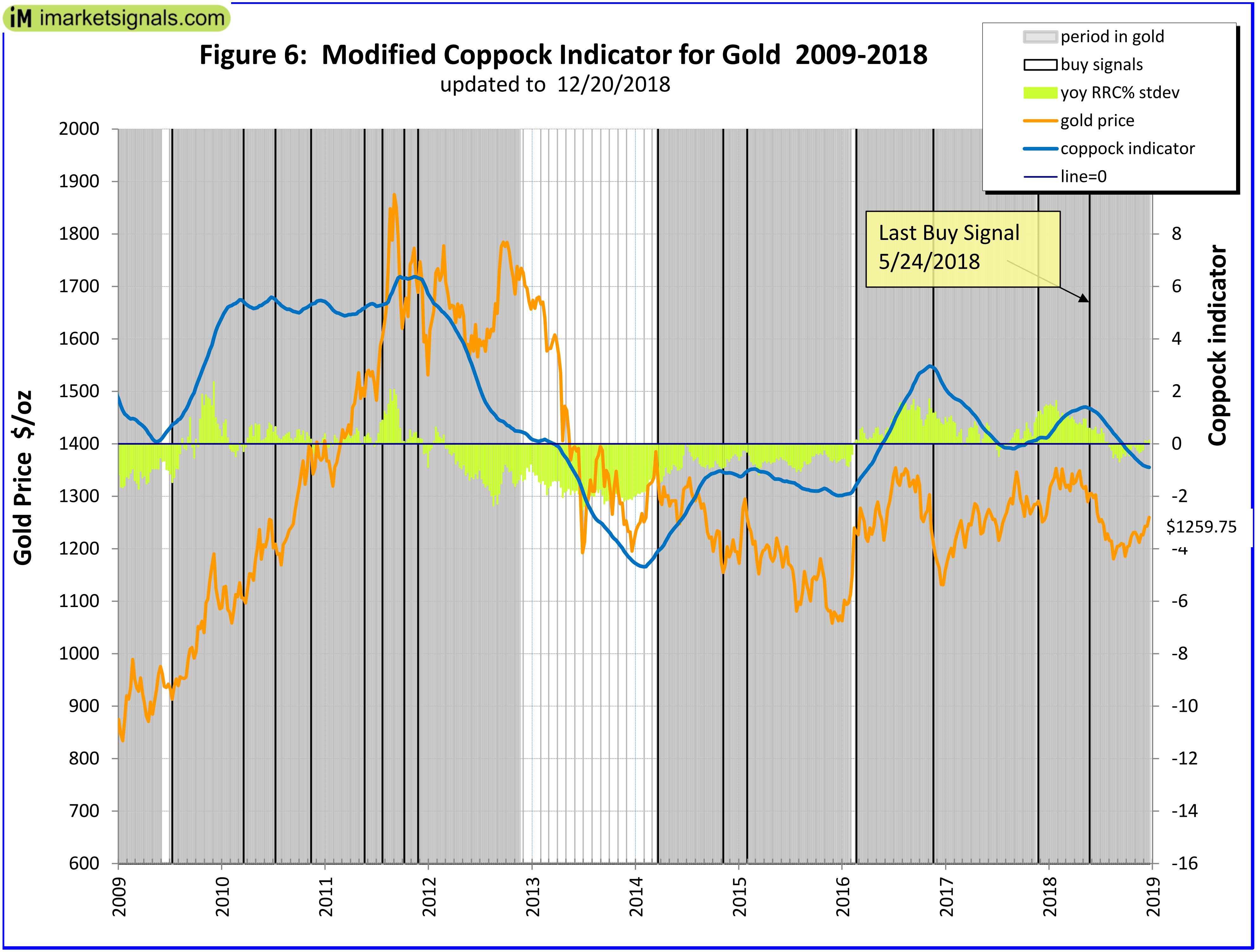
Note: Past performance does not guarantee future returns, investments may increase or decrease in value and you may lose money using this model.

iM imarketsignals.com

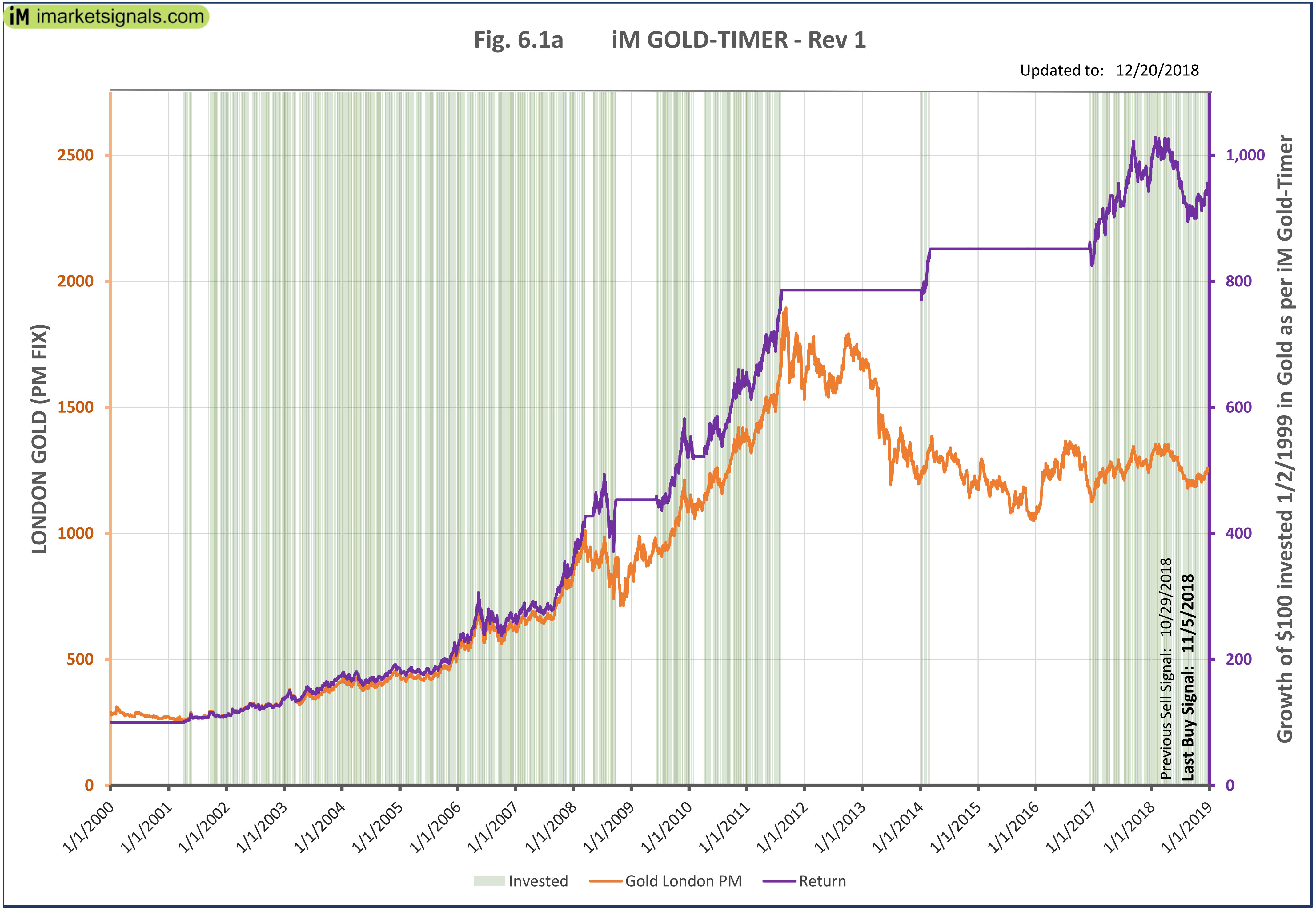
Figure 5: i10 - i2 **Updated to…..12/20/18**



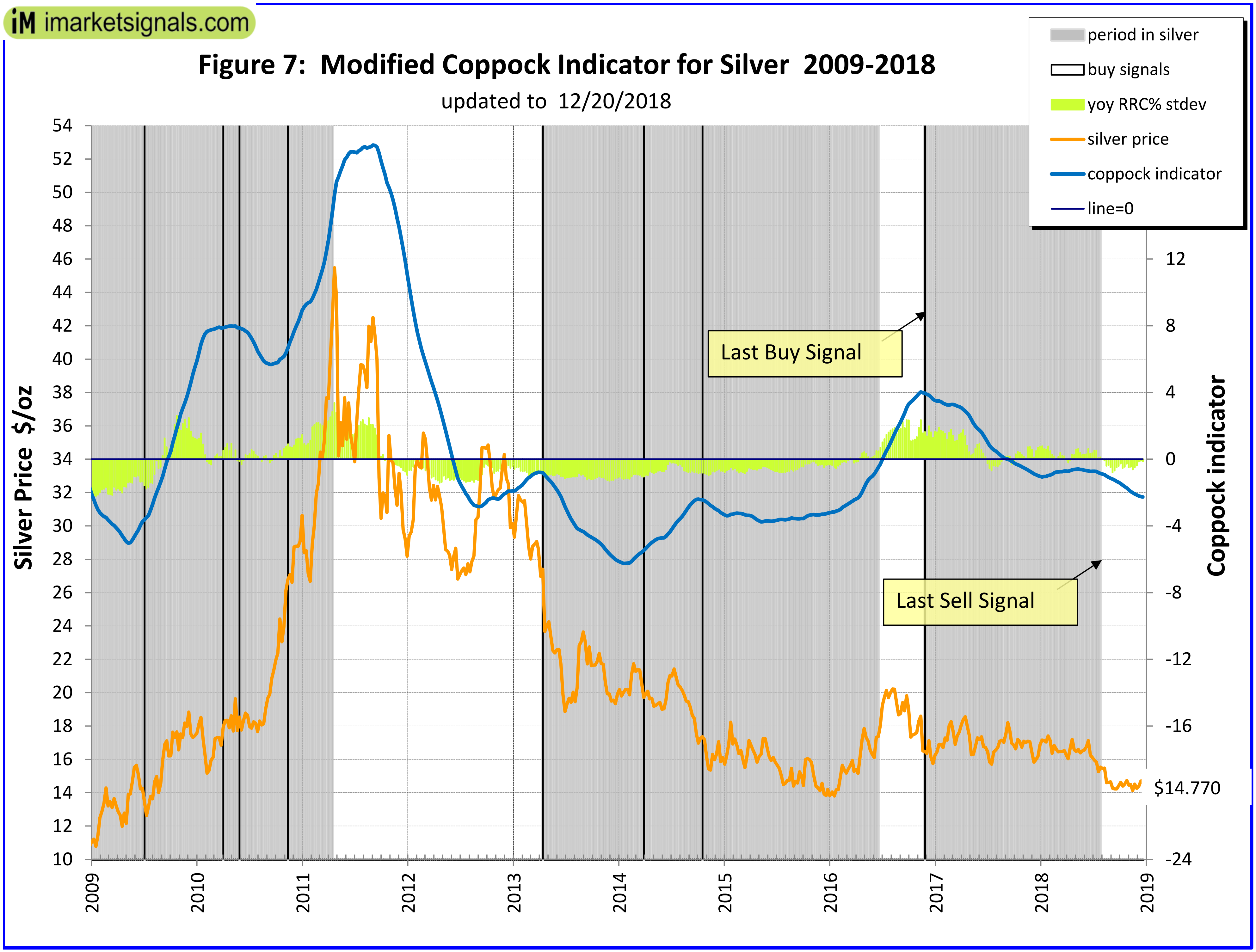
5-Yield Curve.xlsm 09-15



6-COPPOCK GOLD for updates.xlsm



imarketsignals.com
Fig. 6.1a iM GOLD-TIMER - Rev 1
Updated to: 12/20/2018
LONDON GOLD (PM FIX)
Growth of $100 invested 1/2/1999 in Gold as per iM Gold-Timer
0
500
1000
1500
2000
2500
0
200
400
600
800
1,000
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
Previous Sell Signal: 10/29/2018
Last Buy Signal: 11/5/2018
Invested
Gold London PM
Return



imarketsignals.com
Figure 7: Modified Coppock Indicator for Silver 2009-2018
updated to 12/20/2018
period in silver
buy signals
yoy RRC% stdev
silver price
coppock indicator
line=0
Last Buy Signal
Last Sell Signal
Silver Price $/oz
Coppock indicator
$14.770
54
52
50
48
46
44
42
40
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
12
8
4
0
-4
-8
-12
-16
-24
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019