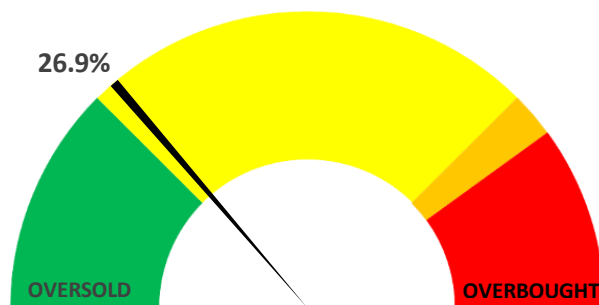


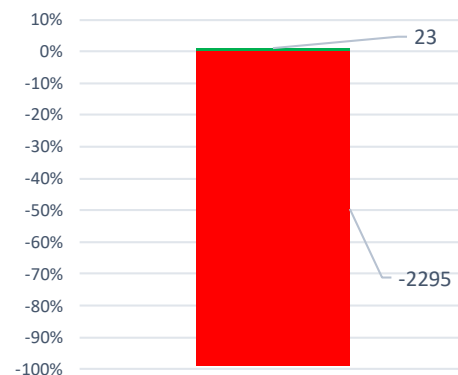
EXTREME SELLS

MAP VIEW LAST WEEK: Epic selling ripped through markets after Fed chair Powell rocked the boat. Global slowdown mixed with monetary tightening spooked everyone. Christmas cheer is tough to find in sell signal counts that exploded. Our normal ratio of buys to sells for nearly thirty years is 1.5 to 1. This past week saw 100 to 1 in favor of sells. Everything got hit- there was no place to hide. Our ratio dropped to 26.9%. If you happen to be looking for a baby- there are so many getting thrown out with the bathwater: our stock is TTD.

MAP-IT RATIO



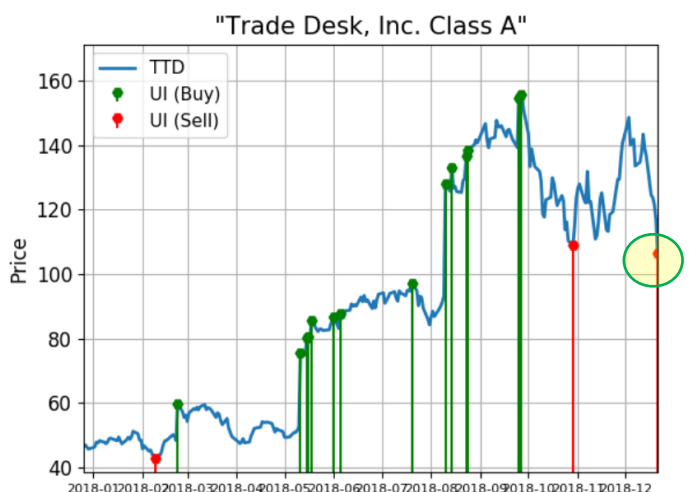
BUY AND SELL SIGNALS



SECTOR STRENGTH AND WEAKNESS

1	Utilities	59.33
2	Information Technology	49.12
3	Health Care	47.55
4	Consumer Staples	46.41
5	Real Estate	44.79
6	Consumer Discretionary	46.45
7	Industrials	42.97
8	Energy	38.25
9	Materials	40.43
10	Telecommunication Services	37.18
11	Financials	38.17

STOCK PICK



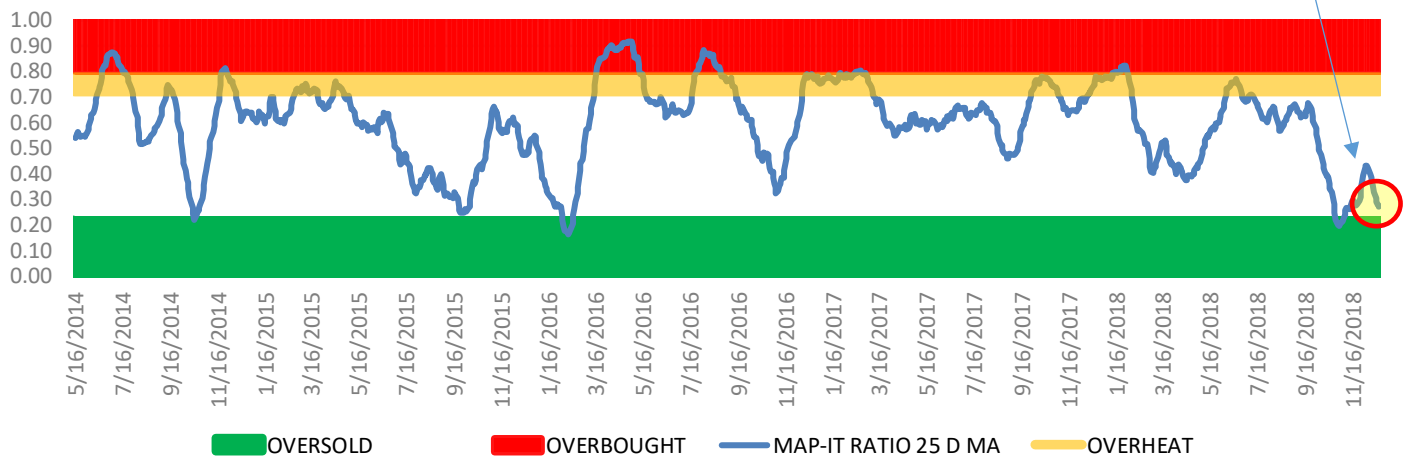
MAP VIEW: MARKET

We have observed that big institutional buying and selling can alert us to overbought or oversold conditions in the market. The below graph is the RUSSELL 2000 Index with the 25-day moving average institutional buying/selling ratio below. A ratio approaching 25% means an oversold market (green) which is bullish, while readings approaching 80% and above suggest an overbought market (red) and is bearish.

RUSSELL 2000



MAP-IT RATIO

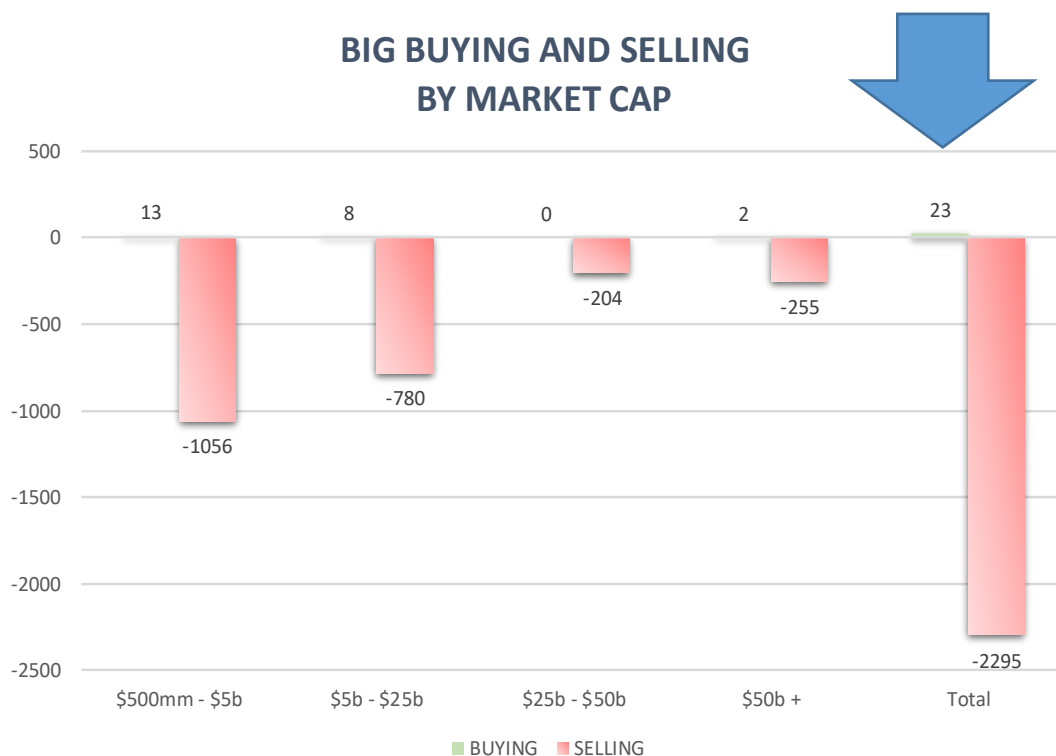


MAP-IT RATIO

The ratio cratered to 26.9%. Barring a Christmas miracle, we should be oversold in the next few days in the eyes of the MAP-IT ratio. The market was going through a healthy correction which seems to have eventually given way to Ebola. Volumes have exploded in major capitulation selling. We suspect funds are blowing up and ETF-forced selling is a major contributor to this worst December in decades. As the ratio falls closer to oversold at 25%, many other market indicators corroborate the view. More on this in the commentary but in short, less than 9% of S&P 500 stocks are trading above their 50-day moving averages as of Thursday. The 10-day advance/decline is at its lowest level in over a year. The trailing 12-month P/E ratio for the S&P 500 has a 16-handle - the lowest in years. The dividend yield on the S&P 500 is around 2.2% while the ten-year bond inched below 2.80%. Those two keep getting closer together which is typically bullish for stocks.

BUYING AND SELLING

Immense selling crushed the market. Insert the reason you want, but we feel HFT started the pressure. That spread to ETFs, which forced selling and then put massive pressure on stocks. Signal counts exploded for sell signals registering our largest week on record (over 28.5 year for MAP data). There was virtually no buying worth mentioning. Small and midcaps were brutalized while large and mega caps couldn't escape the rout either. We are getting so heavily oversold that a bounce feels imminent at this point.



MAP VIEW: SECTORS

METHODOLOGY: We sift through thousands of stocks each day and score them based on proprietary metrics. Then we overlay our signal for unusual institutional trading activity. We show you big buying and selling on the strongest and weakest stocks. Here we average the scores for all the stocks in each sector and rank by strength.

SECTOR RANKINGS	MAP 1400		UI SIGNALS	
	MAP SCORE (AVG)	STOCKS	BUYING	SELLING
Utilities	59.33	44	0	10
Information Technology	49.12	204	2	217
Health Care	47.55	179	4	322
Consumer Staples	46.41	100	0	139
Real Estate	44.79	101	0	168
Consumer Discretionary	46.45	178	6	256
Industrials	42.97	162	0	271
Energy	38.25	112	1	301
Materials	40.43	94	8	116
Telecommunication Services	37.18	32	0	44
Financials	38.17	199	2	451

The prior week saw Financials lead the market lower. Last week saw every sector get thrown out of the plane without a parachute. 10 of the 11 sectors saw selling in excess of 50% their universe components. Discretionary, Financials, Health Care & Industrials saw 60%+ of the universe clock a sell signal on Friday alone! This was a day for the record books! This means not only is the market oversold, but every sector is heavily oversold too. Financials continues to be that main pain point, along with Energy, Industrials, Health, and Consumer Discretionary. It seems many “Trump-bump” sectors are now on the butcher’s block. As investors rush to flatten risk ahead of year-end, funds are blowing up. The environment is brutal for equities but remember this- after forest fires comes new growth. The flush-out is extreme and on par with some of the most fearful times in economic history. But growth metrics globally are not showing any sort of notable slowdown. The investment community is merely fearing a potential slowdown. If and when it comes, the destruction should be largely in the rearview mirror. This is a classic case of a sneeze turning into a cold, into a flu, into life support. The fear of loss triggered the algorithmic avalanche now spreading to main street. As regular investors choose to sidestep the freefall, they sell. They don’t sell individual stocks nearly as much as they sell their passive ETF portfolios. More on this later...

MAP VIEW: STOCK

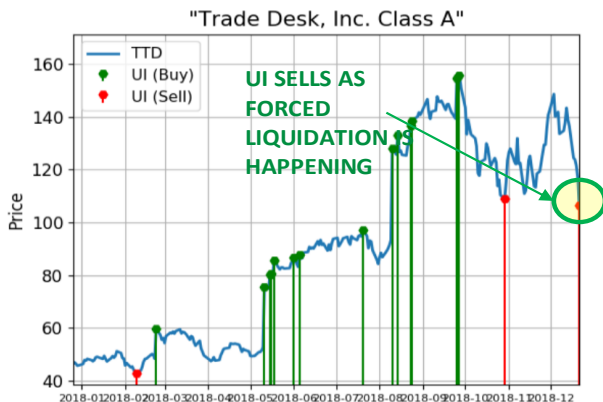
TTD Trade Desk, Inc. Class A - Consumer Discretionary Software & Services, Internet Software & Services, Internet Software & Services
 Previous Close: \$ 106.55 (-9.00%). MAP Score of 63.8 (Technical 52.9 - Fundamental 79.2).

ACTION TO TAKE: Buy TTD up to \$109.21 with a suggested trailing stop-loss of \$9.35 from long initiation point.

TTD has appeared 13 times on the MAP 20 buylist since 5/16/2017 with peak +100% performance since.

■ MAP long signals recently starting 9/26/18 at \$155.75	NEGATIVE	■ 20 Day Average Volume of 1.34 MM – mediocre liquidity	NEUTRAL
■ Trading near 52 week high of \$161.5	NEGATIVE		
■ TTD above 50D(125.21), 100D(128.51), 200D(100.71)MA	NEUTRAL	■ Relative Strength of 24.9 lower third	NEGATIVE
■ TTD is trading near interim highs of \$148.9962	NEGATIVE	■ 52 week stochastic of 54.51%	NEUTRAL
■ TTD is up 133.00% YTD	POSITIVE	■ Forward P/E of 38.73x	NEUTRAL
■ Market Cap of \$4.66 billion	POSITIVE	■ 11% debt/equity ratio	NEUTRAL
■ TTD is down -10.11% 1 Month	NEGATIVE	■ 7.10% held by insiders	NEUTRAL
■ 62 days since 52 week high	NEGATIVE		
■ Short interest of 7.62%	NEUTRAL		
		■ 3 year EPS growth of -271.76%	NEGATIVE
■ Debt/EBITDA ratio of 0.35	POSITIVE	■ 3 year sales growth of 95.23%	POSITIVE
■ Price/Book Value ratio of 7.75	RICH	■ 1 year sales growth of 51.89%	POSITIVE
■ Price/Tangible Book Value ratio of 5.63	RICH	■ Gross profit margin of 78.51%	POSITIVE
■ Revenue per share of 7		■ TTD is outperforming S&P 500 by 138.98%	POSITIVE
		■ 81.48% institutional ownership	POSITIVE

TTD: Historical Chart



Source: MAP

Technical Impression:

TTD broke out to new highs on above average volume most recently on 09/26/18. It is a group leader and is trading off 52 week highs and is outperforming the S&P 500 by 138.98% YTD. It had good relative strength, and a strong stochastic, but market weakness brought technical strength down. TTD is getting pummelled with the overall market puke. This stock was at all-time highs only weeks ago.

Source: FactSet

Fundamental Impression:

TTD has great sales and earnings growth, and a huge 78% gross profit margin. The company is a strong leader in a sector that has been under pressure for no reason. TTD had astonishing earnings. On the downside it has a fwd P/E of 38x. The Trade Desk, Inc. provides a technology platform for ad buyers. It offers agencies, aggregators and advertisers technology to manage and display, social, mobile and video advertising campaigns. The company was founded by Jeffrey Terry Green and David Pickles in November 2009 and is headquartered in Ventura, CA.

Overall Impression:

Trade Desk, Inc. Class A The stock is rated 81.8% buy, 9.1% hold and 9.1% sell. Technically it was strong just off all-time highs when market selling got out of control. With a MAP Score of 63.8 (Technical 52.9%-Fundamental 79.2%) we see TTD as having plenty of upside potential. Trade Desk, Inc. Class A is a growing leader in Consumer Discretionary with room to grow.

Trade:

Reports earnings 02/14/2019. We suggest a buy of TTD at \$106.55. This stock is a MAP favorite in the Tech space and is a teal at this level.



MAP VIEW THOUGHTS: EXTREME SELLS

Fact: Since 2000, when we see extreme selling like this with 400 or more daily sells- the market was positive 3 months later 70% of the time.

Quote: *One of the funny things about the stock market is that every time one person buys, another sells, and both think they are astute. - William Feather*

Wow.

I'm sure a lot of people are saying that. It seems to be an appropriate utterance when nothing else comes to mind. I've been using words like abysmal and ugly in the recent weeks of weekly reflections, but this week's selling was dreadful, terrible, and awful- those were the Microsoft Word synonyms that came up for abysmal. 1 week, MTD, and YTD performance for the major indices were as follows:

INDEX	1 WEEK	MTD	YTD
DJIA	-6.9%	-12.1%	-9.2%
SP 500	-7.1%	-12.5%	-9.6%
NASDAQ COMP	-8.4%	-13.6%	-8.3%
RUSSELL 2000	-8.4%	-15.7%	-15.9%

INDEX	1 WEEK	MTD	YTD
DJIA	-6.9%	-12.1%	-9.2%
SP 500	-7.1%	-12.5%	-9.6%
NASDAQ COMP	-8.4%	-13.6%	-8.3%
RUSSELL 2000	-8.4%	-15.7%	-15.9%

Depending on who you are this is catastrophic. The sector performance was also atrocious. The sad truth is that now we only have two sectors with positive performance for the year, and they are clinging on by a thread. Utilities +2.2% and Health Care +0.2%. Opening my sector performance screen is like peeling back the bandage in the scene from Castaway: gruesome and uncomfortable.

We all know this. So, the question is why? We've gone from a period of relative optimism to extreme pessimism in a few short months. Talks of slowing global growth and a possible recession dominate the headlines. If there's one thing that gets markets moving, it's fear.

I have been asking this obvious even rhetorical question for a while now. The predominant news blurbs attribute it to global slowdown and the Fed. Parts of Europe are dipping into recession (Germany and Italy). But over here in the US the data has been rosy. Plainly, we have hit peak sales and earnings growth momentum. But does the supposed slowdown (which we have no concrete data for) really warrant a -25% haircut from the high as we are seeing in the Russell 2000 (8/31)?

Clearly, I have thought 'no' as my tone has been bullish on US stocks even in the face of this drastic selling price action. I have cited data, fundamentals, and some technical action that was indicative of a bottom. I was right for a while and the bounce I accurately predicted gave way to this recent disgusting plummet.



Many say we can thank Jerome Powell for the levee breaking this week. The rate hike we saw was expected. Less expected was the implied commitment to hike twice more next year. Even less expected and more disliked however, was his language:

The Committee judges that some further gradual increases in the target range for the federal funds rate will be consistent with sustained expansion of economic activity, strong labor market conditions, and inflation near the Committee's symmetric 2% objective over the medium term.

The market didn't like the "further gradual increases" language. The issue was a future commitment to tightening and removing liquidity from the system. This was the last straw and caused the deluge of selling that came after.

We can blame the pending government shutdown. We can blame the Mueller investigation seemingly getting closer to president Trump and potential charges. We can blame what we want in the headlines, but my belief is there is a clear technical catalyst and follow-through. It is my opinion that we need to be looking at ETFs.

Back in October – I wrote of how I see the world in relation to High Frequency Traders. These algorithmic trading firms use news as one of their inputs into trading decisions. When liquidity dried up on the bid-side of the market, they found bad news days as an opportunity to short into weak bids. This broke-open volatility and began the domino effect.

I then wrote about how ETF model managers would eventually be forced to sell. When they need to sell hundreds of millions of dollars of a not-so-liquid ETF, they call up dealers (or interact electronically) and source bids. When dealers price a market where spreads are already widened due to heightened volatility, *their* bid/offer spreads widen. When they end up owning the ETF sold by the customer, they in turn must hedge by selling the stock components of the ETF. This pushes stocks down further.

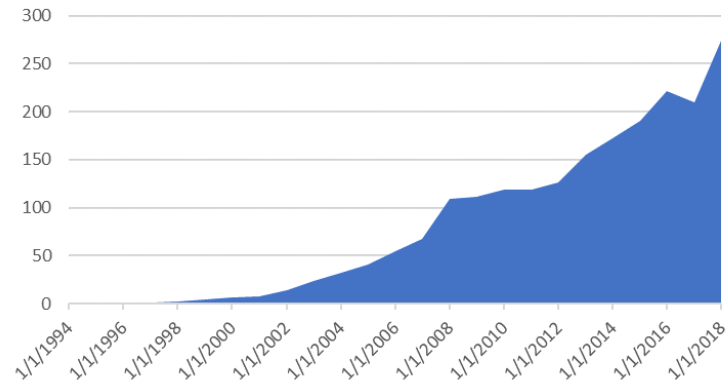
This was just an idea and the more I thought it through, the more I realized that ETFs may be causing the massive spikes in UI sell signals that we see; *not vice-versa*. This concept of the tail wagging the dog is what I'd like to discuss here.

As ETFs trigger sell points, I believe they actually drive stock action- especially on the down side. The number of ETF assets have grown dramatically over the years as well as the number of available ETFs. What we observed is as the number of available ETFs and total assets they controlled ballooned, so did our signals counts. This was true for both ETF *and* stock signals.

So, what we see is that as ETF managers execute redemption requests, the pressure on stocks is massively amplified. One stock may be in 10s or even hundreds of ETFs. In a market pressure point, ETF dumping amplifies the selling of stocks. Furthermore, illiquid ETFs can have a major swing effect on the stocks that comprise them.

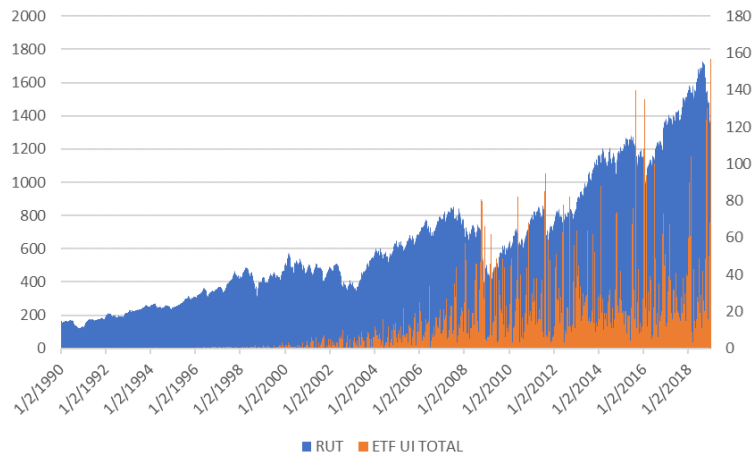


OF ETF TICKER MAKING UIS

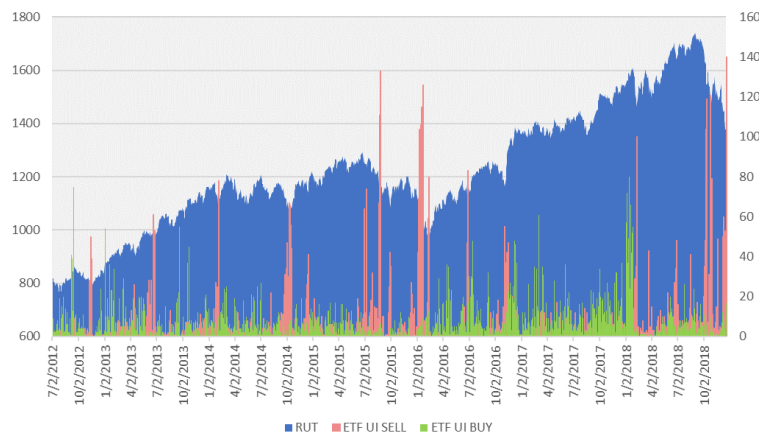


Source: Mapsignals

28 YEARS OF RUSSELL 2000 vs. ETF UI SIGNALS



RUSSELL 2000 VS ETF UI SIGNALS



Source: Mapsignals



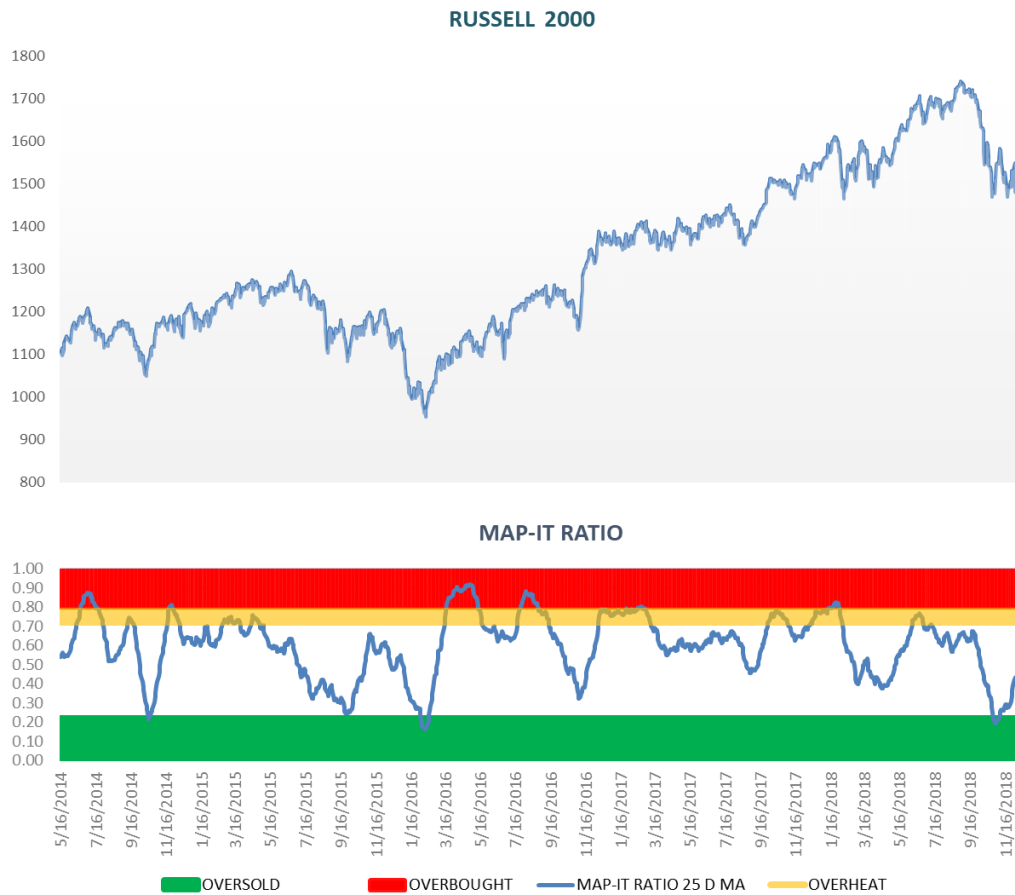
I believe that as assets fly out of ETFs, the forced selling started by model managers, in-turn started by HFT firms taking advantage of what was believed to be a temporary absence of buying, the pressure on stocks is rocking the entire market, and thus world markets.

While the theory may seem a bit out of left-field, we have begun work on an in-depth study which will become a larger white-paper. In short- the data so far (preliminarily) looks to support that thesis. So, for now, I'm going to go ahead and blame ETFs. Lipper came out Friday and said month-to-date ETF outflows are the largest on record since record-keeping began in 1992 and there was only one ETF back then – SPY.

Now, I also believe that it's important to keep a cool head during this time. We've seen irrational markets before. I've watched investors throw in the towel at the worst possible times. The herd is rushing for the exits. But know this: If market sentiment can turn from positive to negative on a dime... it can just as quickly change from negative to positive.

It may sound crazy, but I still expect a big bounce. The breadth of the market is terrible with 9% of S&P 500 stocks trading above their 50-day moving averages as of Thursday- Surely that number is lower now. Naturally, the S&P is in extreme oversold territory by many measures. Its 10-day advance/decline line has dropped to its lowest level in at least a year. The trailing 12-month P/E ratio for the S&P 500 has a 16-handle on it. That's the lowest in multiple years. The dividend yield on the S&P 500 is around 2.2% while the ten-year bond inched below 2.80%. Those two keep getting closer together which is typically bullish for stocks.

Finally, our MAP-IT ratio is cratering closer to 25% which is oversold territory. We are at 26.9% as of this morning: Monday we will surely be lower...



Source: Mapsignals

One Last thing... we took a hard look at forward returns of SPY post major selling days according to MAP. The future returns for the market seem quite promising after we witness abnormally high sell signals. Of the 48 days that displayed unusual sell signals of 400 or more since 2000, the market was positive 3 months later 70% of the time. If you had patience to wait 24 months, 76% of the time the market was higher with an average return of +27%. Naturally, the financial crisis of '08 weighed on overall results.

DATE	STOCK UI SELLS	1W	2W	3W	4W	3M	6M	12M	24M
7/22/2002	-428	9.21%	1.91%	10.24%	16.06%	9.39%	8.27%	22.71%	38.12%
6/13/2006	-449	1.70%	1.56%	4.75%	4.43%	8.37%	16.79%	26.23%	15.35%
7/26/2007	-497	-0.28%	-1.78%	-4.00%	-1.01%	4.28%	-9.21%	-13.52%	-30.59%
7/27/2007	-526	-0.90%	-0.28%	-0.28%	2.22%	6.37%	-7.39%	-11.78%	-28.99%
8/3/2007	-501	0.63%	0.63%	3.15%	2.64%	5.64%	-1.96%	-10.50%	-26.82%
1/4/2008	-402	-0.82%	-6.55%	-5.85%	-1.22%	-2.65%	-9.72%	-32.63%	-15.97%
1/8/2008	-452	-0.53%	-5.90%	-2.16%	-3.44%	-1.02%	-7.49%	-32.88%	-13.58%
1/17/2008	-518	1.17%	2.95%	0.37%	1.30%	3.22%	-5.23%	-34.72%	-10.76%
1/22/2008	-428	3.97%	2.61%	3.27%	3.67%	6.05%	-1.51%	-35.17%	-12.46%
9/17/2008	-405	2.58%	0.10%	-15.90%	-22.36%	-21.52%	-32.02%	-5.62%	1.51%
9/29/2008	-498	-5.98%	-9.01%	-11.29%	-24.63%	-21.34%	-25.60%	-2.36%	7.53%
10/2/2008	-457	-18.91%	-16.16%	-18.02%	-13.90%	-16.21%	-24.26%	-5.99%	7.20%
10/3/2008	-448	-19.79%	-15.52%	-21.12%	-12.24%	-15.07%	-22.46%	-4.70%	8.67%
10/6/2008	-817	-3.22%	-5.64%	-19.83%	-7.27%	-10.02%	-18.94%	3.37%	15.92%
10/7/2008	-850	-0.18%	-4.17%	-6.27%	0.38%	-8.62%	-17.12%	8.51%	21.21%
10/8/2008	-640	-7.68%	-7.05%	-4.54%	-1.35%	-5.87%	-14.06%	12.17%	25.04%
10/9/2008	-943	3.38%	1.09%	6.17%	0.18%	-0.98%	-3.94%	21.33%	34.43%
10/10/2008	-648	5.32%	-1.65%	9.41%	6.06%	1.48%	-1.55%	24.34%	37.77%
11/20/2008	-560	17.92%	13.06%	16.55%	18.34%	3.44%	21.80%	48.80%	66.80%
3/2/2009	-472	-3.53%	7.45%	17.29%	12.40%	35.31%	43.21%	62.60%	93.89%
5/20/2010	-669	2.99%	2.95%	1.50%	4.28%	0.47%	12.99%	26.71%	25.63%
8/2/2011	-500	-6.38%	-4.70%	-7.21%	-3.04%	-0.68%	6.95%	11.20%	42.23%
8/4/2011	-869	-2.44%	-4.78%	-3.31%	0.57%	4.88%	13.17%	18.34%	48.42%
8/5/2011	-650	-1.63%	-6.20%	-1.76%	-1.86%	5.04%	13.34%	18.51%	48.42%
8/8/2011	-1095	7.45%	0.42%	8.11%	4.98%	14.50%	21.82%	27.81%	57.92%
10/3/2011	-447	8.78%	9.37%	14.15%	14.16%	16.71%	29.88%	34.81%	59.15%
6/1/2012	-454	3.85%	5.21%	4.68%	6.75%	10.71%	12.09%	30.37%	56.79%
2/3/2014	-412	3.35%	5.66%	6.17%	6.21%	8.45%	11.54%	19.91%	14.29%
10/9/2014	-402	-3.36%	1.14%	3.45%	5.40%	6.56%	9.47%	6.57%	16.27%
10/10/2014	-554	-1.09%	3.09%	5.84%	6.72%	7.79%	11.34%	7.80%	18.23%
10/13/2014	-523	1.54%	4.67%	7.66%	8.84%	8.42%	12.68%	9.01%	18.45%
8/21/2015	-508	0.73%	-2.65%	-0.55%	-0.68%	6.36%	-1.84%	12.89%	28.12%
8/24/2015	-809	4.31%	1.63%	3.44%	4.22%	11.06%	3.11%	17.48%	34.18%
8/25/2015	-567	2.40%	5.43%	5.97%	4.09%	12.37%	5.60%	18.79%	36.14%
1/7/2016	-431	-1.09%	-3.79%	-2.55%	-1.26%	5.64%	9.10%	19.61%	46.73%
1/8/2016	-419	-2.14%	-0.73%	0.94%	-2.07%	7.10%	11.95%	20.93%	48.62%
1/13/2016	-519	-1.68%	-0.37%	1.31%	-1.89%	10.72%	15.00%	22.83%	53.26%
1/15/2016	-457	1.44%	3.15%	0.70%	-0.63%	11.20%	16.11%	23.49%	54.10%
1/19/2016	-400	1.14%	1.12%	-1.40%	0.91%	12.19%	16.15%	22.71%	55.27%
1/20/2016	-471	1.34%	3.04%	-0.20%	3.89%	13.75%	18.15%	24.76%	57.29%
2/8/2016	-402	0.65%	5.05%	4.39%	8.18%	11.52%	18.82%	26.29%	44.69%
6/27/2016	-449	5.17%	6.91%	8.42%	8.54%	8.55%	14.61%	23.37%	40.26%
2/8/2018	-413	5.98%	4.96%	3.91%	6.39%	4.02%	11.75%	?	?
10/10/2018	-429	0.77%	-4.66%	-2.76%	0.97%	?	?	?	?
10/11/2018	-535	1.55%	-0.77%	0.49%	3.06%	?	?	?	?
10/24/2018	-648	2.00%	5.91%	1.84%	-0.11%	?	?	?	?
12/20/2018	-528	?	?	?	?	?	?	?	?
12/21/2018	-796	?	?	?	?	?	?	?	?

AVG RETURN
 % TIMES MKT+
 % TIMES MKT-

0.43%	-0.03%	0.55%	1.45%	4.13%	4.22%	11.53%	27.11%
58.70%	56.52%	58.70%	63.04%	69.57%	56.52%	67.39%	76.09%
41.30%	43.48%	41.30%	36.96%	30.43%	43.48%	32.61%	23.91%



Source: Mapsignals

Rest assured, this volatility will pass. I believe we're 90% done with the sell-off in prices, and 75% done with the sell-off in terms of time. That means we're close to a bottom. The bounce could be swift and fierce, but sitting through and waiting for it is tough for anyone.

I know the volatility is brutal, but hang in there... The end is in sight.

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