# A Persistent Bid

Let's talk about asset shortages.

In This Issue:



If you're active on fintwit then you've probably heard people mention the possibility of a coming asset shortage squeeze — I myself, have been mulling the idea over.

But the concept is a fuzzy one. There's little research on the topic. Very few people are aware of the idea and its impact. And even those that do talk about it, have serious misconceptions of how it actually works.

Even more importantly, it's a useful model to apply in our framework for analyzing market cycles — it's at the heart of what drives bull markets (hint… it's not earnings). It also ties into our debt cycle model and is likely to become an important driver of market returns over the coming year. So knowing what it is and how it works will put us ahead of the market… which is where we want to be.

**Everything in markets comes down to supply and demand.** Our jobs as speculators is to figure out the two and see if there's a mismatch that will lead to a price change (a trend). So let's start by defining market demand.

Investors can allocate their savings to three main assets: stocks, bonds, and cash. They make these allocation decisions based on desired returns and tolerance for risk to come up with a portfolio mix — the classic being 60% in stocks and 40% in bonds/cash. **Recent price appreciation (not valuation or yield) is the overwhelming driver behind this allocation decision.** Momentum is the bottom line, which means investors are always chasing the trend — nobody likes sitting out of a rising market.

Savings — the amount of money available to invest — fluctuates according to the levels of cash + credit (money) in the system. Since credit is easier to create than cash (any two willing parties can create credit out of thin air with an IOU), **credit largely drives the amount of investable money in the system**. Rising lending equals more savings to invest. The amount cycles up and down in accordance with our [debt cycle framework.]

The supply side of financial assets is comprised not just of the total amount of shares or bonds in existence, which is what many people mistakenly think. Rather, **it's the market value — the total dollar amount in existence at current market prices — that makes up supply.**

This means that the equity market has a flexible supply. **If the demand for stocks increases then those flows will drive up prices along with the overall market value thus creating more supply to meet that demand.** It's a system that automatically self corrects over time.

The bond market on the other hand, has a theoretical supply limit.

There's a ceiling on the market value of bonds because credit shouldn't trade much above the price which corresponds to a 0% yield to maturity. It used to be thought that this was an iron clad rule. But after years of NIRP we now know that bonds can and do trade above this limit, in which their yield is negative. But even here, they can only trade so far above this level that there's a range that serves as a limit on bond market value and hence supply.

So to summarize, the basics of our supply and demand model is:

- On the demand side we have:
    a. The amount of savings available to invest is largely driven by the credit cycle
    b. The allocation mix of investor portfolios is largely driven by performance chasing
- On the supply side we have:
    a. Supply is made up of the total market value of the asset and this market value is equal to the amount of shares + the price at which they trade
    b. Stocks have a flexible supply in that greater demand leads to higher market value and more supply
    c. Bonds have a theoretical limit in that they can't trade much below 0% interest rates

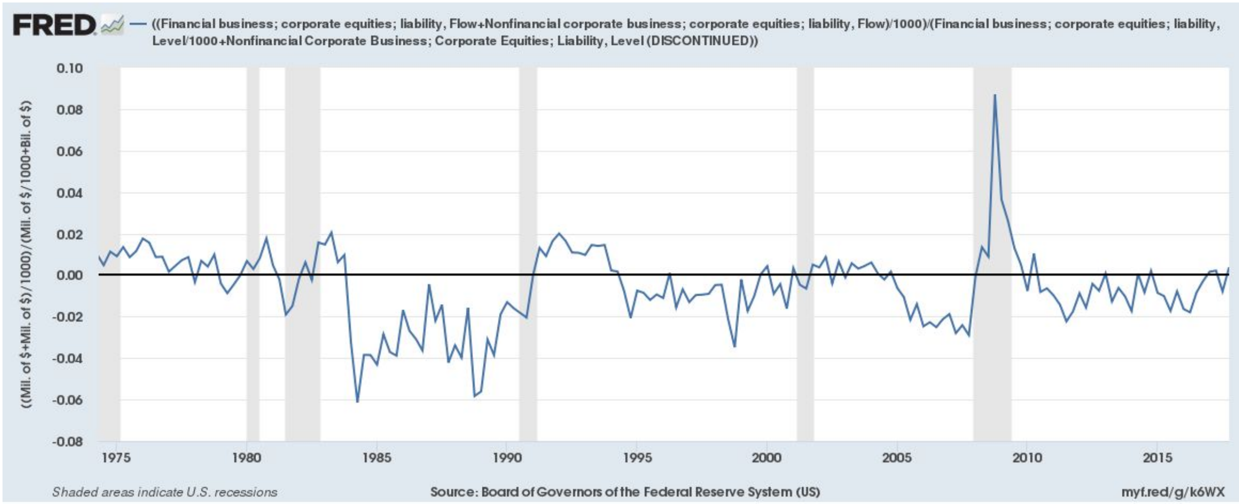
This is a very different of thinking about what moves the market. It's the model that Stanley Druckenmiller was referring to when he said:

> *Earnings don't move the overall market; it's the Federal Reserve Board… focus on the central banks and focus on the movement of liquidity… most people in the market are looking for earnings and conventional measures. It's liquidity that moves markets.*

Liquidity *is* credit driven investment demand. This isn't to say that earnings don't matter. They do, especially on an individual company level. But on the aggregate, **earnings are largely a result, not the cause of, the liquidity driven short-term debt cycle.**

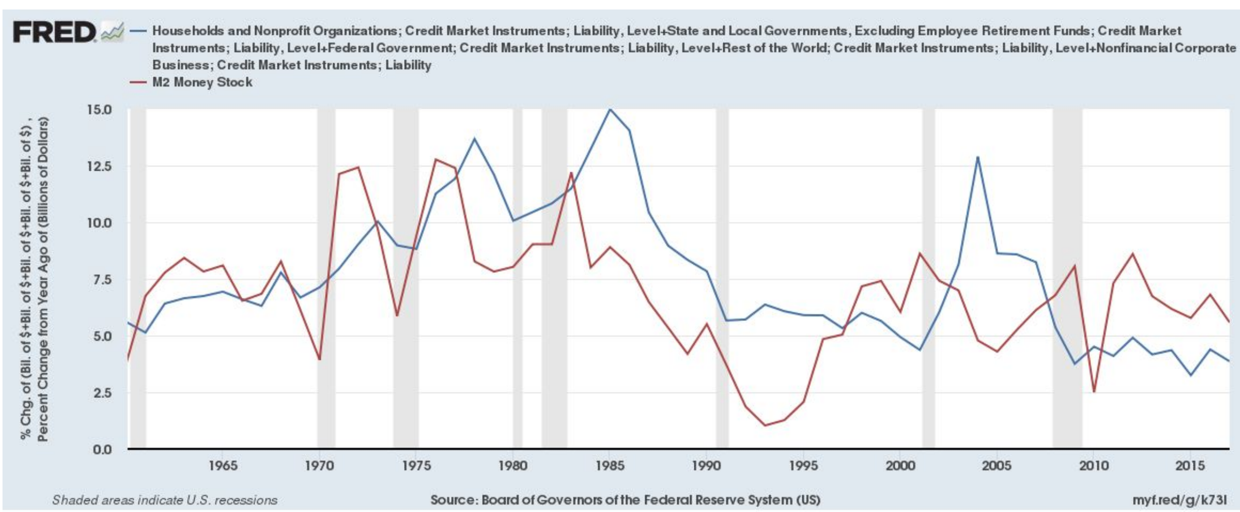
We can look back through time and see how this model correlates to market returns.

Historically, US corporate share issuance has rarely exceeded 2% and over the last three and a half decades **corporates have been actively reducing their share count through buybacks and M&A at an average annual rate of 2%**. Chart below shows net corporate share issuance.




While the amount of shares has been falling, the amount of money (cash+credit), has been steadily increasing.

Over the last 50 years, t**he US's money stock has been rising at an average annual rate of 8% a year.** Chart below shows total new credit (blue line) and M2 cash stock (red line).




**So over the last five decades we've had the supply of equity shares shrinking by an average of 1-2% a year, through buybacks and M&A. And we've had the total money stock increasing at an average rate of 8% a year.** Disregarding total market value and investor allocation preferences for a second, this gives us a <u>supply/demand mismatch of roughly 9.5% a year.</u>

Well, guess what the average annual return has been on the stock market over the same period?

That's right...9.5%.

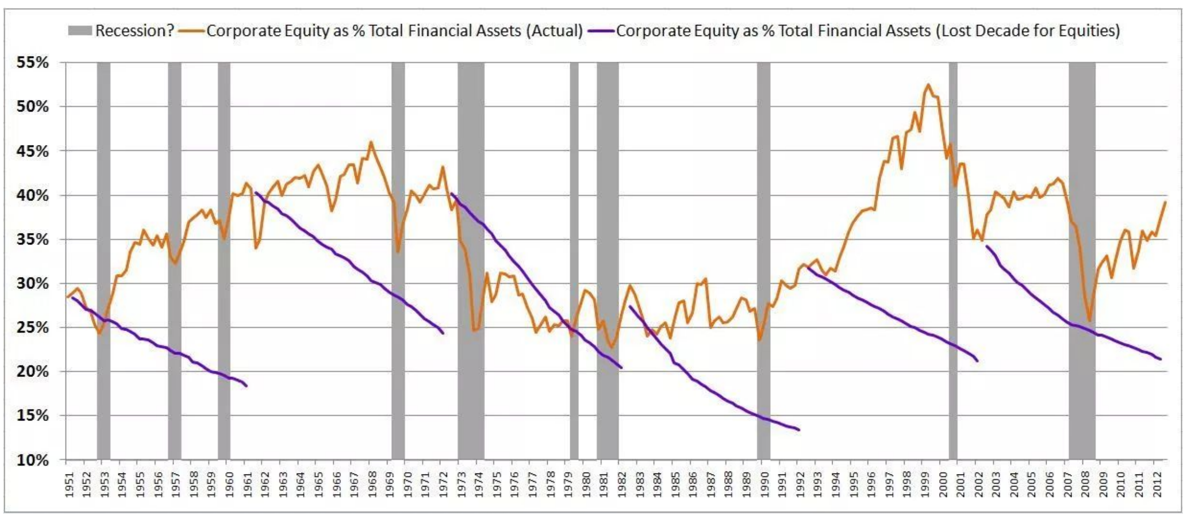
The stock market's average annual returns equal the supply/demand mismatch of share reduction and money creation over the same period. This isn't coincidence. It's just math.

You see, if investors keep their portfolio mix (their allocation preference between stocks, bonds, and cash) relatively constant, then **the market value of stocks has to rise at the same level of the supply and demand imbalance between share reduction and money creation**.

If not, investor's allocation to equities will dwindle relative to bonds and cash and the market value of stocks will fall on a relative basis to the amount of investable savings.

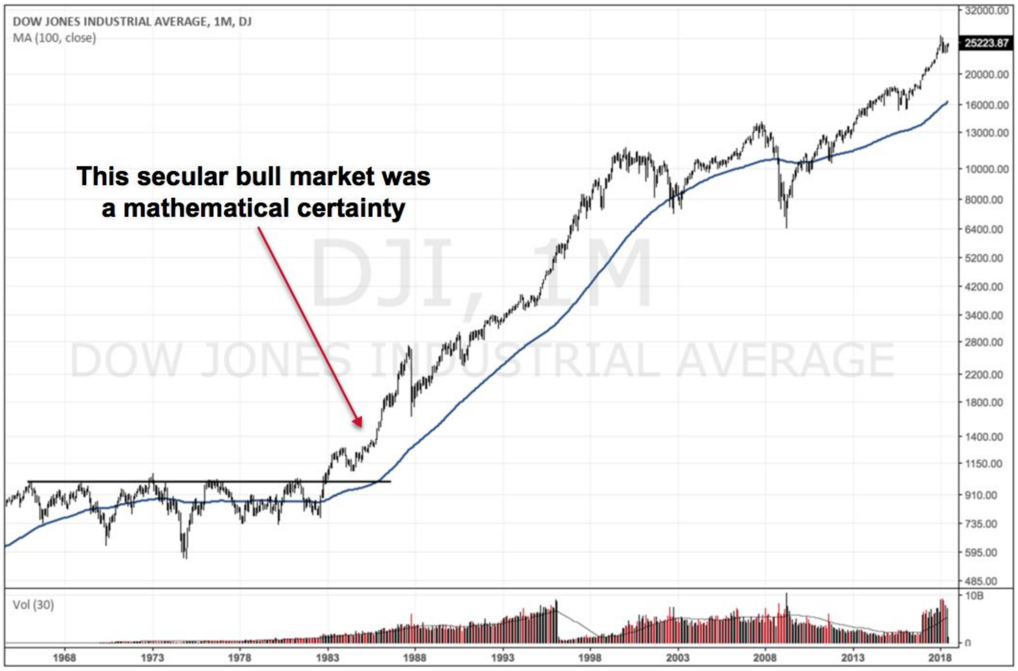
We can see what this would look like on the chart below via *Philosophical Economics*. The chart shows how much the investor allocation to stocks would decrease by if the market went through a "lost decade" period; where the share count / money demand imbalance grew at its historical rate, but stock prices stayed constant.

The purple line shows the allocation to equities over each hypothetical "lost decade" period and the orange line shows what the actual allocation to stocks was.

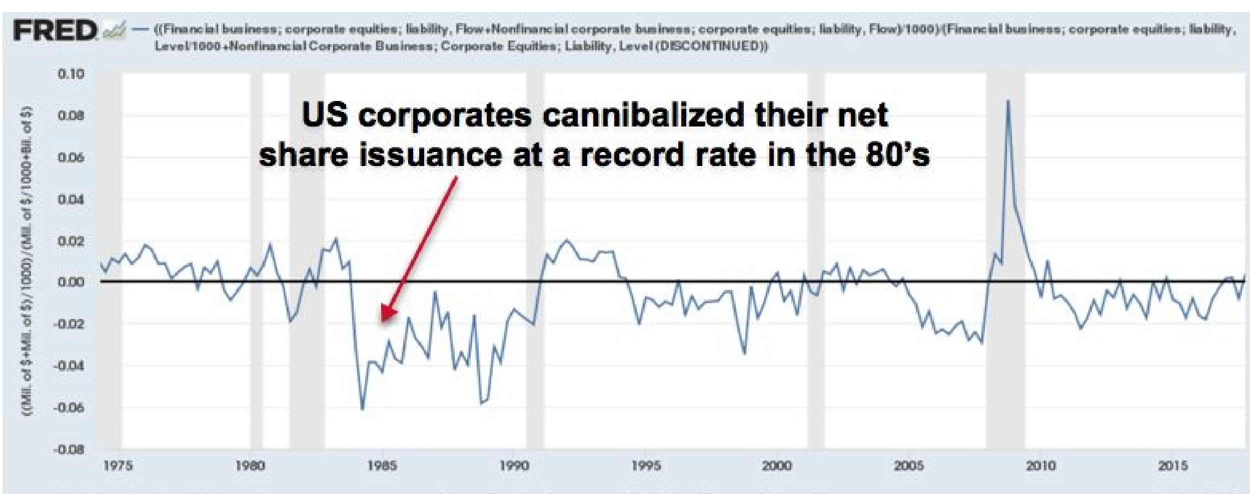


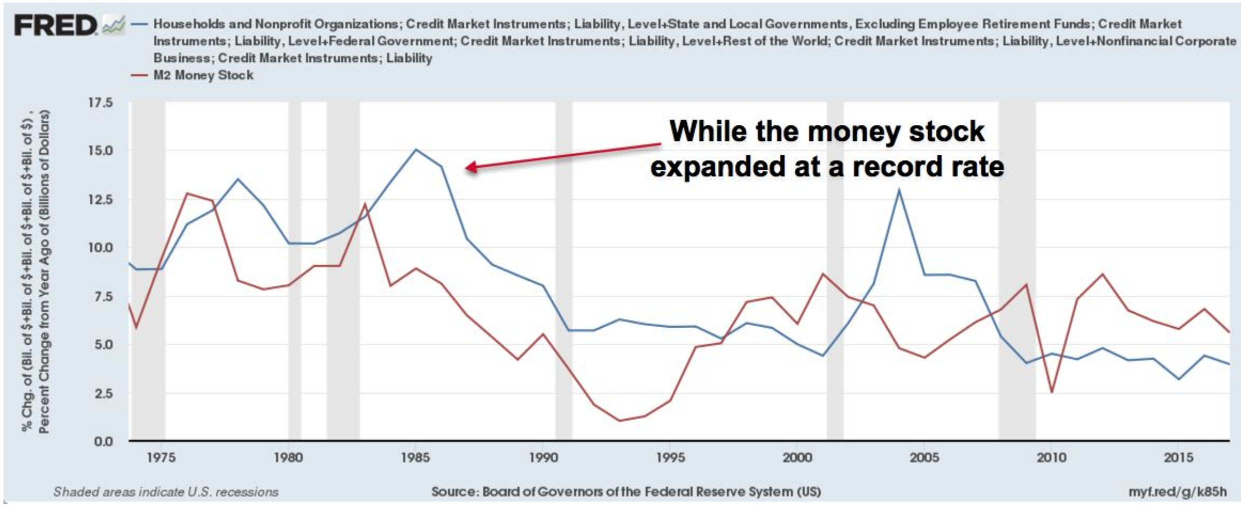

So we can see, **the market has to rise over time because we operate in an inflationary market system, where the quantity of money is nearly always growing and the corporate sector's aversion to dilution keeps share growth at a minimum to net negative.** The only way for the market to clear — for supply and demand to balance — is for the market's total value to rise, increasing the supply to meet the demand.

If you were trading back in the early 80s and you understood this market supply and demand model, you would have foreseen the massive secular bull market that was *mathematically inevitable.*



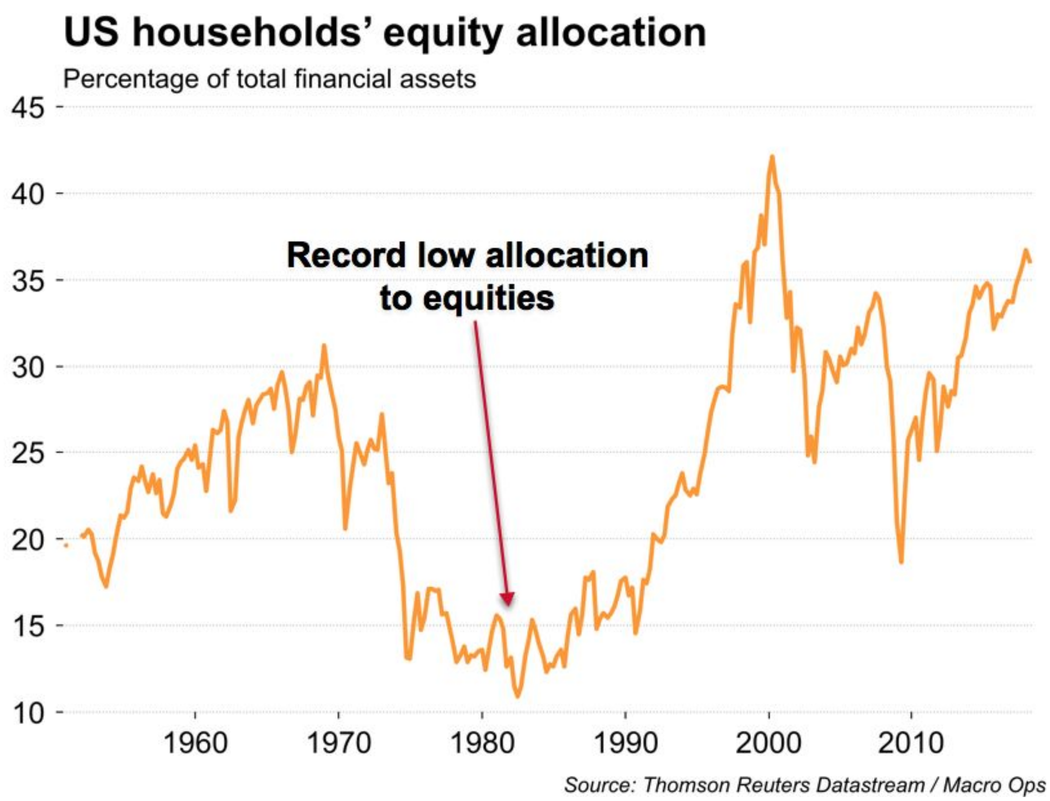

In the early 80's we saw a perfect storm that led to a huge imbalance between the supply of equities (shares issued plus total relative market value) and demand (total money creation plus investor allocation).






We can see that following the 1981 recession both money creation ballooned to all-time highs and corporates saw record net negative share issuance.

At the same time, investor's allocation to stocks hit an all-time low of 12%! Chart below shows household's allocation to equities as a percentage of total financial assets.



At that rate of money creation and net share decline, investor's allocation to stocks would have had to fall to *near zero* just to keep the market from rising.

**The secular bull market HAD to happen so that the market's total value could rise, bringing supply up to meet demand and allowing the market to clear.**

Now let's apply this model to markets today.

Currently, investor's allocation to equities is nearing secular highs; roughly double what it was in the early 80's but still below the levels reached in 2000. Money growth is positive but slightly below average. And net share issuance is average, at a roughly 1.5% annual deficit throughout this cycle.

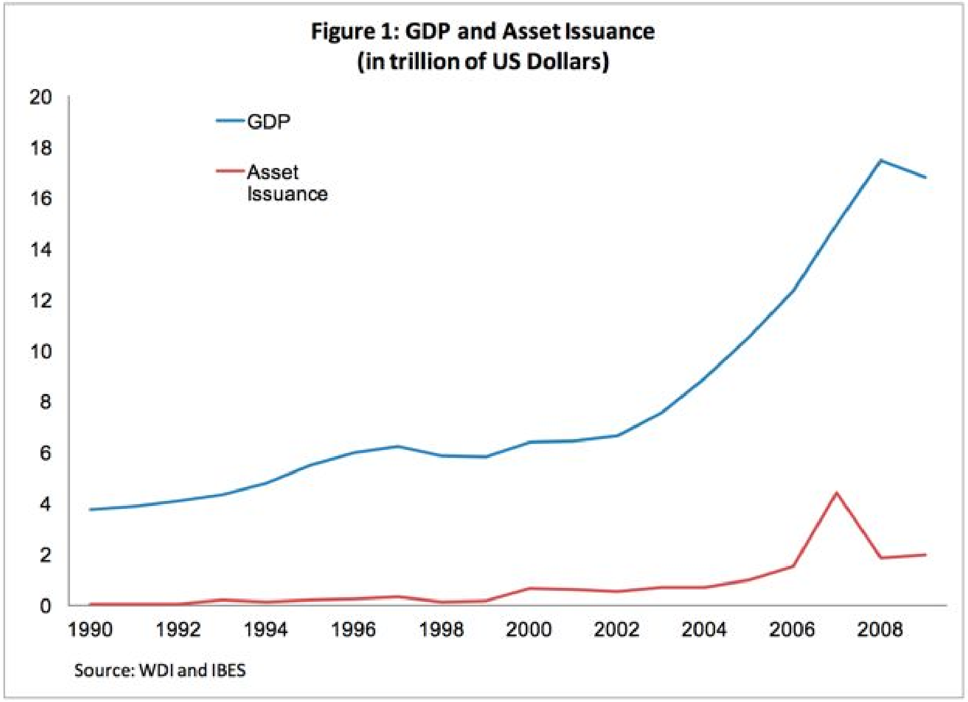
From this we can see that the bull market has been driven by dwindling share supply + positive money creation + a shifting investor preference to hold more stocks as a percentage of their portfolio.

But there's another factor that we need to introduce and which has become more important over the last 20 years with the rise of globalization. And that's the growing money stock in emerging markets. It's here where things get interesting.

Classical economic theory states that capital should flow from rich countries to poor countries. But, like much of economic theory, this isn't how the things *actually* work.

The IMF points to the reason why in a recent paper, saying an "economy's ability to produce output is only imperfectly linked to its ability to generate financial assets."

The chart below shows this. **As emerging markets increase in size, their domestic financial markets lag behind — their financial assets grow at roughly half the rate of GDP. With a limited domestic pool of securities, EM savers end up having to invest the majority of their wealth abroad.**




The IMF hits at what this means for developed market asset demand, writing "improved macroeconomic fundamentals have raised the demand for financial assets. Rising income per capita in EMs, pension reforms in Latin America, increasing commodity prices in the Middle East and Africa, and limited consumption growth in East Asia have contributed to an increasing supply of domestic savings in EMs that needs to be invested."

As emerging markets mature, their ability to generate credit and grow their money stock rises exponentially. And since EM financial markets can't soak up this ballooning money stock, it means that an increasing amount of it *has* to flow into the US; which has the deepest financial markets in the world. This significantly raises the demand for US assets.

This is why this bull market continues to trudge on, irritating perma-bears who think it has to end for the sole reason of that it's gone on so long.

**But as long as emerging markets stay buoyant, propped up by a slowing but still growing China, and commodity prices (particularly oil) stay elevated — keeping petrodollars flowing back into US financial markets — then the global money stock will continue to expand. And that means a persistent bid for US assets which will lead to a higher market value so supply and demand can eventually clear.**

When we combine this structural bid for US risk assets with the increasing likelihood of a late cycle FOMO chasing leveraging phase — a phase which tends to mark the end of most long bull markets. We end up with a high likelihood of seeing an asset shortage induced squeeze. A boom in stock market value that will create greater supply. A supply that will eventually peak once global demand begins to contract. And then the process will work in reverse as a major supply glut will have to clear...

Should be a fun road ahead.

# Macro: K.I.S.S.

In the Marine Corps we operated by the acronym K.I.S.S. which stands for Keep It Simple, Stupid. The idea is that systems and operations work best if they're kept simple and not made more complicated than need be. Combat is plenty confusing on its own and it's easy to suffer from information overload which can lead to failure to follow through or total analysis paralysis. Both of which could get you killed.

Thankfully in markets we don't have to worry about catching lead. But it pays just as well to heed the principle of K.I.S.S when playing the macro game. There's an endless deluge of data, opinions, and explanations for market moves. Macro is complicated enough. Our job is to distill and simplify and apply Occam's Razor and track the few things that matter most at any one time until new information disproves their utility.

We believe the most important drivers right now are:

1. A decelerating China that's trying to set itself up for a strong centenary in 2021
2. Slowing global growth relative to the US which is drawing capital from the periphery back to the core (US), leading to a stronger dollar -> tighter liquidity -> greater volatility -> stronger dollar feedback loop
3. The turning of the long-term debt cycle which is driving divisive populist politics and greater geopolitical tension

The craziness going on in Turkey, Argentina, Italy, and Brazil is important too, of course. They're interesting stories to follow and we can find some unique trades to play those specific developments. But in the broader macro sense they are symptoms of the above three drivers and not underlying causes themselves.

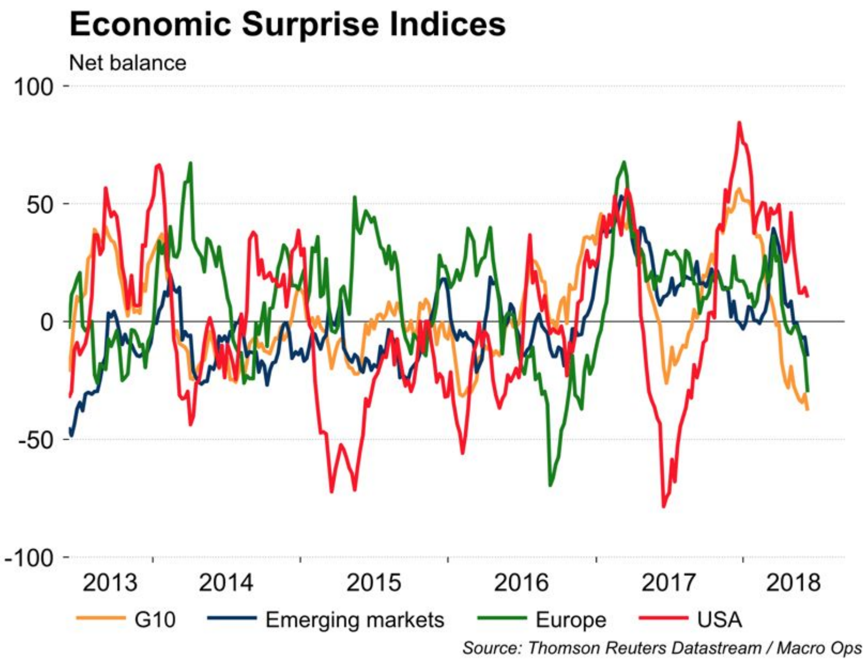
Let's go through some charts and see what the data is telling us about our three drivers and discuss some related trades/themes. We won't cover China since we discussed it last month and there's nothing to update.

**Flowing Back To The Core**

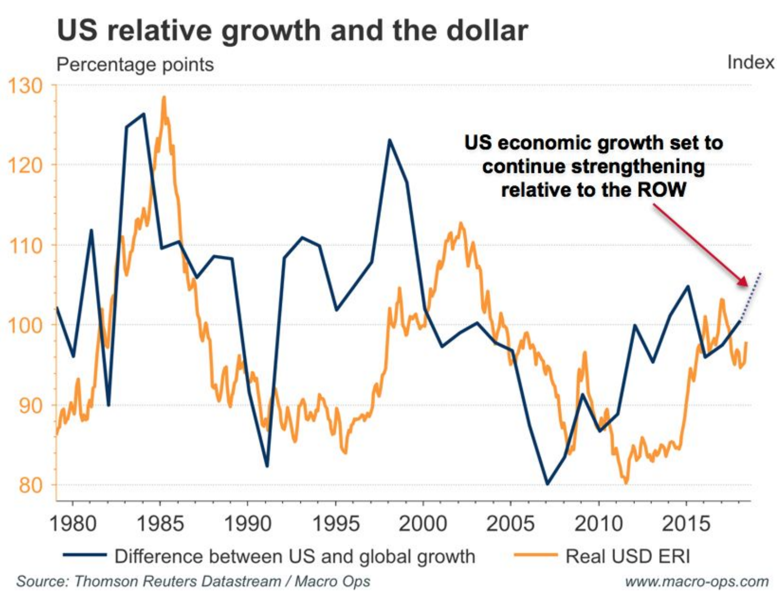
The data and the tape continue to confirm our US vs. rest-of-world (ROW) outperformance thesis. This opinion rests on a continued growing disparity between US economic and market strength relative to the ROW.

The chart below shows earnings momentum across world. This is a leading indicator that measures analyst earnings revisions (changing expectations). It shows that earnings expectations are in decline everywhere except for the US, where they remain extremely robust.

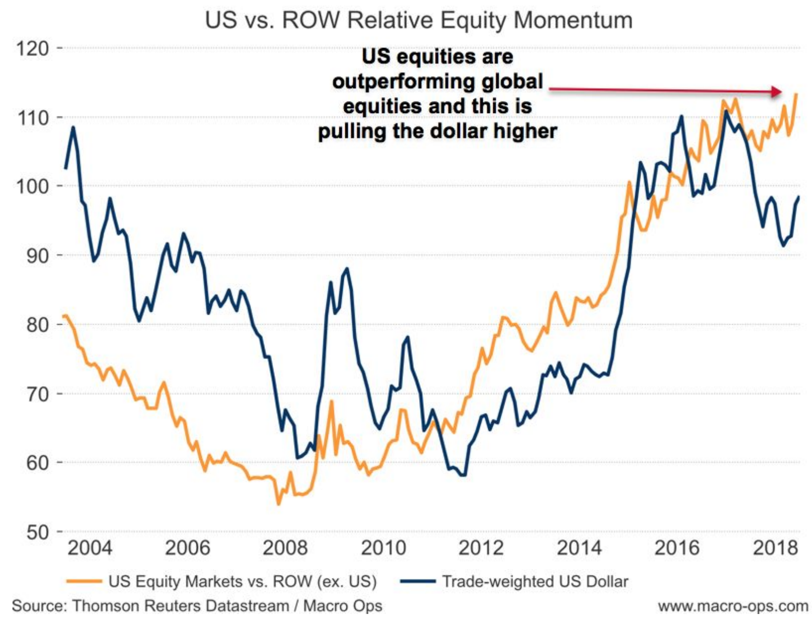

The Citi Economic Surprise Index (CESI) which measures economic data prints relative to expectations (data surprises) show that data has been coming in below expectations everywhere except for the US (below 0 is a negative surprise and above 0 is a positive surprise).



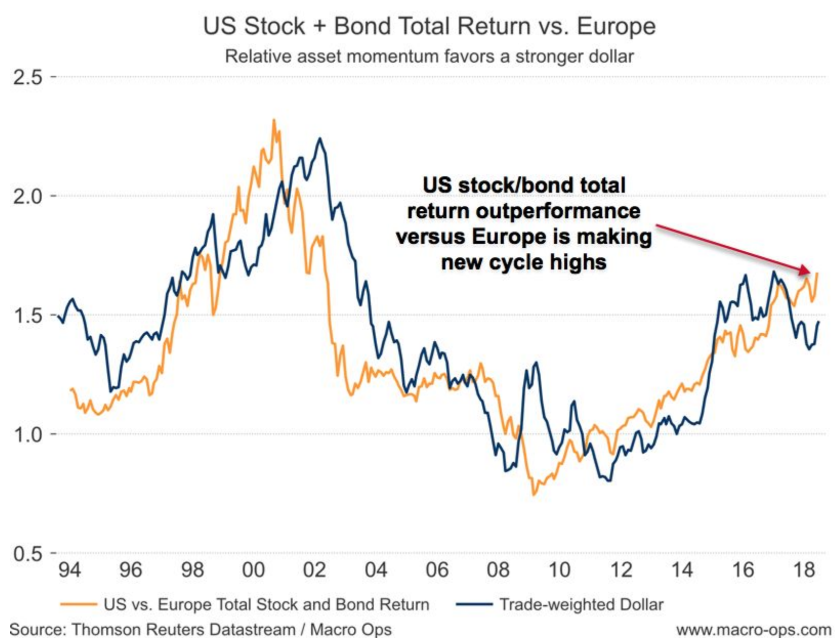

And we can see the US outperformance directly in the economic growth numbers where relative GDP US trend growth is accelerating versus the ROW. This indicator has a high correlation to future US dollar performance.



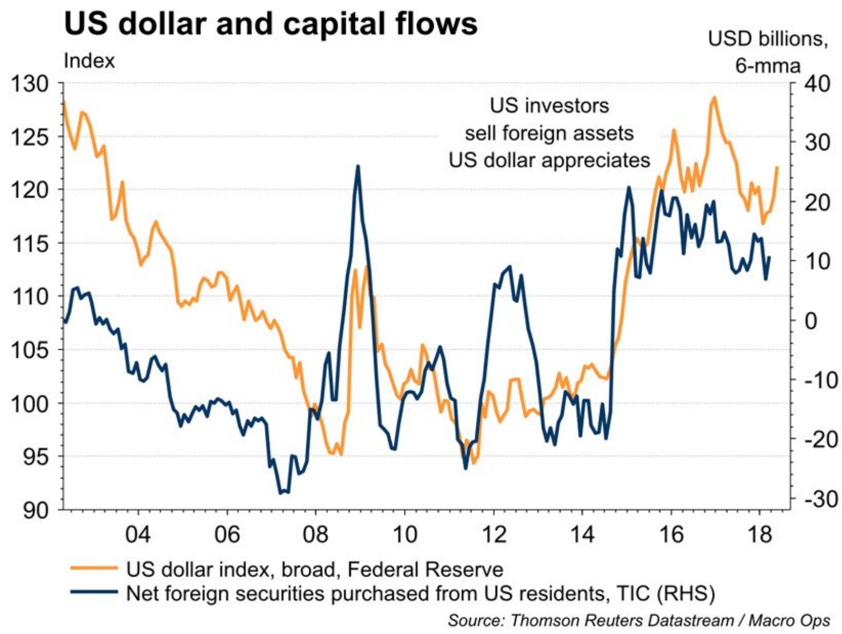

Slowing global growth combined with a strong US economy is pulling capital back from the periphery and into the core. This is driving relative US equity outperformance which is leading to more speculative inflows driving US stocks and the dollar higher.




When analyzing the dollar we have to pay special attention to the euro since it makes up a majority of the dollar trade weighted basket. This chart shows US vs. Europe stock+bond total relative returns. US stock/bond relative performance recently made new cycle highs. This is pulling the dollar higher and driving a self-reinforcing feedback loop.

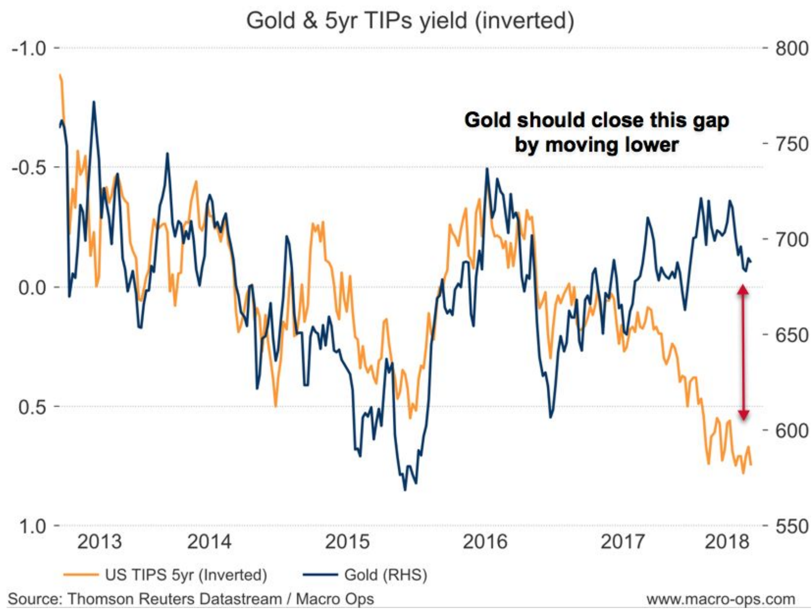



Looking at the treasury data we can see these capital flows directly. The blue line on the chart rises when US investors sell their foreign assets. We can see there's a circular relationship between the two.

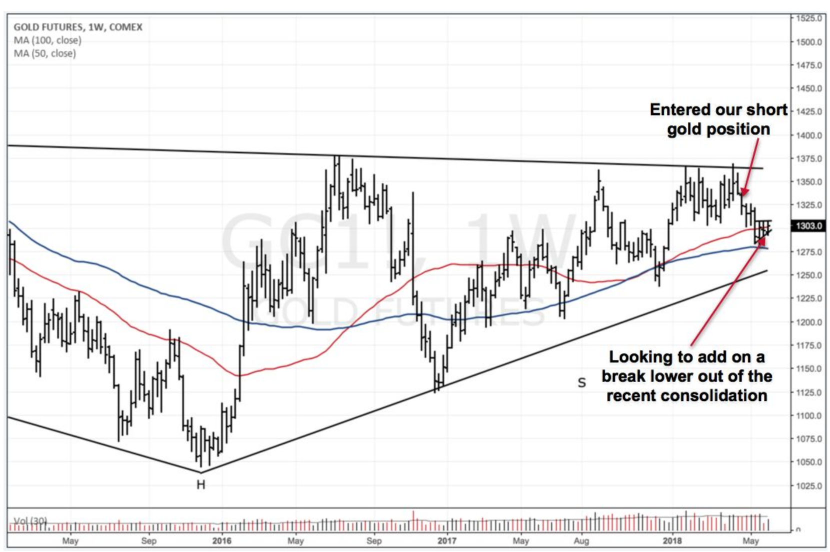



We've been long the dollar since April 23rd and have since added to our position. We view the recent pullback as a healthy correction in a developing trend and will look to add to our position in the coming weeks.

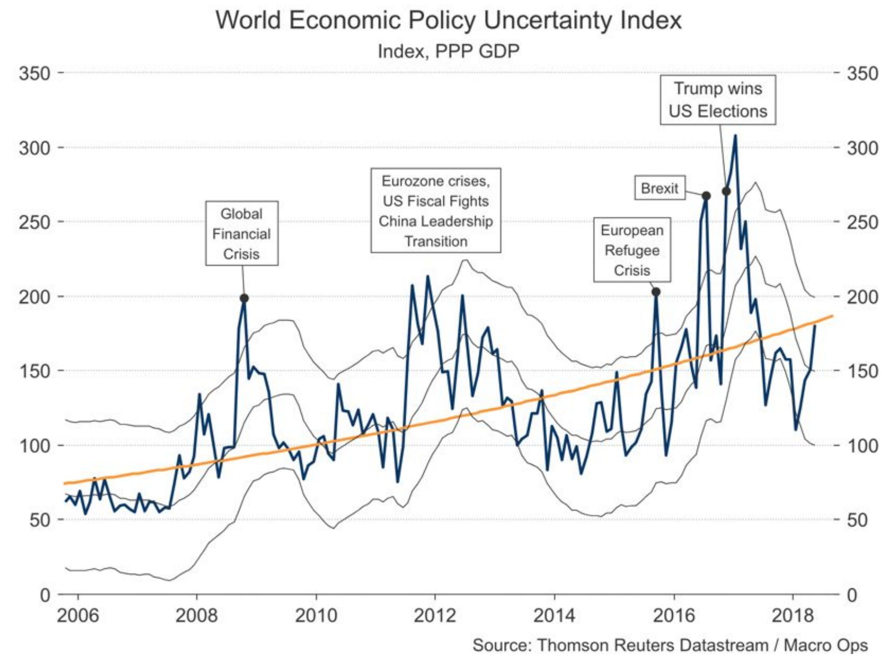

Gold often leads the dollar at major turning points. The chart below shows the inverted yield on TIPs (orange line) and gold (blue line). Over time both should track one another as inflation expectations change and the real yield on treasuries rises and falls. Recently, the gap has widened between the two. We expect it to close with gold moving much lower — a potential catalyst for this could be signs of a peace deal between North Korea and the US.



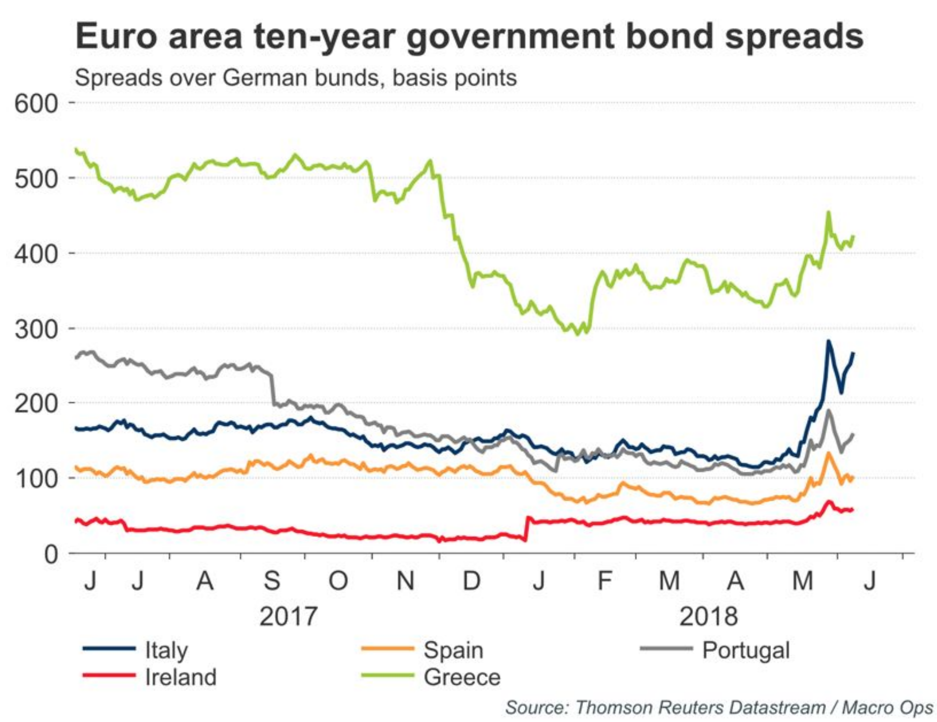

We will look to add to our short gold position on a break lower from its recent consolidation (chart below is a weekly).




We wrote about geopolitical and populist cycles in our April 2017 MIR titled [*The Dead Hand of Inevitability*](). With the dollar rising again and global liquidity slowly starting to recede, we should expect increasing volatility; not just in markets but in politics, as well. The recent populist upset in Italy is just a small step in a much larger trend that is only just beginning. And the trend is a direct result of the turning of the long-term debt cycle.




This rising uncertainty is leading to a global repricing of risk. One area we'll see this more in is widening sovereign debt spreads.

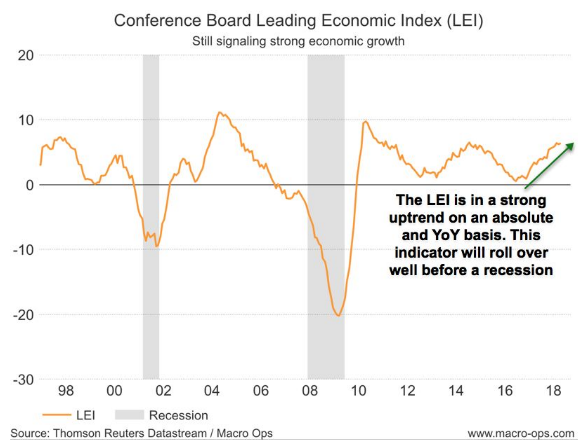


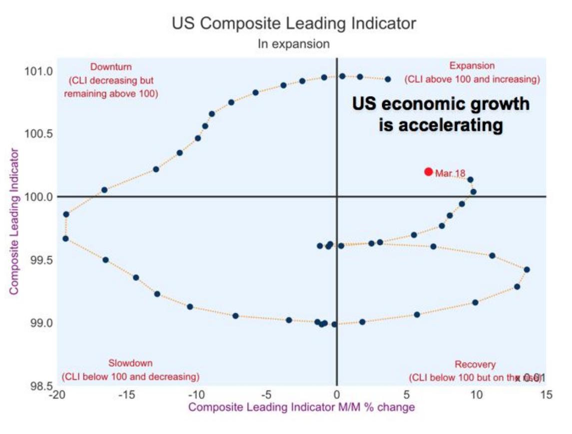
**Global Macro Summary**

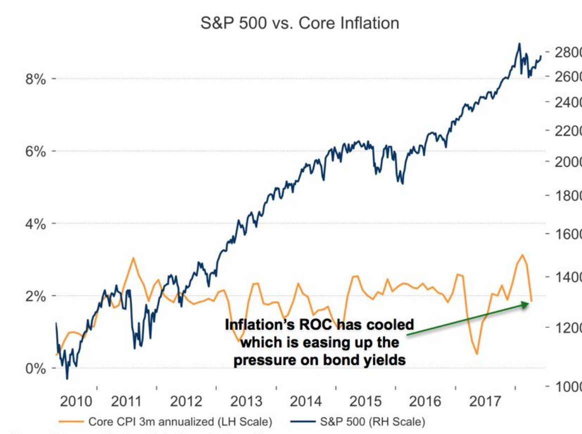
- The strong synchronized global growth of last year has ended
- With both growth and liquidity slowly receding, we should expect a trend towards greater disparity in outcomes that's accompanied by rising volatility
- Accelerating US growth versus decelerating global growth is drawing capital from the periphery back to the core
- These flows are leading to US vs. ROW outperformance which is attracting further speculative flows and driving up the dollar
- This is kickstarting a dollar bull feedback loop where a stronger dollar attracts more inflows, leading to greater US market outperformance and greater emerging market volatility, which attracts more inflows
- This feedback loop will only be exacerbated by the increasing trend towards populist politics that we're seeing in Europe and emerging markets and which is being driven by the long-term debt cycle

**Short-term US Macro Overview**

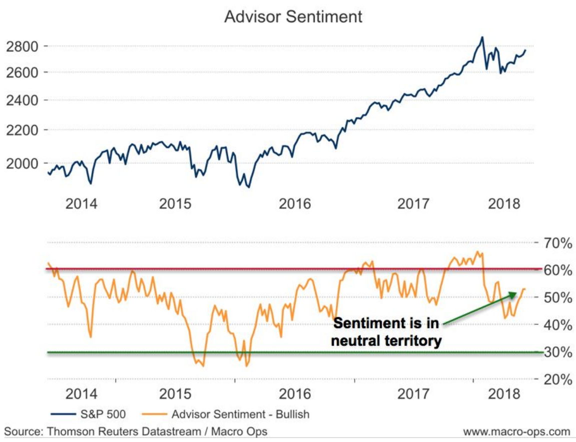
- **Liquidity:** US liquidity is near its cycle highs (meaning, it's extremely loose). This is very bullish US risk assets and should prevent emerging markets from going into full-blown crisis mode. This indicator will turn over well before this bull market ends.
- **LEI:** The Conference Board LEI, which tracks a basket of US economic indicators, is still in a strong uptrend on both an absolute and YoY basis. This indicator will roll over well before we enter a recession.
- **CLI:** Our US composite leading indicator shows the US economy is in an accelerating expansion which should continue into the end of the year.
- **Inflation ROC:** The 3-month annualized core inflation rate has come down from its Jan/Feb highs, which sent interest rates shooting up. A slower change in inflation eases up pressure on yields and is bullish for stocks

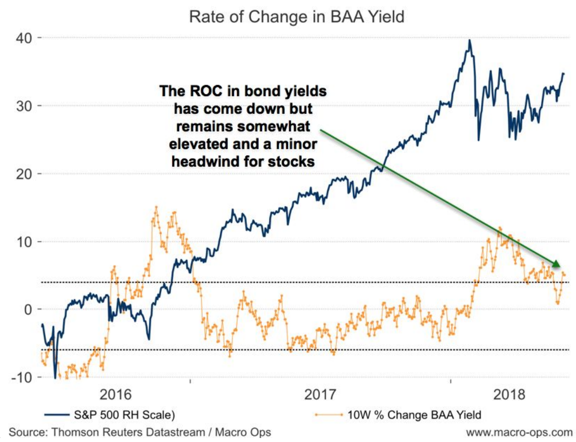



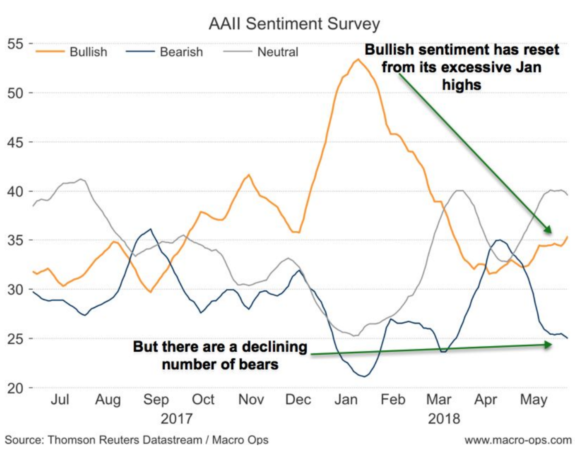



- **Advisor Sentiment:** Advisor sentiment has reset from its excessively bullish Jan/Feb highs and is now giving a neutral reading. This is supportive of stocks moving higher.
- **BAA Yield ROC:** The rate of change in yields has come down from its highs at the start of the year but it still remains elevated. This indicator is in neutral/headwind territory for stocks.
- **AAII Sentiment Survey:** Bullish sentiment has completely reset since the beginning of the year and is now supportive of stocks moving higher.
- **S&P 50-day MA Spread:** The percentage of SPX stocks above their 50-day moving averages is in overbought territory. It can and probably will move higher from here but we should be on the lookout for a pullback in the next few weeks as the short-term trend is becoming extended.





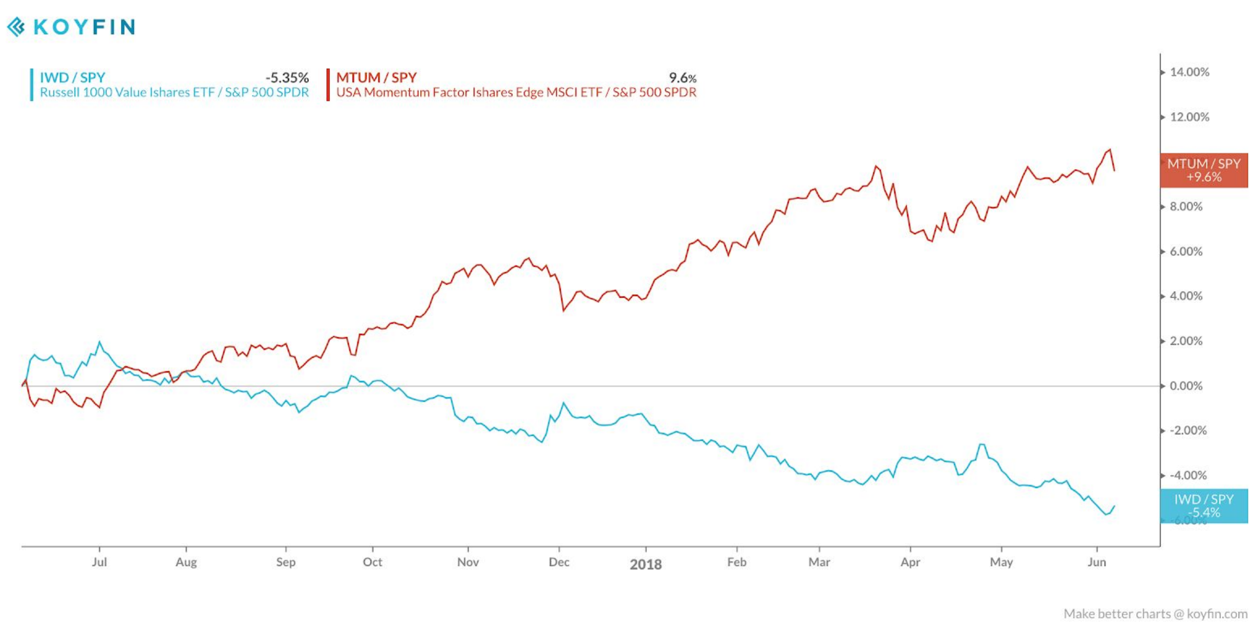
**Summary:** The US economy is strong and growth is accelerating. All our leading economic indicators are giving positive readings making the odds of a recession in the next 12-months extremely low. Liquidity is still flush which is supportive of the broader trend higher in stocks. Market sentiment has reset from its highs reached at the start of the year. All this means that the primary bullish trend in US stocks is supported by the data and the primary path of least resistance remains up.

However, over the short-term, the trend is overbought and the ROC in yields is elevated. This makes the market more susceptible to a selloff over the next few weeks. A selloff would reset both of these and give us a good opportunity to add to our positions. There are numerous catalysts that could spark a selloff in the week ahead. We have CPI and DPRK Summit on the 12th, the FOMC meeting on the 13th, and June OpX on the 15th.

# Micro: Momentum and Value

Momentum has drastically outperformed value as a factor over the last year. There's two ways to think about this (1) is that we want to be in momentum stocks because momentum has a tendency to persist or (2) this outperformance looks stretched and we should expect to see some mean reversion between the two factors.

Our take is that both are equally possible. Late cycle markets can be quirky so we want to hedge our bets somewhat and concentrate our portfolio in a small basket of stocks that represent the best opportunities in both potential outcomes.




For our momentum picks, we want to be long stocks that are not just momentum leaders but that also have strong growing fundamentals. Fundamentals that are being overly discounted due to a misconception of their growth potential.

Last month, we pitched Google, Amazon, and Facebook. Three stocks that everybody believes are overvalued just because everybody else believes they're so. A common knowledge game where the common knowledge is wrong.

We pointed out why these beliefs are grounded in faulty misconceptions and not hard facts. In reality, these companies are trading at below market valuations when properly adjusted for their true earnings potential. And that this is a common case of the market being scared off by big numbers and drastically undervaluing the power of compounding growth.

A similar area that has strong momentum, solid fundamental growth, and a popular misconception leading to a misvaluation, is semiconductors. Chart below shows how tech and semis have more than tripled the market's return, ytd.


Over the last two years, the popular narrative has been that semis are very late cycle and are headed for a wall.

This is because semis are like a commodity and have long followed a standard short capital cycle. And for no other reason than this cycle has gone on a long time have investors started expecting chip capacity to begin exceeding demand, leading to lower pricing and collapsing margins — something that's happened around this time in every other cycle.

But chip pricing hasn't fallen and margins aren't contracting. The data is failing to confirm the popular narrative.

In fact, last year semiconductors recorded their largest yoy sales growth in 14 years. This quarter, the information technology sector had the second highest earnings growth rate (36.3%) in the S&P and within that, semis had the second highest growth of all infotech sub-industries, seeing an increase in EPS of 54.5%. Semis also saw incredibly strong top line growth of 28.2%. If the semi capital cycle is turning, it's not showing up in the data, at all.

Either the bears are right and early, or they are anchoring to the past and failing to realize that something is different this time around. Our money is on the latter.

Like all other commodities, semiconductors are susceptible to larger secular cycles driven by structural shifts in demand; due to technological change or large demographic/wealth transitions (such as the Wealth S-curve).

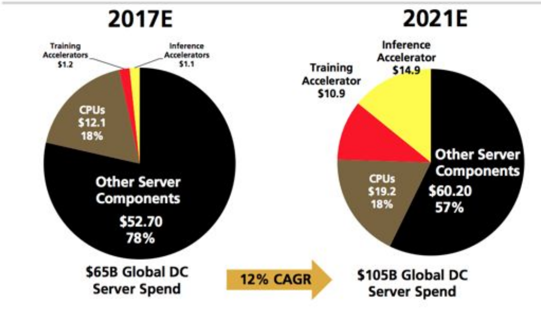
It's likely that semis have entered one of these large secular upswings. Similar to what the rise of China did for global oil demand, the need for ever increasing computing power due to AI/ML, hyperscale data centers, IoT, AR/VR, Big Data, autonomous driving etc… has changed the structural demand for computer chips.

Investment bank UBS shared their thoughts on the potential for a phase shift in silicon demand, writing:

> *"This Time is Different" refers to the idea that during the clockspeed scaling era (1970s to 2000s), global server spend has typically grown in the low-single digits, and that because of adoption of Deep Learnings and AI applications, total spend will grow at an unprecedented 12% through 2021. The investment implications of this scenario are substantial: the current semiconductor cycle, which has been unusually strong and long, has at least an additional three to four years to run. Memory shortages and rising prices will continue and capacity expansion by our semicap universe and foundries will find the required demand. That is, AI is truly a rising tide that would lift all boats.*
>
> *AI creates a new virtuous cycle; decentralization of compute like early PC era AI has been in development for >60yrs, but accelerated dramatically in the past 5yrs given a new critical mass of data fuelled by smartphones and social media. While Moore's Law scaling challenges have shifted more of the burden (and value) to software, AI changes the paradigm because 1) compute matters again and there are little to no scaling limitations to the problem set (the more data, the better the outcome), and 2) creates a new virtuous demand cycle, much like the combustion engine did for oil. With cloud, compute has been centralized but there are still limited feedback "loops" to PCs and smartphones. AI creates a new feedback "loop" and should push more compute intelligence to the edge for key mobile and automotive applications in particular. At the same time, money is buying less incremental chip performance gains due to Moore's*

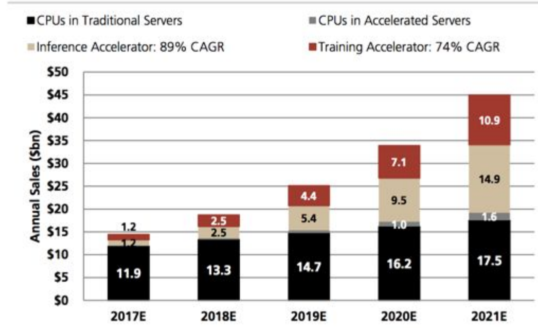
*Law slow down (even with EUV) so the entire supply chain (semicaps included) should see inflationary secular effects.*

**Figure 32: Bull Case Data Center Penetration**




Source: UBS analysis based on IDC data (2017E global spend only)

**Figure 33: Bull Case Silicon Sales Growth**




Source: UBS Analysis

It looks like Stanley Druckenmiller and David Tepper both agree with this idea. Semi stocks were their largest new buys last quarter and are amongst their largest positions (Druckenmiller left, Tepper right).

03/31/2018

**Top Buys**

| Name | % Change |
|---|---|
| INTC Intel Corp. | 7.086% |
| BABA Alibaba Group Holdi... | 6.667% |
| MU Micron Technology, ... | 6.302% |
| AMZN Amazon.com Inc. | 3.759% |
| NFLX Netflix Inc | 3.096% |

03/31/2018

**Top Buys**

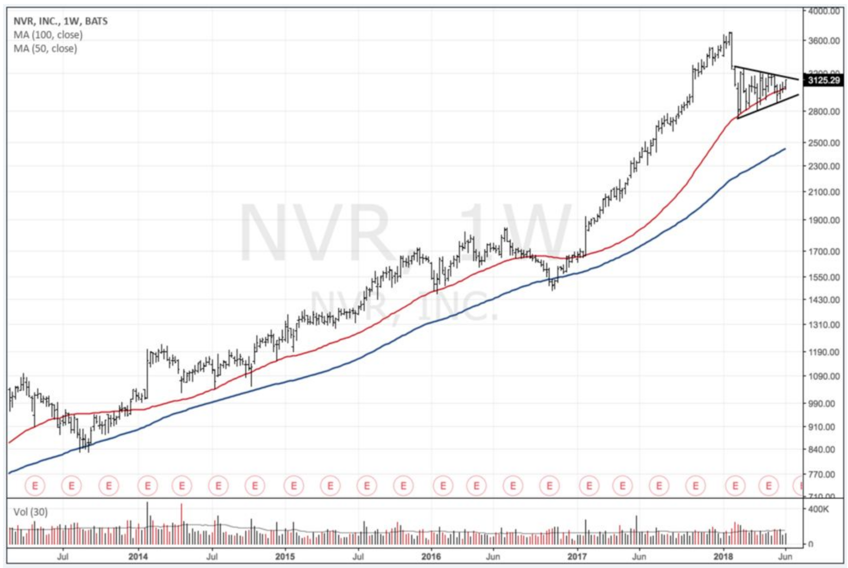
| Name | % Change |
|---|---|
| MU Micron Technology, ... | 8.467% |
| LRCX Lam Research Corp. | 2.709% |
| WFC Wells Fargo & Co. (... | 1.585% |
| UBS UBS AG | 1.261% |
| AGN Allergan PLC (Forme... | 1.127% |

Our favorite way to play this is by buying (either through DOTMs or vanilla stock) a basket of semi stocks that are market leaders with strong fundamental growth and solid charts. The names we like best are Micron (MU), Intel (INTC), and Advanced Micro Devices (AMD). The next bout of market weakness will offer a good buying opportunity to enter or add to these positions.



**Our Value Play: A Cannibalistic Homebuilder**

For our value pick we're planning on adding NVR Inc. (NVR). NVR is a residential home builder that we've been following for sometime. It's happens to also be run by a tier-1 capital allocator.




I've been neutral on homebuilders this cycle for the sole reason that assets that boomed in the previous cycle typically require a full cycle reset before they can find their legs again. And for the most part, this has been true. Home builders have been lagging the market.


But recent data points to an increasingly tight housing supply. A diminishing supply that's being met with ever growing demand arising from mature cycle dynamics such as rising wages and greater consumer confidence.

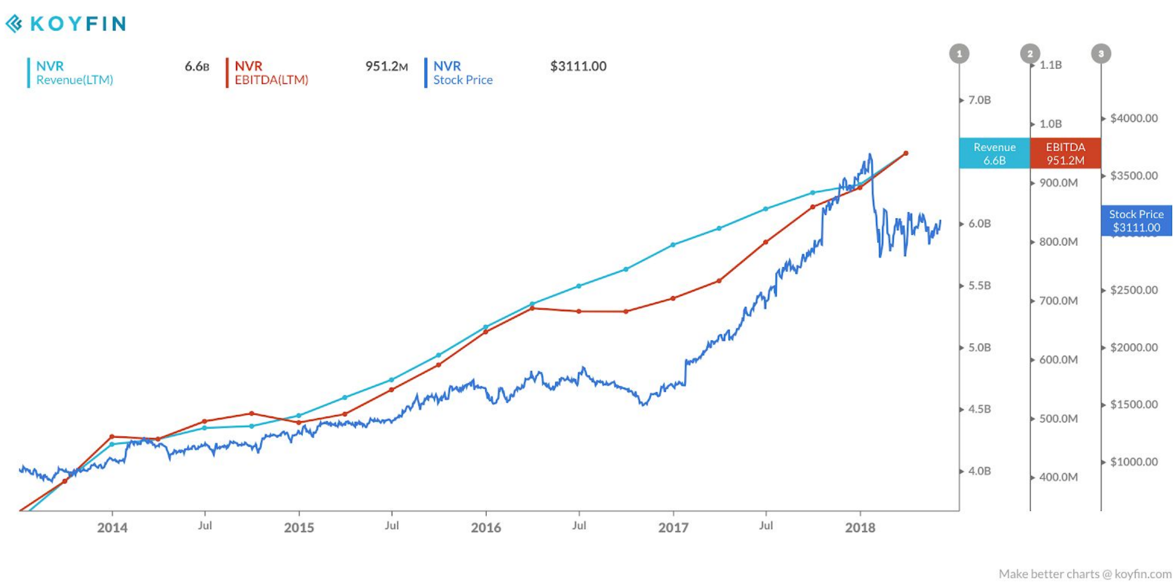
This made me take another look at NVR, which is a special stock on its own. And a potential powerhouse if combined with strong macro cyclical tailwinds.

To start, William Thorndike, the author of one of my favorite investing books *The Outsiders* — which is a case study of the best capital allocators / owner operators to have ever compounded money over the long-term — was asked at a recent Google talk what company today would best fit *The*

*Outsiders* model. His response was a little known home builder called NVR.

NVR is the fourth largest home builder in the US. They primarily focus on first time buyers in the East Coast market. They have a unique and advantageous business model in that they don't buy large plots of land for future development. But instead, they purchase land options, which only require a 10% deposit. They only exercise this option once a home buyer signs a purchase contract. This not only significantly derisks NVR's balance sheet but this asset light business model also allows the company to deploy capital much more efficiently.

These big differences have made NVR a best in class stock. The company has a higher return on equity and capital than all its peers while at the sametime it has the least leveraged balance sheet of the group. Which is likely why NVR stock has outperformed both the market and its peer group over the last 10 years.




NVR checks all the boxes of a proper value investment.

It's seen strong and steady top and bottom line growth over the entire current market cycle.

It has top notch management with a fantastic incentive structure in place. Executive bonus payments are based on return on capital metrics and vest over a 4 year period (which is much longer than the industry standard of only 12m). Not to mention, the CEO Paul Seville, has hundreds of millions of dollars locked up in the company — that's called skin in the game...

The company keeps an extremely low profile. They don't have much of an IR department and hold no conference calls nor give any guidance. They simply focus on what matters and that's executing.

Charlie Munger was once asked how to make a lot of money in stocks and he said to focus on the cannibals. Cannibals are companies that have a long history of buying back large amounts of stock. And in this regard, NVR stands in a league of its own. The company's shares outstanding have declined by over 75% in the last 24 years. They've declined by a quarter over just the last 4 years. That is insane… NVR is an $11B+ market cap company with a float of less than 4M shares...

When Seville was asked about the high level of buybacks he responded, "If you are a long-term owner of the stock, maybe in about ten years you'll own one share and we'll own one share."

These buybacks helped the company grow annual EPS in excess of 30% over the last five years.

We can buy this valuable cannibal for a dirt cheap 13x next years earnings. That is a ridiculous value. I think we'll load up the truck on this one.

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That's it for this month!

If you've got any questions please shoot them over to me at alex@macro-ops.com or hit us up in the CC if you're a Collective member.

Take care and good luck in the markets,

Alex