MACRO INTELLIGENCE REPORT

Macro Ops
Target. Deploy. Profit.

# The Holy Trifecta

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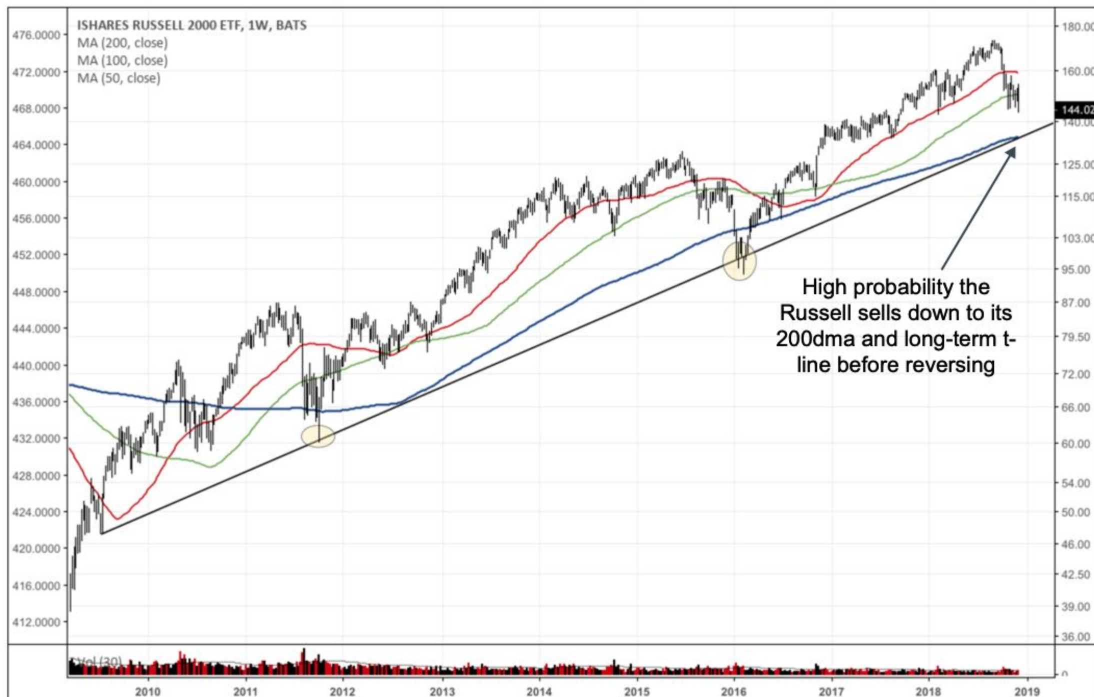
In our December MIR titled *Genghis John and Building Snowmobiles* during the midst of the market rout I wrote the following noting the key macro variables we didn't and couldn't know at the time:

- We can't predict with high certainty exactly how the Fed will react to slowing global data ex. US

- We can't predict if/when China will attempt to reflate its economy with another massive credit injection

- Rising geopolitical tensions bring greater risks and unknowns. We don't know if the trade war will escalate significantly (though recent signs indicate it will) or if other events will conspire (such as a Russian invasion of Ukraine).

Here's a chart of the Russell small-caps index I included in the report along with our thoughts on where the market was headed.



Much has happened since those early volatile December days. The market sold off and bounced off key support as we expected.

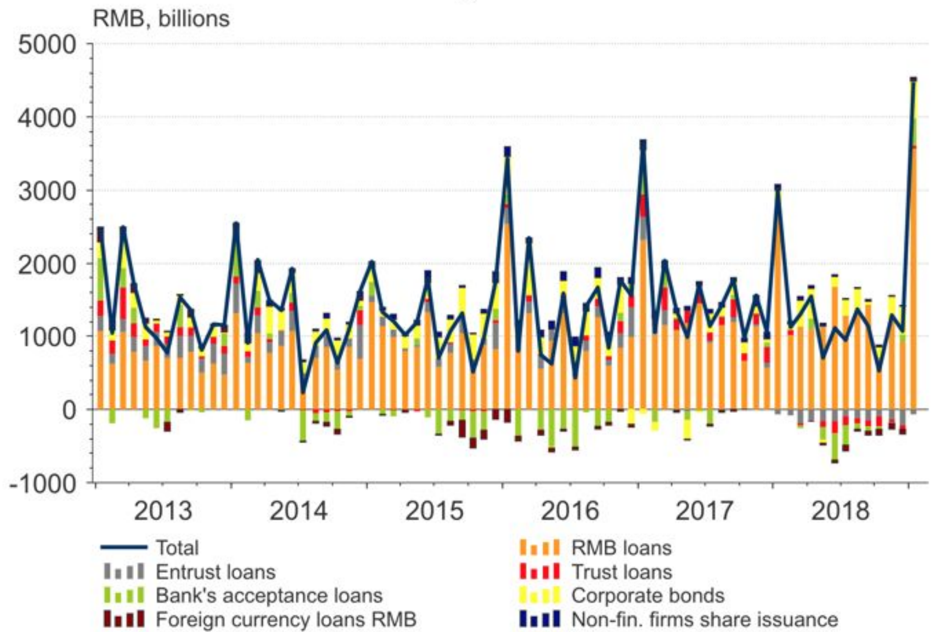
And we've received some answers to two of our three previous 'unknowns' (1) The Fed's response to slowing global growth and (2) if/when China would stimulate.

In this month's MIR, we're going to talk about our now known macro variables and what they mean for markets going forward. We're also going to discuss some macro concepts like financial deepening and the risk cycle to get a better grasp on where we're headed. We'll then finish up with a bull thesis on an underfollowed and deeply undervalued industrial company.

Let's start with China and the Red Dragon's predilection for debt.

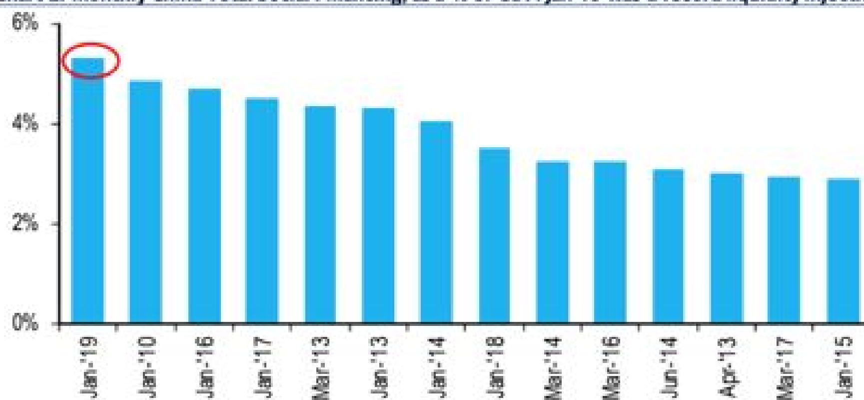
The answer to our question of if/when China would stimulate and by how much ended up being "now and by A LOT".

Chinese credit data for the month of January just hit and the numbers are… how do you say… impressive?

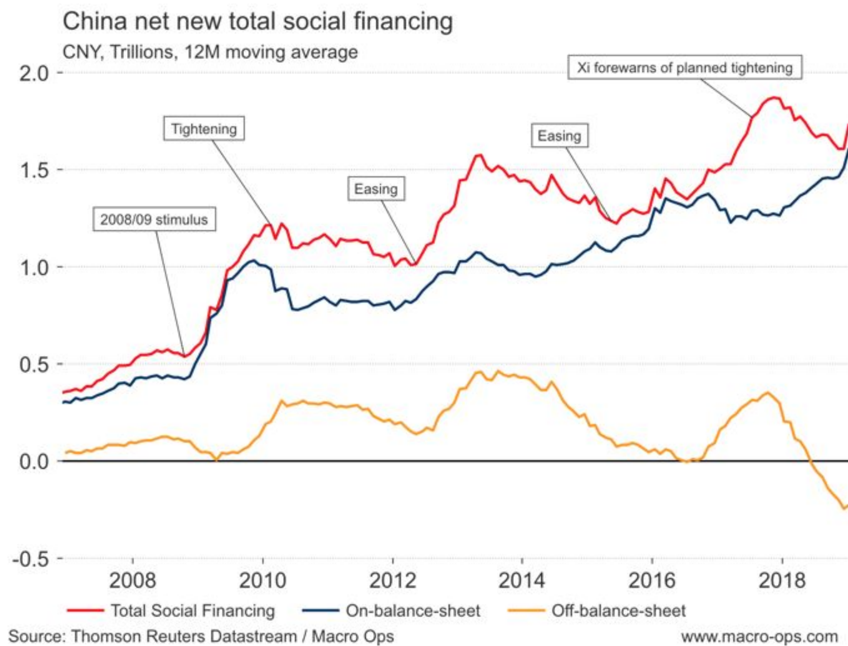



January was a gargantuan month for credit creation in China.

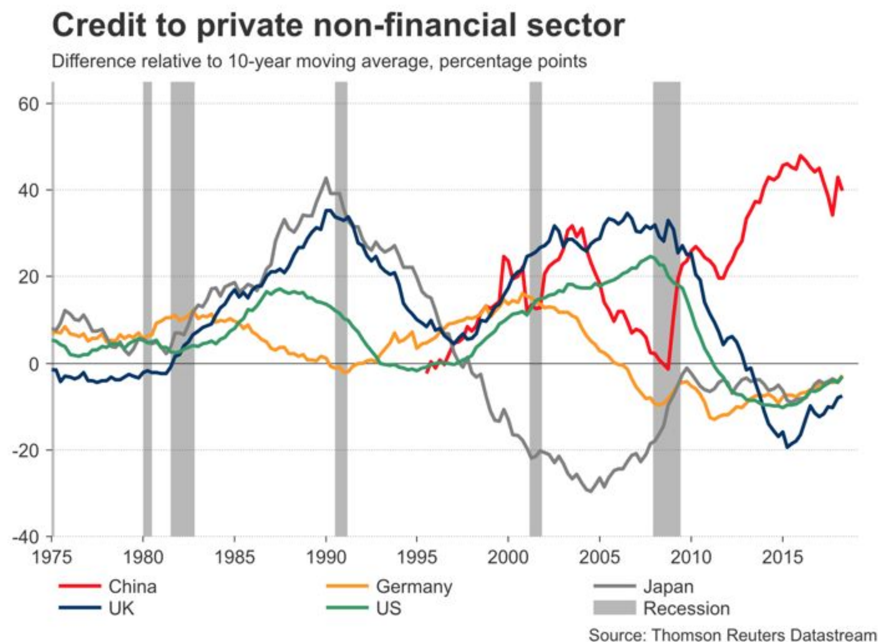
Total Social Financing in January was the largest monthly liquidity injection as a % of GDP on record. That one month is equal to nearly a quarter of the total credit creation for ALL of last year and makes for a 51% increase over the year prior.



Here's another look at the data. The orange line shows that credit growth in the shadow banking sector is still contracting (though, the contraction even seems to have stalled somewhat). The red line shows the recent hockey stick turn in total credit creation.




I've been writing for the last few years about how China is THE most important macro variable this cycle. The reason why is shown in the chart below.



China has undeniably been the global growth workhorse this cycle having helped staved off crushing global deflation with its incredibly large and reliable injections of credit at the nearest hint of slowing growth.

The last time China injected anywhere close to this amount of credit was at the start of 16'. That shot to the arm defibrillated the global economy back to life and sent markets on a 2-year near volatility-free money printing uptrend.

Should we expect the same thing again? Are we about to embark on another emerging market (EM) led bull? Is it time to mortgage the house and dump the proceeds into some EM high-fliers and then just kick back and wait to cash out?

Not so fast Kemosabe…

We have to look under the hood of this credit data to get a better grasp on what's really going on. And when we do that, we find that the stimulus is not all it's cracked up to be.

First, the January numbers were inflated due to seasonal issues. The Chinese New Year fell earlier in the month of February than the previous year which meant banks were giving out more loans in the weeks of January leading up to the holiday.

Secondly, the financial derisking campaign began in earnest at the end of 17'. Because of this, last year's new credit numbers were abnormally low which means there was a very low base effect for this year.

Thirdly, the PBoC pointed out themselves that the credit growth numbers for the month were aided by a slowing pace of contraction in the shadow banking sector. Authorities are still very much focusing on dismantling the off-balance sheet Godzilla they've spawned, so it's unlikely January will mark a major turning point in the trend in shadow banking credit growth.

And fourthly, it appears the vast majority of January's credit growth was due to a one-off jump in banker's acceptances and bill financing (short-term loans). This is not indicative of a shift to long-term credit growth. In fact, Premier Li Keqiang went out of his way this past week to drill home the fact that the party isn't going to repeat the massive credit stimulus playbook of times past. Li said (via Trivium China):

> *I reiterate that the prudent monetary policy has not changed and will not change. We are determined not to engage in 'flood-like' stimulus."*

So while January's credit data isn't nothing. It's notable. it's just not quite 'flood-like' and certainly not as impressive as many market participants seem to be thinking it is.

There's typically a 6 to 9 month lag between stimulus and its effects being felt throughout the real economy. As of now, there's no sign of the data improving.

The current extent of China's slowing may surprise some given the number of other stimulative measures the CCP has enacted over the last year (ie, tax and rate cuts). But this should be expected when you have an economy like China's that's hit the end of the Gerschenkron Growth Model, is straining under its debt burden, and is riddled with unproductive assets.

If the latest round of credit growth is enough to right the ship or is a precursor to a continued 'flood-like' stimulus then we should soon see it reflected in the data. The primary one being M1 money supply growth (new net credit growth should lead to deposit growth). See the big jump in M1 in 2016 during the last credit injection? Well, nothing similar yet. M1 growth is still sitting at multi-decade lows…

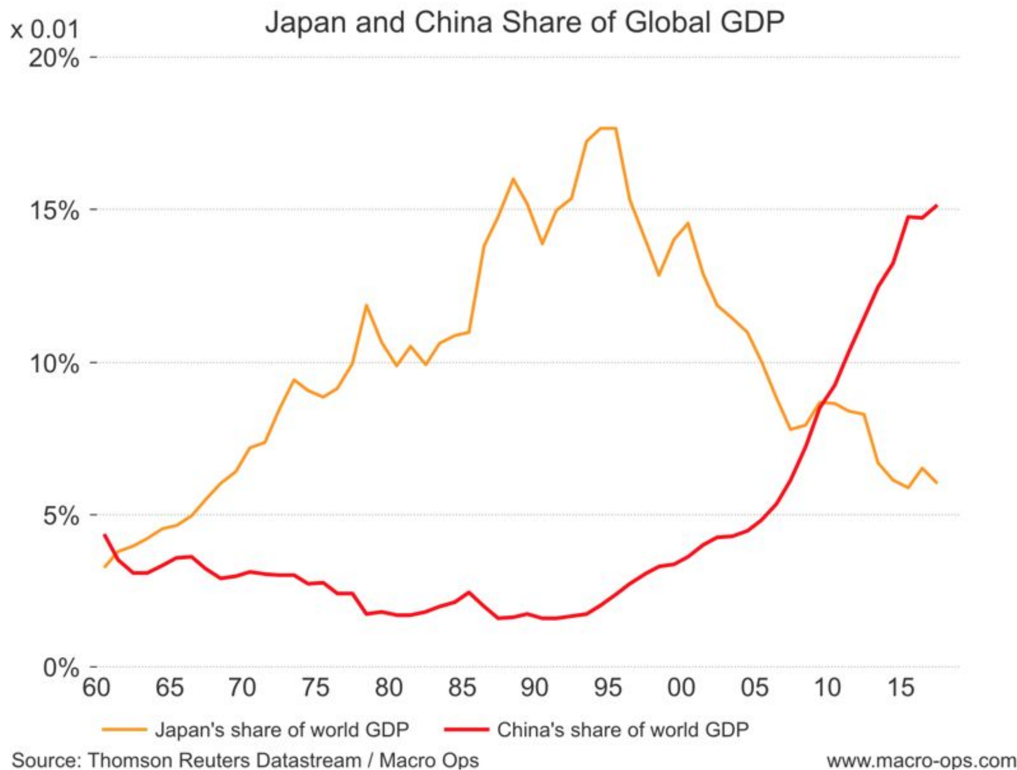
Before moving on, I'd just like to reiterate that we should expect China to continue to slow — at least until they really hit the classic stimulus button leading up to the Party Centennial in 2021 which I expect will happen in the second half of this year — but we shouldn't expect a crisis. Here's one of my favorite economists, Michael Pettis, explaining why:

> *Paradoxically, too much debt doesn't always lead to a crisis. Historical precedents clearly demonstrate that what sets off a debt crisis is not excessive debt but rather severe balance sheet mismatches. For that reason, countries with too much debt don't suffer debt crises if they can successfully manage these balance sheet mismatches through a forced restructuring of liabilities. China's balance sheets, for example, may seem horribly mismatched on paper, but I have long argued that China is unlikely to suffer a debt crisis, even though Chinese debt has been excessively high for years and has been rising rapidly, as long as the country's banking system is largely closed and its regulators continue to be powerful and highly credible. With a closed banking system and powerful regulators, Beijing can restructure liabilities at will.*

Of course, this doesn't mean that China has found the secret to defying the basic laws of economics and can just continue to stimulate its way to perpetual prosperity. There's a cost to everything and a crisis is only one way the bill comes due. And in fact, the other payment method can be much more costly. Here's Pettis again:

> *Contrary to conventional wisdom, however, even if a country can avoid a crisis, this doesn't mean that it will manage to avoid paying the costs of having too much debt. In fact, the cost may be worse: excessively indebted countries that do not suffer debt crises seem inevitably to end up suffering from lost decades of economic stagnation; these periods, in the medium to long term, have much more harmful economic effects than debt crises do (although such stagnation can be much less politically harmful and sometimes less socially harmful). Debt crises, in other words, are simply one way that excessive debt can be resolved; while they are usually more costly in political and social terms, they tend to be less costly in economic terms.*

It's likely that China will go the way of Japan in the 90s and Russia in the 70s. This means decades of stagnation and low single-digit growth as the country gives back its share of world GDP and gets stuck in the middle-income trap (which I discussed here).




Moving onto our second unknown: how will the Fed respond to slowing global growth?

You should already know the answer. It was uber-dovishly…

And this was the correct move, in my opinion. Powell and team had let the market assume too much of an inflexible stance regarding rate hikes and balance sheet runoff, hence the market volatility in December. Jay and the FOMC have been walking those expectations back and in this, they've done a good job.

Fed watcher Tim Duy summarized the FOMC's stance perfectly, writing:

> *The Fed made a dovish shift, declaring that they are on the sidelines for the time being. Given that they seem to believe the downside risks are more prevalent, it is reasonable to think the bar to easing in the near term is much lower than the bar to hiking. Importantly, it looks to me that the Fed has shifted gears well ahead of any recession; then did not invert the 10-2 spread and then keep hiking as typically occurs ahead of a recession. A flexible Fed and the lack of inflation was always a saving grace for the economy. The Fed may have just pushed back the next recession. If so, expect everyone who expects an imminent recession to "blame the Fed" when that recession fails to emerge.*

Jerome Powell said, “I would want to see a need for further rate increases, and for me, a big part of that would be inflation.” This means that the Fed is on standby with rate hikes until either inflation begins to perk up or — and this is just my take and wasn’t explicitly stated by the Fed — the market begins to run hot again and the Fed wants to cool risk-taking.

The market has responded by driving rate expectations lower (yellow line depicts the latest Fed Funds curve). And if anything, it’s now overpricing the downside risks to rates.

It’s not just the US Fed but central banks globally have pivoted from being in the aggregate hawkish to an easier stance.

The US Fed and central banks, in general, have shown themselves to be very responsive to the economy *and* the market. Some say that central banks have no mandate and therefore no business to be paying attention to the gyrations of the market. This type of thinking misses a key point regarding the reality of our modern economy and that's the financial deepening in Western countries, especially here in the US.

You see, secular declining interest rates and inflation coupled with financial 'innovation' has led to a boom in consumer and corporate credit versus just 40-years ago. This has resulted in a financial deepening, or the financialization rather, of our economy.

This means that the financial economy is many times the size of the real economy. This financial economy is vulnerable to changing interest rates and widening credit spreads resulting from market volatility, more so than the real one. And because of its large relative size, pain in the financial economy can quickly transmit into pain in the real economy. Thus it's become an important variable in the Fed's mandate.

This is why we should expect the Fed to continue to error dovish when either the economic data begins to suggest downside risk is mounting or fear drives the market down to much. In a sense, **the Fed put has now become real.**

Where does this all leave us?

Let's summarize what we've found so far:

- The Fed has shown itself to be very responsive to the economic data as well as the market. The Fed is no longer a headwind for risk assets and we should expect the Fed to respond in kind to market volatility due to the financialization of our economy.

- China has hit the stimulus button but the actual impact will likely be much less than the perceived size of the credit boost on the surface. We'll have to keep a close eye on M1 growth but expect data out of China to continue to slowly weaken while the PBoC and CCP manage a gradual slowdown. Look for the real credit stimulus to come sometime in the second half of the year as they gear up for their run into 2021 Party centennial.

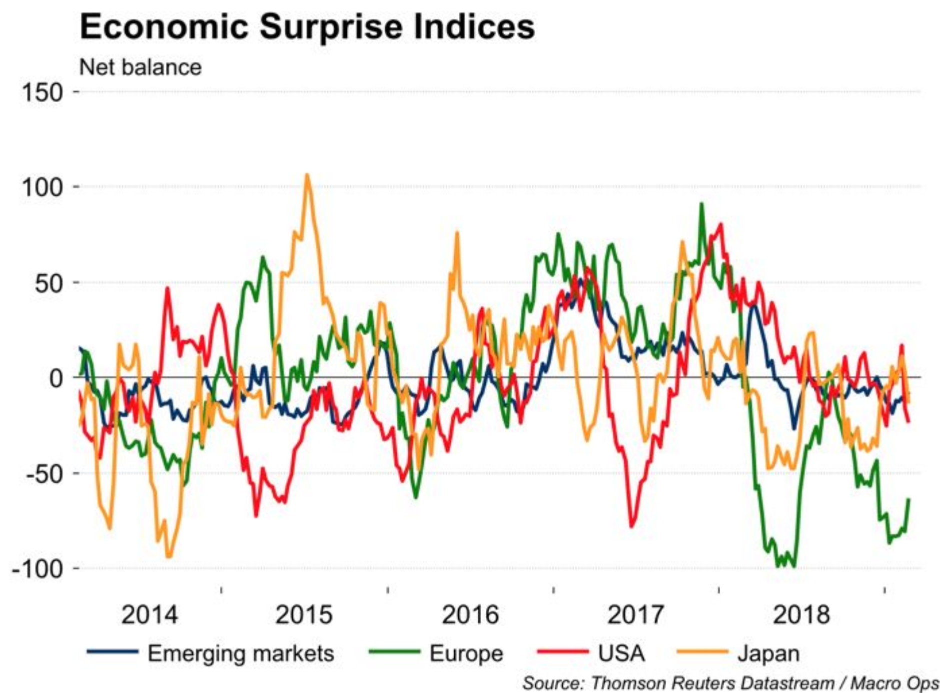
Now let's take a Michael Marcus Trifecta style look at the market and synthesize the Macro, Technicals, and Sentiment to see where the opportunities lie going forward and the risks are buried.

# Macro: A Slowing World and a Resilient US

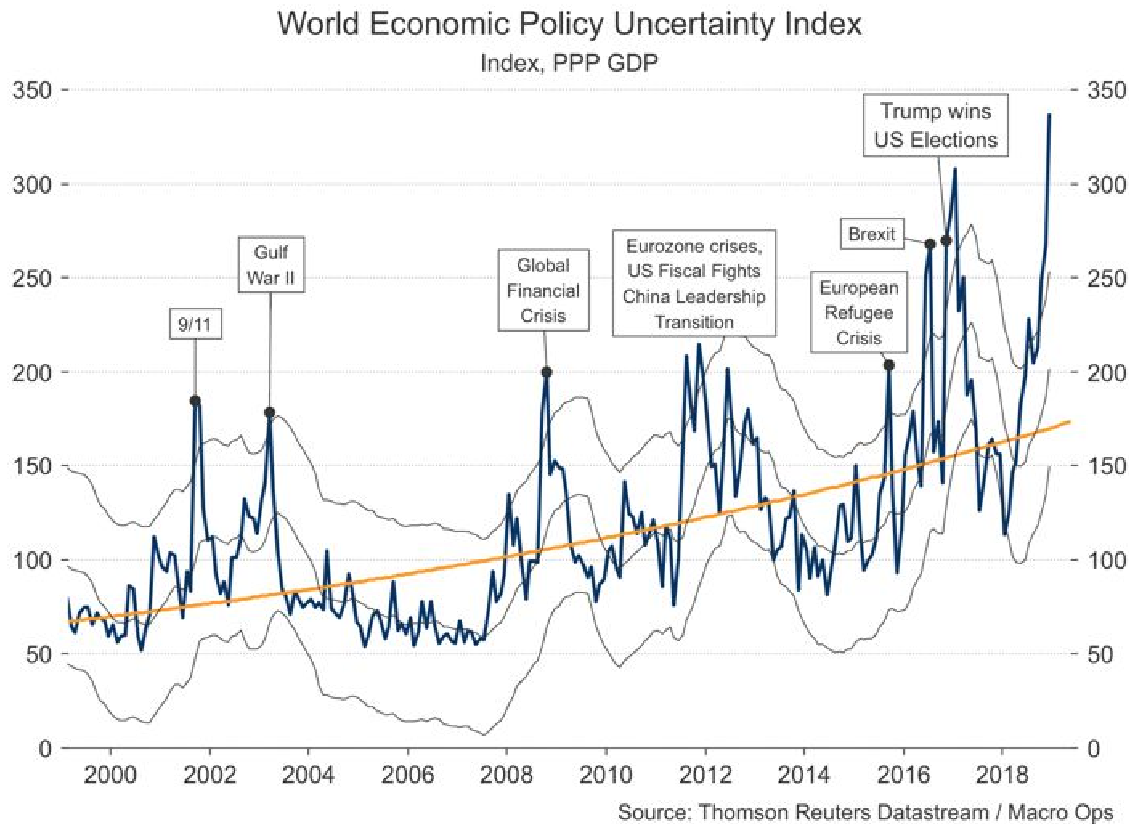
China is slowing and is bringing much of the world along with it. Composite PMIs are headed towards 50 (sub 50 indicates negative growth) for much of the world with the US being the exception.

Exports out of Asia have turned negative for the first time since 16'.

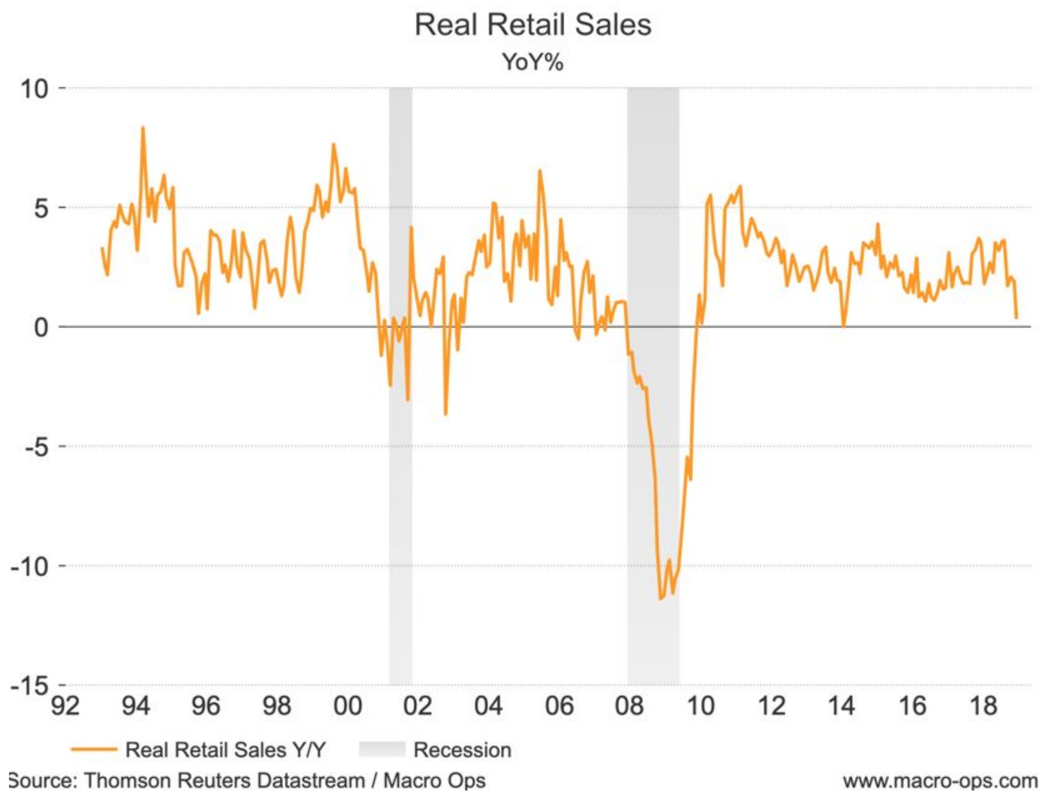
Citi's Economic Surprise Indices (CESI) are negative for every major region with Europe fishing at the very bottom of the index.



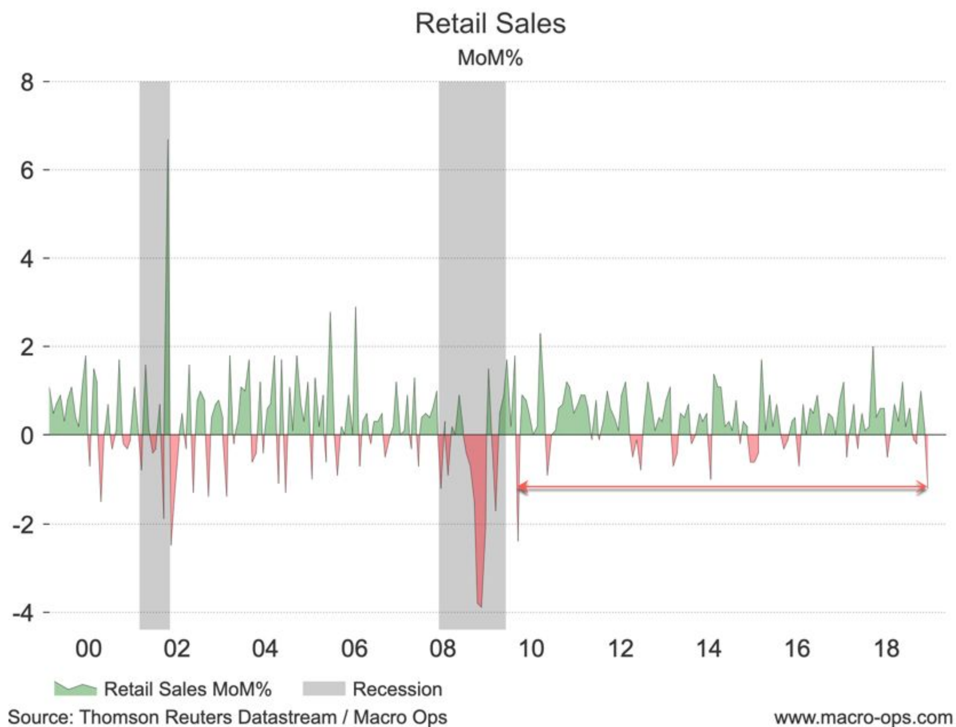
The World Economic Policy Uncertainty Index is at an all-time high on the back of Brexit, mounting trade wars, and escalating disunity in geopolitics…




While the US may still be the cleanest dirty shirt in the bin, it's not immune to the slowing growth. Inflation adjusted retail sales fell out of bed recently. If this data point turns negative then the prospect of a coming recession rises dramatically.



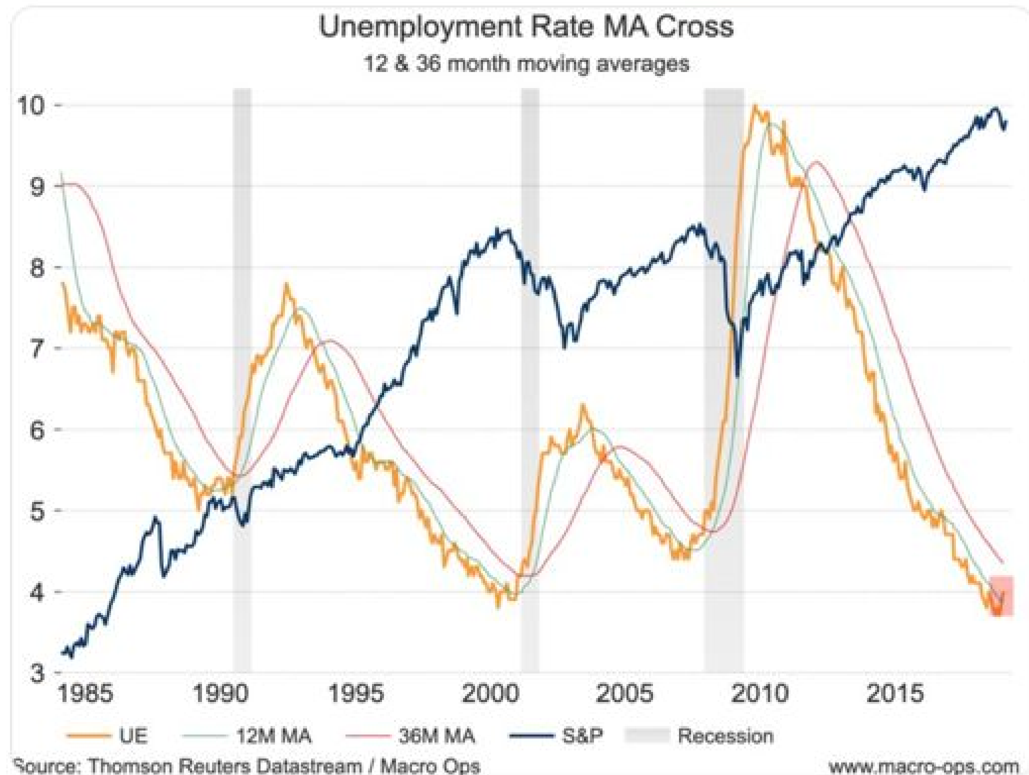

Here's the same indicator on a month-over-month basis. Real retail sales saw their largest monthly decline since 09'.



Retail sales are important but it’s the labor market that drives consumption. While there are some concerning signs such as the unemployment rate crossing over its 12-month moving average recently (a cross above its 36-month MA [red line] practically guarantees recession) the labor market as a whole still looks strong.

**Alex** @MacroOps · Feb 11

The Unemployment Rate has crossed above the 12-month moving average for the first time since Sep 16'. Something worth keeping an eye on. A rise above the 36mma has a strong history of signaling recession $SPY

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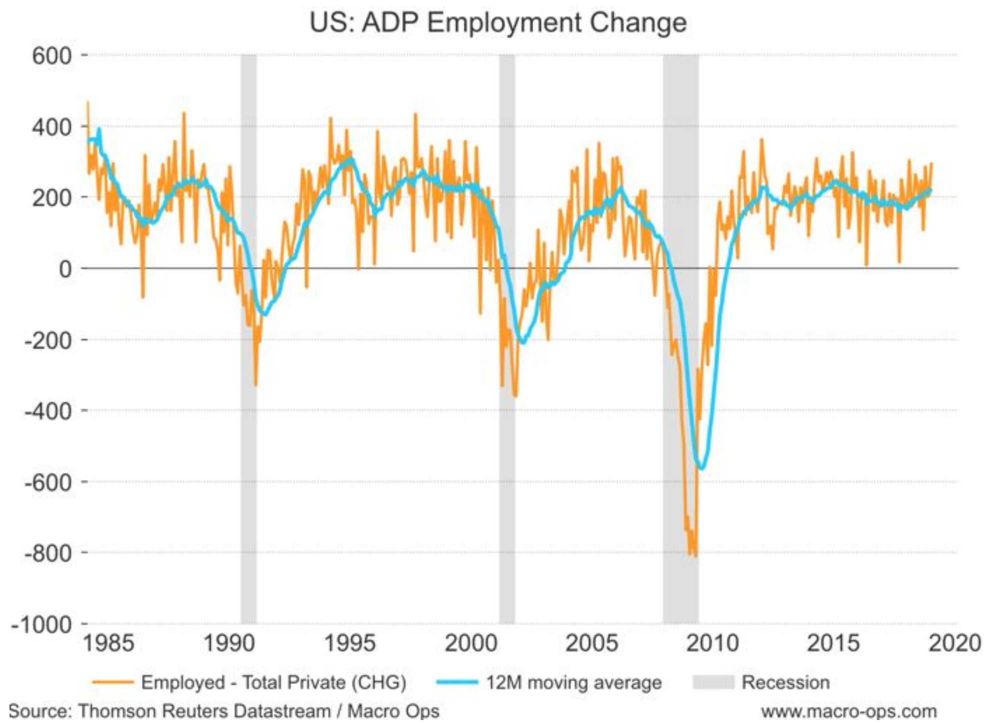
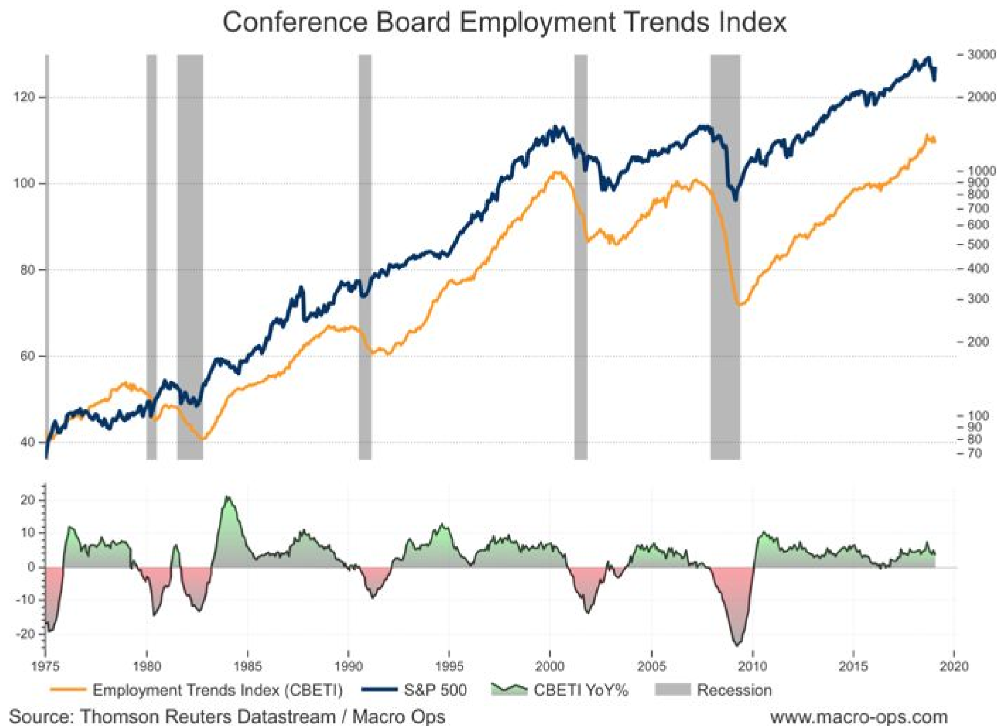
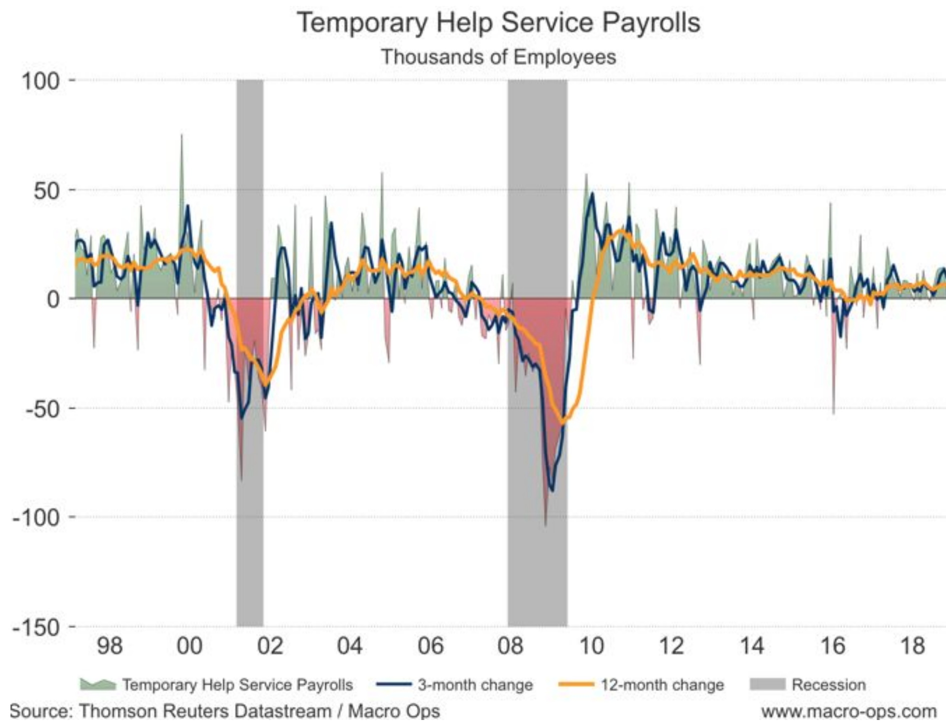
ADP Private Payroll Employment data remains robust. We should see this turn over well before a recession.



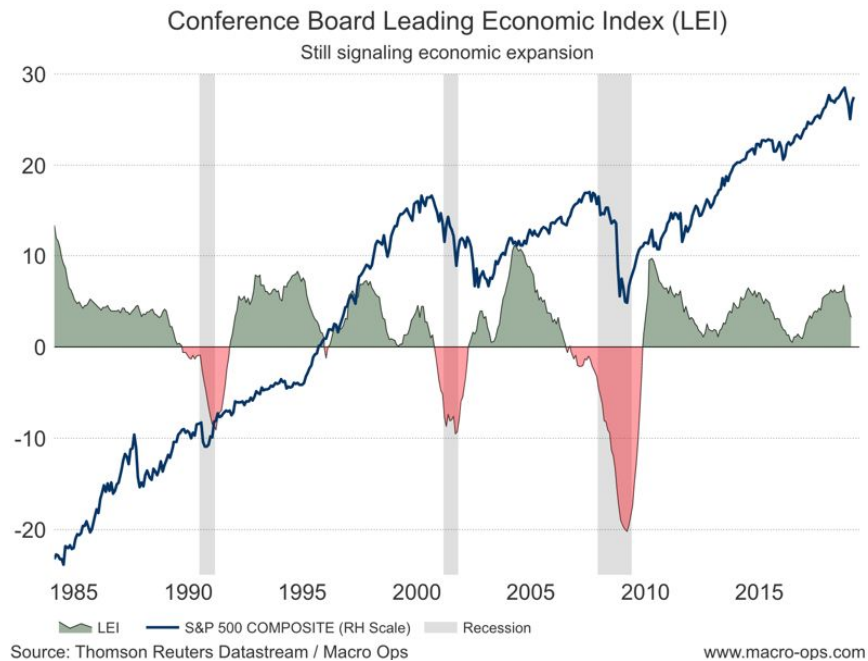

The Conference Board Employment Trends Index is still in a strong uptrend on both a nominal and year-over-year basis.



Temporary Help Service Payrolls are positive on a nominal, 3-month, and 12-month basis. This indicator will turn negative well before a recession.




The LEI is positive but contracting on a year-over-year basis. The LEI has correctly signalled every recession since its inception in 1959. The indicator has turned over and headed lower an average of 10.5 months before recession. It's not currently giving a recessionary signal.

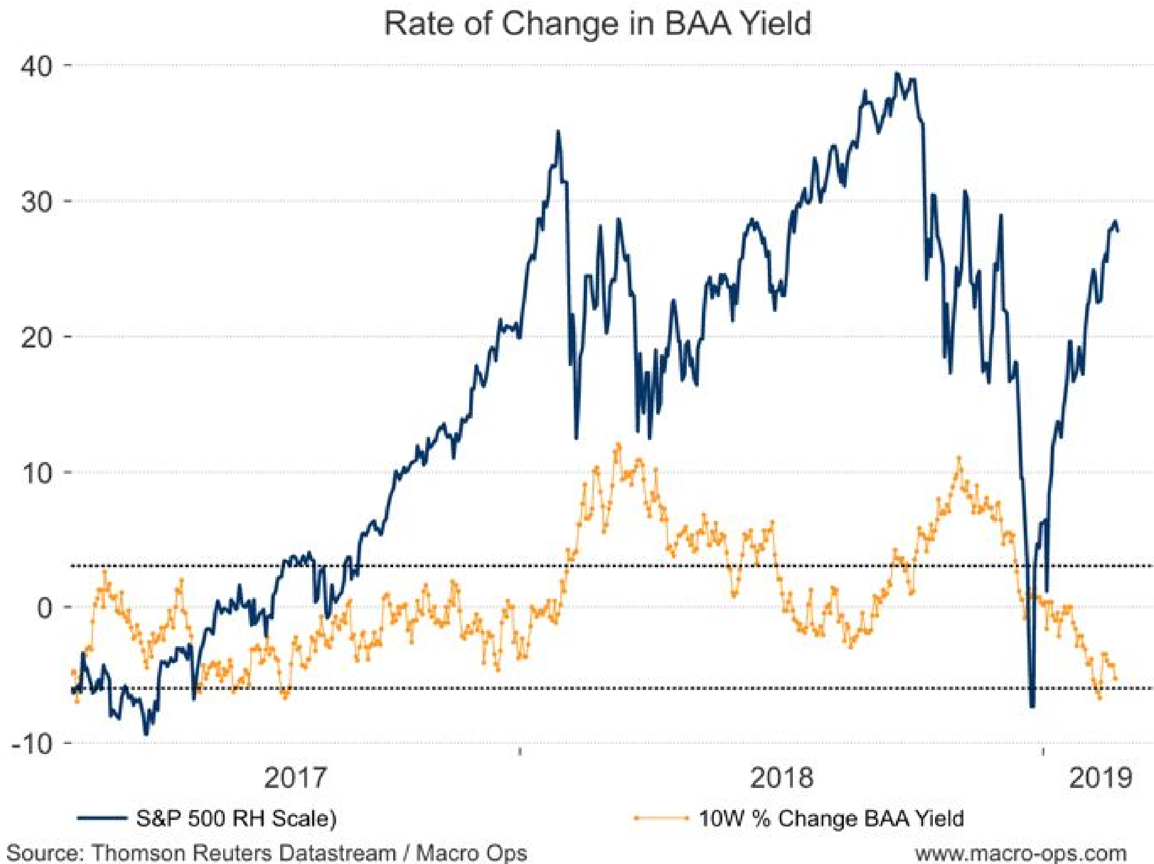



Indicators of liquidity and financial stress in the US have all turned over and are heading back down which is positive for risk assets.

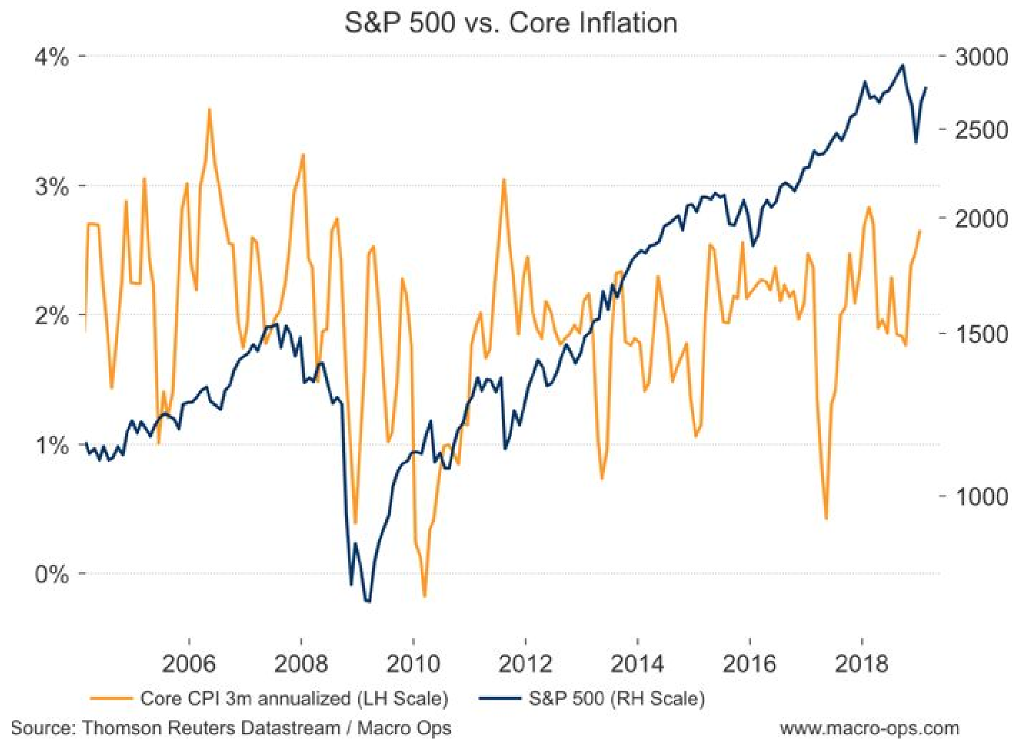
The rate of change in rates has come down considerably.

Stocks and bonds complete for capital flows and when yields on bonds rise too quickly they begin to attract capital from stocks. This causes stock market volatility which then kicks in a

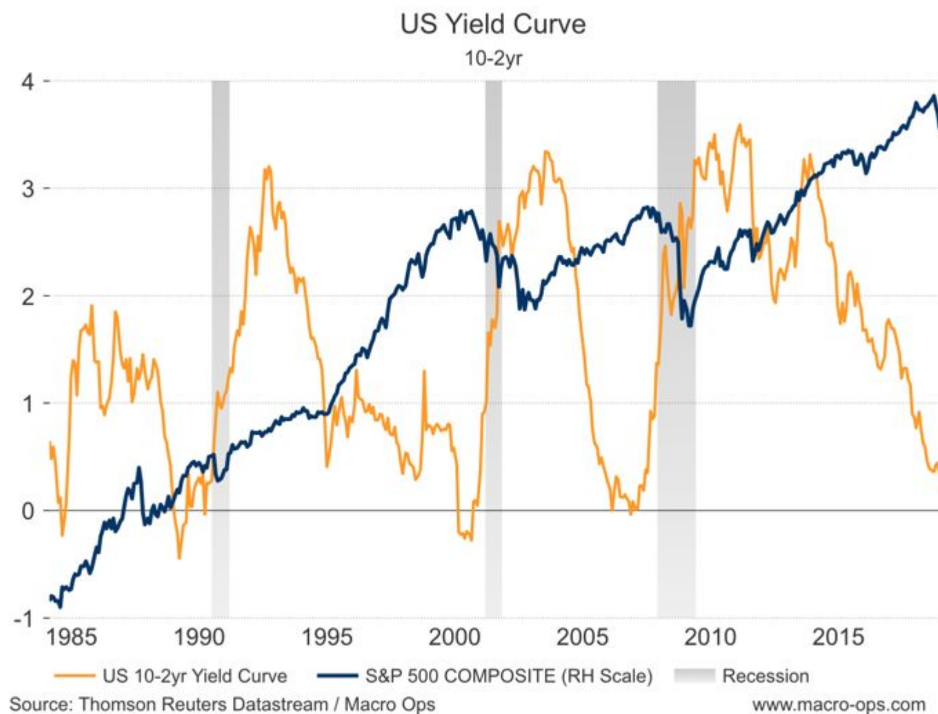
self-correcting cycle where capital flowing out of stocks and into bonds drives yields back down, making stocks more attractive and reversing the flows once again. December's market volatility drove flows back into the safe haven of bonds pushing yields down thus lowering the hurdle for stocks.




The rate of change (ROC) in inflation is an important driver of bond yields and thus the stock market. When the short-term ROC in inflation picks up it typically drives yields higher which then causes stock market volatility. This indicator has picked up over the last month and is now in territory that's pushed yields higher and caused short-term market volatility in the past.




The 10-2 yield curve continues to flatten but is still a ways from inverting. The 10-2 curve typically inverts well before a recession. This indicator is far from signalling recessionary risk currently.



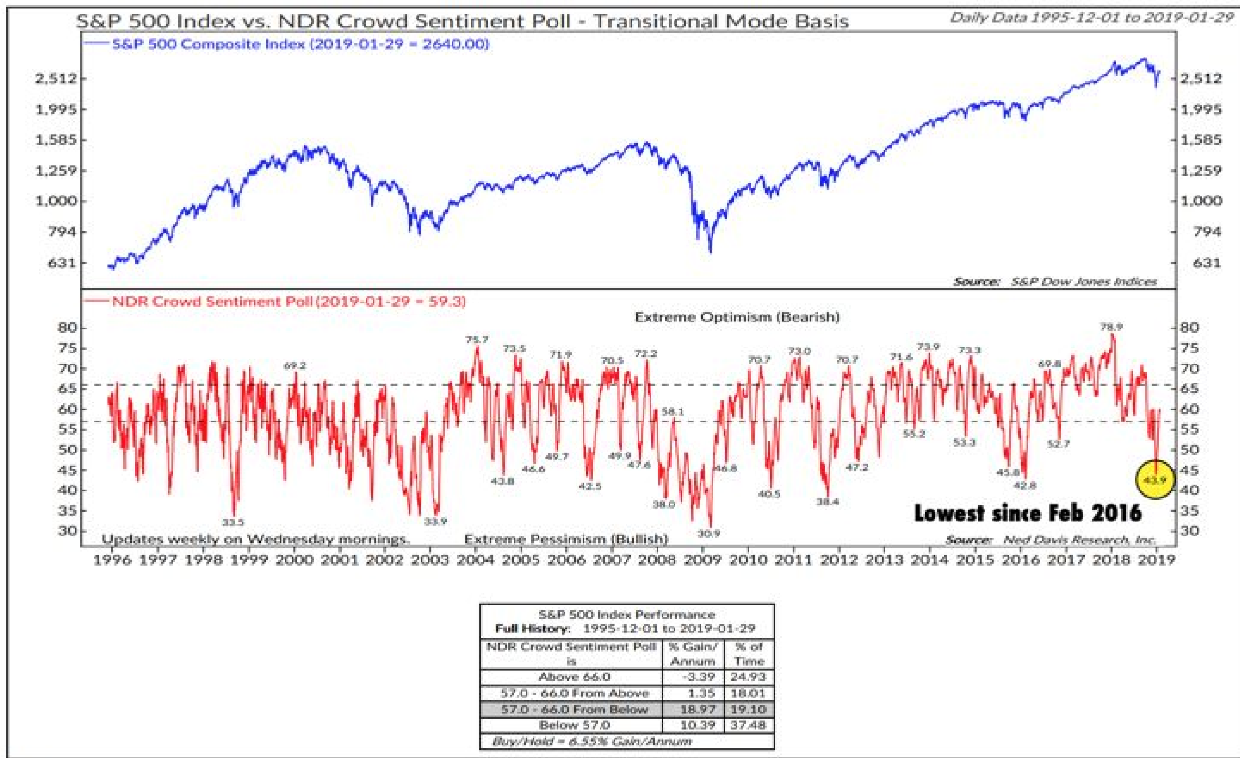
**Macro Summary:**

- All signs point to slowing global growth, led by a struggling China.
- Despite slowing retail sales (which may have been affected by December's negative sentiment shift and market volatility) the economy in the US remains relatively robust. Yes, it's slowing, but overall recessionary risks appear to be low.
- The labor market remains incredibly robust though there are a few signs of creeping weakness that we need to watch.
- The LEI and yield curve are still well away from ringing the recession bell.
- Financial conditions have rolled back over in the US and are once again easing significantly. This is bullish for risk assets.
- The RoC in rates have come down considerably and are now supportive of stocks moving higher.
- The RoC in inflation has recently picked up and if it stays elevated will lead to higher yields and an eventual market selloff.

# Sentiment: Everyone Is Offsides

When you slice and dice the positioning data, two things become clear (1) investors, both professional and retail, are still fairly bearish and are holding lots of cash and (2) they're more bearish on US stocks relative to EM and are positioned accordingly. Let me show you the charts.

NDR's Crowd Sentiment Poll hit its lowest level since early 16' in December. A range which has marked major bottoms in the past.

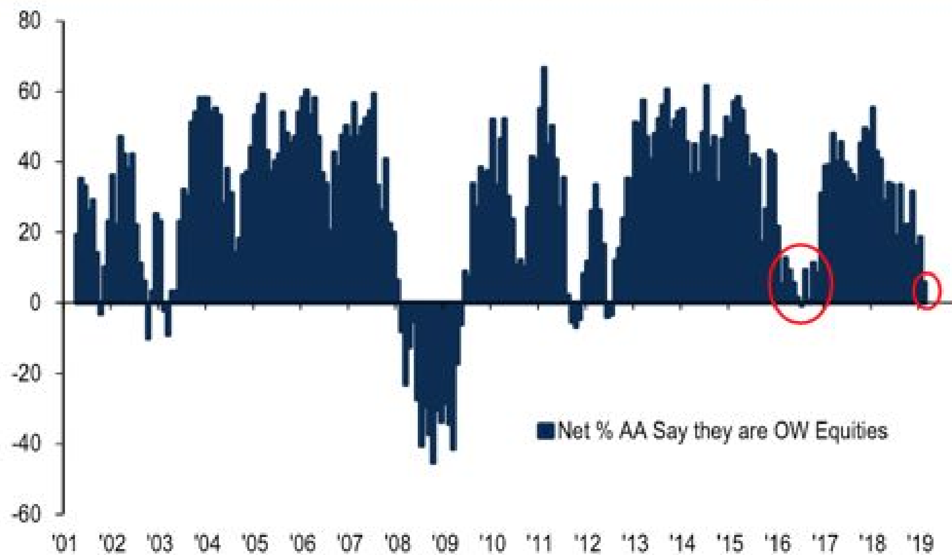



S&P 500 Index Performance
**Full History:** 1995-12-01 to 2019-01-29

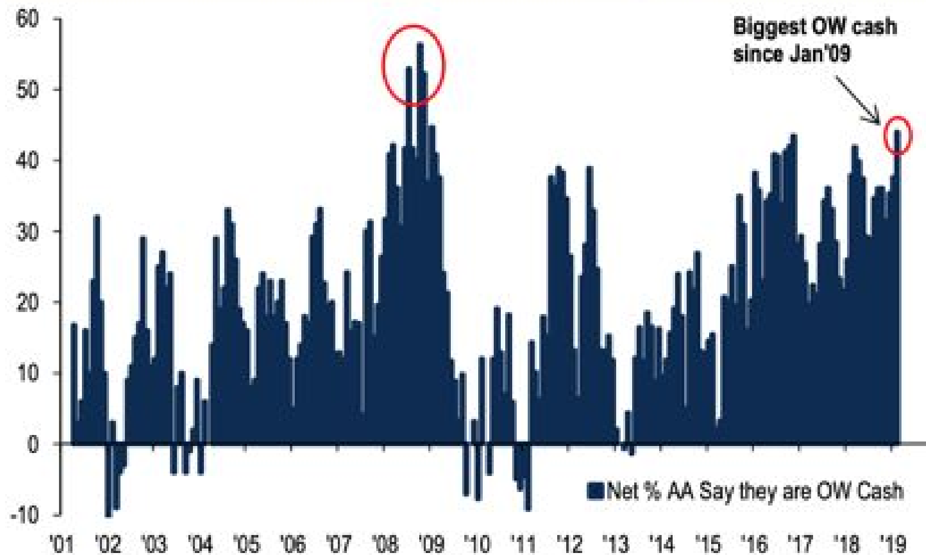
| NDR Crowd Sentiment Poll is | % Gain/ Annum | % of Time |
|---|---|---|
| Above 66.0 | -3.39 | 24.93 |
| 57.0 - 66.0 From Above | 1.35 | 18.01 |
| 57.0 - 66.0 From Below | 18.97 | 19.10 |
| Below 57.0 | 10.39 | 37.48 |

*Buy/Hold = 6.55% Gain/Annum*

The latest BofAML Fund Manager Survey shows that hedgies are holding their lowest amount of equities since 16'.



Conversely, they're holding their highest levels of cash since the depths of the Great Financial Crisis.

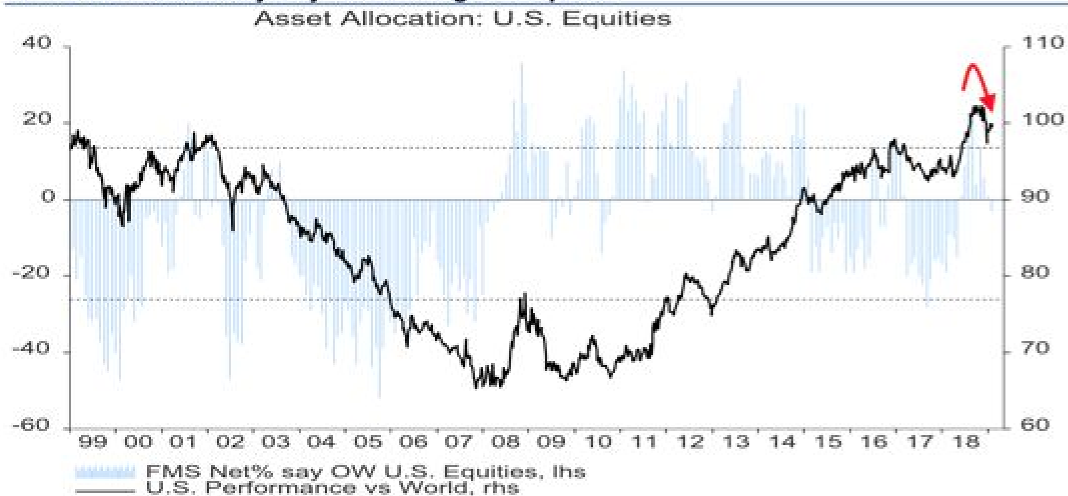



Allocation to emerging market stocks are back near the highs reached in 2017. BofAML notes that this makes EM equities the "#1 consensus overweight amongst FMS investors".

Cumulative capital flows into both EM stock and bonds are back near all-time highs.

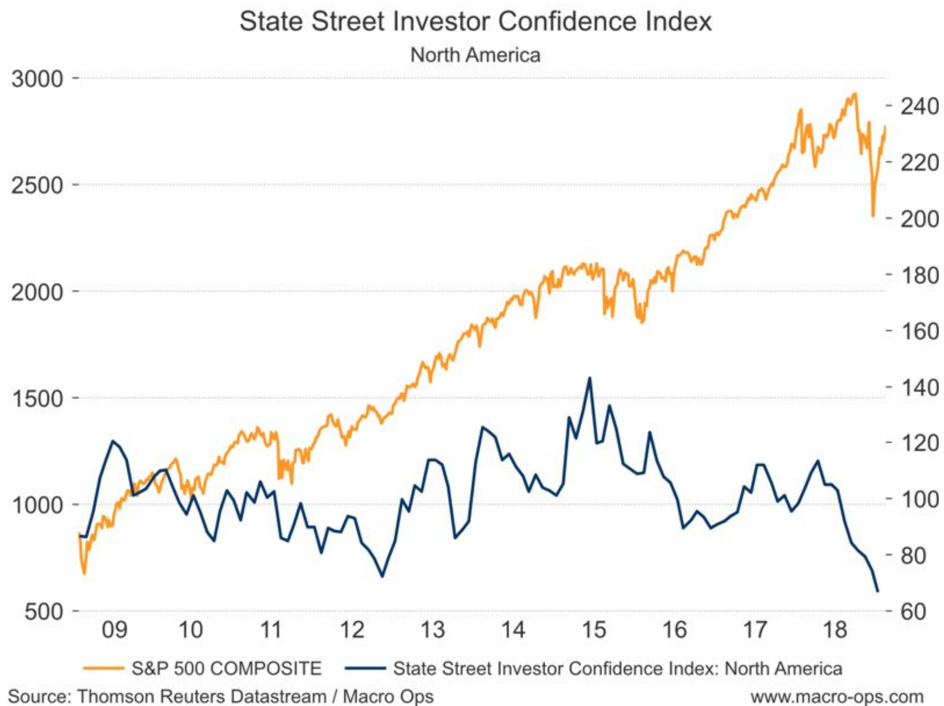
This means there's plenty of fuel for an EM reversal should the market begin to rethink their bullish EM stance.

Meanwhile, allocation to US equities has fallen into negative territory making US stocks the "2nd least favored region" according to the survey.

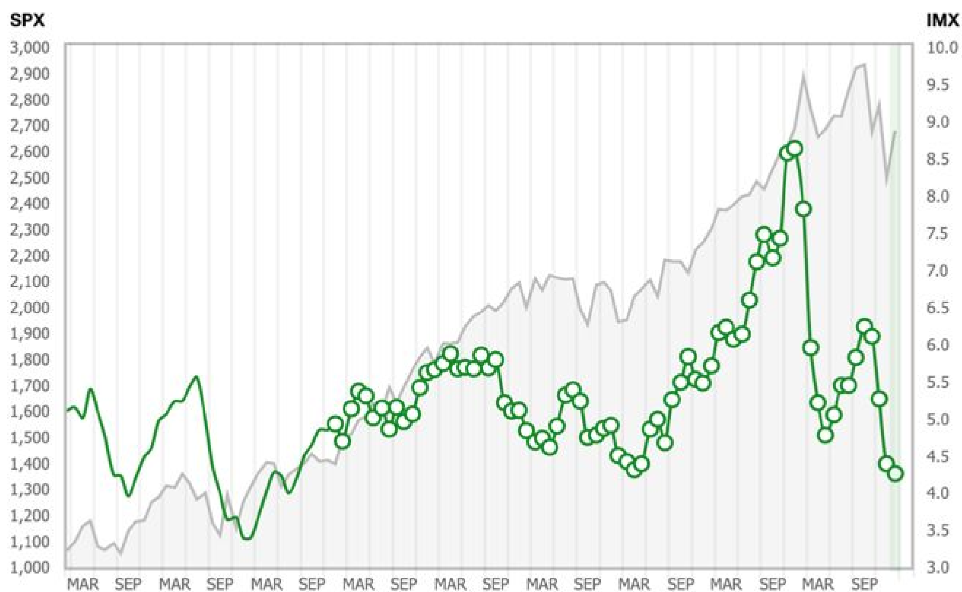



Source: BofA Merrill Lynch Global Fund Manager Survey

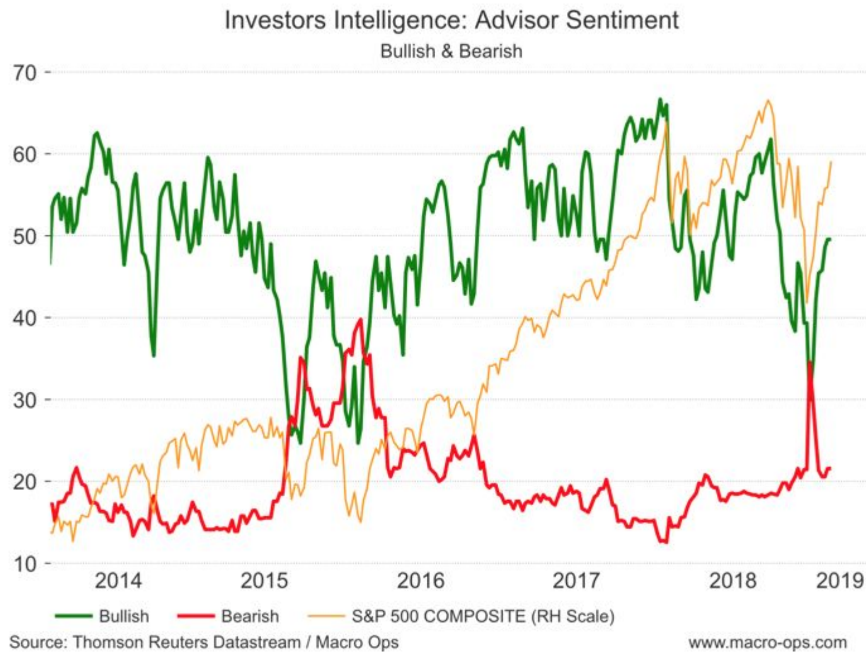
The State Street Investor Confidence Index for North America also shows extreme negative investor sentiment on the US market. The index just reached new cycle lows.



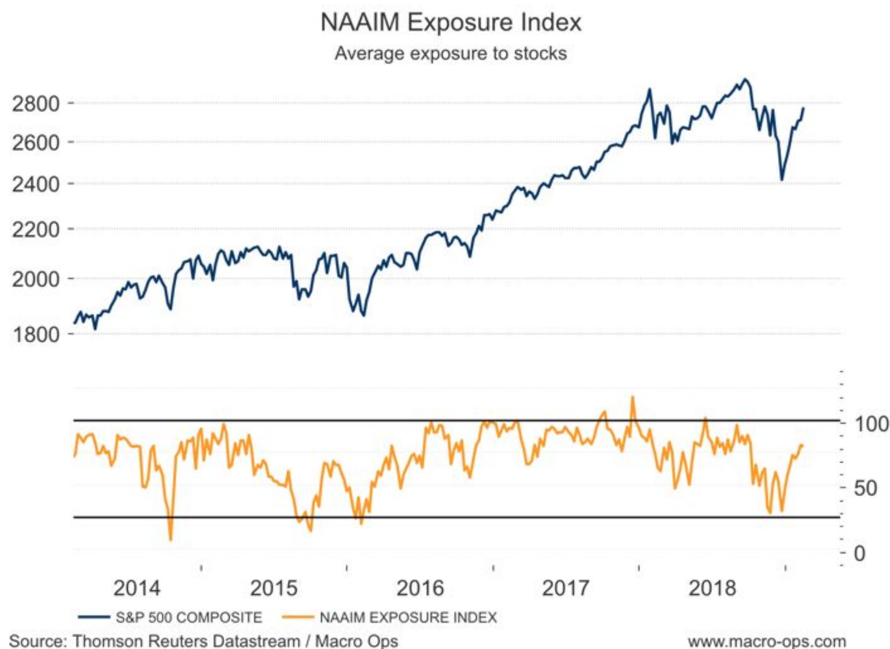

The TD Ameritrade Retail Investor Movement Index (IMX) which tracks the actual trading and positioning of over 11 million retail accounts shows that retail traders dumped their holdings into the December low and have not been buying this rally. THIS IS BULLISH!



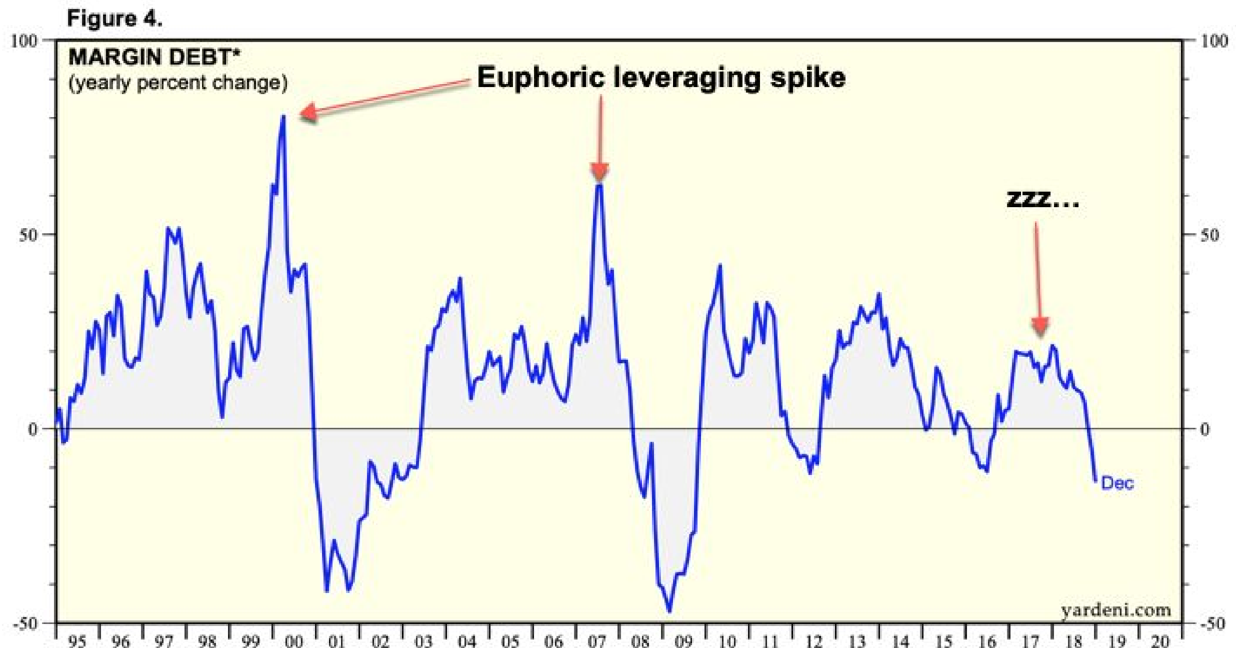
We saw full sentiment capitulation in the II Advisor Sentiment data in December. The indicator has since recovered somewhat but sentiment remains at supportive-to-neutral levels for equities.



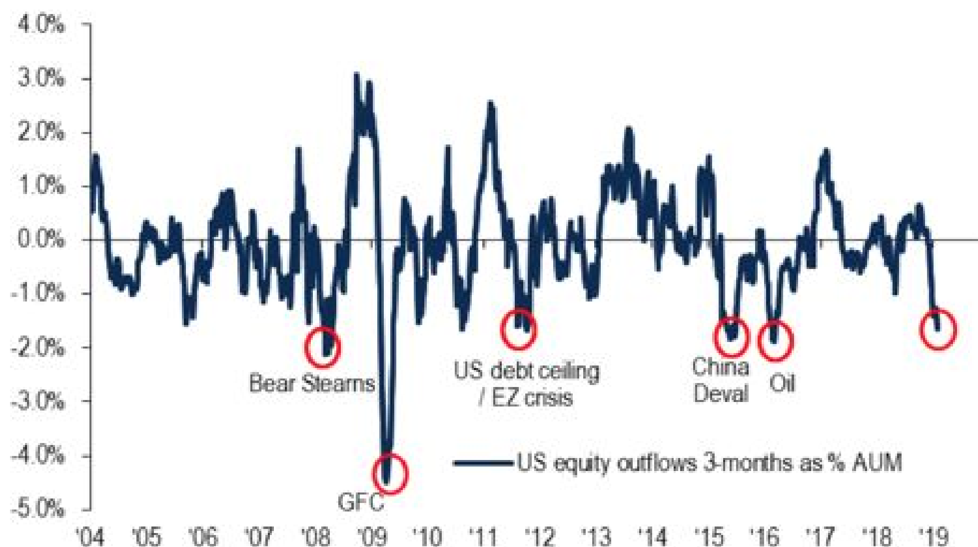

The NAAIM Stock Exposure Index shows that investors reduced their stock holdings to near cycle lows in December but have since been buying back. The index is still well below levels that warrant caution.



The year-over-year change in NYSE margin debt is negative and we've yet to see the euphoric leveraging spike that has marked the top of the last two bull markets.




Lastly, equity redemptions in the US reached similar levels as a percentage of AUM as that of past major market lows.



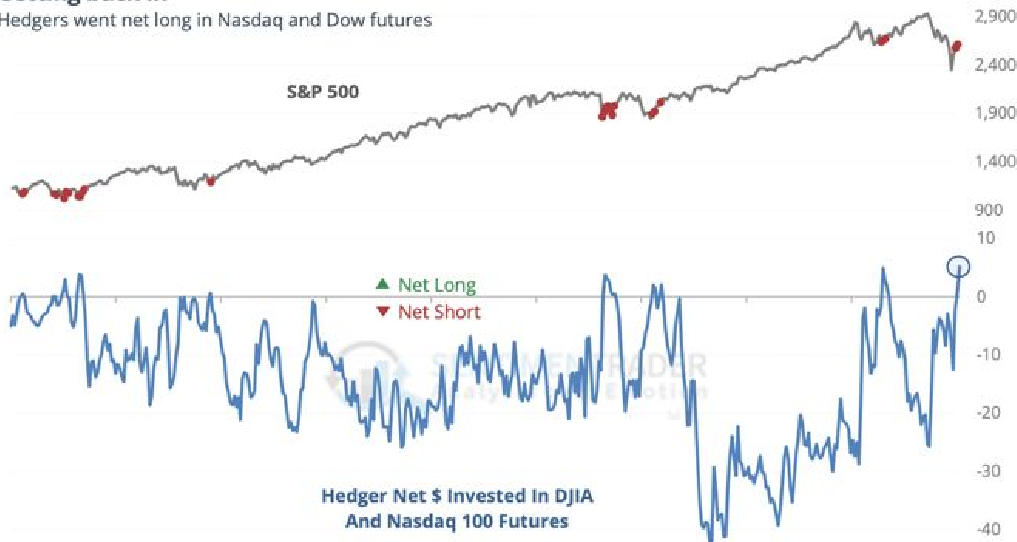
**Sentiment Summary:**

- ➢ Investors, both professional and retail, are underweight stocks and overweight cash.
- ➢ And the bit of equities they are allocated to are in emerging markets where cumulative flows into EM bonds and stocks are near all-time highs.
- ➢ They are at the same time extremely pessimistic on the US market and subsequently vastly underweight US stocks.
- ➢ This suggests that EM stocks have become a consensus trade while long US stocks is contrarian.
- ➢ The lack of euphoric leveraging in margin debt combined with large-scale US equity redemptions suggest the December bottom in the market was the low.

# Technicals: Record Breadth Thrusts

The US stock market rally off December's lows has been powerful in breadth. Our tweak on the late Marty Zweig's long-term Breadth Thrust Indicator shown below just gave a major buy signal. The vertical red lines mark the last four times this indicator was triggered.

The following via Sentiment Trader shows that "smart money" hedgers built up their largest net long position S&P 500 in the market in January.




According to Sentiment Trader, “any week showing a net long position in these contracts led to **exceptionally positive returns in the S&P with virtually no risk and a higher reward**. This is an unusual development, but its record over the past decade has been exceptional and we’d rate it as a positive.”

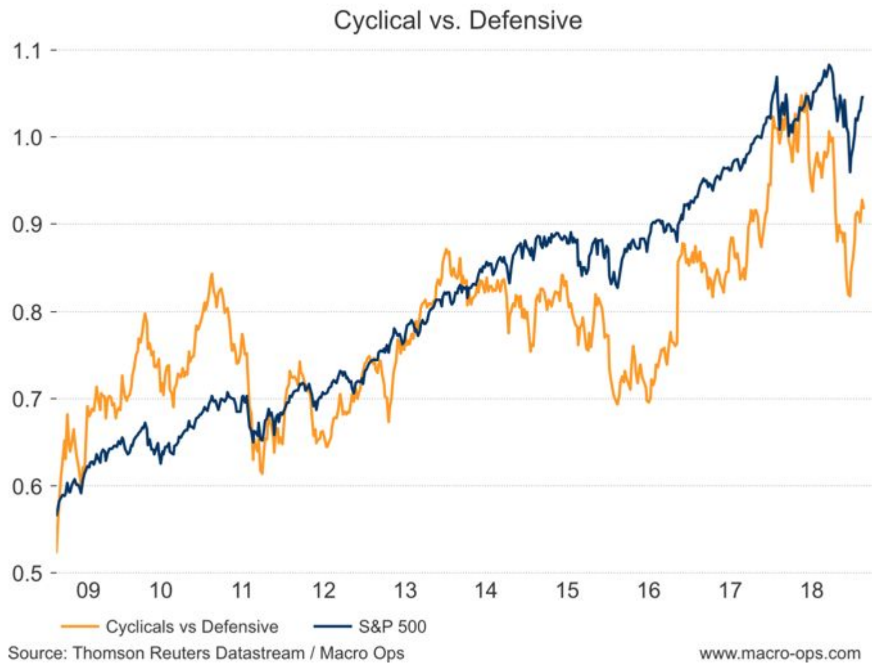
S&P 500 after hedgers net long Nasdaq & Dow futures (2010-2019)

| Signals | 1 Week | 2 Weeks | 1 Month | 2 Months | 3 Months | 6 Months | 1 Year |
|---|---|---|---|---|---|---|---|
| 2010-02-09 | 2.7 | 3.2 | 7.4 | 11.8 | 8.0 | 4.7 | 23.7 |
| 2010-02-16 | 0.0 | 2.1 | 6.5 | 8.9 | 3.8 | -1.4 | 21.7 |
| 2010-06-01 | -0.8 | 4.2 | -3.7 | 2.9 | -2.0 | 10.9 | 25.6 |
| 2010-06-08 | 5.0 | 3.1 | 0.8 | 5.6 | 2.8 | 15.2 | 21.0 |
| 2010-07-06 | 6.5 | 5.4 | 9.6 | 6.0 | 10.6 | 23.7 | 30.1 |
| 2010-07-13 | -1.1 | 1.7 | -0.5 | 1.3 | 6.4 | 15.9 | 19.9 |
| 2010-07-20 | 2.8 | 3.4 | 1.0 | 3.9 | 9.3 | 19.5 | 22.5 |
| 2010-08-24 | -0.2 | 4.5 | 6.9 | 12.5 | 13.9 | 24.3 | 10.5 |
| 2010-08-31 | 4.7 | 7.2 | 8.8 | 12.8 | 12.5 | 24.7 | 15.6 |
| 2010-09-07 | 2.7 | 4.4 | 6.2 | 11.8 | 12.0 | 21.1 | 6.7 |
| 2010-09-14 | 1.7 | 2.4 | 5.1 | 8.2 | 10.6 | 14.3 | 4.6 |
| 2011-11-29 | 5.3 | 2.6 | 5.7 | 9.8 | 15.0 | 9.6 | 18.5 |
| 2015-08-25 | 2.5 | 4.0 | 3.5 | 11.1 | 11.7 | 4.5 | 16.5 |
| 2015-09-01 | 1.5 | 4.3 | 0.5 | 8.6 | 9.9 | 4.2 | 13.4 |
| 2015-09-08 | 0.4 | -1.4 | 1.3 | 6.6 | 5.5 | 1.0 | 11.0 |
| 2015-09-15 | -1.8 | -4.8 | 0.8 | 3.4 | 2.2 | 2.5 | 7.5 |
| 2015-09-22 | -3.0 | 1.9 | 3.9 | 7.1 | 4.0 | 4.8 | 11.3 |
| 2015-09-29 | 5.1 | 6.3 | 10.9 | 10.9 | 10.3 | 9.3 | 15.2 |
| 2015-10-06 | 1.2 | 2.6 | 6.2 | 5.6 | 0.5 | 3.1 | 9.1 |
| 2016-02-16 | 1.4 | 4.4 | 6.9 | 9.8 | 9.0 | 15.5 | 23.3 |
| 2016-02-23 | 3.0 | 3.0 | 6.0 | 8.9 | 6.6 | 13.6 | 23.0 |
| 2016-03-15 | 1.7 | 2.4 | 3.3 | 1.5 | 2.9 | 5.5 | 18.3 |
| 2018-04-24 | 0.8 | 1.4 | 3.7 | 4.6 | 7.1 | 4.6 | |
| 2018-05-01 | 0.6 | 2.1 | 1.9 | 2.4 | 6.1 | -0.5 | |
| 2018-05-08 | 1.5 | 2.0 | 3.7 | 4.2 | 7.0 | 2.5 | |
| 2019-01-08 | 1.4 | 2.5 | | | | | |
| 2019-01-15 | 1.1 | 2.7 | | | | | |
| **Median** | **1.5** | **2.7** | **3.9** | **7.1** | **7.1** | **9.3** | **17.4** |
| **% Positive** | **78%** | **93%** | **92%** | **100%** | **96%** | **92%** | **100%** |
| Risk | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -2.1 | -3.1 |
| Reward | 2.3 | 3.7 | 5.2 | 9.2 | 9.4 | 13.7 | 22.9 |
| Z-Score | 2.9 | 5.3 | 4.4 | 7.5 | 5.2 | 2.3 | 3.9 |

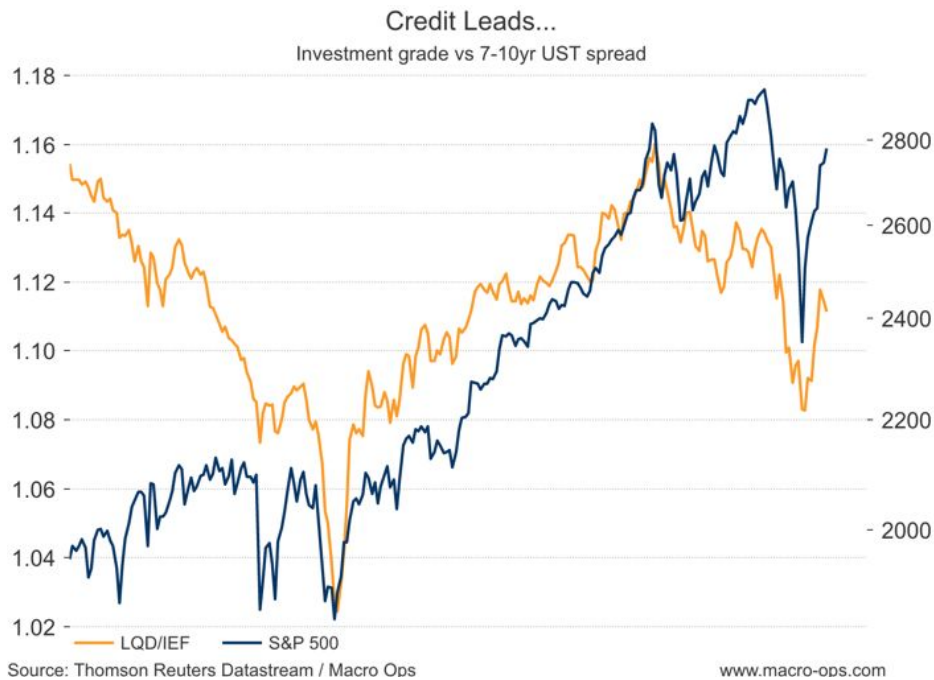
The advance/decline line (blue line) just hit a new cycle high.

The VIX (black line) just crossed back below the 15 handle. The VIX typically stays elevated in a bear market and has never fallen below 15 during an ongoing bear market over the past 30-years. Which *bears* the question, maybe this isn't a bear market?

Cyclical vs Defensive stocks (orange line) are moving in the right direction and are supporting the broader trend higher.




While credit spreads (orange line) have turned slightly lower recently. If this continues to turn over then we should begin to expect a pullback in stocks.



The percent of stocks trading above their 50-day moving average is now at extreme levels. This indicates a stretched market in the short-term which raises the odds of sideways chop and an eventual pullback in the coming weeks.

The 10-day moving average of the Total Put/Call Ratio (red line) is in neutral territory and still some distance from giving a sell signal (horizontal red line).

**Technicals Summary:**

- ➢ Multiple breadth thrust indicators in both equities and bonds have triggered over the last month and a half, including our Zweig long-term indicator. This tells us the recent US rally is supported by strong and wide-spread demand flows which is exactly what you want to see at the beginning of a new bullish uptrend.
- ➢ "Smart money" hedgers buying net long positions in the indices gives us good historical odds of a continued advance in the market.
- ➢ Cyclical vs. Defensive stocks are trending in the right direction and are supportive of the move higher.
- ➢ The recent turn in credit spreads needs to be watched closely. If it continues to turn then we should expect a turn in equities to follow.
- ➢ The percent of stocks trading above the 50-day MA is now extremely stretched. This raises the odds of sideways action in the market followed by a corrective selloff.

## Trifecta Summary:

The rest of the world (RoW) is slowing on the back of a struggling China. This trend is likely to continue until China really hits the juice, which we don't expect until the second half of this year. We'll be looking for changes in the M1 numbers in the meantime.

The US is still the world's cleanest dirty shirt. Growth here is slowing but is looking better than the RoW. There's some signs of trouble, such as slowing retail sales and a slight jump in unemployment. But overall our leading indicators suggest recession is still a ways off. Combine this with a markedly dovish Fed and we get somewhat of a goldilocks scenario. Deflationary pressures from abroad help keep inflation levels low in the US. And the safe haven bid keeps US bond yields low, thus supportive of US stocks.

Emerging markets have become a crowded long while long US stocks are now a contrarian trade. We should expect capital to soon reverse from EM back into the US driving relative US outperformance. It's likely we'll see EM outperformance continue until the announcement of a US-China trade deal (a high probability event, imo). I believe this event will likely drive a major bull trap reversal in EM stocks as the trade war has little bearing on China's real economic problems.

Both professional and retail sentiment and positioning is overly bearish, especially on US stocks, which means there's plenty of fuel to drive the trend in US stocks higher.

The broader technicals are very supportive of the trend higher in US stocks. Though the recent run has become extended on a short-term basis. We should expect some sideways chop and a minor correction in the coming weeks.

Finally, I want to briefly discuss a concept called the Risk Cycle.

The Risk Cycle is a way of thinking about the broader psychology of participants in the market. Think of it as the collective mood and subsequent actions of investors and business people in the market and larger economy.

There's an inherent feedback loop between the mood of the collective intelligence and the market/economy in which they act. When the market/economy performs well for an extended period of time, the collective mood improves and becomes more and more optimistic. This optimism, driven by extrapolation of the recent past, leads to more risk-taking in the financial and real economy (think employing more margin to buy stocks or borrowing more money to fund a business).

This collective action then boosts the market and the real economy which feeds directly back into the collective psychology and on and on…

This feedback loop eventually leads to investors, consumers, business people getting over their skis, to borrow a term from Mark Dow. In practical terms, this means people and businesses over investing in non-productive assets (think the TMT and housing Bubble) with the use of debt. The collective euphoria drives an abundance of risk-taking, using leverage, that eventually has to be unwound. This unwind causes forced selling (leverage creates instability because it spawns forced sellers) which prompts panic, hysteria, and the full reversal of the risk cycle.

This risk cycle is at the heart of the market cycle. It's what causes blow-off cyclical tops and leads to painful extended bear markets.

The current bull market has endured for so long and is likely to endure even longer, because of where we are in the risk cycle. This bull market has benefited from repeated shocks and mini rolling bear markets which have kept the collective mood reaching a euphoric state.

The high political and economic uncertainty, the event echo of the GFC, and the general pessimistic mood amongst investors have kept actors in both the financial and real economy from getting too far over their skis. Yes, there's been isolated examples of euphoria such as the crypto bubble and some signs of mania in the PE/VC space. But these have mostly run their course and never posed systemic risks to the rest of the economy.

This means that everything negative and chaotic that has kept the collective a little worried, a little concerned, has been in aggregate bullish for this market cycle. And it's likely to continue to be so.

We should begin to fret about the end of the cycle when we notice that everybody else is no longer doing so…

# Micro: GrafTech International [EAF]

(The following is from our value investor who still has to remain nameless due to compliance reasons. He's the same investor who pitched GTX, ROAD, and CRTO. H/T to Massif Capital for the idea. Enjoy!)

GrafTech International (EAF) is a leading manufacturer of high-quality graphite electrode (GE) products that are essential components to the production of Electric Arc Furnace steel. The company sports a vertically integrated, highly differentiated business model with supply-side advantages giving it pricing power over competitors.

Reduced supply of electrodes coupled with increased demand and long-term contracted revenues present large tailwinds to double one's investment. We believe current share prices signal extreme misunderstanding from Wall Street on the future of GrafTech's business. **Existing contracted revenues provide a path to over $3B in FCF over the next five years (almost 70% of the current market cap), all of which the investor can own for under 5x EBITDA.**

If that's not good enough, management has a history of returning high percentages of those cash-flows back to its shareholders in the form of dividends, buybacks and special dividends.

## Industry Background and Overview

Electric Arc Furnace steel production is the fastest growing sector within the overall steel industry, growing around 8 – 10% in 2017 compared with Blast Furnace production at around 3.5%. EAF has grown at higher rates mainly due to greater resilience, a more variable cost structure, lower capital intensity and less taxing on the environment.

In order to run Electric Arc Furnaces, producers rely on graphite electrodes as an essential part of production. These electrodes need to generate enough heat to melt the scrap metals (and other materials) while being able to sustain composition without breaking down. This makes GE the only product on the market capable of fulfilling EAF requirements.

In order to make these graphite electrodes, you need petroleum needle coke to serve as your largest raw input. Without getting too deep into the weeds on this, it's important to know that petroleum needle coke is a final-stage carbon and highly essential for the production of electrodes using the EAF technique.

### Petroleum Needle Coke & Vertical Integration

The petroleum needle coke industry is extremely concentrated with Phillips 66 and Seadrift Coke, LP accounting for more than 50% of the overall market. Demand for needle coke is growing rapidly due to two structural changes: supply shortages & increased product demand.

Since 2014, the needle coke industry has consolidated and retired plants resulting in a 20% reduction in overall supply. This makes intuitive sense given that in 2016, graphite electrode prices per metric ton were just $2,600 – causing most firms to retire (in some cases permanently) plants that were running at losses. GrafTech is now well positioned, capturing both the supply side -- with the petroleum needle -- and the demand side -- finished electrode products.

GrafTech acquired Seadrift Coke in 2010, significantly reducing their dependence on third-party needle coke providers. Seadrift Coke provides GrafTech with over 60% of its required needle coke material to produce their electrodes.

This vertical integration provides GrafTech with incredible cost savings compared to its competitors as well as a more secure source of materials when supply runs tight (like current conditions). Because of this, GrafTech enjoys a 26% margin advantage against its competitors that use third-party suppliers to source their needle coke.

To put that into numbers; GrafTech spends roughly $2,500 per metric ton on producing electrodes while their competitors spend over $5,000 to produce the same electrodes.
The supply/demand discombobulation resulted in skyrocketing prices for graphite electrodes. Between 2006 – 2016, graphite electrode (GE) price per ton floated around $4,500. With the renewed vigor from the demand side, GE prices per MT ranged from $15,000 - $30,000 in 2018.

These record prices won't stay around forever, and the GrafTech management teams knows this. In order to capture as much of this price hike as they can, the company changed their sales strategy, focusing on long-term take-or-pay contracts.

## The Power of Contracted Revenues

Before 2018, GrafTech ran on 100% short-term contracts (less than a year), mostly six months in duration. Given the price hikes and demand for their product, switching to long-term take-or-pay commitments provided the company with high visibility into revenues over the next five years.

GrafTech has over 100 existing long-term agreements -- 87% of those of the five-year type – for a total contracted supply of around 636,000 metric tons, locking in an average price per MT of $9,700. That's a contracted revenue backlog of over $6.2B over the next five years.

Couple these revenues with the cost advantages the company enjoys through its wholly-owned subsidiary and you end up with 65% gross margins on that $6.2B in revenues. After netting out capital expenditures (which are around 8% of total revenues) we're left with $3.1B in free cash flow over the next five years.

Even if you subtract out debt, the company is still projected to crank out over $2B in unlevered FCF. If we use today's market cap value of $4.1B (as of 02/15) **that means 75% of the company's market cap will be generated in FCF over the next five years.** These figures are *only* for the take-or-pay contracts, we still haven't talked about the spot price sales business that churns out cash, which we'll touch on soon.

## What Will Management Do with The Cash?

It certainly is a great thing that GrafTech can generate large amounts of cash, but if management is lousy at allocating, what good are those cash flows? Luckily management has shown a track record of being extremely shareholder friendly since its IPO back in April. Before its last earnings report, the company generated Post IPO FCF of $595M. Of that $595M, $203M went into special dividends, $225M went to share buybacks, $69M went to standard quarterly dividends and $56M went to debt repayment.

In other words, management has returned 84% of its FCF to its shareholders.

Looking forward, management laid out a similar plan for 2019 capital allocation in their last earnings call. Share buybacks and regular dividends are on tap for 2019, but management will allocate more capital to paying down debt – adding $100M in repayment on top of their $28M minimum requirement.

I like the idea of splitting the allocation between buybacks and debt repayment. In fact, I wouldn't mind seeing them chip away at the dividend to pay back debt and increase buybacks – both of which would be more accretive to shareholders compared to a dividend.

## Valuation

With a business like GrafTech, it makes better sense to value its two sales components as a sum-of-the-parts valuation. Let's start with contracted revenues segment. The company is expected to generate roughly $3B in FCF. If we assume 65% gross margins – in line with the cost and price at which their revenues are contracted – we arrive at around $970M in 2022 EBIT.

Taking out taxes, capital expenditures, D&A and changes in working capital we achieve 2022 FCF of $753M. Assuming a terminal growth rate of 1% we get an Enterprise Value of $7.6B and an 8x EV/EBITDA multiple. Adding in net debt of roughly $1.4B and dividing by shares (290M) we get an intrinsic value range around $21 - $22.

We can cross-reference this with a multiple valuation, at 10x and arrive at $24/share for the contracted revenues – giving us a near 40% margin of safety.

Moving on, GrafTech generated roughly 30% of revenues from spot volume sales. To be on the conservative side, we'll assume spot prices mean revert to the lower end of their range (roughly $7K/metric ton). Keeping spot volumes close to 25% of revenues gets us 2022 EBIT of $226M.

After backing out taxes we're left with FCF of $178M. Keep in mind GrafTech doesn't incur any capex costs for their spot volume sales. After taxes, all incremental increases in revenues drop straight through to FCF. Assuming the same growth rate of 1% and a 10% discount rate, we get an EV of $1.5B – giving us fair value range around $5/share.

So, not only are you getting the core contracted revenue business for a substantial discount, but you're thrown in a $5/share spot volume business for free. In fact, you can get all of this for less than 5x forward earnings and 5x EBITDA.

## Risks

I couldn't get away writing about a steel producer without mentioning *China*. The steel industry has experienced cyclical headwinds, notably in 2008 – 2009 when EAF steel production cut 17%, as well as between 2011 – 2015 when production declined another 10%. These production declines were mostly the result of Chinese BOF steel over-production.

However, the China risk seems mitigated for two reasons. First, China doesn't manufacture Electric Arc Furnace steel – they work mostly with BOF steel. Secondly, China has no direct source for petroleum needle coke – so even if they wanted to start producing EAF steel, they would have to first find a way to obtain the raw material in a tightening supply market.

Other risks would be a sharp decline in the price of graphite electrodes (like the prices around 2016 at $2,600/metric ton). A decline in the use of Electric Arc Furnace steel production would cascade into reduced demand for the electrodes, causing downward pressure on margins and profits. Another risk would be continued selling pressure from Brookfield (who acquired GrafTech in 2015), which controls a healthy portion of shares outstanding.

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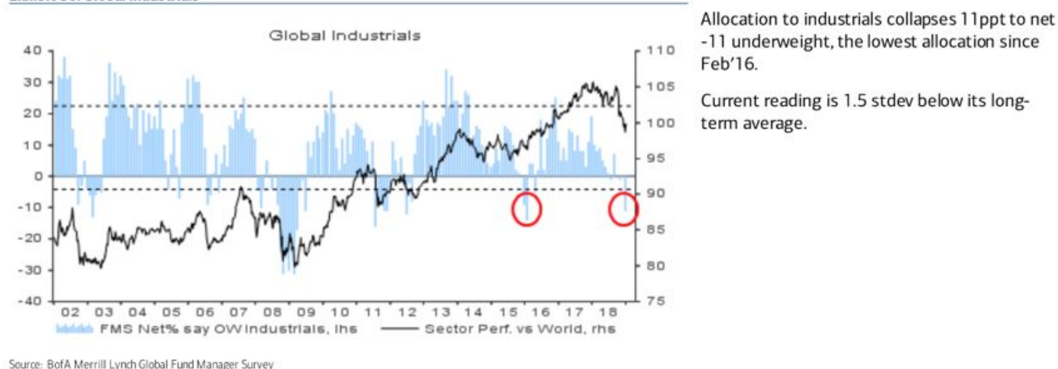
Alex again.

There's a lot to like about this play. There's a substantial margin of safety in buying a company that will generate 3/4ths its market cap in free cash flow over the next 5-years from just the contracted revenue side of its business alone. Couple this with the tight supply environment and the potential for major upside in the spot market and you get a highly asymmetric bet. Which is just the kind of bets we at MO like.

I've also been looking to add some more industrials to my book since they are now one of the most out of favor sectors at the moment (see chart via BofAML FMS below).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Plus, we're starting to see some hot action return to the sector. Just check out steel maker DMC Global's (BOOM) chart.

That's all I've got for this month!

Keep an eye on Disney (DIS) which is our biggest holding (we wrote it up here). It's looking ready to run.

Until next time, thanks for reading and shoot any questions you may have to me at alex@macro-ops.com.

Your Macro Operator,

Alex