MACRO INTELLIGENCE REPORT

Macro Ops
Target. Deploy. Profit.

The Profit Equation and John Jerk

In this month's *MIR* we're going to talk Minsky and the Levy/Kalecki Profit Equation.

In This Issue:

This may sound a bit heady, but don't worry. We're going to break it all down Barney style and then walk you through how you can use the frameworks for understanding the current environment in order to better assess the probabilities of potential outcomes (ie, gauge the general conditions).

> *I still had much to learn but I knew what to do. No more floundering, no more half-right methods. Tape reading was an important part of the game; so was beginning at the right time; so was sticking to your position. But my greatest discovery was that a man must study general conditions, to size them so as to be able to anticipate probabilities.* ~ Jesse Livermore

Let's kick things off with the Levy/Kalecki Profit Equation.

The Profit Equation is just a macroeconomic accounting identity for how the global economy *actually* operates. Specifically, it answers the question as to where "Profits" come from and thus, growth.

If you've ever heard of The Jerome Levy Forecasting Center where a number of talented economists work. Well, that's the same Levy. The center performs analysis using the Profits Equation framework developed by Jerome Levy in 1908 (side note: Kalecki was a renowned economist who developed the same framework as Levy years later and received credit initially for it because Levy was a relatively unknown name).

Now, you can read the full white paper on the equation here, which I highly suggest you do so. We're just going to cover the gist of it today, because it's relevant to potential macro risks and constraints we'll be facing in the coming year(s).

The actual accounting identity looks like this:

Profits before tax = + Investment – Nonbusiness saving + Dividends + Corporate profits taxes

This accounting identity, which like any identity holds true under any circumstance, is just saying that corporate profits are the direct result of net investment minus nonbusiness (Households + Government + rest of world) saving before dividends and corporate taxes are paid out.

Confused? Don't worry. I'll break it down even more.

We all know where profits come from at the individual level, right? A company earns more in revenue than its costs and the excess is profit.

Well, if you pull back and look at the global economy as a whole, it's a closed system. Its closed in the sense that profits aren't magically appearing from anywhere outside of the global economy. But profits obviously aren't a zero sum game. If one company earns profits it doesn't necessarily mean that another company somewhere has to be operating at a loss. There wouldn't be any growth if that was the case. So, where do profits come from then?

The answer is in net investment, which is a positive sum game. If we divide the economy into our four aggregate entities (1) US Corporations (2) Households (3) All levels of US Government and (4) the Rest of the World (RoW) and look at them as a whole, there needs to be net positive investment as a whole for their to be profits.

This means that an economy's ability to produce profits comes down to the net expansion of the aggregate balance sheet in the macro accounting identity. For instance, if the US Government is running a budget surplus (shrinking its balance sheet), like it did in the late 90's. Then either the Household, Corporate, or the RoW needs to take up the slack and expand their balance sheets to make up for the fall in demand. Or else demand will fall and profits will contract.

In the late 90's, US Corporates made up for the government's demand deficit by expanding their balance sheet. In the 2000s it was Households and the RoW (led by China) who borrowed money and invested — US Households in homes and China in building entire cities.

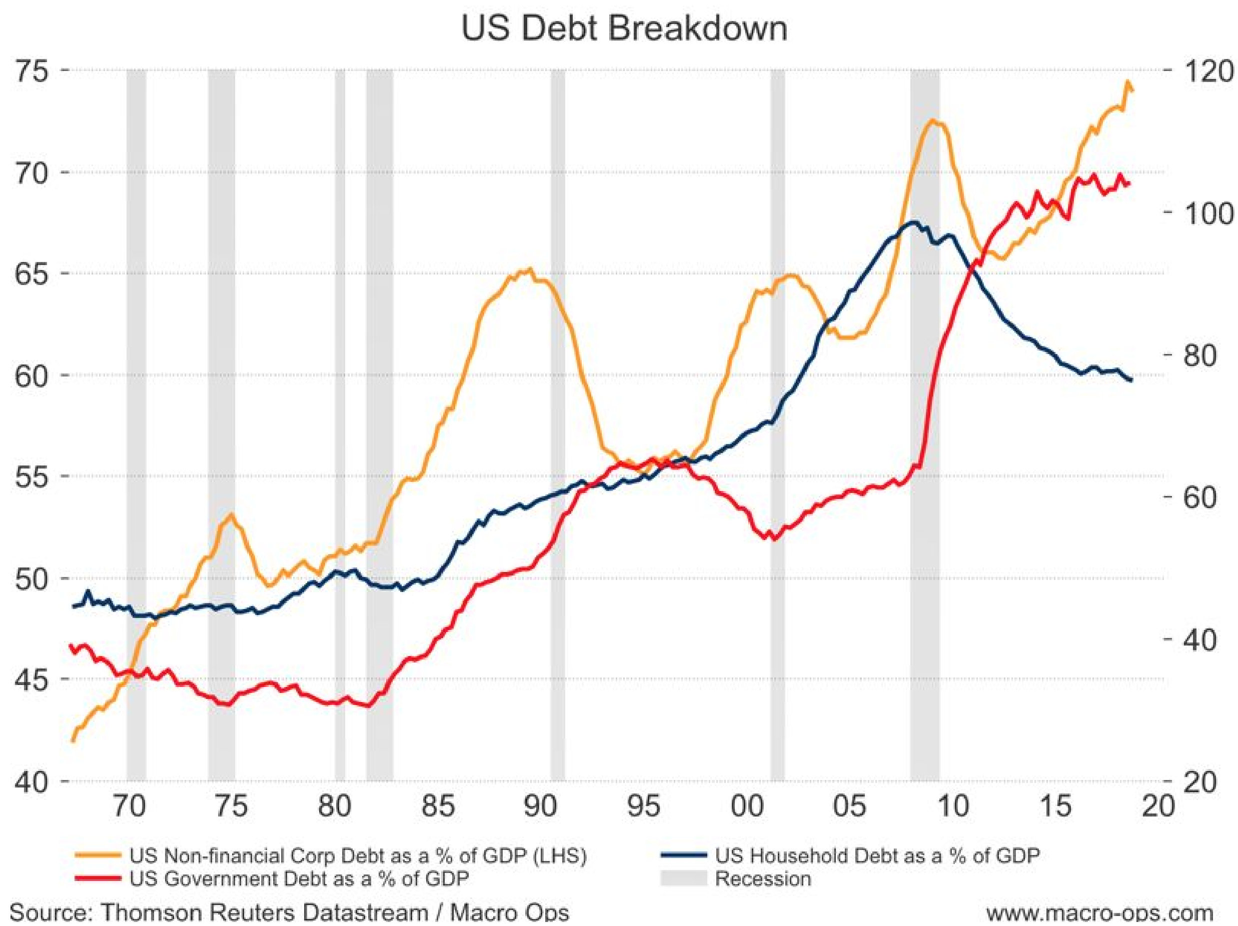
Understanding that profits are essentially the residual of the net balance sheet expansion/contraction of the entire global economy is helpful because (1) we can look at the trends in the balance sheets of our four macro aggregates to see if net demand (profit) is being created and (2) we know that their are natural limits to how much balance sheets can expand and therefore whether the global economy may be headed for a contraction in profits.

This is essentially a more nuanced framework for understanding how the debt cycle (as put forth by Bridgewater) works. Profits are essentially the result of expanding balance sheets (increases in debt). The more balance sheets expand the lower interest rates need to drop in order to decrease debt servicing costs and keep the cost of capital down for marginally profitable firms — essentially keep the economy from going into free fall.

Enough with the theory… How does this apply to the present day?

Well, think about what's been the source of profits in the US economy the last couple of years.

The Household sector has been deleveraging since the Great Financial Crisis (GFC). They've been contracting their balance sheets and thus have been a negative source of profits/demand in the economy. The demand then has come from both the Federal Government and the Private Sector, both of which have been rapidly expanding their debt.



The RoW, primarily the Eurozone and China being the two economies large enough to matter, have been either a wash or net drag on global demand over the last few years.

China has pretty much maxed out its balance sheet limits where it now takes extraordinary injections of credit from the government to produce a relatively modest and short-lived economic impulse — the whole "pushing on a string" thing. And European consumers and corporates are fairly weighed down by debt and haven't been helped much at all by their governments, who unlike the US decided to go with German imposed austerity following the GFC (though this may be starting to change, which we'll discuss soon).

And this brings us to a growing concern of mine. Where is net demand going to come from in the future?

The fiscal impulse from the US tax cuts and increased budget deficit is starting to wear off. And on the corporate side, with corporate debt to GDP at all-time highs, how much more credit driven demand can we expect?

Things actually look worse when you disaggregate the corporate data. Taking a look under the hood we find that debt is actually much higher and there are a number of "zombie" firms that aren't profitable even in such a low cost financing environment which means its going to take just a small tightening of financial conditions to cause these firms to go belly up, potentially kick starting a chain reaction of defaults.

Check out the following notes from Financial & Insurance Firm, Euler Hermes (emphasis by me):

- Between 2009 and Q3 18 the US total debt has declined from a peak representing 350% of GDP in Q1 09 to 311.5% in Q3 18. While the US as a whole has been deleveraging, the business sector (corporate and non-corporate) has re-leveraged, **standing at 72.6% of GDP or USD 15tn today. This represents a 2pp deviation to trend. Past recessions in the US have coincided with positive deviations ranging from 2-8pp of GDP.**
- According to our calculations, **the true level of non financial corporate debt in the US may be 30% or USD 3.9tn higher than officially reported**, primarily because of leveraged loans bought by non-banks. We estimate that the debt-to-EBITDA ratio would thus be close to 4.6 instead of 3.9. As a consequence, the BAA-Treasuries' spread (to AAA) should be about 120bps higher than currently observed (~ 230bps today) if hidden debt were factored in.
- The Trump Administration's fiscal stimulus has boosted demand in the US over the past couple of years. According to our model, a correction of this excess demand, back to potential output growth, **could trigger an increase of the corporate delinquency rate from 1% in Q3 18 to 2.32% (highest level since Q2 11).** This adjustment could follow strong disagreement about fiscal policy as we enter 2019-20 budget discussions. Corporate spreads will thus continue to hover around 230-250bps as seen today, still underestimating hidden debt, but aware of looming risks in the corporate sector. In a stress scenario (likelihood to switch estimated at 35%), which could correspond to a series of defaults for instance, the delinquency rate would jump to 3% and credit spreads would very quickly increase by 70bps higher than today.

- ➢ The bottom line is that be it from scoping (hidden debt) or for cyclical reasons, we believe that corporate spreads are underestimated today, and that unfortunate events (rapid downturn, market defaults) could end up pushing up spread by 70-190bps, by sheer realization by market actors of intrinsic risks in that segment.

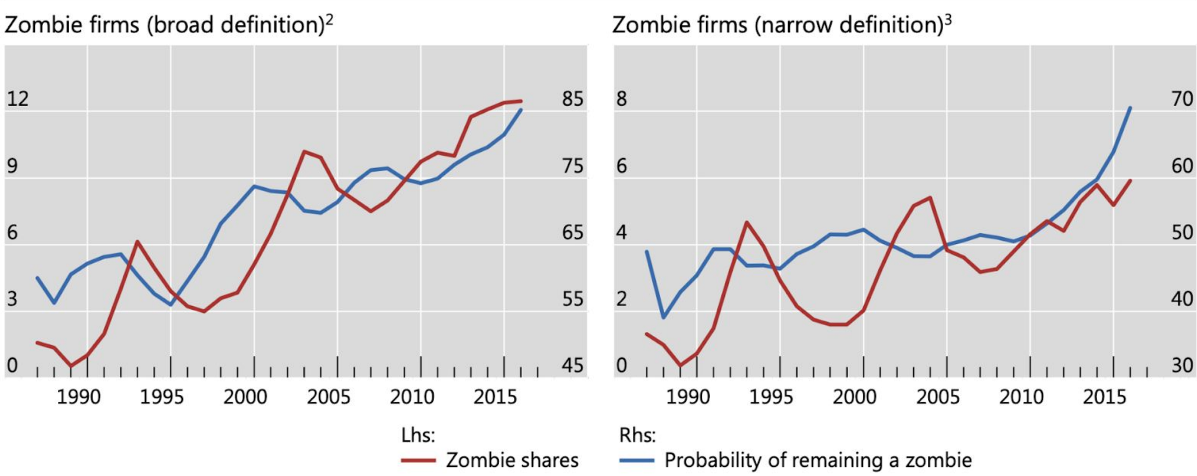
The Bank for International Settlements (BIS) put out a research paper last Fall, titled "The rise of zombie firms: causes and consequences", where they discuss the pervasive rot in the developed market corporate sector, especially here in the US.

Here's a few of the notable highlights from the paper.

- ➢ 12% of all companies globally are now "zombie firms," meaning that they can barely pay the interest on their debts. The number is 16% in the US, which is an eight-fold increase since the 90s.
- ➢ These zombie firms have been kept alive by low interest rates along with investor demand for "leveraged loans".
- ➢ The leveraged loan market is now in the trillions (the exact number is unknown) and consists of low-quality corporate debt that's at risk of being downgraded — which would cause forced liquidation — should interest rates rise too much.

Zombie firms are on the rise and survive for longer[1]

In per cent Graph 2



It seems we're on a clear course of transition from what Minsky would call the "speculative financing" stage to the "Ponzi Financing" stage of the financial cycle.

For those of you not familiar with Hyman Minsky, here's a brief summary of one of his more popular theories, which applies to our discussion today.

Minsky came up with the “financial-instability hypothesis” which stated that long stretches of prosperity sow the seeds for an eventual crisis. Economic stability breeds instability.

Minsky understood that recency bias drives myopia in the human decision making process. Economic actors end up extrapolating low volatility into the future which leads to more risk taking in the present through the use of leverage (credit).

The theory was established by defining what investment *is,* and its role in an economy. Which, put simply, investment is the exchange of money today for money in the future. That money (investment) can come from one of two sources: the economic actors’ (consumer, company, government) *own* cash flows, or from the cash flows of *others* (lenders). And it’s the balance between these two sources of investment that comprises the stability of the financial system.

According to Minsky, the financial cycle typically follows three stages of financing; these are:

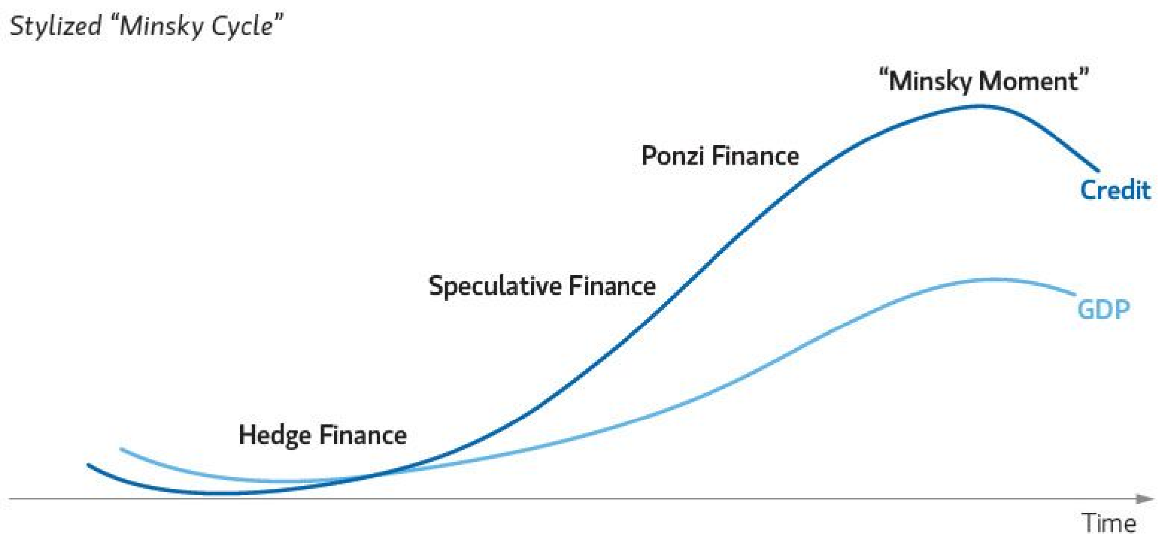
1. Hedge financing
2. Speculative financing
3. Ponzi financing

Hedge financing is the most stable of the three. It’s when the economic actor relies on its own stable cash flows to repay any borrowings. It’s when the actor’s earnings far outweigh its limited borrowings.

Speculative financing is when the actor uses its own cash flow to pay the interest on its debt, but must assume more debt to repay the principal; thus rolling its debt over. This stage of financing is less stable than hedge financing.

And lastly, there’s Ponzi financing, which is the most unstable of the three stages of financing. Ponzi financing is where the actor’s cash flows do not cover either the principal or interest payments on its debts. The actor is completely reliant on the appreciation of the underlying asset in the hopes that it’ll be enough to cover its liabilities.

Minsky argued that financial cycles naturally progress from each stage of financing to the latter; driven by human greed and carelessness. When economies enter the Ponzi stage, they become increasingly unstable and eventually experience a “Minsky Moment” which is a sudden collapse in asset values, leaving both lenders and borrowers exposed. This is the deleveraging phase of the debt cycle as put forth by Bridgewater.



So we have a diminishing US fiscal impulse, a nearly tapped out corporate sector riddled with zombie firms in an economy transitioning from speculative to ponzi finance, all which sits atop a leveraged loan market that measures in the trillions. Great…

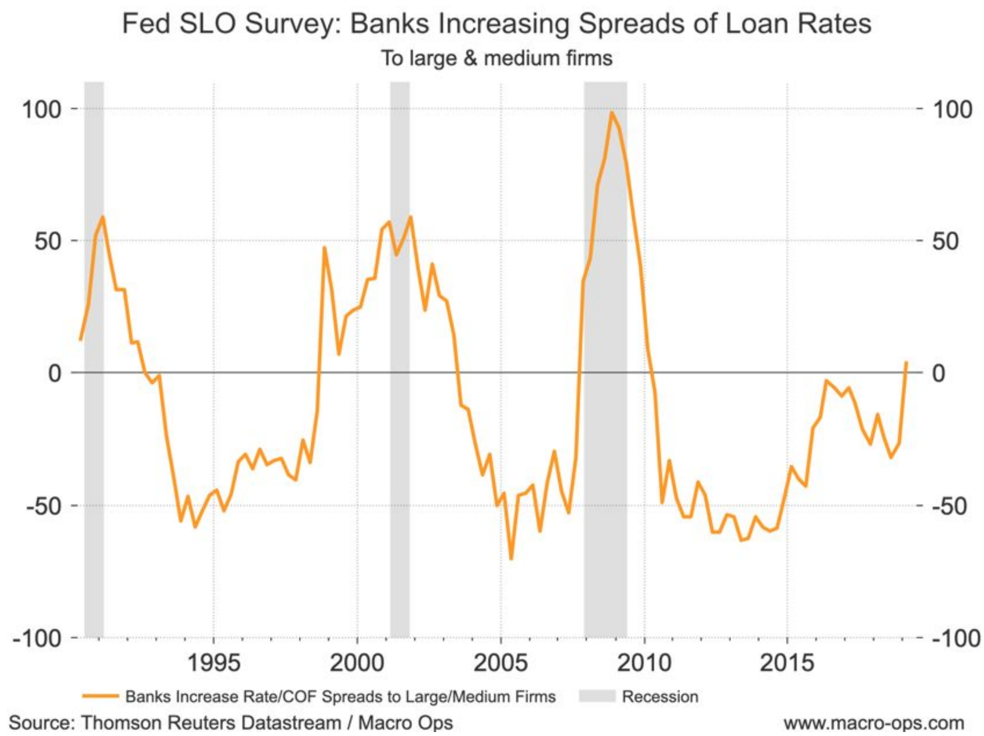
The Game Masters (Policy Makers) are well aware of this threat. Former Fed chair Janet Yellen remarked in an interview with the FT last Fall that "I am worried about the systemic risks associated with these loans. There has been a huge deterioration in standards; covenants have been loosened in leveraged lending… There are a lot of holds. We should not feel the financial stability glass is full."

I believe it was the market's concern (rightfully so) that drove the large selloff at the end of last year. With the Fed acting as if they were on rate hiking autopilot, a painful recession and zombie killing field was all but assured if they had not changed course. But, they did, and here we are. The game is still going and may very likely go on for a while longer.

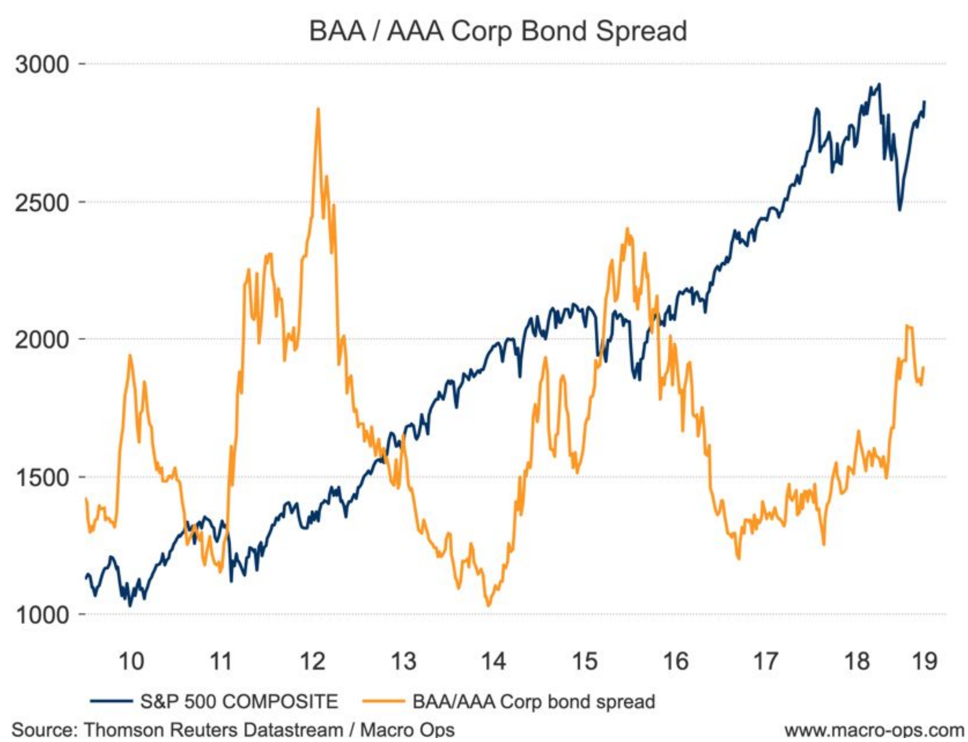
This is all rather big picture stuff. It may or may not be actionable in the near future. But it's certainly something we need to be aware of because it will <u>eventually</u> matter and be actionable.

I'm still bullish the market (I'll explain more below) but I do think the longer-term risk/reward is less positively skewed than it was just a few months ago.

There's some deteriorating data that's linked to the leveraged loan market as well as our zombie firms that will eventually cause a domino effect of economic pain should the data not reverse following the Fed's easier stance. The two charts below are evidence front and center for this. We have the Fed Senior Lending Officer (SLO) survey showing banks are increasing the spreads on loan rates to large and medium firms (a reading above zero means lending conditions are tightening).



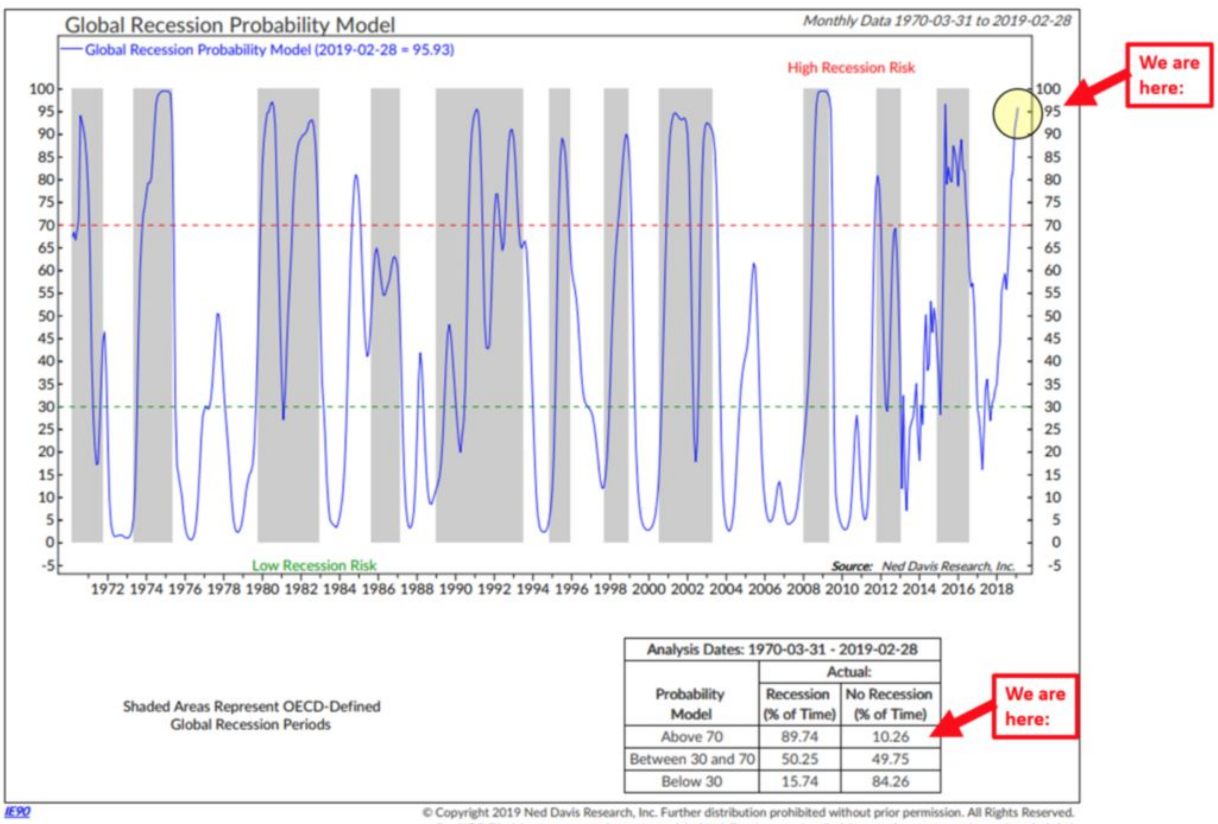
And the BAA/AA corporate bond spread has failed to reverse with our other indicators of financial/liquidity conditions. This tells me the market is finally starting to sniff out the brewing trouble we just discussed.



With all that big picture stuff out of the way. Let me walk you through my current base case for global markets.

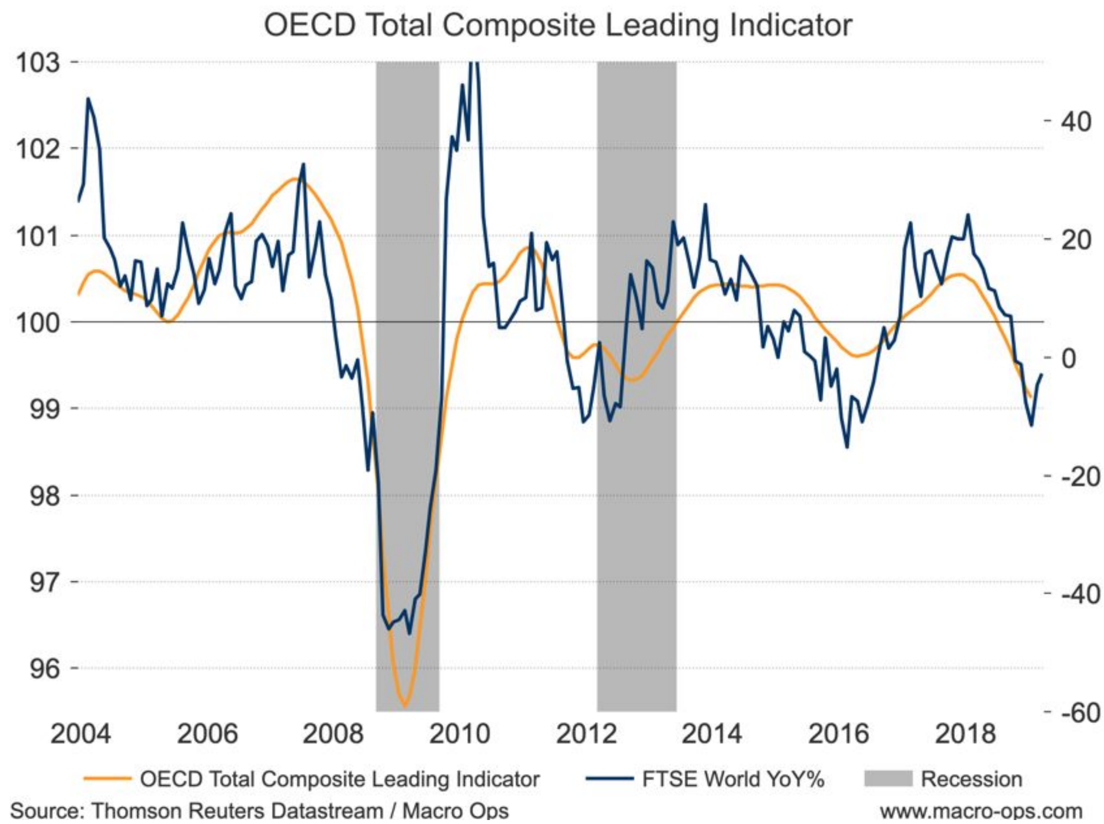
The global economy has been experiencing a rolling economic recession that began early last year in China, spread throughout EM and into Europe, and is now beginning to impact the US. NDR's Global Recession Probability Model is now over 95% (one of its higher readings).

Perma-bears, of which there are still many, will point to this and say "See! Recession is here. It's time to sell your stocks". But a fundamental truth that they often forget is that the market is forward looking. This rolling global recession is not a surprise. This should already be baked into prices. That's what last year's horrendous bear markets in EM and large US dislocation were about.



Analysis Dates: 1970-03-31 - 2019-02-28		
	Actual:	
Probability Model	Recession (% of Time)	No Recession (% of Time)
Above 70	89.74	10.26
Between 30 and 70	50.25	49.75
Below 30	15.74	84.26

Furthermore, NDR points out that the typical global recession ex. US lasts on average 14-months. That would put this one ending sometime in the next couple of months. The chart below of the OECD Total Composite Leading Indicator along with the YoY performance of the FTSE World Equity Index shows that equity markets lead the data and from the looks of it, we've likely already seen an intermediate bottom.



The market usually leads because there are people who know more than you do. ~ Bruce Kovner

Returning to our Profit Equation and the question of who's going to pick up the demand slack from the US government and corporate sector. Collective members already know the potential answers to that question.

There's the likelihood (though far from a certainty) that China aggressively stimulates sometime in the second half of this year in order to boost its economy in time for its all-important 2021 centennial party anniversary. And then there's the changing fiscal impulse winds in Europe.

Read the following excerpts from a recent note on Europe via Morgan Stanley (emphasis by me):

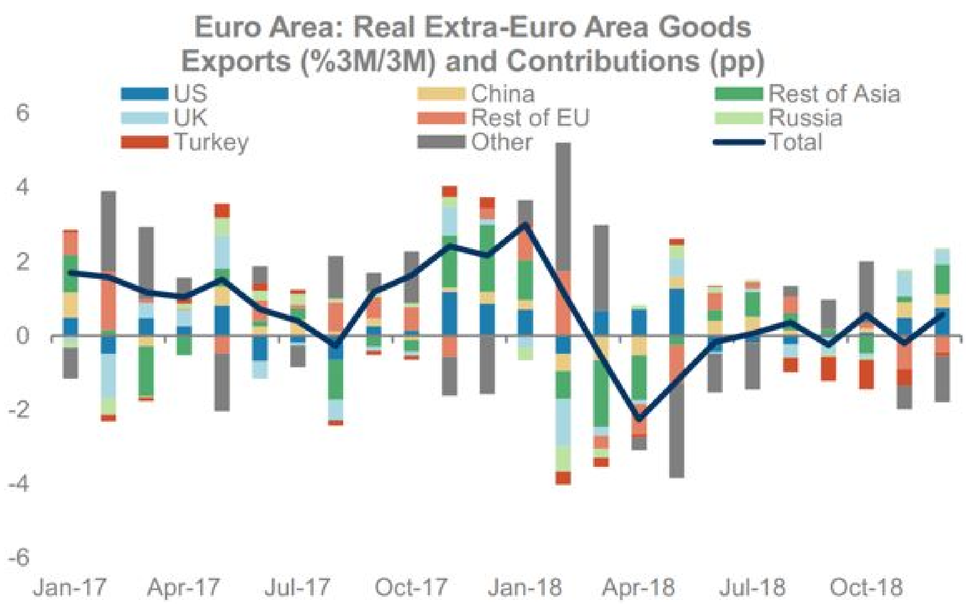
- One of the key misconceptions in European macro is on fiscal policy. While there's scope for the budget stimulus to get bigger, the misconception is that it's just a tail scenario. The reality is that it's already in the pipeline. **We expect the largest fiscal impulse in a decade.**

- When is the trough in growth? Probably in 1Q. We then expect 2Q to be slightly better. We'd call this 'stabilisation'. Shrinking German car production following new EU emission standards and the French protests made things worse temporarily. Their unwinding may result in upside surprises for a while.

- What's the size of the boost and who's doing it? The fiscal impulse, i.e., the change in the structural primary balance, is 0.6pp of GDP for 2019. This includes everything that's been legislated or announced in detail. The large countries in the euro area are all loosening the belt. The biggest boost will likely come from Germany, followed by France and Italy, and then Spain.

- What type of stimulus and what's the effect? Tax cuts, subsidies, some investments and some incentives to invest. Tax cuts and incentives have a medium multiplier effect, subsidies a smaller one and public investment a bigger one.

Exhibit 13: Exports to China and the UK no longer shrinking



Source: Eurostat, Morgan Stanley Research estimates

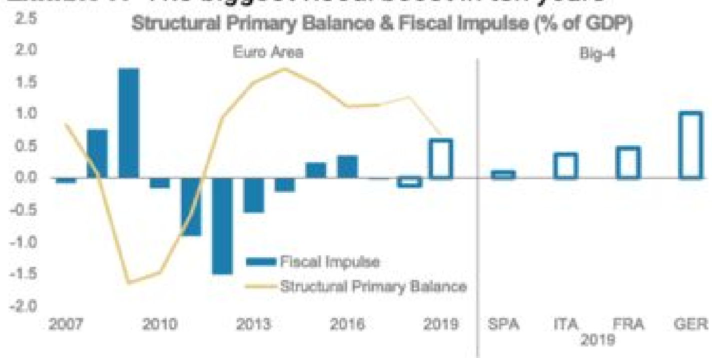
Exhibit 18: A tactical bounceback

Source: Eurostat, Morgan Stanley Research; Note: Empty bars, thin line = Morgan Stanley forecast.

Exhibit 19: Domestic demand to stay resilient

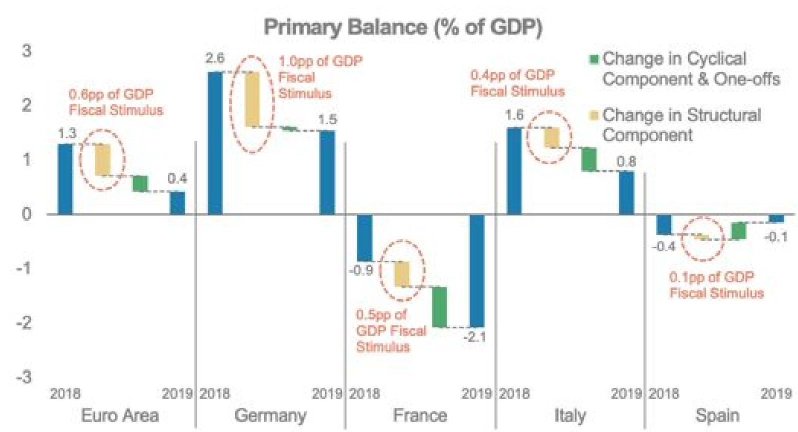
Source: Eurostat, Morgan Stanley Research; Note: Empty bars, thin line = Morgan Stanley forecast.

Exhibit 1: The biggest fiscal boost in ten years



Source: European Commission, Morgan Stanley Research; Note: Empty bars, thin line = Morgan Stanley forecast; Structural primary balance = cyclically adjusted primary balance ex one-offs; Fiscal boost = change in structural primary budget balance; +/- = fiscal boost/drag.

Exhibit 5: Loosening the belt across the board



Source: Morgan Stanley Research estimates

Leading European econ indicators look like they've already bottomed. If this plays out, it along with an uber easy Fed, may be enough to keep the global economy chugging along at a positive though slow and anemic pace; which just so happens to be the best environment for stocks.

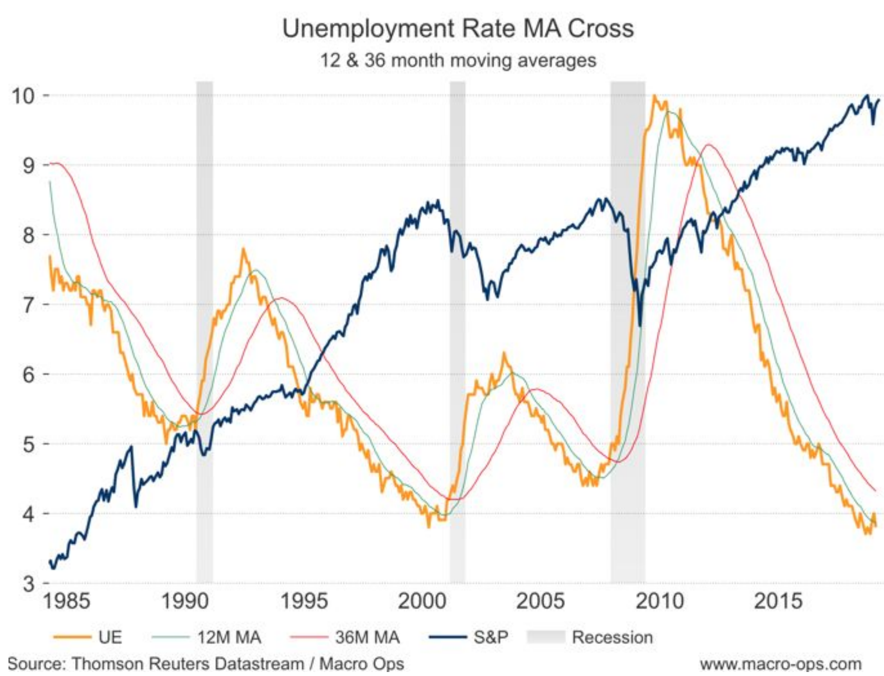
Here's Stanley Druckenmiller explaining why.

> *Contrary to what a lot of the financial press has stated, looking at the great bull markets of this century, the best environment for stocks is a very dull, slow economy that the Federal Reserve is trying to get going… Once an economy reaches a certain level of acceleration… the Fed is no longer with you… The Fed, instead of trying to get the economy moving, reverts to acting like the central bankers they are and starts worrying about inflation and things getting too hot. So it tries to cool things off… shrinking liquidity… [While at the same time] The corporations start having to build inventory, which again takes money out of the financial assets… finally, if things get really heated, companies start engaging in capital spending… All three of these things, tend to shrink the overall money available for investing in stocks and stock prices go down…*

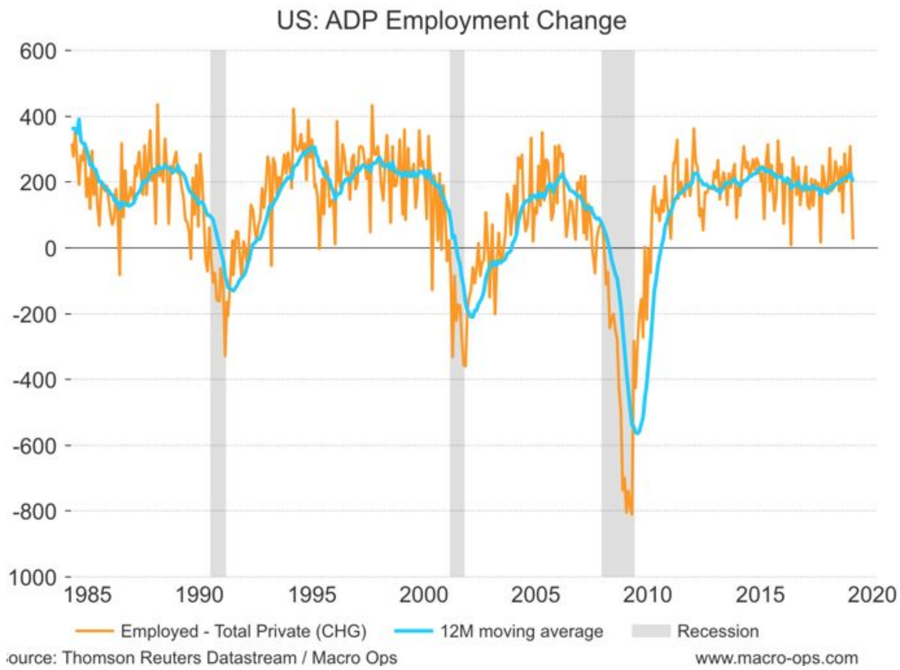
Now let's run through the Macro, Sentiment/Positioning, and Technical Data.

Starting with the labor market.

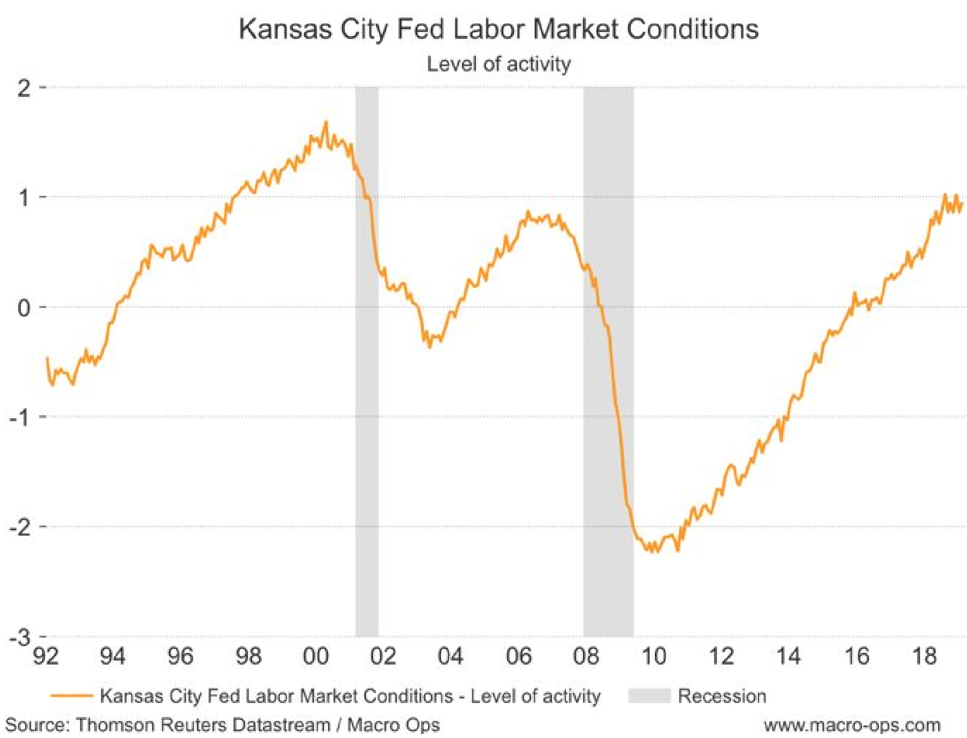
The unemployment rate recently moved back below its 12-month moving average and is well below its 36mma.



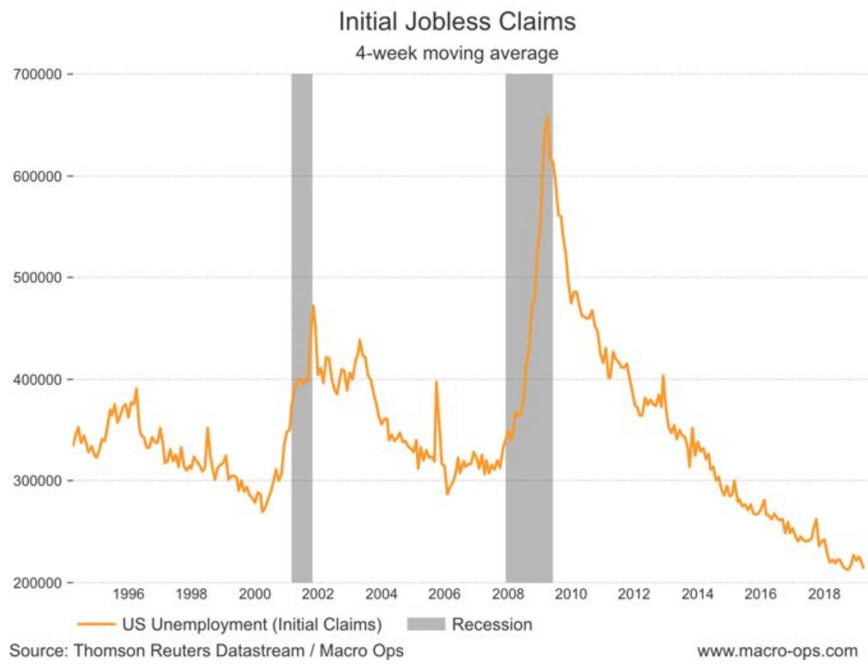
The ADP Employment indicator is still at healthy levels. The 12-month moving average (blue line) is positive and nowhere near turning negative.



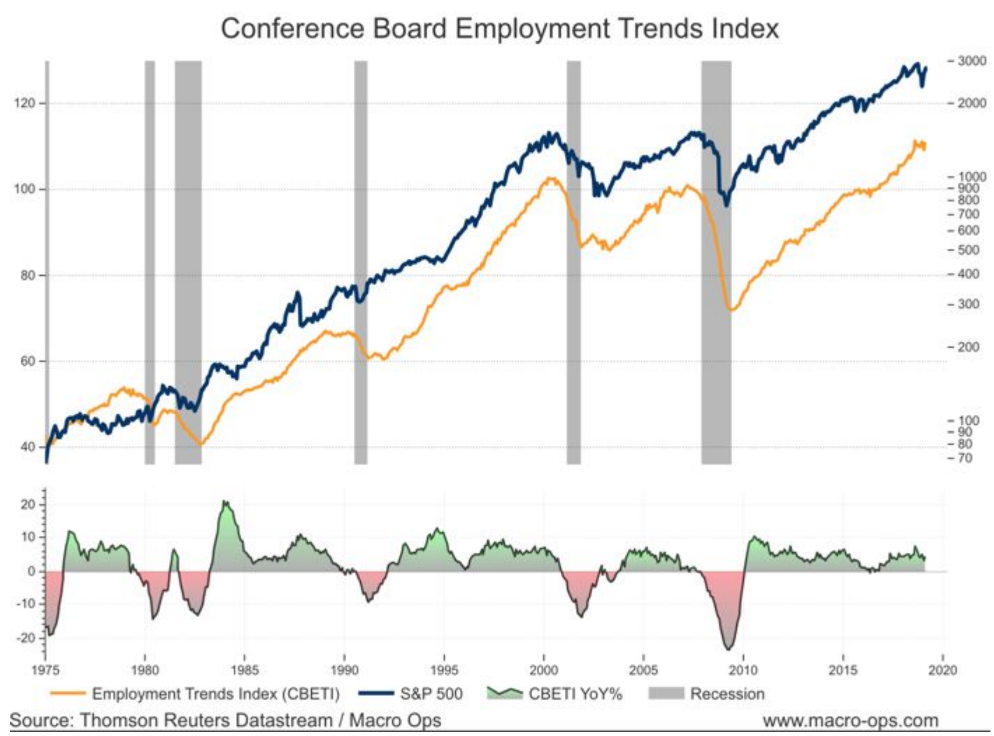
The Kansas City Fed Labor Market Conditions Indicator is still in an uptrend.



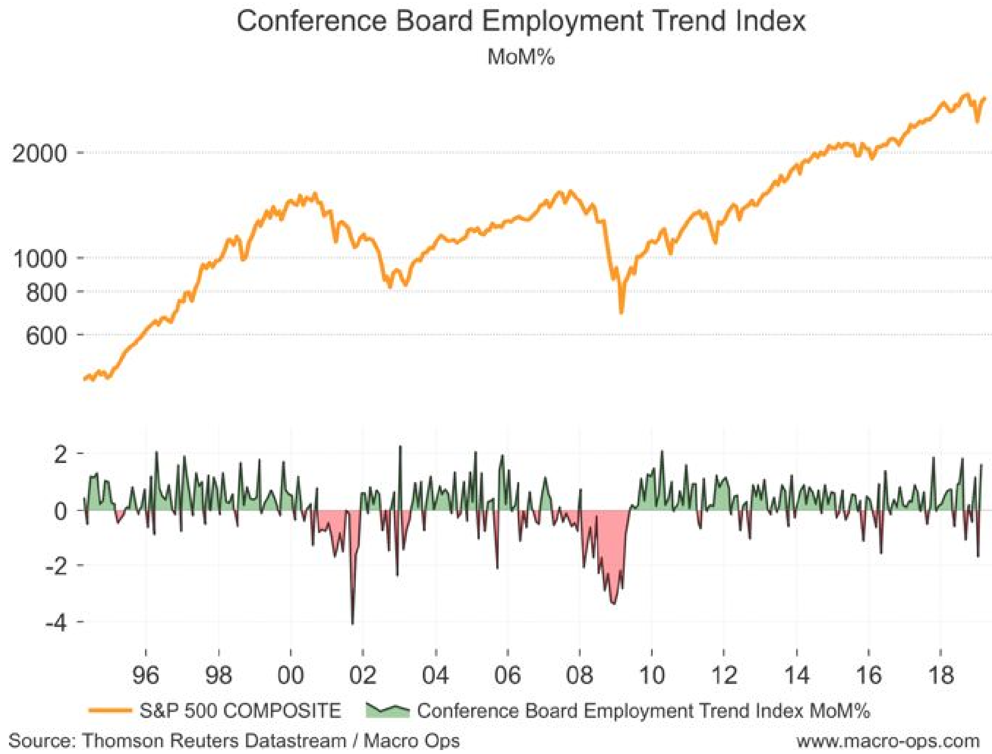
The 4-week moving average of Initial Jobless Claims is still trending lower.



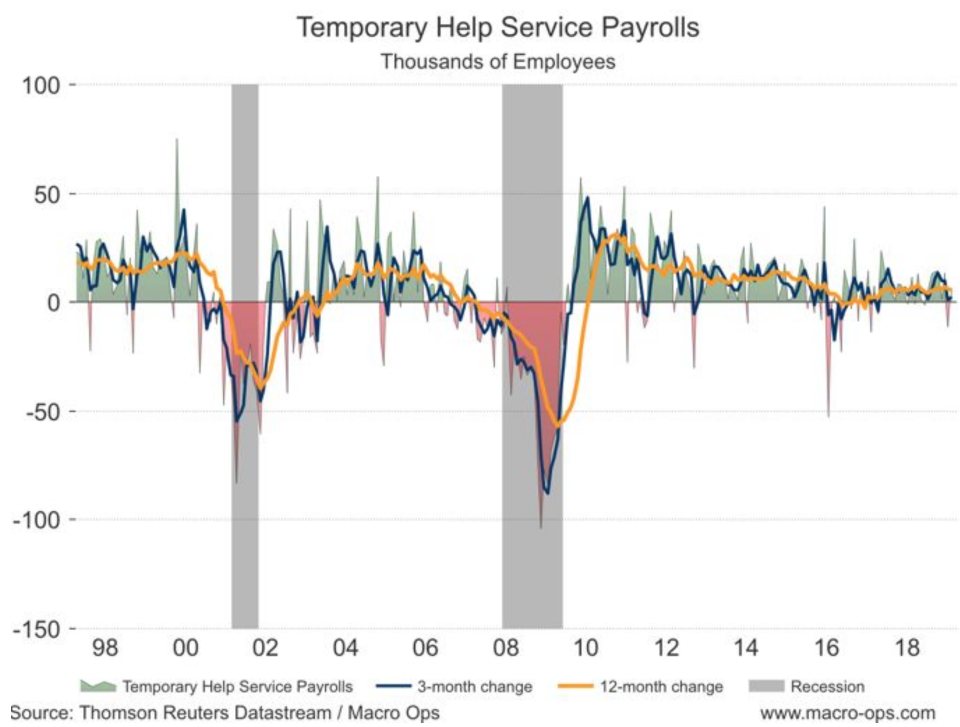
The Conference Board Employment Trends Index is still very positive on a nominal and YoY basis.



As well as a MoM basis.



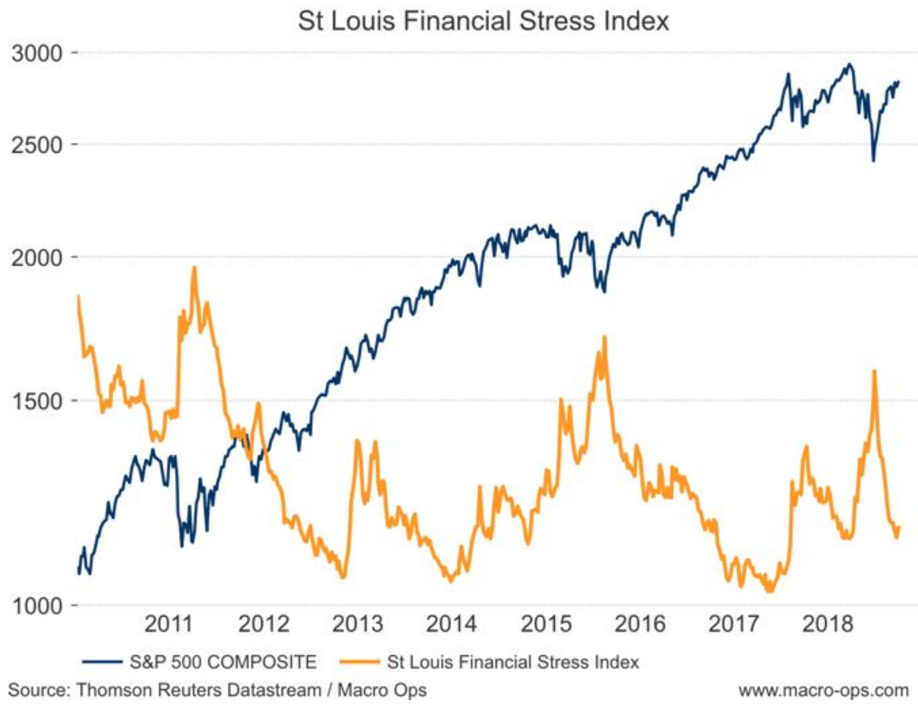
And finally, Temporary Help Service Payroll numbers are positive on a nominal, 3-month, and 12-month basis.



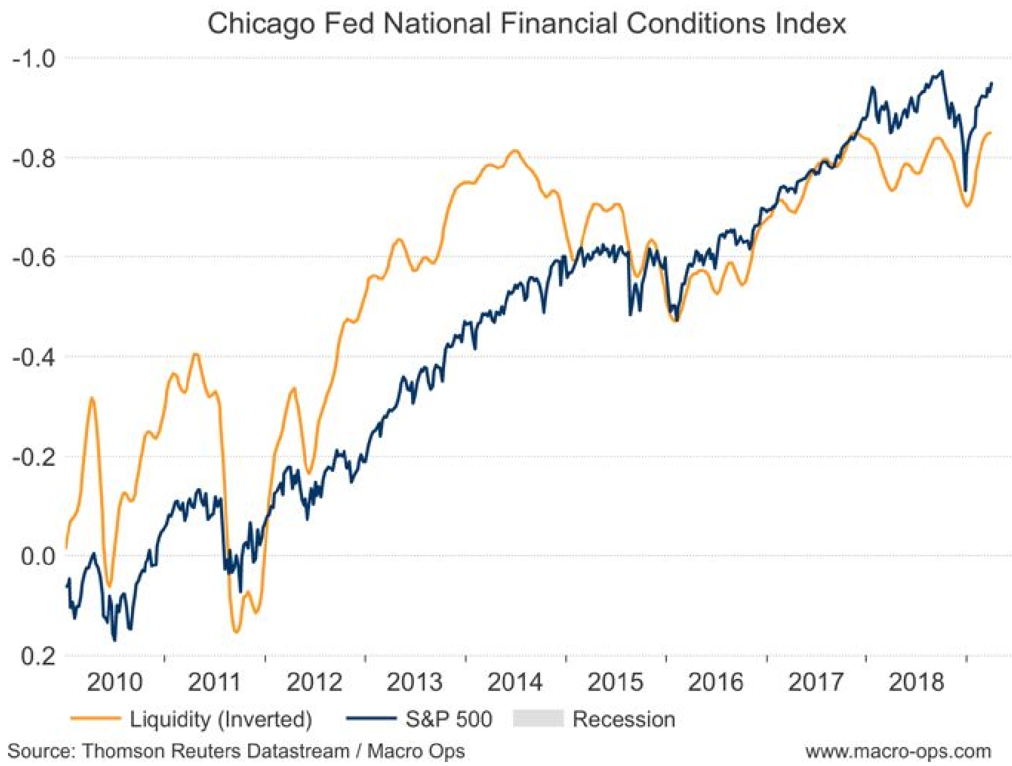
Summary: The labor market is strong and not yet showing any of the typical signs that precede a market top and a recession.

Now let's look at financial conditions and liquidity.

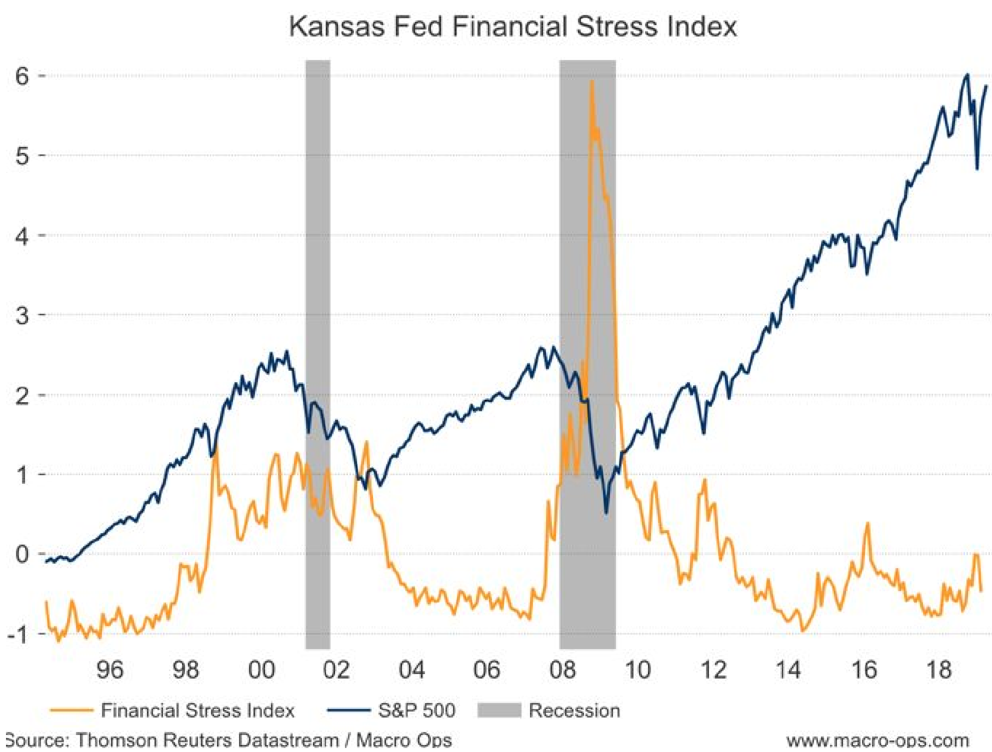
The St. Louis Financial Stress Index has reversed from its high levels reached at the end of last year.



The Chicago Fed National Financial Conditions Index is at new cycle lows (inverse on chart).

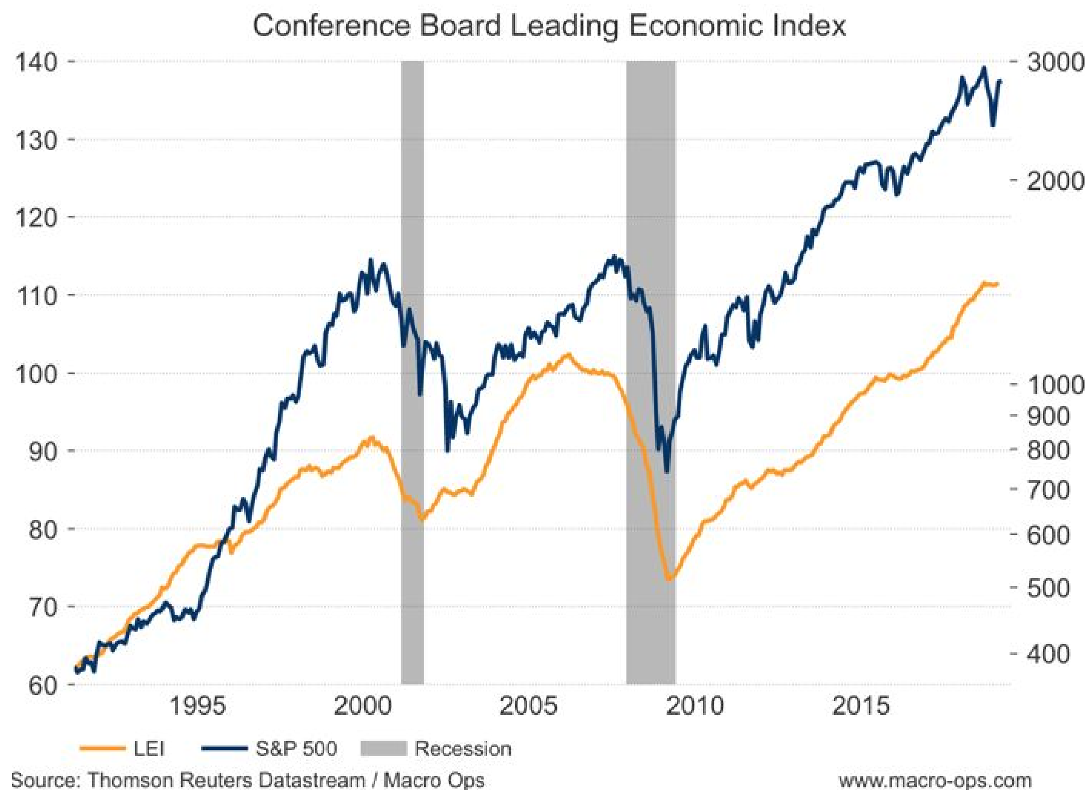


And the Kansas Fed Financial Stress Index is trending back down after its spike last year.

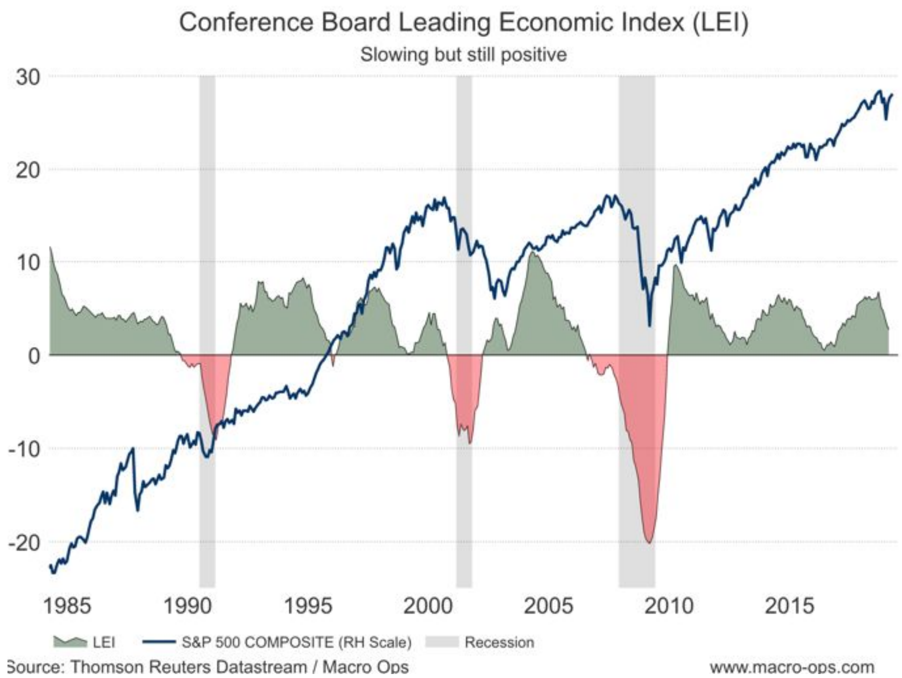


Summary: Liquidity and financial conditions are easing and remain extremely loose following the Fed's abrupt reversal of policy and forward guidance. This is very bullish risk assets. One point of concern is the spread in BAA/AAA corporate bond yields. But my guess is that we see these spreads level out soon.

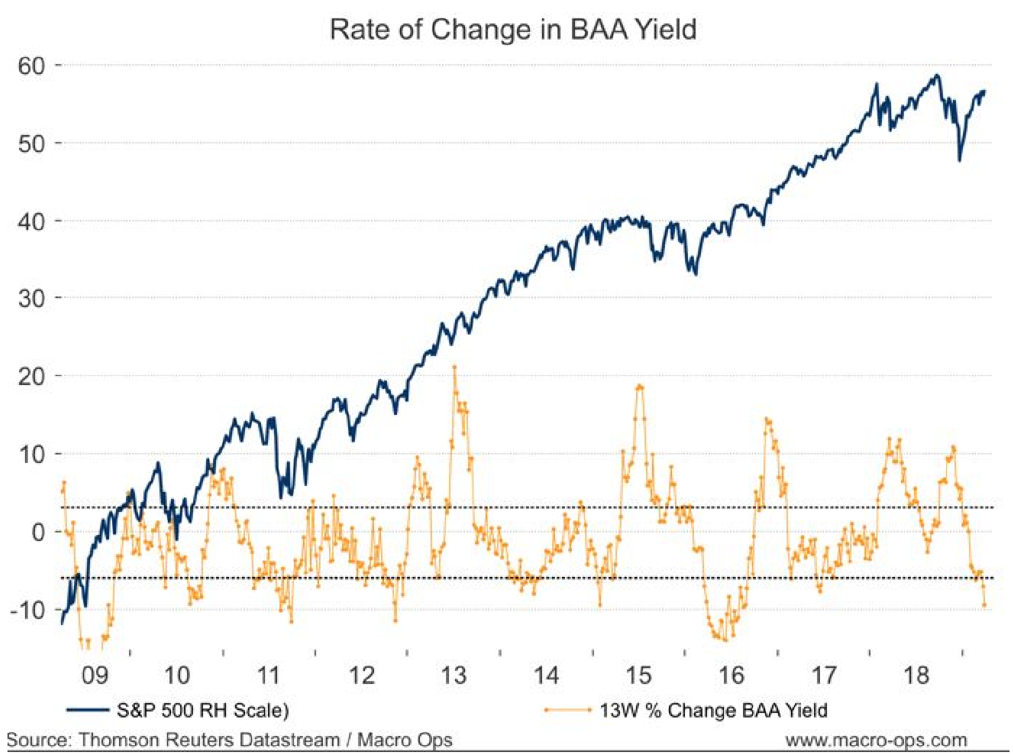
What about macroeconomic indicators? Well, the Conference Board Leading Economic Index is positive on a nominal basis.



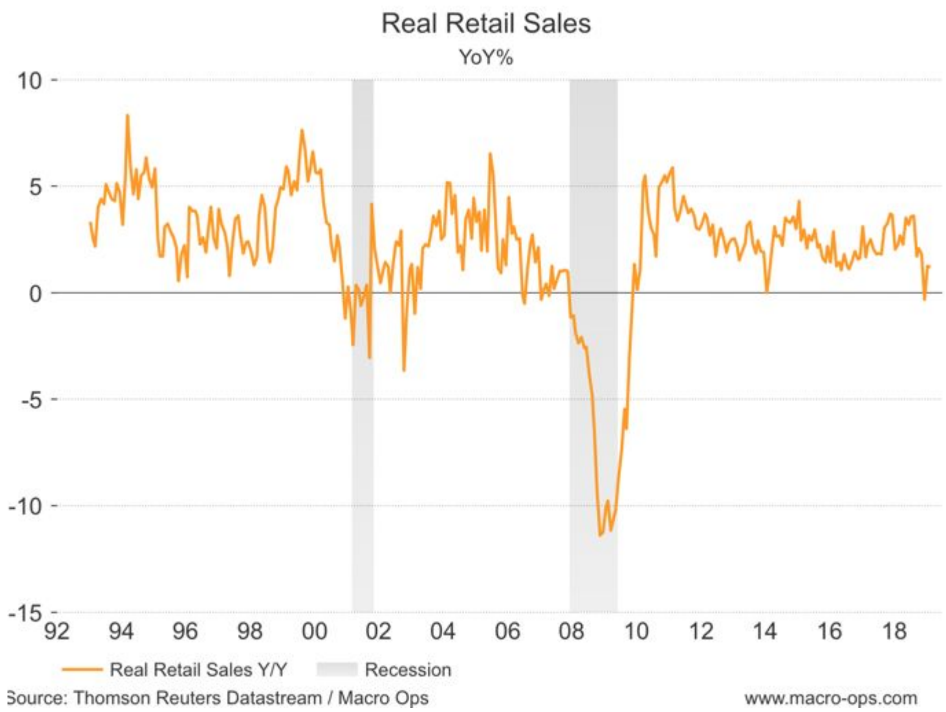
And a YoY basis. This indicator typically turns negative 10-months before a recession hits.



Stocks compete with bonds for capital flows. Lower bond yields also mean a lower hurdle rate for equity valuations. This is why a falling RoC in BAA yields is positive for stocks. This indicator is now at its lowest level since the beginning of 2016.

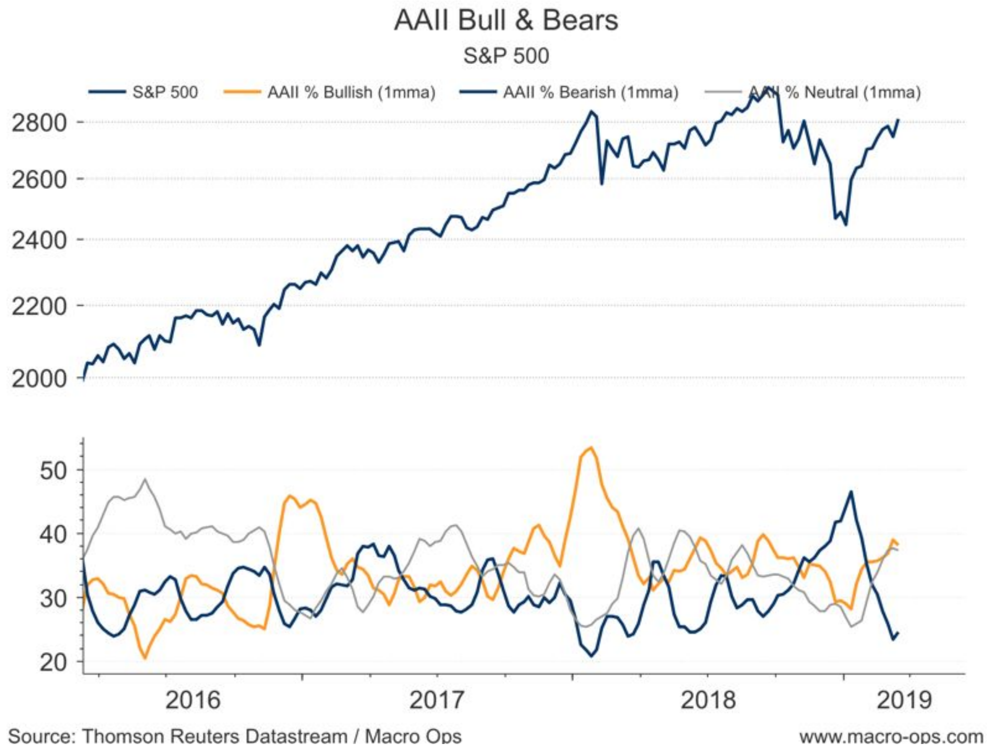


Real Retail Sales rebounded after collapsing at the beginning of the year. The earlier weakness was likely the result of a negative wealth shock due to the end of year market dislocation.

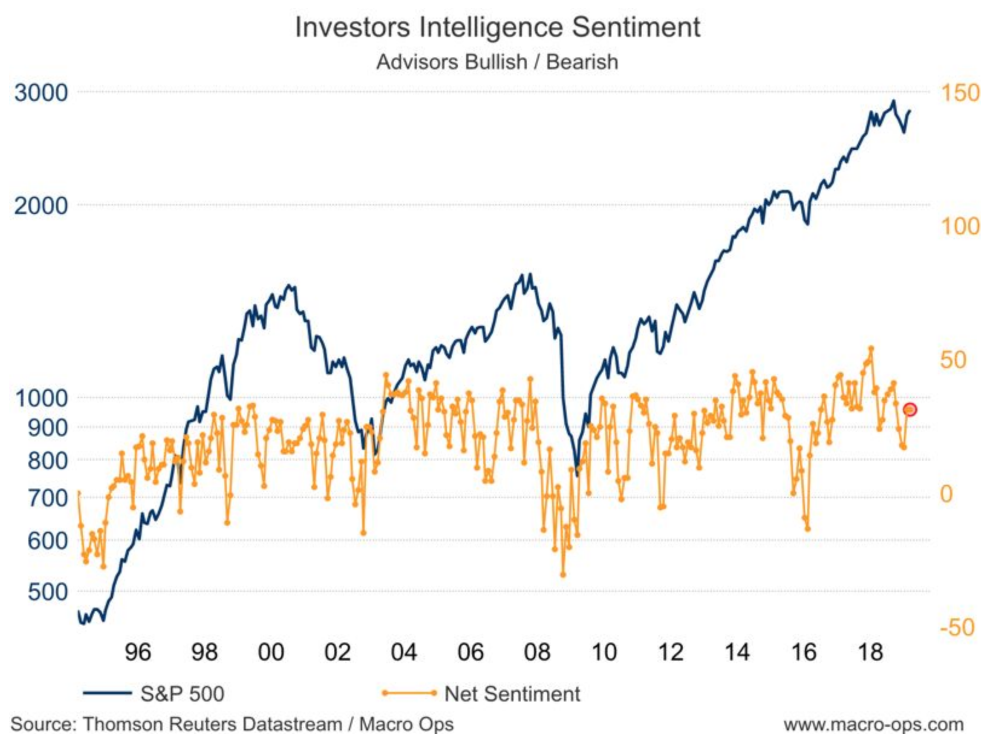


Summary: Growth has certainly decelerated here in the US but it's still far from levels that have signalled a coming recession in the past. This is why our base case is that we'll see slowing growth and a muddling through until the global economy picks up in the latter half of the year.

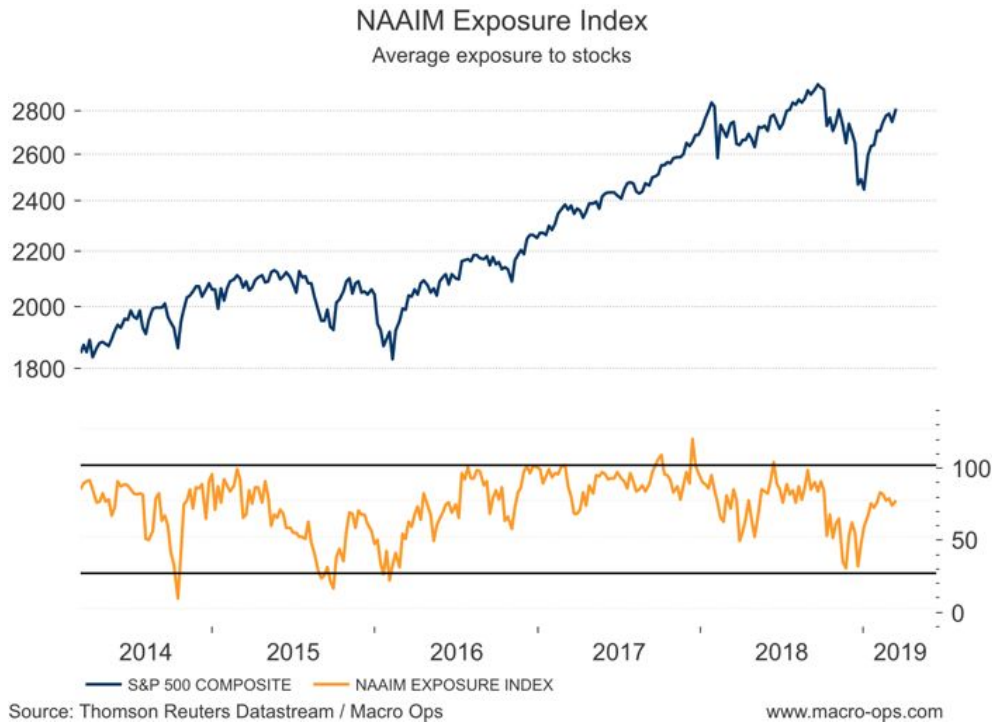
This positive but low growth environment does not square with positioning and sentiment which are still very bearish. AAII Bull & Bears are at neutral levels and remain supportive of the broader trend higher in stocks.



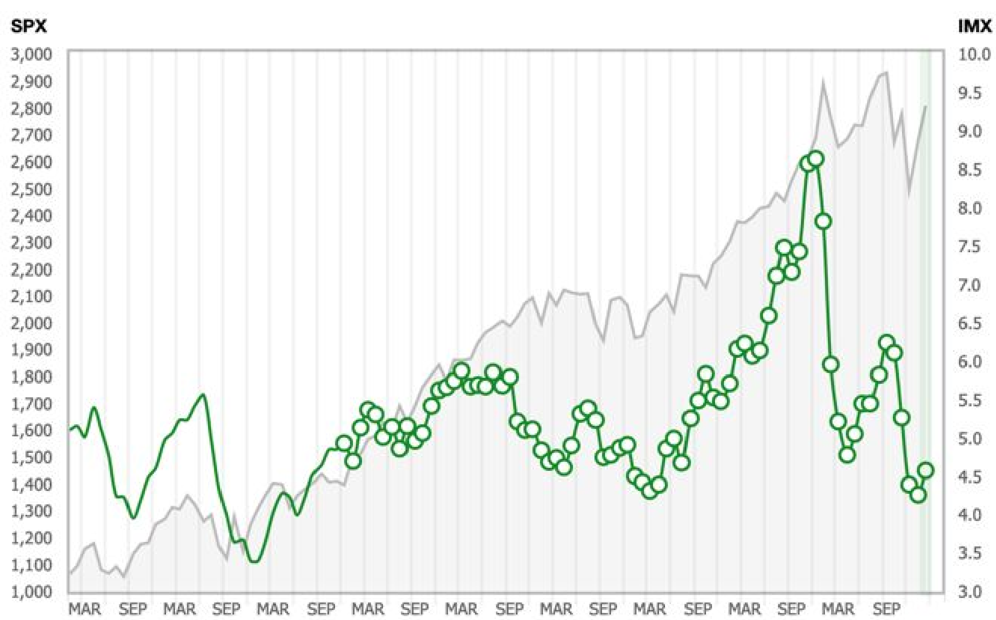
II Bull/Bears is also at neutral levels and is supportive of the broader trend higher in stocks.



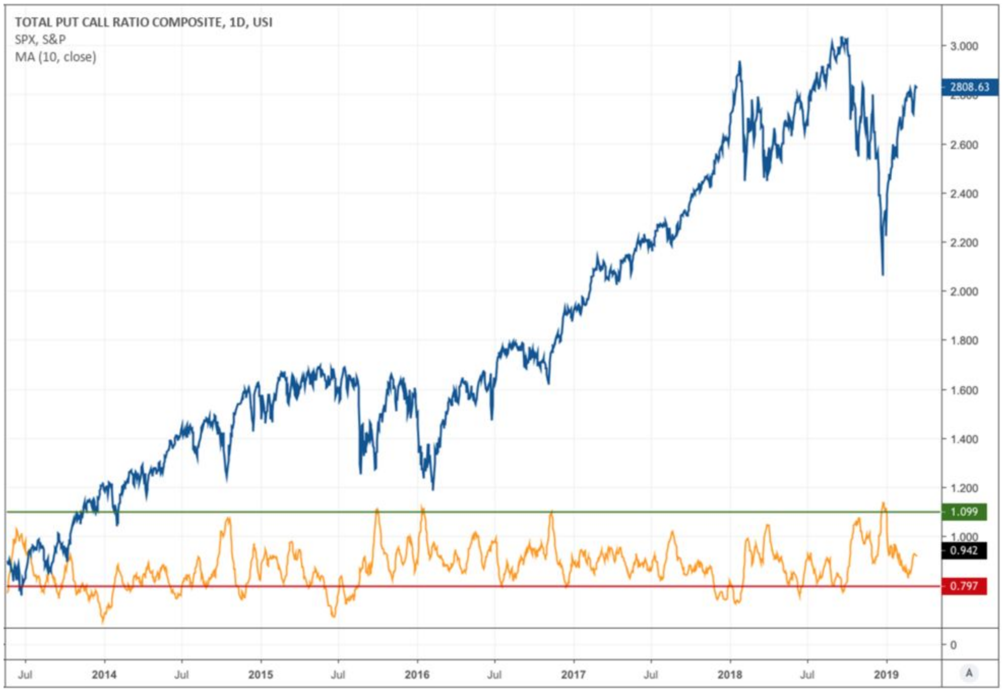
The NAAIM Stock Exposure Index is at neutral levels and is supportive of the broader trend higher in stocks.



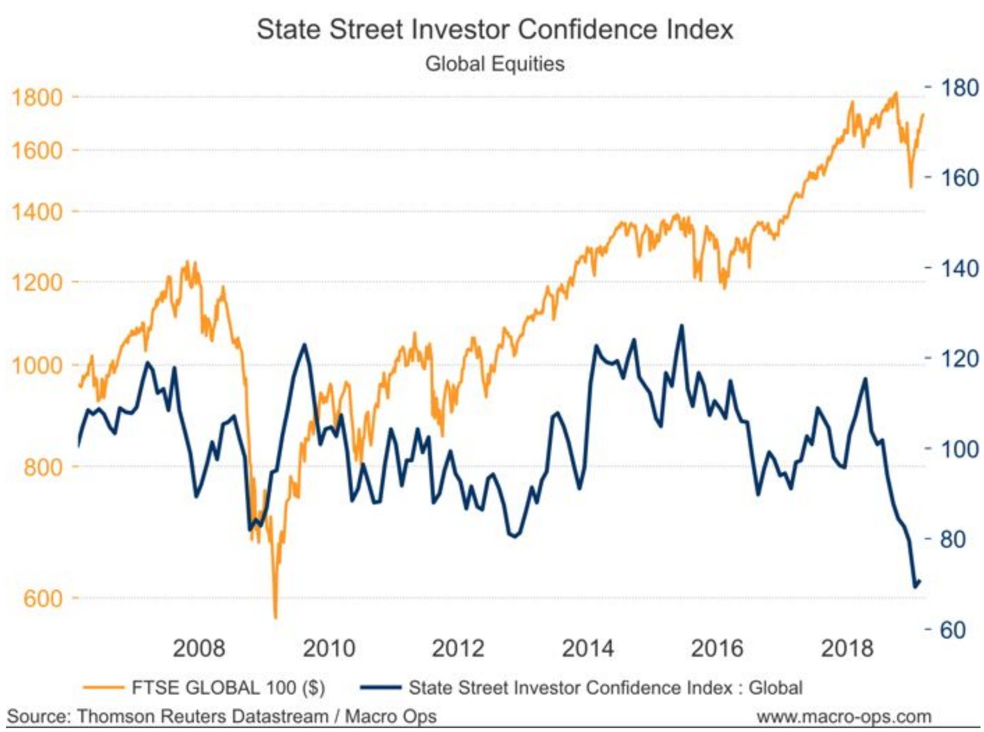
The TD Ameritrade Retail Movement Index (IMX) shows that retail traders have sat this rally out and are at positioning levels similar to those that preceded the rally that began in early 16’



The Total Put/Call ratio shows that the market has yet reached complacent positioning on this rally, suggesting more upside is ahead.

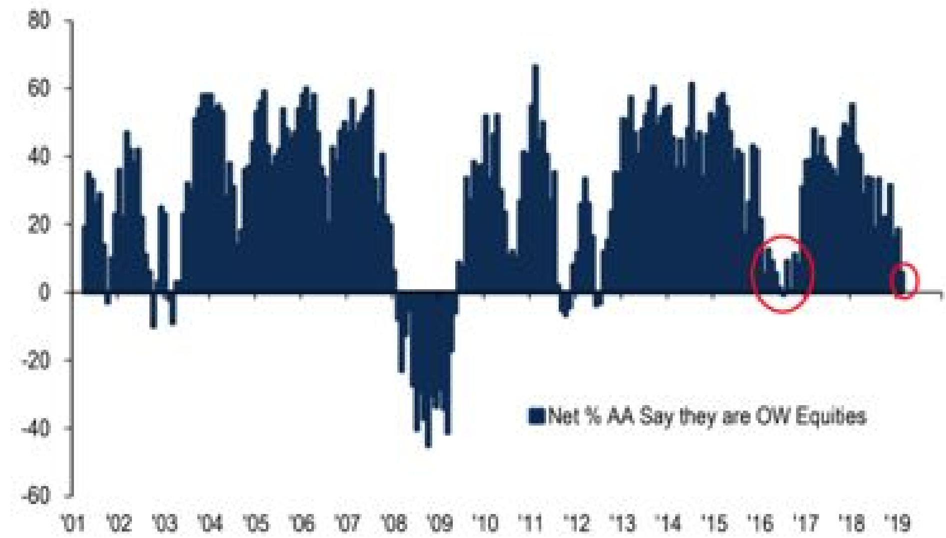


The State Street Investor Confidence Index is at ALL-TIME lows…



Fund managers have their lowest allocation to stocks since mid-16'.

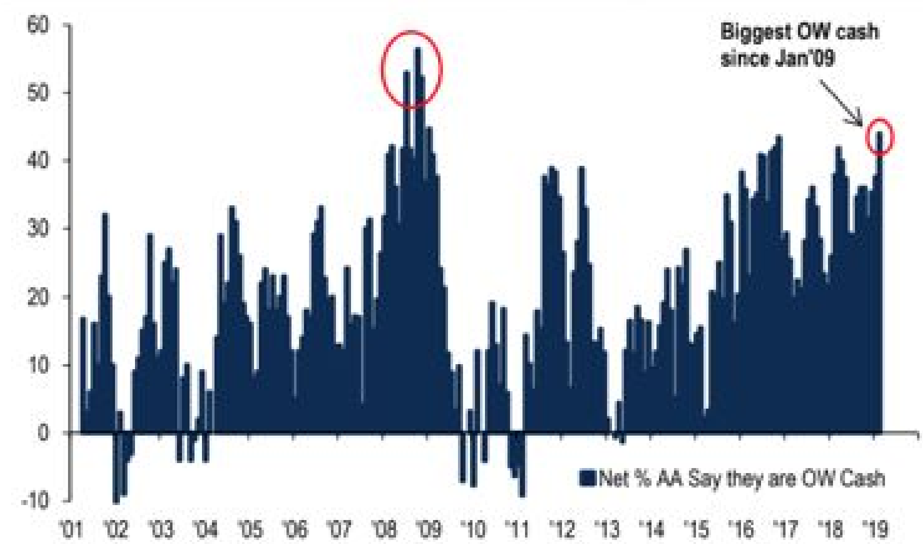
Exhibit 2: Smallest overweight in FMS global equity allocation since Sept'16



Source: BofA Merrill Lynch Global Fund Manager Survey

And have their highest cash balances since January of 2009'.

Exhibit 3:Rotation into cash takes allocation to highest since Jan'09



Source: BofA Merrill Lynch Global Fund Manager Survey

Summary: Sentiment and positioning still remain extremely offsides. This suggests the path of least resistance remains up for stocks.

Strong labor markets. Flush liquidity. Positive though slowing economic data. Terrible sentiment. Okay…

This reminds me of an old article titled "The Day They Red-Dogged Motorola," written by the pseudonymous financial writer "Adam Smith". Smith writes about the typical retail investor he calls John Jerk. Here's what he says.

> *In more polite circles, John Jerk and his brother are called "the little fellows" or "the odd-lotters" or "the small investors." I wish I knew Mr. Jerk and his brother. They live in some place called the Hinterlands, and everything they do is wrong. They buy when the smart people sell, they sell when the smart people buy, and they panic at exactly the wrong time. There are services that make a very good living out of charting the activity of Mr. J. and his poor brother. If I knew them I would give them room and board and consult them…. I would push the pheasant and champagne through the little hatch of his cell and ask Mr. J. what he was going to do that morning, and if he said, "buy," I would know to sell, and so on.*

We never want to be John Jerk…

I've been talking about a major macro move brewing. FX and precious metal volatility is at or near ALL-TIME lows. Compression regimes like these tend to lead to expansionary ones (i.e., major trends).

The major dollar (DXY) pairs like the euro and aussie look ripe for a major move. I'm agnostic about which way they'll break, though I have my bias (dollar lower). I plan to aggressively trade the breakout in either direction. The same goes with gold who's monthly Bollinger Band width is at its lowest point since 02'.

I also see major opportunity in oil and related stocks. We're currently long both. I planned to write about the opportunity some in this MIR but personal events have cut my time short so I'll be covering it in a separate report that I'll put out to the group soon.

That's all I've got for this month's MIR.

If you have any questions, just shoot me an email or a tweet, or hit me up in the CC if you are a Collective member.

Happy trading and have a great weekend!

Your Macro Operator,

Alex