

QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

December 10, 2018

Volume 11 Issue 237

Market Overview



Signals Overview

Aggregator	CBI Reading
Long	0

Tonight's Research Points

- A strong drop on the 3rd day of a pullback under the 200ma but above a 20-day low has most often been followed by a rally in the next few days.
- Multiple days of 1.75% drops have triggered studies suggesting a short-term bullish edge.
- I expect a QT reprieve this week, and for QT to be lighter than normal in December and January.
- The CBI remains at 0. Higher readings would make a bounce more probable.
- The SPX completed its Death Cross formation on Friday, which caused the Market Timing Course signals to turn flat.

Short-term Outlook

The Bottom Line

The Aggregator is bullish. Evidence is strong. And reward/risk appears favorable. I like the odds for the bulls over the next few days.

Summary of Recent Active Studies (see Letters from listed dates for details)

Study Date	Description	Time span	Bias	Avg Run-up	Avg DrawDn	Avg DrawDn - 1 Std Dev
Active - Short Term						
December 10, 2018	Dn 1.75% 2 of 3 days but > 10-low	1-2 days	Bullish			
December 10, 2018	SPX dn 3 < 200ma. 1% dn 2day > 20-low	1-4 days	Bullish			
December 7, 2018	Close > 1% above open but down on day	1-2 days	Bullish			
December 7, 2018	Unfilled gap dn 2 days < 200ma	1-5 days	Bullish			
Active - Long Term						
November 8, 2018	FTD with strong breadth & 20-day high	int term	Bullish			
November 1, 2018	Best 6 Month During Pres Yr 3	1-6 months	Bullish	17.70%	-3.10%	-7.20%
October 1, 2018	Quantitative Tightening \$50billion/mo	int term	Bearish			
January 8, 2018	1st 4 days of year close higher	1-250 days	Bullish	15.90%	-5.70%	-11.10%
July 22, 2013	New High Divergence (Study of Tops)	int term	Bearish			

The Evidence

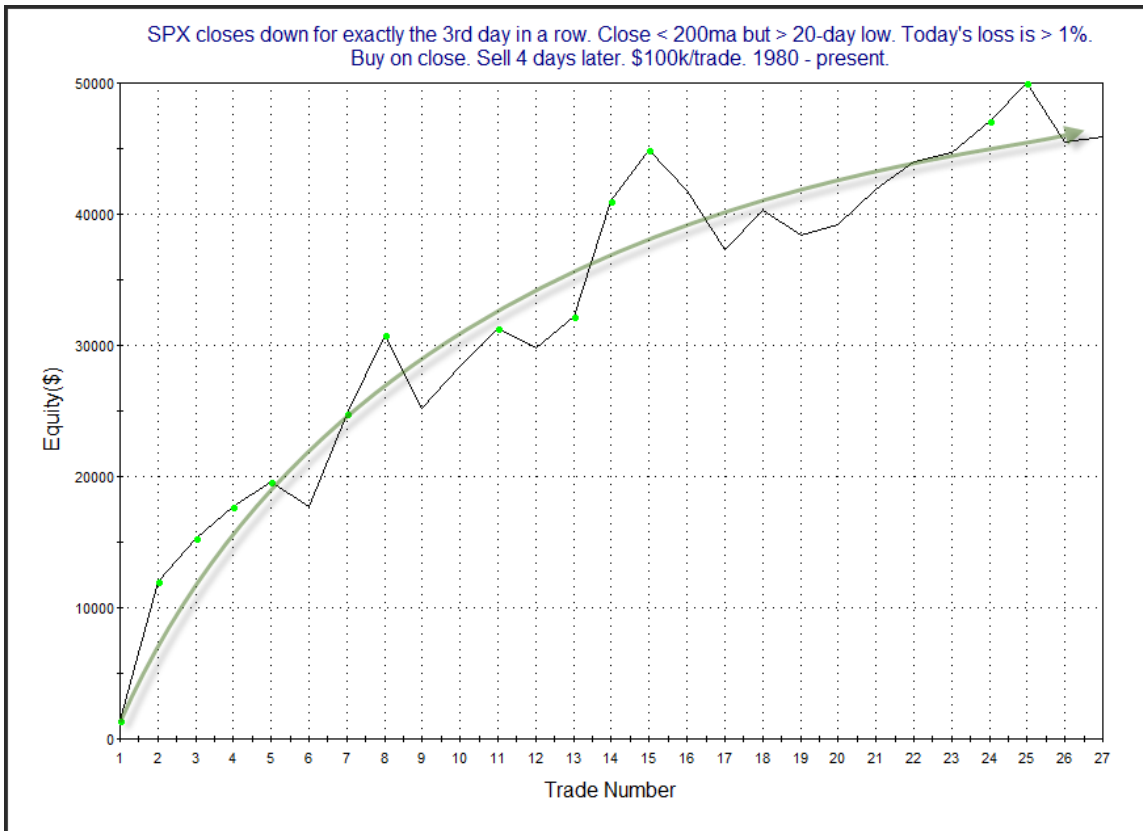
Friday was another big selling day. The SPX finished down 2.3%, the NASDAQ tumbled 3.05%, and the Russell 2000 dropped 2.0%. Breadth was negative as the NYSE Up Issues % was 31% and the Up Volume % came in at 19%. NYSE volume declined quite a bit from Thursday's level.

The strong move lower over the last few days has triggered a large number of studies in the Quantifinder. The one below combined a few of the themes shown in other Quantifinder studies. It was last seen in the 1/16/15 letter and has been updated.

SPX closes down for exactly the 3rd day in a row. Close < 200ma but > 20-day low. Today's loss is > 1%. Buy on close. Sell X days later. \$100k/trade. 1980 - present.

X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Max Winning Trade	All: Avg Losing Trade	All: Max Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
10	54,914.18	26	18	8	69.23	4,253.60	13,815.90	-2,706.32	-6,435.17	1.57	3.54	2,112.08
9	51,020.11	26	17	9	65.38	4,224.41	12,019.45	-2,310.54	-6,486.13	1.83	3.45	1,962.31
8	50,354.39	26	17	8	65.38	4,480.68	12,293.93	-3,227.15	-6,288.70	1.39	2.95	1,936.71
7	38,121.79	26	18	8	69.23	3,601.41	12,277.87	-3,337.94	-6,115.59	1.08	2.43	1,466.22
6	34,686.87	27	18	9	66.67	3,725.94	10,326.58	-3,597.78	-11,683.62	1.04	2.07	1,284.70
5	40,700.76	27	18	9	66.67	3,829.21	12,331.51	-3,136.12	-5,973.00	1.22	2.44	1,507.44
4	45,882.11	27	20	7	74.07	3,440.76	10,588.68	-3,276.14	-5,638.06	1.05	3.00	1,699.34
3	40,320.76	27	18	9	66.67	3,005.43	8,432.34	-1,530.78	-3,408.93	1.96	3.93	1,493.36
2	23,470.78	27	15	12	55.56	2,496.47	7,249.63	-1,164.68	-2,936.78	2.14	2.68	869.29
1	20,008.51	27	19	8	70.37	1,469.59	6,901.83	-989.20	-3,162.00	1.49	3.53	741.06

Results here appear solidly bullish. Below is the 4-day profit curve.



The persistent upslope acts as some confirmation of the bullish edge.

Of course the SPX lost quite a bit more than just 1%. And it was the 2nd day of the last 3 in which it suffered a sizable decline. There were several studies that triggered which looked at drops of 1.75% or more on 2 of 3 days. I've updated a few of the more compelling ones. This 1st one below was last seen in the 5/14/09 subscriber letter – and this is the 1st time it has triggered since then. It combined the 3 consecutive down days and sharp selling with the fact that SPX failed to close at even a 10-day low.

SPX closes down > 1.75% today and either yesterday or the day before. It has now closed lower at least 3 days in a row. Close > 10-day low close. Buy on close. Sell X days later. \$100k/trade. 1980 - present.

X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Max Winning Trade	All: Avg Losing Trade	All: Max Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
10	47,252.74	8	8	0	100.00	5,906.59	13,815.90	0.00	0.00	100.00	100.00	5,906.59
9	45,002.87	8	8	0	100.00	5,625.36	11,206.23	0.00	0.00	100.00	100.00	5,625.36
8	48,355.23	8	8	0	100.00	6,044.40	11,769.59	0.00	0.00	100.00	100.00	6,044.40
7	42,340.09	8	8	0	100.00	5,292.51	10,117.38	0.00	0.00	100.00	100.00	5,292.51
6	28,146.84	8	7	1	87.50	4,125.46	10,167.24	-731.40	-731.40	5.64	39.48	3,518.36
5	31,865.56	8	7	1	87.50	4,611.07	12,331.51	-411.93	-411.93	11.19	78.36	3,983.20
4	32,673.23	8	7	1	87.50	4,796.14	10,588.68	-899.76	-899.76	5.33	37.31	4,084.15
3	27,158.41	8	8	0	100.00	3,394.80	8,432.34	0.00	0.00	100.00	100.00	3,394.80
2	9,473.73	8	6	2	75.00	2,046.81	5,018.23	-1,403.57	-2,689.62	1.46	4.37	1,184.22
1	5,846.07	8	7	1	87.50	1,667.98	2,971.43	-5,829.81	-5,829.81	0.29	2.00	730.76

The failure to make a 10-day low when there has been such strong selling generally indicates that there was a strong run-up prior to the selloff. And that appears to help the odds of the selloff. The size of the moves shown in the table were very strong. Let's look at the 3-day and 8-day results below.

SPX closes down > 1.75% today and either yesterday or the day before. It has now closed lower at least 3 days in a row. Close > 10-day low close. Buy on close. Sell 3 days later. \$100k/trade. 1980 - present.

Date/Time	Signal	Price	% Profit	Run-up Drawdown
4/24/1987	Buy	\$281.52	1.08%	\$1,735.95
4/29/1987	Sell	\$284.57		(\$1,885.05)
10/26/1987	Buy	\$227.66	7.52%	\$8,354.17
10/29/1987	Sell	\$244.77		(\$605.82)
1/14/1999	Buy	\$1,212.19	3.67%	\$5,074.98
1/20/1999	Sell	\$1,256.62		\$0.00
4/13/2000	Buy	\$1,440.51	0.07%	\$73.14
4/18/2000	Sell	\$1,441.57		(\$6,976.59)
5/23/2000	Buy	\$1,373.85	0.30%	\$2,721.60
5/26/2000	Sell	\$1,378.02		(\$918.72)
8/5/2002	Buy	\$834.60	8.49%	\$8,477.56
8/8/2002	Sell	\$905.46		\$0.00
11/11/2002	Buy	\$876.19	3.20%	\$3,201.12
11/14/2002	Sell	\$904.27		(\$459.42)
5/13/2009	Buy	\$883.92	2.92%	\$2,947.04
5/18/2009	Sell	\$909.71		(\$562.74)

SPX closes down > 1.75% today and either yesterday or the day before. It has now closed lower at least 3 days in a row. Close > 10-day low close.
Buy on close. Sell 8 days later. \$100k/trade. 1980 - present.

Date/Time	Signal	Price	% Profit	Run-up Drawdown
4/24/1987	Buy	\$281.52	4.95%	\$5,204.30
5/6/1987	Sell	\$295.46		(\$1,885.05)
10/26/1987	Buy	\$227.66	11.78%	\$12,480.77
11/5/1987	Sell	\$254.47		(\$605.82)
1/14/1999	Buy	\$1,212.19	2.56%	\$5,074.98
1/27/1999	Sell	\$1,243.19		\$0.00
4/13/2000	Buy	\$1,440.51	1.42%	\$2,927.67
4/26/2000	Sell	\$1,460.99		(\$6,976.59)
5/23/2000	Buy	\$1,373.85	6.83%	\$7,875.36
6/5/2000	Sell	\$1,467.63		(\$918.72)
8/5/2002	Buy	\$834.60	11.46%	\$11,744.11
8/15/2002	Sell	\$930.25		\$0.00
11/11/2002	Buy	\$876.19	6.57%	\$6,719.16
11/21/2002	Sell	\$933.76		(\$459.42)
5/13/2009	Buy	\$883.92	2.99%	\$4,596.84
5/26/2009	Sell	\$910.33		(\$562.74)

The results are very impressive, and suggestive of a bullish edge. Of course the number of instances here is lower than I prefer. So let's also look at some similar studies to see if they provide us some confirmation.

This next one was last seen in the 10/3/11 letter, and used SPY instead of SPX. It required a similar selloff, but it did not need 3 consecutive down days. It did require the SPY not make a 7-day intraday low on the last day of the selloff.

SPY drops > 1.75% today and either yesterday or the day before. Today's low is > the 7-day low.
Buy on close. Sell X days later. \$100k/trade. 1993 - present.

X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Max Winning Trade	All: Avg Losing Trade	All: Max Losing Trade	All: Win/Loss Ratio	All: Profit Factor	All: Avg Trade
10	29,979.79	13	9	4	69.23	5,788.85	8,317.86	-5,529.96	-15,612.36	1.05	2.36	2,306.14
9	51,253.23	13	12	1	92.31	5,242.66	10,776.31	-11,658.69	-11,658.69	0.45	5.40	3,942.56
8	35,531.24	13	11	2	84.62	4,204.42	7,136.41	-5,358.71	-6,921.03	0.78	4.32	2,733.17
7	26,632.92	13	10	3	76.92	3,772.90	6,876.35	-3,698.70	-5,648.10	1.02	3.40	2,048.69
6	32,540.36	13	10	3	76.92	3,874.00	6,242.98	-2,066.56	-2,265.75	1.87	6.25	2,503.10
5	19,117.12	13	9	4	69.23	3,458.89	6,568.20	-3,003.23	-8,193.40	1.15	2.59	1,470.55
4	19,158.48	14	11	3	78.57	3,667.03	7,967.00	-7,059.63	-12,890.18	0.52	1.90	1,368.46
3	18,954.72	14	11	3	78.57	3,073.93	7,413.70	-4,952.82	-7,379.07	0.62	2.28	1,353.91
2	26,172.31	15	11	4	73.33	2,983.71	6,363.32	-1,662.12	-3,970.80	1.80	4.94	1,744.82
1	13,889.37	15	11	4	73.33	1,985.50	4,803.44	-1,987.79	-3,479.04	1.00	2.75	925.96

All 15 instances closed above the entry price at some point in the next 3 days.

Here again we see a highly reliable bounce over the next few days. Below are the list of instances and their 2-day results.

SPY drops > 1.75% today and either yesterday or the day before. Today's low is > the 7-day low. Buy on close. Sell 2 days later. \$100k/trade. 1993 - present.				
Date/Time	Signal	Price	% Profit	Run-up Drawdown
9/10/1998	Buy	\$97.25	6.37%	\$7,391.32
9/14/1998	Sell	\$103.44		(\$257.00)
1/14/1999	Buy	\$121.22	3.28%	\$5,150.00
1/19/1999	Sell	\$125.19		\$0.00
1/2/2001	Buy	\$128.81	3.66%	\$5,579.44
1/4/2001	Sell	\$133.53		(\$892.40)
2/21/2002	Buy	\$108.30	2.91%	\$3,239.73
2/25/2002	Sell	\$111.45		(\$396.89)
6/21/2002	Buy	\$99.28	-1.73%	\$1,621.27
6/25/2002	Sell	\$97.56		(\$2,044.21)
6/25/2002	Buy	\$97.56	1.92%	\$1,978.25
6/27/2002	Sell	\$99.43		(\$2,429.25)
8/2/2002	Buy	\$86.79	-0.23%	\$1,278.72
8/6/2002	Sell	\$86.59		(\$3,732.48)
9/23/2008	Buy	\$118.55	1.89%	\$2,832.48
9/25/2008	Sell	\$120.79		(\$640.68)
10/22/2008	Buy	\$90.64	-3.97%	\$1,996.43
10/24/2008	Sell	\$87.04		(\$7,323.92)
11/14/2008	Buy	\$86.62	0.53%	\$2,238.76
11/18/2008	Sell	\$87.08		(\$4,281.34)
1/30/2009	Buy	\$82.83	1.10%	\$1,846.71
2/3/2009	Sell	\$83.74		(\$1,834.64)
3/24/2009	Buy	\$80.60	3.11%	\$3,348.00
3/26/2009	Sell	\$83.11		(\$1,909.60)
3/30/2009	Buy	\$78.79	2.88%	\$3,337.47
4/1/2009	Sell	\$81.06		(\$583.74)
8/10/2011	Buy	\$112.29	5.19%	\$6,167.70
8/12/2011	Sell	\$118.12		\$0.00
9/30/2011	Buy	\$113.15	-0.72%	\$706.40
10/4/2011	Sell	\$112.34		(\$5,050.76)

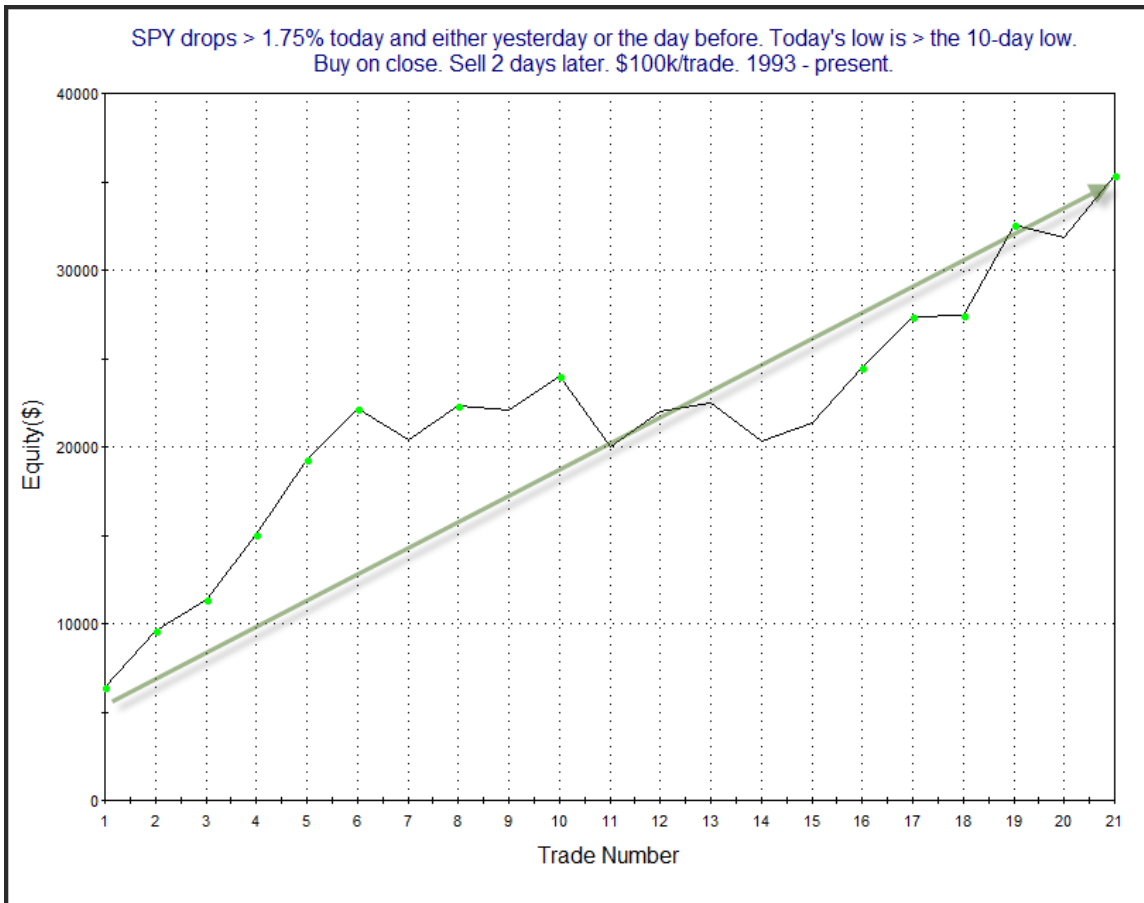
Most of these dates are different from the previous study. Results here have been strong and consistent. Every instance except the last one showed a run-up of at least 1.25%. In the 10/3/11 letter I also loosened the criteria to see if I could get a greater number of instances. The looser study (looking at 10-day lows instead of 7-day lows) is updated below.

SPY drops > 1.75% today and either yesterday or the day before. Today's low is > the 10-day low.
Buy on close. Sell X days later. \$100k/trade. 1993 - present.

X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Max Winning Trade	All: Avg Losing Trade	All: Max Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
10	28,500.61	18	12	6	66.67	5,856.89	12,317.05	-6,963.68	-16,951.00	0.84	1.68	1,583.37
9	38,355.56	18	14	4	77.78	5,063.17	10,776.31	-8,132.20	-11,658.69	0.62	2.18	2,130.86
8	31,323.71	18	13	5	72.22	4,371.62	7,136.41	-5,101.48	-7,113.48	0.86	2.23	1,740.21
7	24,560.71	18	13	5	72.22	3,666.81	7,656.30	-4,621.58	-5,929.00	0.79	2.06	1,364.48
6	22,919.85	19	13	6	68.42	3,540.39	6,242.98	-3,850.87	-9,559.44	0.92	1.99	1,206.31
5	25,042.91	19	13	6	68.42	3,385.73	6,568.20	-3,161.93	-8,193.40	1.07	2.32	1,318.05
4	18,069.36	20	14	6	70.00	3,596.43	7,967.00	-5,380.11	-12,890.18	0.67	1.56	903.47
3	21,040.91	20	15	5	75.00	2,826.28	7,413.70	-4,270.66	-7,379.07	0.66	1.99	1,052.05
2	35,360.00	21	16	5	76.19	2,764.38	6,363.32	-1,774.01	-3,970.80	1.56	4.99	1,683.81
1	21,823.19	23	18	5	78.26	1,787.52	4,803.44	-2,070.45	-3,479.04	0.86	3.11	948.83

22 of 23 instances (96%) closed above the entry price at some point in the next 3 days.

Over the 1st few days the consistency and the results were nearly as strong. Below is a profit curve for the 2-day holding period.

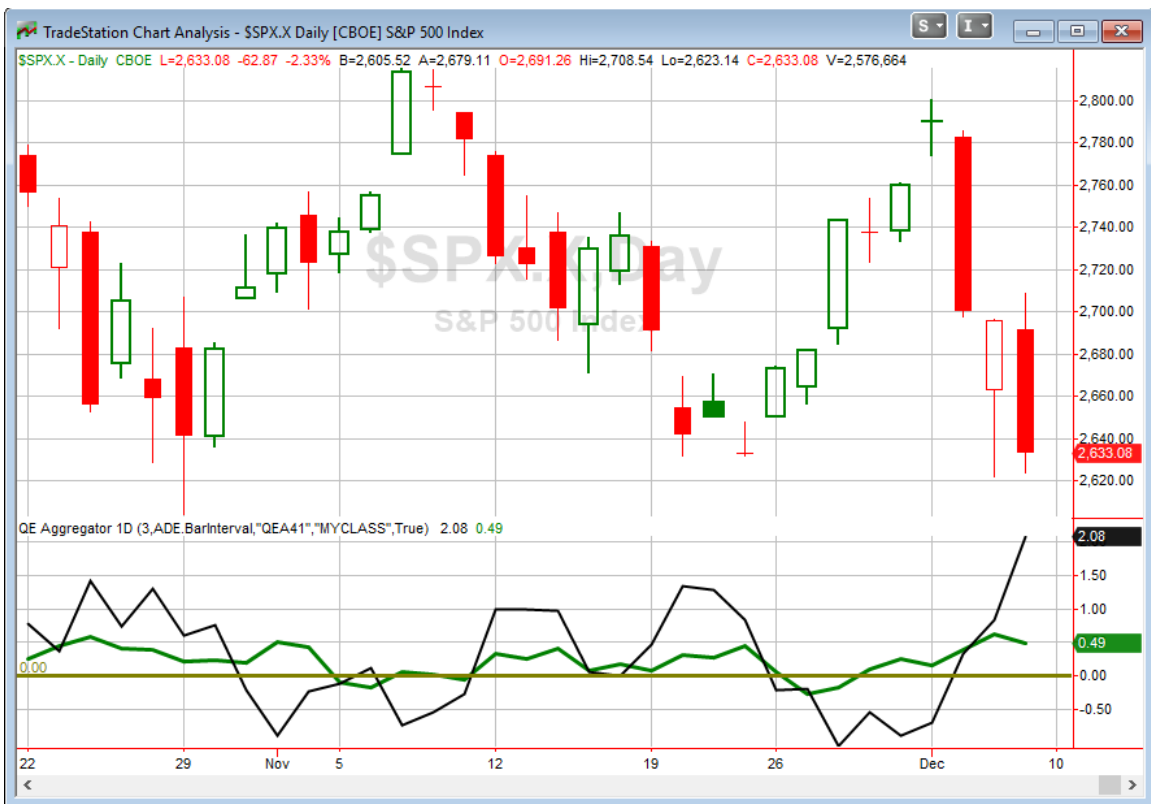


The move from lower left to upper right acts as further confirmation. The last 3 studies are all providing a similar message. I elected to use the results from this one in the Aggregator, since it has the largest sample size of the three.

Another plus for the possibility of a bounce is that I expect the SOMA to rise slightly this week (ending Wednesday afternoon). In other words, no Quantitative Tightening (QT) is expected. I will discuss this more in the intermediate-term section below. But there is not the typical QT headwind for the bulls to deal with over the next few days.

On a less-than-bullish note, I will point out that the Quantifiable Edges Capitulative Breadth Indicator (CBI) remains at zero. This is a minor concern. Bounces typically are more reliable when the CBI is elevated. And the higher the CBI, the higher the odds for a bounce. But as I pointed out in the studies above, the market is not even at a 10-day low. And you do not often get strong capitulation in a range-bound market.

I have updated [the Aggregator chart](#) below.



With today's evidence considered the green Aggregator Line remained above zero. Positive readings mean net expectations are for upside over the next few days. Meanwhile, the black Differential Line is now very far above 0. The positive Differential Line reading means SPX is strongly oversold versus recent expectations. So expectations are positive and SPX is oversold. This is considered a bullish configuration. Bullish configurations are visible on the chart whenever both lines close above zero. Therefore, the Aggregator signal stayed long at the close.

With the current active studies, expectations are slated to remain bullish on Monday. This might change if extremely compelling new bearish evidence emerges. The Differential Pivot will be 2719.64 on Monday. That is a whopping 3.3% above Friday's close, and it is unlikely we will see a rally that large on Monday. A more likely scenario for working off the oversold condition would be a multi-day rally or consolidation.

So the Aggregator is bullish. Evidence is suggesting a strong bounce is probable in the next few days. And there is plenty of room to the upside before the market would turn overbought. So reward/risk appears favorable. And QT is not a hindrance at the moment. I want some long exposure. And (unfortunately) I took some on Friday. I contemplated adding more right here, but with the highly volatile environment and uncertain intermediate-term backdrop I am being a bit more cautious than usual. That said, another down day on Monday would certainly have me wanting 1 more lot of SPY. A 4th down day heading into a Turnaround Tuesday would definitely add to the bullish evidence. So I'll be looking to add to my currently small long position if the SPY closes down again on Monday. More aggressive traders could look to enter ahead of that if they perceived the current bullish edge to be strong enough.

Intermediate-term Outlook (2 weeks – 2 months) – updated 12/10– neutral

Combo #1	Combo #2	Combo #3
Flat	Flat	Flat

Above is the status of the different Combination Signals from the Quantifiable Edges Market Timing Course. Signals are long-term in nature. All 3 can be either flat or long. None of them look to short. More information on these signals can be found in the [Quantifiable Edges Market Timing Course](#), which is included with all annual subscriptions. Detailed descriptions of these combination approaches can be found in [Lesson 8](#). Subscribers may also download detailed hypothetical historical performance reports covering 12/31/71 – 3/7/14 in [Lesson 11, Course Downloads](#). (You must go through the course first in order to access the Downloads.) *This week the Combo Systems all flipped from “long” to “flat”.*

The market basically reversed the gains of the previous week with a big drop this week. The SPX lost 4.6%, the NASDAQ tumbled 4.9%, and the Russell 2000 dropped 5.6%. What led the Market Timing Course combo systems to turn flat on Friday afternoon was the fact that the SPX Death Cross arrived. I wrote about the Death Cross in much detail last week. And have copied that commentary below. You may scroll through the blue italicized section if you don't care to review it again.

In the past I have used Tradestation data and looked back to 1960 when examining Death Crosses. Today I decided to use Amibroker with my Norgate database, which goes back to 1928, and examine Death Crosses back as far as I can. This made for an interesting starting point, because the 1st instance, in 1929, came shortly after the 1929 market crash that was followed by the Great Depression. It was also followed by the most substantial decline – by far. Let's first look at a list of all the Death Cross formations and how the SPX performed while they were in effect.

Symbol	Trade	Date	Price	Exit date	Exit Price	#days	% chg	Max Drawdn
SSPX	Death Cross	11/22/1929	21.53	9/19/1932	7.34	708	-65.91%	-79.56%
SSPX	Death Cross	3/27/1933	6.09	5/18/1933	8.89	38	45.98%	-3.94%
SSPX	Death Cross	5/31/1934	9.61	5/23/1935	10.07	245	4.79%	-16.13%
SSPX	Death Cross	5/21/1937	16.27	7/27/1938	12.25	298	-24.71%	-47.76%
SSPX	Death Cross	3/31/1939	10.98	9/18/1939	12.47	118	13.57%	-5.10%
SSPX	Death Cross	3/20/1940	12.14	12/13/1940	10.69	186	-11.94%	-25.95%
SSPX	Death Cross	2/21/1941	9.76	8/18/1941	10.13	124	3.79%	-4.71%
SSPX	Death Cross	11/18/1941	9.26	8/14/1942	8.58	188	-7.34%	-19.33%
SSPX	Death Cross	12/1/1943	11.13	3/13/1944	12.24	73	9.97%	0.00%
SSPX	Death Cross	8/28/1946	16.73	7/25/1947	16.08	228	-3.89%	-17.69%
SSPX	Death Cross	1/22/1948	14.42	5/14/1948	16.39	79	13.66%	-4.02%
SSPX	Death Cross	12/1/1948	15.01	8/31/1949	15.22	192	1.40%	-9.73%
SSPX	Death Cross	5/11/1953	24.91	12/21/1953	24.95	156	0.16%	-8.83%
SSPX	Death Cross	10/26/1956	46.27	6/3/1957	47.37	149	2.38%	-8.39%
SSPX	Death Cross	9/26/1957	42.57	5/8/1958	43.99	156	3.34%	-8.43%
SSPX	Death Cross	10/30/1959	57.52	12/30/1959	59.77	41	3.91%	-2.26%
SSPX	Death Cross	2/15/1960	55.17	1/4/1961	58.36	224	5.78%	-5.38%
SSPX	Death Cross	5/7/1962	66.02	1/3/1963	63.72	167	-3.48%	-22.22%
SSPX	Death Cross	7/22/1965	83.85	9/17/1965	90.05	41	7.39%	-0.66%
SSPX	Death Cross	4/28/1966	91.13	2/3/1967	87.36	195	-4.14%	-20.68%
SSPX	Death Cross	2/27/1968	90.53	5/17/1968	96.9	57	7.04%	-3.91%
SSPX	Death Cross	3/13/1969	98.39	5/27/1969	103.57	52	5.26%	-1.35%
SSPX	Death Cross	6/23/1969	96.23	10/22/1970	83.38	339	-13.35%	-28.70%
SSPX	Death Cross	9/24/1971	98.15	1/26/1972	102.5	87	4.43%	-8.98%
SSPX	Death Cross	4/18/1973	111.54	3/6/1975	83.69	476	-24.97%	-45.35%
SSPX	Death Cross	12/1/1976	102.49	1/4/1977	105.7	24	3.13%	-0.85%
SSPX	Death Cross	3/3/1977	100.88	5/22/1978	99.09	308	-1.77%	-14.30%
SSPX	Death Cross	12/13/1978	96.06	3/21/1979	101.25	68	5.40%	-3.56%
SSPX	Death Cross	4/22/1980	103.43	6/17/1980	116.03	40	12.18%	-2.53%
SSPX	Death Cross	7/2/1981	128.64	9/28/1982	123.24	314	-4.20%	-20.55%
SSPX	Death Cross	2/3/1984	160.91	9/12/1984	164.68	154	2.34%	-8.48%
SSPX	Death Cross	11/18/1986	236.78	11/25/1986	248.17	6	4.81%	-0.54%
SSPX	Death Cross	11/5/1987	254.48	6/28/1988	272.31	163	7.01%	-13.06%
SSPX	Death Cross	2/26/1990	328.67	5/25/1990	354.58	64	7.88%	-1.43%
SSPX	Death Cross	9/7/1990	323.4	2/15/1991	369.06	113	14.12%	-8.93%
SSPX	Death Cross	4/19/1994	442.54	9/15/1994	474.81	104	7.29%	-0.84%
SSPX	Death Cross	9/29/1998	1049.02	12/8/1998	1181.38	50	12.62%	-11.98%
SSPX	Death Cross	11/4/1999	1362.64	11/11/1999	1381.46	6	1.38%	-0.57%
SSPX	Death Cross	10/30/2000	1398.66	5/14/2003	939.28	635	-32.84%	-45.05%
SSPX	Death Cross	8/18/2004	1095.17	11/5/2004	1166.17	57	6.48%	-1.48%
SSPX	Death Cross	7/19/2006	1259.81	9/12/2006	1313	39	4.22%	-1.83%
SSPX	Death Cross	12/21/2007	1484.46	6/23/2009	895.1	378	-39.70%	-55.08%
SSPX	Death Cross	7/2/2010	1022.58	10/22/2010	1183.08	79	15.70%	-0.65%
SSPX	Death Cross	8/12/2011	1178.81	1/31/2012	1312.41	118	11.33%	-8.83%
SSPX	Death Cross	8/28/2015	1988.87	12/21/2015	2021.15	80	1.62%	-5.88%
SSPX	Death Cross	1/11/2016	1923.67	4/25/2016	2087.79	73	8.53%	-5.90%

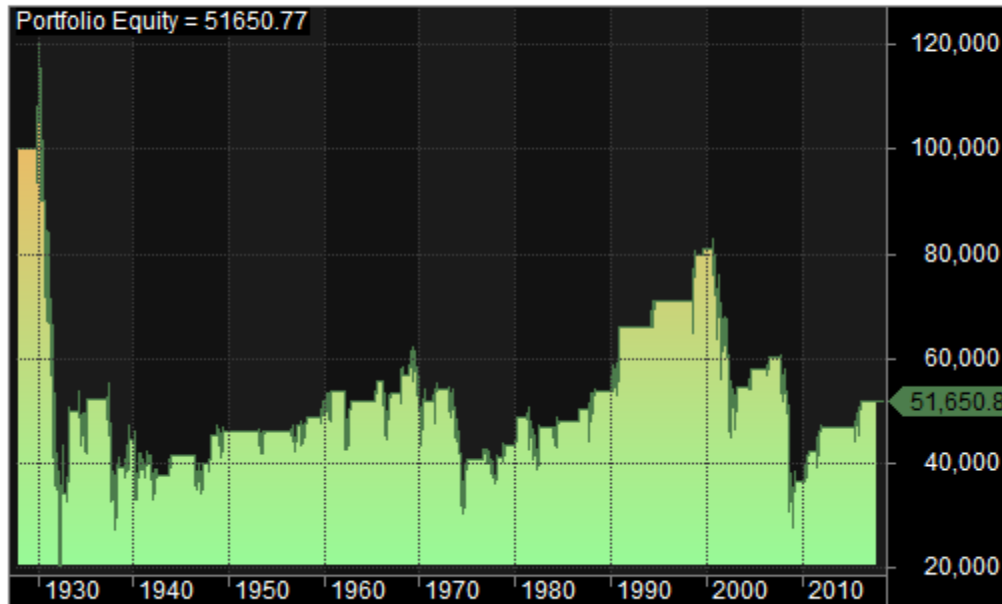
Below are summary stats for the above trades.

SPX Death Cross. Performance per trade. \$100k/trade. 1929 - present.	
Statistics	
All trades	46
Avg. Profit/Loss	44.92
Avg. Profit/Loss %	0.45%
Avg. Bars Held	162.83
<hr/>	
Winners	33 (71.74 %)
Total Profit	25891.14
Avg. Profit	784.58
Avg. Profit %	7.85%
Avg. Bars Held	93.03
Max. Consecutive	8
Largest win	4597.70
# bars in largest win	38
<hr/>	
Losers	13 (28.26 %)
Total Loss	-23824.99
Avg. Loss	-1832.69
Avg. Loss %	-18.33%
Avg. Bars Held	340.00
Max. Consecutive	1
Largest loss	-6590.80
# bars in largest loss	708

Interestingly, 33 of the 46 instances (72%) actually saw the SPX realize gains while the Death Cross was in effect. The problem is the losing trades were very large. And even most of the winners saw a sizable round-trip lower before they were able to carve out some gains. The average drawdown for these 46 trades would have been 13.3%. And there were 5 separate instances that saw drawdowns of at least 45%.

Even though the giant losers were relatively rare, their impact is large. And the fact that the 1st instance was the worst instance also provides a great example how devastating large drawdowns can be. The profit curve below shows a hypothetical portfolio of only being invested in the market during SPX Death Crosses.

\$100k hypothetical portfolio invested only during "Death Cross" formations.
\$0 commission. \$0 interest on cash when out of market. 1929 - present.



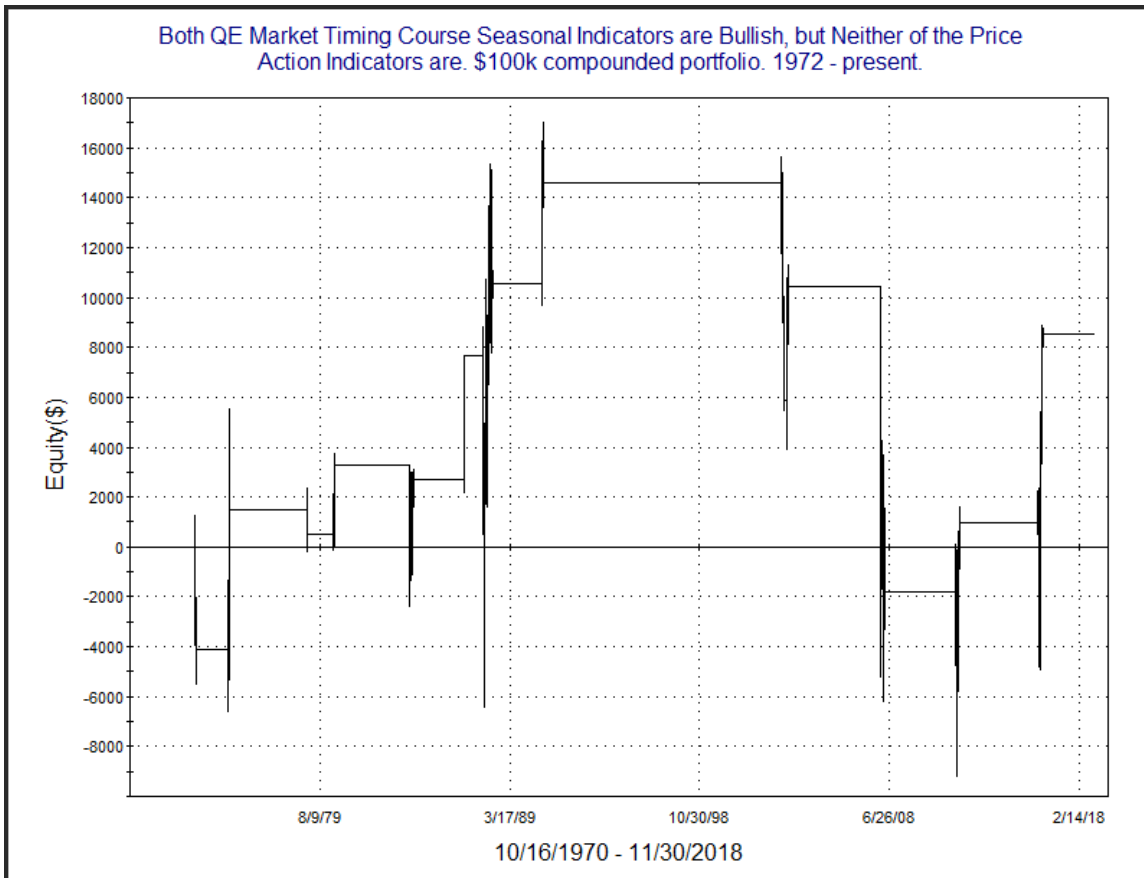
The 1st instance from 1929 – 1933 saw the portfolio rise to \$120k before falling down as low as about \$20k and then finishing that trade with a value of about \$34k. And it has never managed to get back to breakeven. The 72% “win rate” on the Death Cross tells me it is NOT a reliable timing device. But the few instances of massive losses show just how valuable it can be to protect gains and avoid large portions of nasty bear markets. If we get into a big bear market, I won’t actually be sitting out of the market for several years. But it does allow us to adjust strategies, exposure and other risk parameters. Those subscribers that have been with us since 2008 know that the 2008 bear was one of our best trading years for several strategies. The Death Cross / Golden Cross on its own is not a great system. But it can help us put the market into a context where we can better evaluate opportunities. And I have also found in helpful when combining with other timing indicators, as I’ve done in the Market Timing Course.

So today I decided I would review how the market has performed when both Price Action indicators were neutral/negative while both Seasonality indicators were bullish.

Both QE Market Timing Course Seasonal Indicators are Bullish, but Neither of the Price Action Indicators are. \$100k/trade. 1972 - present.

TradeStation Performance Summary Expand ▾			
All Trades			
Total Net Profit	\$10,085.08	Profit Factor	1.38
Gross Profit	\$36,517.09	Gross Loss	(\$26,432.01)
Total Number of Trades	18	Percent Profitable	50.00%
Winning Trades	9	Losing Trades	9
Even Trades	0		
Avg. Trade Net Profit	\$560.28	Ratio Avg. Win:Avg. Loss	1.38
Avg. Winning Trade	\$4,057.45	Avg. Losing Trade	(\$2,936.89)
Largest Winning Trade	\$7,604.61	Largest Losing Trade	(\$10,939.76)

Stats here are basically neutral. The market has not made much headway in either direction when Seasonality has been 2x bullish but has not had any support from Price Action. It does not appear to be the kind of setup in which traders would want to be very aggressive in either direction. Below is a look at a profit curve of a portfolio that includes compounding.

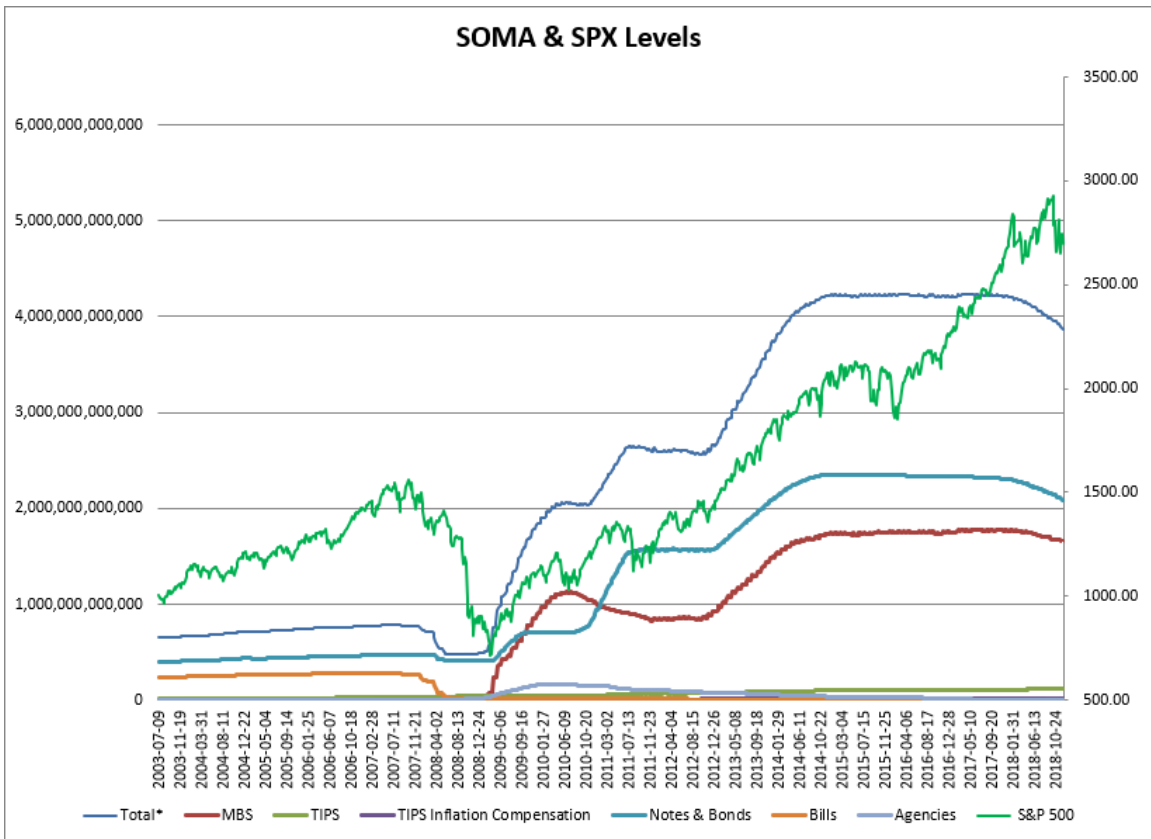


Lots of zig-zags through zero again highlight the inconsistency.

As I typically do each week, I have updated our Fed SOMA charts below. Below is a description for those who are new to these charts or who may want a refresher.

SOMA stands for System Open Market Account. It is the account at the Fed that contains all of its bond purchase holdings. We have tracked Fed purchases for several years, and as is evident in the charts below, the stock market has consistently reacted positively when the Fed has been buying securities in the open market and increasing the size of its account. When the account has declined, the market has struggled. The obvious takeaway has been “don’t fight the Fed”. As far as intermediate-term indicators go, this has been as good as anything in recent years.

In October 2017 the Fed began reducing the size of the SOMA by not reinvesting some maturities in MBS and treasuries. That program is expected to continue for the next few years. Below is a long-term view of SOMA and SPX (back to 2003).



The table below is from the Fed’s website and shows the changes this past week.

« As of 11/28/2018

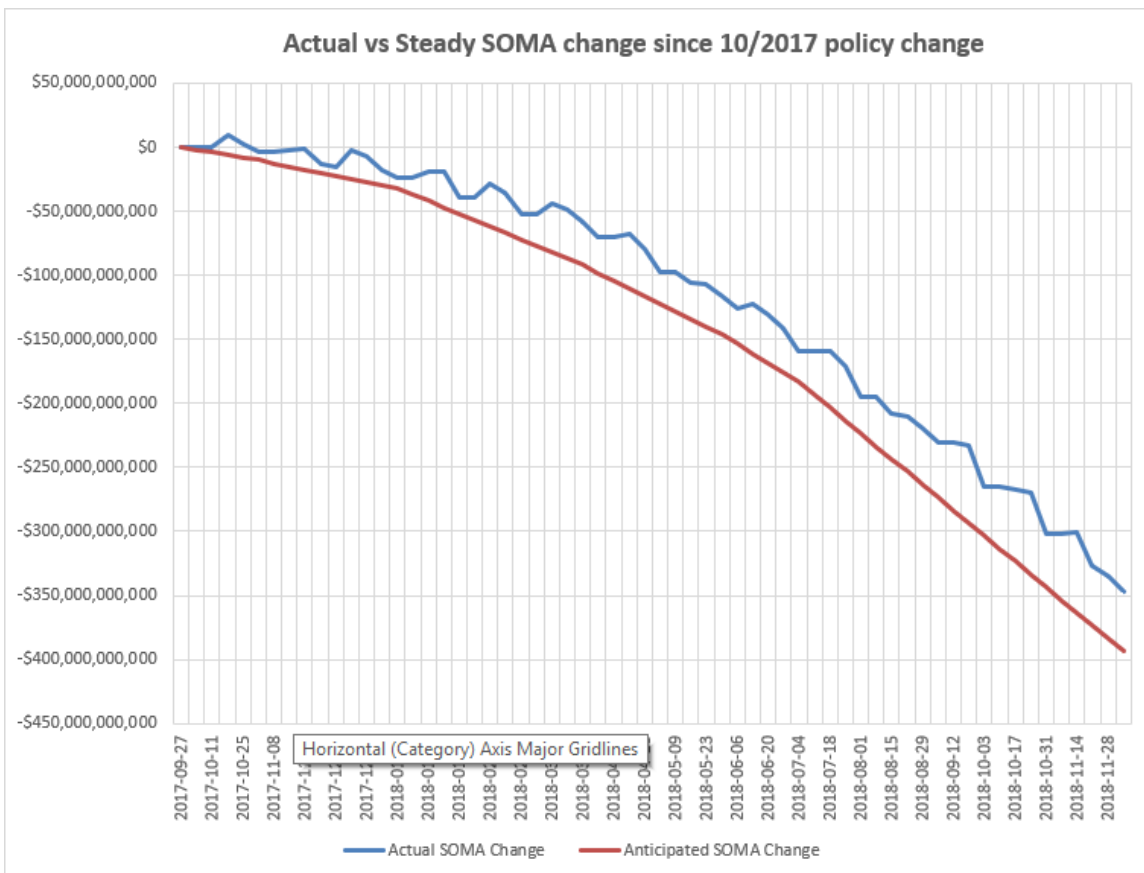
DOMESTIC SECURITIES HOLDINGS AS OF
December 5, 2018

Security Type	Total (in Thousands)
US Treasury Bills (T-Bills)	
US Treasury Notes and Bonds (Notes/Bonds)	2,082,970,091.9
US Treasury Floating Rate Notes (FRN)	18,825,874.1
US Treasury Inflation-Protected Securities (TIPS)*	116,544,672.9
Federal Agency Securities**	2,409,000.0
Agency Mortgage-Backed Securities***	1,653,469,689.4
Total SOMA Holdings	3,874,219,328.3
Change From Prior Week	-12,620,115.7

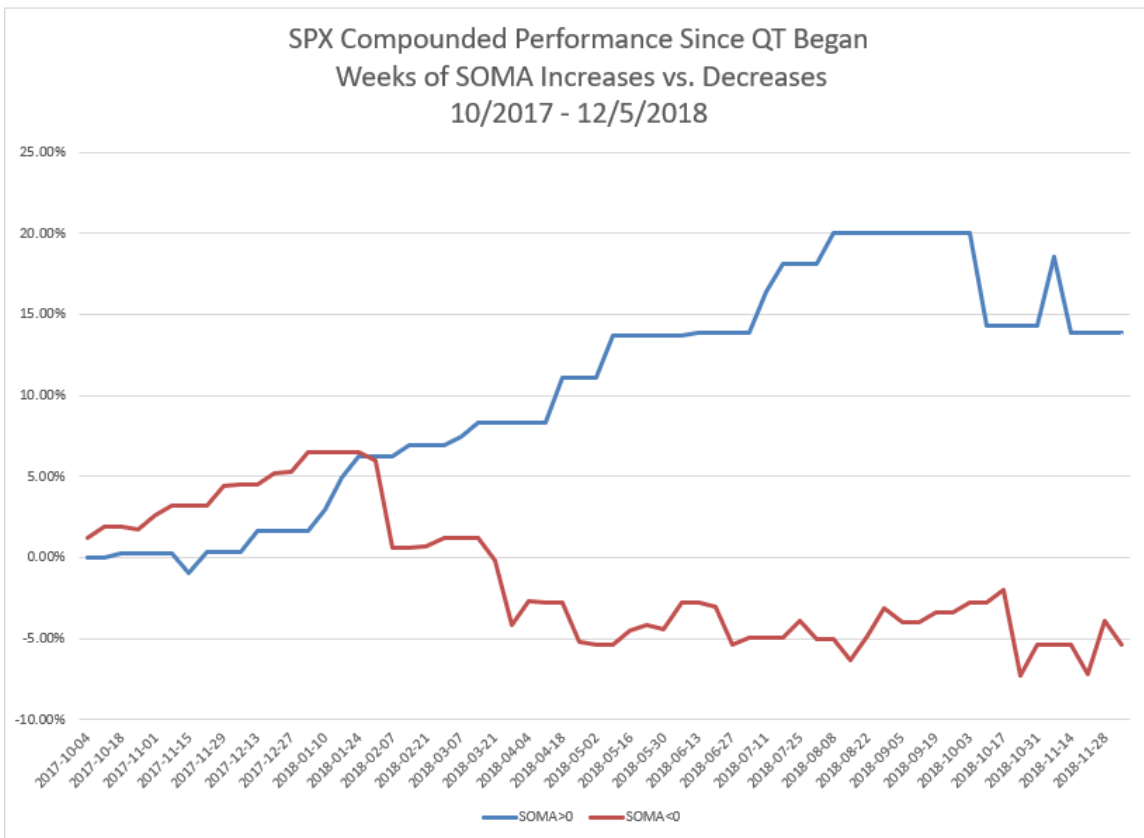
*Does not reflect inflation compensation of 22,210,175.3
 **Fannie Mae, Freddie Mac and Federal Home Loan Bank
 ***Guaranteed by Fannie Mae, Freddie Mac, and Ginnie Mae. Current face value of the securities, which is the remaining principal balance of the securities.

Data posted on 12/06/2018 4:30pm.

And now a zoomed-in view since October comparing steady reductions to actual.



The Fed’s SOMA this past week (Wednesday to Wednesday) posted a decline of \$12.6 billion. The decline was in line with what we were expecting. Meanwhile, the SPX lost 1.6% for the week ending 12/5. That is not unusual for a week where the SOMA declines. The “Actual vs Steady” chart shows that the decline in the SOMA this past week was about average, with the Quantitative Tightening (QT) rate being \$50 billion / month. The market has typically encountered difficulty during SOMA contractions, and flourished when the SOMA has seen expansions. I discuss this in detail in the Fed-Based Quantifiable Edges for Stock Market Trading Research Paper. This next chart shows compounded results since QT began of being long SPX during SOMA expansion weeks vs SOMA contraction weeks. It is updated from last week.



You can see here the sharp contrast in expansion weeks versus contraction weeks over the last 14 months. Despite some recent struggles, expansion weeks (blue line) have seen strong gains. Meanwhile, weeks with QT (red line) have been net losers. Since October 2017 the blue “expansion week” strategy would have posted a 13.9% gain while the red “contraction week” strategy would have lost 5.4%. So how might the next few weeks of QT play out? Let’s first look at the T-Note and T-Bond Maturity Table below, from the Fed’s website.

« As of 11/28/2018

DOMESTIC SECURITIES HOLDINGS AS OF
December 5, 2018 📅

Summary T-Bills T-Notes and T-Bonds FRN TIPS Agencies						
Maturity Date	CUSIP	Coupon (%)	Par Value (in Thousands)	% of Total Outstanding ¹	Change in Par from Prior Week ²	Change in Par from Prior Year ²
12/31/18	912828U99	1.250	3,457,357.0	11.74%		
12/31/18	912828RY8	1.375	12,695,123.4	42.41%		
12/31/18	912828A75	1.500	2,057,000.0	5.88%		
1/31/19	912828V56	1.125	1,648,772.7	5.96%		
1/31/19	912828SD3	1.250	5,843,714.5	19.78%		
1/31/19	912828B33	1.500	4,173,000.0	11.92%		
2/15/19	912810EC8	8.875	7,497,000.0	57.27%		
2/15/19	912828P53	0.750	1,884,490.1	7.28%		
2/15/19	912828KD1	2.750	34,141,943.8	58.19%		
2/28/19	912828W30	1.125	3,605,863.3	12.18%		
2/28/19	912828SH4	1.375	6,315,645.0	21.48%		
2/28/19	912828C24	1.500	2,607,325.5	7.43%		

The first thing to note about the table above is that there will not be any new treasury expirations until 12/31. So any QT between now and then will be due to AMBS securities coming off the books. Compared to treasuries, AMBS flows are a little more difficult to anticipate. This is because 1) amounts may vary depending on loan pre-payments, and 2) there is a lag of 1-3 months to settle. For those interested in details, AMBS policies and procedures are described in more detail at the Fed's website: <https://www.newyorkfed.org/markets/ambs-treasury-faq>. I have found that examining past months will often provide clues as to the flows we can anticipate during similar periods of the current month.

There has only been one other month since October 2017 where the reporting week ended on the 12th. That was in September, and it saw a slight rise in the SOMA. Weeks that ended on the 11th came in July, April and 10/17. July saw a slight rise to the SOMA while the other two saw a slight decline. Both June and last December saw weeks end on the 13th, and both of those saw rises to the SOMA. Based on all this, it appears that the market will have a decent chance at a QT reprieve, and even a slight rise to the SOMA for the current week ending on 12/12. This may have been thrown off slightly by the market closure this past Wednesday due to the national day of mourning in honor of President Bush.

The following week, ending on the 19th is a little unclear. To this point, there have been 3 weeks ending on the 19th or 20th since QT began, and they all saw SOMA contractions. But the 3 weeks that ended on the 18th actually saw the SOMA expand. I suspect we will see a small decline, but it is not 100%.

Another thing to note about the treasury expiration schedule shown above is the small amount of treasuries that are set to mature in December and January. The current Fed policy calls for up to \$50 billion/month in QT. And \$30 billion of that is from treasuries, while the other \$20 billion is AMBS. But there are not \$30 billion worth of treasuries expiring the next couple of months that the Fed could roll off the books. There has been some talk recently of the Fed possibly reducing the QT schedule. February is the next big QT month. So the Fed could easily wait until the January 29th-30th meeting to reduce QT amounts, since they are naturally being reduced anyway during December and January.

The 2nd half of December is typically a strong seasonal time for the market. This is especially true for smallcaps. I will be looking at this in more detail in next weekend's letter.

The bulls lost another indicator that was in their favor this week with the SPX Death Cross completing. We still see a mix of evidence for the intermediate-term. Positive seasonality is the biggest plus for the market right now. Not only are we in the Best 6 months during the 3rd year of a Presidential Cycle, but the 2nd half of December is coming soon. So it is a tough time to turn outright bearish. The FTD study from a few weeks ago points bullish and it still has not resolved as a success or a failure. On the bearish side, we now have multiple trend indicators pointing downward. And QT is a large concern. But QT is going to be reduced this month and next. Overall, evidence is still not overly compelling for either the bulls or the bears. I am keeping my bias neutral. This means I will not be very aggressive on either the long or the short side, but am willing to take trades in either direction if short-term reward/risk appears favorable.

Catapult and Capitulative Breadth Statistics

[Catapult & CBI Presentation Link](#)

OpenCatapult Triggers

None

Broad Market Large Cap CBI – 0

Additional New Trade Ideas

A full listing of system triggers can be found at the [numbered systems page](#) each night. I will cherry pick some of my favorite setups from the S&P 100 and ETF lists along with occasional other trade ideas to track below.

SPY – Buy ¼ index position @ \$263.56 LIMIT ON CLOSE. Base on the short-term outlook above, I will look to add a 2nd lot of SPY if it closes down again on Monday.

Current Open Trade Ideas

Symbol	Entry Date	Entry Price	Current Price	% Gain/Loss	Stop	Notes
SPY(1/4)	12/7/2018	\$269.45	\$263.57	-2.18%		Aggregator

A complete list of Quantifiable Edges trade idea results since the inception of the letter in 2008 [can be found here](#).

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