Market Brief – It's All Relative

Time and space are not absolutes, but rather relative… or something. To be honest, I've studied Einstein's two theories of relativity countless times, but my little pea-brain still has a tough time understanding 'em. But when Einstein first came out with his "Theory", he was constantly bombarded by journalist and curious folk alike, who didn't understand a lick of it either. So he told his secretary to respond to these inquisitors with this simple analogy:

"When you sit with a nice girl for two hours you think it's only a minute, but when you sit on a hot stove for a minute you think it's two hours. That's relativity."

Now that, I get. Makes perfect sense. Things are relative. Very few things are absolute or can be viewed in a vacuum.

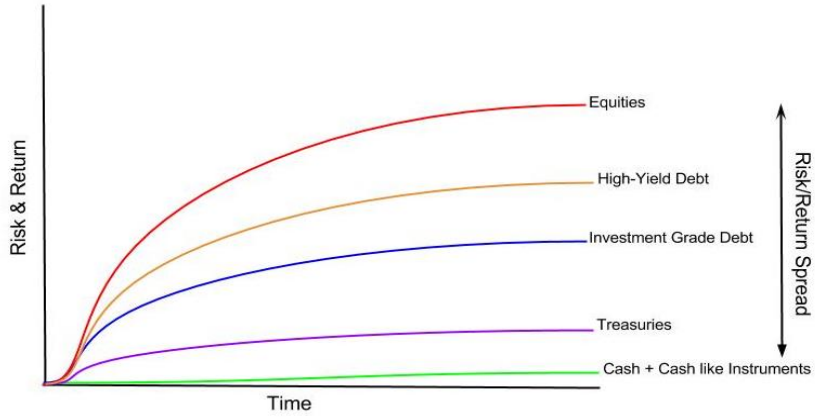
You may be asking, "Alex, why the hell are you talking about Einstein, stoves, and girls?" — good question.

You see… relativity has been on my mind a lot lately. Not Einstein's relativity. But rather the relativity of financial markets and the economy.

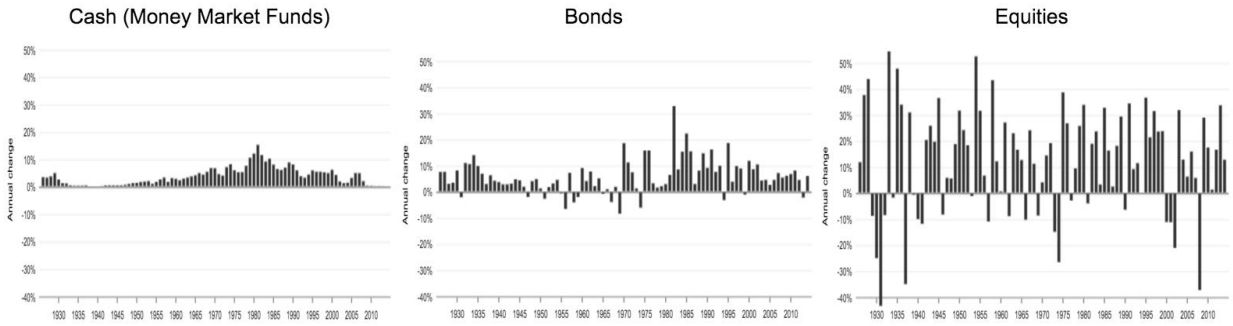
Here's the gist of what I believe and what I've been working on lately:

1. The cyclic nature of markets and the economy is transmitted through financial spreads, beginning with the cost of money. The central bank controls the cost of money; in which EVERYTHING is valued off of. And it's the *relative* changes over time in the cost of money that transmit through these financial spreads, creating large bull and bear markets in different assets. Nothing is valued or moves within a vacuum. Everything is relative and reflexive.

2. Spreads start with the cost of money. The next spread up is the closest asset in terms of risk (ie, short dated treasuries). After that comes longer dated treasuries. And then you get investment grade corporates. Next there's high-yield, then real estate, and finally, equities. It could look something like this:



3. The difference (spread) between all of these assets is called risk premia. Risk premia is the risk (volatility) and average return function of each asset. The asset classes with lower risk premia (ie, higher on the capital structure and less volatile) offer a lower average return. While assets like equities, which have much higher volatility and a higher risk of total loss of capital, payout a higher average return over time — they have a higher risk premia. Here's a little snapshot that shows this volatility/return relationship of the big three asset classes over the last 80 years.



4. Risk premia exists because people need to be compensated for lending their money (exchanging cash for stock) and assuming risk. Or else why the hell would anybody change their fungible safe dollars for a more illiquid risk asset? They wouldn't. It would be completely illogical. And believe it or not, these crazy markets mostly operate out of logic — now that logic might be

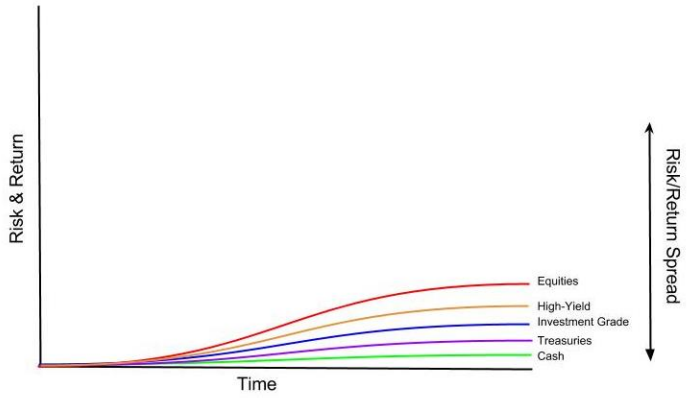
short-sighted, confused, and sometimes excitable — but it's still logic nonetheless.

5. So… if you can model the transmission function from the cost of money throughout the risk premia spread, then you should be able to better understand (predict) the future large movements of asset classes. Because timing is everything isn't it? And I can't stand when people just point out the obvious, "these markets are really overvalued right here". To that I say; markets can go from stupid valuations to stupider valuations — that doesn't help me much as a trader. And then, when looked at relatively (because equities aren't valued in a vacuum) maybe market valuations aren't "stupider", but rather completely predictable given the risk premia spread.

So it all starts with the Fed's policy tools. The overnight rate, open market operations, and reserve requirements, are the tools in which the Fed sets the cost of money. When they lower the cost of money, this transmits through the yield curve of treasury bonds, bringing down both the short and long end — pulling the premia of cash + cash like instruments and bonds lower. This widens the spread between risk free assets and risky assets (ie, high-yield and equities). The larger risk premia means that investors get compensated more for assuming risk relative to that of cash and bonds.

This causes risk assets to get bid up. And when these assets are bid up, their future return *actually* goes down.

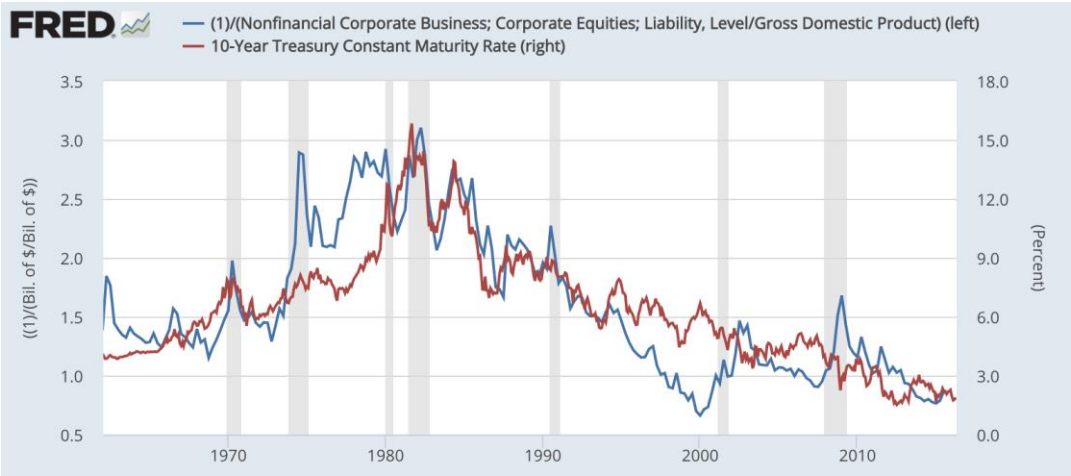
Their risk premia spread gets pulled closer and closer to that of cash and bonds. This goes on until it cannot get any tighter. You can take rates negative… you can make the return on cash negative… and you can eke out a bit more in spread between riskless and risky assets… but eventually that spread gets bid tight and looks something like this:



Now, here's the thing. When the risk premia spread is pulled as tight as it can go, not only does the future return on those assets drop. But the risk, or volatility distribution, actually widens and becomes increasingly asymmetric with a fat negative tail.

Say what? Sorry… this time in english. When there is little difference in risk premia (expected return) between cash and risk assets (equities), risk assets becomes drastically more risky while also offering essentially the same expected return as cash.

When there's no difference between the expected return on that of equities over cash, then why the hell would anybody want to hold equities? They wouldn't. They don't.



The above chart shows this direct relationship. The chart is of the market cap as a percentage of gdp flipped upside down to show the inverse correlation (and causation) between the value of equities and the interest rate on the 10 year. The rate on treasuries moves lower, widening the spread on equities, which then get bid up driving their valuations higher and pulling their risk premia closer to that of bonds.

Over the last 35 years, the US experienced one of its greatest bull markets in history during the 80s & 90s. This bull market is completely attributable to the cost of money and subsequent risk premia spread being pulled significantly lower… widening the spread between risk-free and risk assets and pushing money further out on the risk curve.

The 90's bull market and the tech bubble had little to do with "irrational exuberance". Rather, it was mostly the logical movement of money in search of yield. The over-optimism that is symptomatic of large bull markets is directly caused by this manipulation of risk premia spreads. The central banks lull everybody into thinking risk has dissipated — and the recency/confirmation bias that is innate in the human psyche are just added fuel to the fire.

This of course occurs while risk/volatility has not been thwarted, but rather has been built up and pushed slightly back… it continues to build like an avalanche that breaks near the top of a peak and gathers mass and momentum on its destructive path downwards.

I think understanding the risk-premia will also allow you to better understand growth. Because where does economic growth come from? Mainstream economics looks at things like employment, productivity, earnings and so on. But I believe that these are not the foundational causes of growth.

We know that overtime, things like productivity are relatively constant. Going back 200 years, we seem to average out a pretty constant 2% productivity growth rate which is reflected in real GDP. This is the accumulation of knowledge (better technologies resulting in more efficient workers).

But the short-term cyclic nature of GDP growth is not due to swings in our inherent productivity. When growth slows, it's not because we suddenly wake up one day and are less productive.

And then there's earnings. I just finished reading a really interesting book called "Ahead of the Curve" by Joseph Ellis (which was recommended by Jamie, a fellow Operator). In the book, Mr. Ellis argues that the rate of change of real average hourly wages is the single greatest indicator of growth.

I have tested this model and it's a pretty good indicator (we'll soon be adding it to the Hub). But if you're going after first principles and getting down to the first initial cause of growth, then I would say it's the adjustment of the cost of money transmitted through the risk premia spread.

Because where do earnings come from? Well, they come from companies making more profits. When companies make more profits, competition increases and labor

costs rise. This means higher wages which then funnel into more consumer spending and increased revenues for companies and so on.

But all this starts with the lowering of the cost of money. By pulling the lowest risk premia spread down, borrowing becomes cheaper. So does debt servicing costs. This means more demand. The higher demand coupled with cheaper debt costs equals higher profits for companies. And it is this that causes the labor market to tighten, meaning higher wages and more consumer spending.

This all goes on until either inflation picks up too much and the central bank is forced to tighten (raise rates) or until rates hit the zero bound and risk premia spreads can't tighten any further.

This is where we are now. There is little room left for the cost of cash to be pulled much lower. Yellen could reverse course and cut the 25bps she raised in December. She could even go negative. She could start up QE again. And equities could run maybe just a bit more… just a tiny little bit. But then, the bit more they run, the more their downside risk increases.

And even if she did this (which nearly impossible politically without first having a dramatic crises, like a stock market crash) inflation would eventually start to really run, forcing her hand to raise rates.

When the cost of cash starts to rise, the riskier assets have to suddenly (and often violently) adjust. And because valuations are so high, and a lot of margin (buying stock on debt) has been built up in the system, it leads to a bunch of money trying to flee through an increasingly narrow door. This is what liquidity gaps and market crashes are made of.

Anyways, this is just a very quick rundown of my thinking on it. What I'm working on now is modeling the different risk premia curves and their relative relationships between one another (ie, trade weighted dollar, high yield to equities, different durations amongst bonds, and so on). If you have any thoughts on it, please share.

I wasn't going to write about this at all for this week's Brief (because I still have a ton of work to do on it), but tonight I saw this twitter exchange between Marc Andreessen — he's a big Silicon Valley VC dude — and some other people in regards to tech valuations and NIRP'ed bonds. Here's a snapshot of it:

Mr. Andreessen, who I presume is a very smart guy since he runs one of the most prominent and successful Silicon Valley VC funds, is making a completely illogical comparison here (also displaying some of his cognitive biases). In the twitter exchange, he responds to a tweet talking about the $6B of negative yielding bonds around the world with "But the $50B or so per year flowing into tech is a bubble. Sure."

Now, I'm not a huge fan of the term bubble because it tends to get thrown around a lot by people who don't really understand what they're talking about (kind of like how "gate" is attached by the news media to any little "scandal"). But if we use the term bubble to mean that an asset or sector is at unsustainable valuations and will mean revert within the next few years… then yeah, I would say both bonds and tech are in a bubble.

And here's what Andreesen fails to understand, but what my risk premia spread model is working towards quantifying. The overvalued $6B worth of NIRP yielding bonds are indeed a bubble… and are at the same time part of the transmission mechanism that caused a bubble in the tech sector too! So you can't say, "tech isn't in a bubble cause look at how overpriced bonds are".

If bonds were yielding 5% in real terms then I can guarantee the tech sector would be a lot more deflated. Nobody would be giving their money to cash-burning companies (assuming TONS of risk) when they could get a nice return in a risk-free asset like treasuries. The risk premia spread would just not be favorable enough to assign a high valuation to equities or any other risky assets.

Temperamental Tech

Speaking of the tech sector, there is some trouble-a-brewing amongst the old guard. Big tech companies like Intel, Dell, and IBM are experiencing declining sales and profits resulting from their slow transition to the new cloud/mobile era. In response to this, they're cutting costs, streamlining, and becoming more efficient (ie, they will be firing a ton of people over the next two years).

Here's a breakdown of the planned layoffs already in the works by the large techs (via Trip Chowdry of Global Equity Research):

- Intel: Total Employees: 130,000: about 12% layoffs = about 12,000
- EMC: Total Employees: 70,000: about 40% layoffs = about 28,000
- VMWare: Total Employees:17,000: Between 30% layoffs = about 5,100
- HP Enterprise: Total Employees 240,000: about 30% layoffs = about 72,000
- HP Inc: Total Employees 47,000: about 30% layoffs = about 14,000
- IBM: Total Employees 379,000: about 40% layoffs = about 150,000
- Cisco: Total Employees 72,000: about 40% layoffs = about 28,000
- Juniper: Total Employees 8,800: about 40% layoffs = about 3,500
- Oracle: Total Employees 132,000: about 25% layoffs = about 33,000
- Microsoft: Total Employees 118,000: about 20% layoffs = about 23,000 (Microsoft is letting go about 200 to 250 people every week, and none of these are ever announced)
- Network Appliance: Total Employees: 12,800: about 25% layoffs= about 3,200
- Symantec: Total Employees: 19,000: about 25% layoffs = about 4,750
- F5 Networks:Total Employees: 4,500: about 25% layoffs = about 1,125
- Yahoo: Total Employees 12,500: about 50% layoffs = about 6,250
- Yelp: Total Employees 3,671: about 50% layoffs = about 1,800

Trip finds that the total planned layoffs for these large tech companies is going to be 369,000 over just the next 12 months. Turning business cycle anyone?

Perhaps the trouble is just relegated to the old guard who have failed to keep pace with the newer, more exciting, cloud-based-mobile-virtual-social profitless crowd?

Doubtful. And the people I've talked to who work in the Valley, say times are a' changin… Companies are starting to wake up and realize that no profits and a couple hundred million annual burn rate might not be a legit business model — *Gasp… I know, I'm as shocked as you are!*

There was a great open letter that did the rounds on the twitter-sphere this weekend, written by another prominent SV VC guy named Bill Gurley. It was addressed to the private tech space as a whole. If you have the time, I suggest reading it in full (here's the link), it's titled "On the Road to Recap: Why the Unicorn Financing Market Just Became Dangerous… For All Involved".

The letter is great because Bill doesn't hold back in calling out SV and many of its biggest private tech companies — even ones he's invested in (like Uber, AirBnB, Snapchat etc) — for their poor stewardship of capital. And also notes how many these "unicorns" will soon be flightless donkeys.

When talking about new investors being approached to invest in these "very-late-stage" financing rounds, Gurley gives them the following advice (emphasis added is mine):

> *The main message for investors who are just now being approached is the following:* ***it's not the second inning or even the sixth, it's the fourteenth inning in a five-hour baseball game.*** *You are not being invited to a special dance, you are being approached because you are the lender of last resort.* ***And because of how we meandered to this place in time, parting with your dollars now would be an extremely risky move. Caveat emptor.***

Where does he say this trouble of abusing capital stems from? The green behind the ears entrepreneurs themselves:

Many modern entrepreneurs have limited exposure to the notion of failure or layoffs because it has been so long since these things were common in the industry.

Couldn't we say the exact same thing about most traders and investors in today's market, "*Many modern traders/investors have had limited exposure to the notion of real*

volatility and a failing of the buy-the-dip strategy because it has been so long since we've had a bear market."

And then Gurley summarizes everything that is oh-so-wrong in Silicon Valley right now, writing:

> *This glut of capital has led to (1) record high burn rates, likely 5-10x those of the 1999 timeframe, (2) most companies operating far, far away from profitability, (3) excessively intense competition driven by access to said capital, (4) delayed or non-existent liquidity for employees and investors, and (5) the aforementioned solicitous fundraising practices. More money will not solve any of these problems – it will only contribute to them. The healthiest thing that could possibly happen is a dramatic increase in the real cost of capital and a return to an appreciation for sound business execution.*

Now, I have witnessed, first-hand, the absurdity of Silicon Valley and it's ridiculous capital frenzy.

A couple of years ago, I briefly worked as a consultant for one of the more "promising" privately held unicorns. In fact, I started at this company immediately after finishing a job in Afghanistan where I had worked for nearly a year. I went from living in a trailer and wearing a flak jacket to working at this tech company where we had "Margarita Mondays", beer kegs on tap, free massages and meditation instruction, skateboarding in the office… and I could go on and on. Talk about a culture shock… A really awesome shock.

If you've seen the HBO show, "Silicon Valley", well that's not an exaggerated parody of life in the valley – that is literally many techies day-to-day. I don't think anyone will be able to say with a straight-face when this thing finally blows up, that, "there was just no way to see this coming…"

The unraveling tech space reminds me of the scene from the original Austin Powers. You know, the one where Austin Powers is on the steamroller and he's headed for one of the henchman who is standing in its path. The henchman is screaming in terror as the steamroller barrells down on him. But then… the camera pans out and the henchman is standing 100 yards from the steamroller and the steamroller is moving at a crawl. And eventually (5 minutes later) he is slowly mashed into a human pancake.

That's how inevitable this tech blowup is. And that's basically what an investor is doing if they are buying into these illiquid assets this late in the game… they are going to get steamrolled.

I personally don't want to own any tech at this point. Not now, not at these levels. The nasty price action in some of the bigger names this past week, like Google and Microsoft, who both whiffed on earnings is a bit of an ominous signal to me. Both stocks look like they could be completing long-term tops. We'll have to see how the other bigs do (ie, AAPL, AMZN, FB etc) when they report in the next few weeks.

Enough with being Mr. Negative, let's talk about something positive. Like, emerging markets and select commodity companies.

We've been doing some select dumpster diving trades over the last few weeks. Dumpster diving is what we call buying a beaten down, oversold asset and holding it for a quick pop. We employ small positions and tightly manage risk. It's a basic mean reversion play. There's been some great opportunities here over the last few weeks. The great thing about these moves, is that when they work out, you can easily see a 20-60% run in just a few weeks time. All the built up short interest and weak hands have already been shaken out.

Meb Faber, who is a quant and financial blogger, recently shared a study he did on these mean reversion plays. Here's what he found:

1) *Three down years in a row from one asset class is still quite rare. It has only happened six times across 378 total years, or less than 2% of the time. But when it happens the returns are impressive:*
   a) *30 Year Bonds 1978-1980. A two-year return of 48%.*
   b) *US, Foreign, Emerging Stocks 2000-2002. Two-year returns of 43%, 69%, 96%, respectively.*
   c) *(For those of you counting, yes, that's just four of the six occurrences. The remaining two are happening now, which we'll get to in just a moment.)*

2) *We can run similar studies that analyze countries, sectors, and industries rather than asset classes. But since they are more concentrated and more volatile, it makes sense to increase our "down years" time-frame from two to three years to three, four, and five years. Dating back to the 1920's, these are still rare occurrences. Down three years in a row only occurs about 3% of the time; down four about 1% of the time, and down five straight years happens almost never. But the returns are just as impressive as those we found with asset classes.*
   a) *Countries down three years in a row returned 56% over the ensuing two years. If down four years in a row, it bumps to 74%. Five years in a row? 135%.*
   b) *For sectors, we find three down years returns 60% over the ensuing two years. Four years jumps to 91%. Five years returns, 138%*
   c) *For industries, down 3 years = 59% returns; down 4 years = 80% returns; and five straight down years returns 105% over the ensuring two years.*

3) *A basic rule of thumb is that if the asset is down two, three, four, and five years in a row you can expect future two year total returns of 40%, 60%, 80%, and 100%. (So multiply the number of years down in a row by two.)*

Interesting stats, and we could possibly be seeing the very beginnings of this mean reversion process at work — meaning there may be another 30-60% upside in some of these beaten down commodity companies. I don't have a lot of conviction either way at the moment. I say trade them for their price action, don't invest in them for the long haul. Manage risk and honor stops.

The whole commodity recovery theme relies completely on two things; the China story and the US dollar. So the big question is whether China can juice liquidity enough (lower the cost of its money) to get things going again. And is the Fed's dovish talk enough to keep spreads from widening? The verdict is still out on these questions… though the CCP is sure as hell pulling out all the stops.

I'm still currently leaning towards no and no. But we'll see. We have the Fed and BOJ meeting this coming week, so keep your eyes out for that. The BOJ floated the idea this last week of trying out negative loan rates and the yen responded favorably, by quickly falling 200bps. So I wouldn't be surprised if they follow through with that. I don't expect much from the Fed, but there's always the possibility of a surprise.

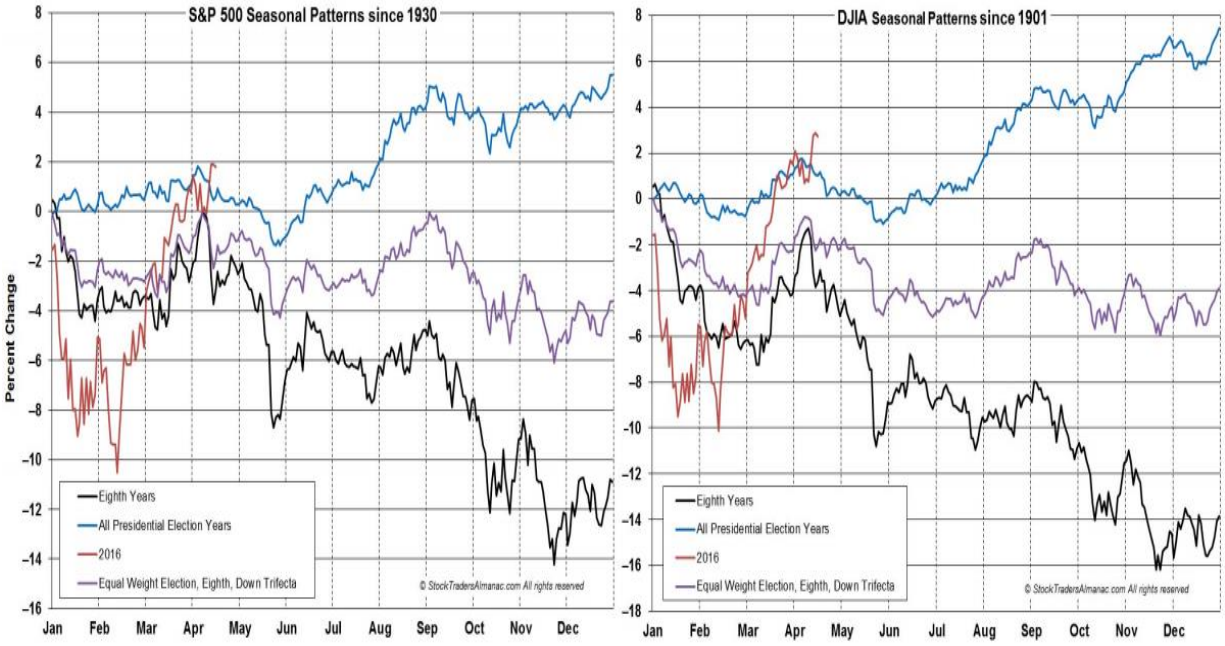
I'll end this market update here. If ya'll have feedback, disagreements, or just want to share your opinion on some of the things I talked about, just jump on into the Comm Center and share.

Comm Center Highlights

The Election Correction

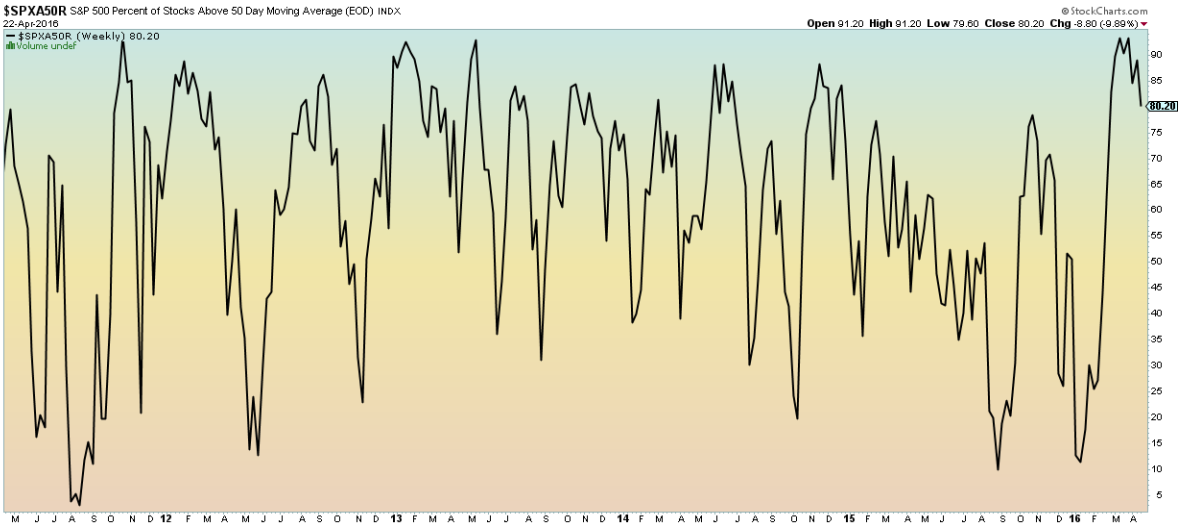
Jamie hits us with a new bearish hypothesis based on the current election cycle.

Historically speaking, markets on average have been weak heading into November during the 8th year of a presidency.



And as the old saying goes — markets hate uncertainty. A potential Trump-Clinton election? That the definition of uncertainty. This coupled with poor seasonality ("sell in May and go away") may cause a decline through the rest of the year.

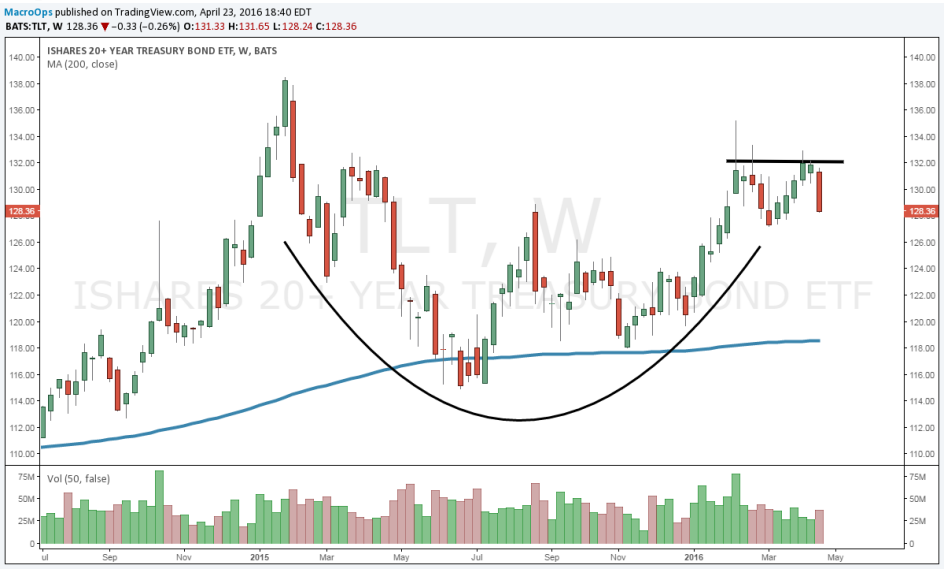
On the technical side we may already be seeing the start of this decline. The S&P 500 percentage of stocks above their 50 DMA is beginning to roll over.



VIX readings are also at low levels, indicating complacency in the market.

Brexit may be the event that really gets things moving. And even if a Brexit doesn't occur, Jamie believes that the uncertainty surrounding the event may cause EUR/USD to weaken. This would in turn strengthen USD, which usually triggers the "risk off" mode for investors as they pull funds out of the equity market.

Long bonds may be the best way to play this scenario. TLT is forming a nice cup with handle pattern.



Jamie also has interest in potentially shorting EUR/USD and gold.

Be sure to check out the comments in this thread. They explore both emerging markets and the gold hypothesis further.

You "Know" Nothing

In Friday's daily commentary we discussed Crispin Odey, another big time hedge fund manager whose fund met with disaster due to poor risk management.

It's a classic case of believing in your own thesis *too* much, becoming attached to it, and letting it ruin you. They key is to stay fallible! Remember: strong opinions, weakly held. No matter how good that kool-aid you made looks, don't you dare drink it.

We also discussed Keynes. For anyone looking to learn more about this classic economist's theory, the following resources will help:

1. Essays In Persuasion (Free)
2. The General Theory of Employment, Interest, and Money (Amazon)

There was also some Game of Thrones talk. But we'll let you jump into thread to read that…

Portfolio Review

Below are our current positions in each one of our portfolios:

Macro Ops Tactical Portfolio

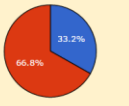
NAV $1,012,008.57

Asset Class	Position	Size	Cost Basis	Risk Point	Open Risk	Target 1	Notional
Equity	Ligand (LGND)	400	117.67	111.33	$2,536.00	130.4	$47,068
Equity	Nifty 50 (INDY)	5375	27.32	26.39	$4,998.75	29.60	$146,845
Commodity	Bean Oil (ZL)	6	32.67	31.95	$2,160.00	35.07	$240,624
Commodity	Bean Meal (ZM)	3	281.50	273.4	$2,430.00	296.5	$171,420
Commodity	Platinum (PL)	4	996.50	967.3	$5,840.00	1059	$200,500
Commodity	Uranium (URA)	5000	14.10	13.15	$4,750.00	17.13	$69,750

Metrics

Exposure Breakdown

Equity	$7,534.75
Commodity	$15,180.00
Fixed Income	$0.00
Forex	$0.00



Total Open Risk
$22,714.75
2.24%

*Updated 4/24

Macro Ops Strategic Portfolio								
NAV	$966,504.28							
Asset Class	Position	Size	Cost Basis	Risk Point	Open Risk	Target 1	Beta (1yr)	Notional

Metrics				
Exposure Breakdown			Total Open Risk	Portfolio Beta
Equity	$0.00		$0.00	0
Commodity	$0.00		0.00%	
Fixed Income	$0.00			
Forex	$0.00		*Updated 4/24	

Macro Ops Income Portfolio				
NAV	$1,015,049.50			
Asset Class	Position	Size	Cost Basis	Max Profit
Option	SPX June 16 1960 Put	-10	10.8	$10,800
Option	SPX June 16 2155 Call	-10	14.8	$14,800
Option	SPX June 16 1520 Put	10	1	Hedge

Scenario Analysis/Stress Tests	
Worst Case	Worst Drawdown
SPX Down 10%	-$58,000
SPX Down 20%	-$252,861

Here's a more in-depth review of a few of our positions and recent trades:

/PL - Platinum

We went long Platinum around the same time Silver broke out. While Silver quickly moved higher, Platinum hesitated at first, but this week it finally showed strength and shot higher.

We plan to keep a close eye on Gold to see how it resolves its current consolidation. If it breaks lower, that may be an early signal to exit Platinum.

JOY - Joy Global Inc.

JOY is another beaten down commodities play. As a mining equipment manufacturer, the company benefits from a commodity rebound. And right now commodities are rallying due to US inflation worries and a weakening USD.

We went long JOY on a breakout of a 7-month inverted head and shoulders pattern. Price is currently holding strong.

INDY - India Nifty 50

A number of global indices, both emerging and developed, broke out in the last week. Our vehicle of choice to play the rally is INDY. INDY made a nice weekly close above its long-term downward channel.

We're long-term bullish on India. They have low debt, a growing educated workforce, and a strong leader in Modi who has the potential to cut through the British-era legacy bureaucratic red tape.

Hub Spotlight

You can check out the updated IMINT here. And the updated HIT List can be found here.

One of our favorite "On Deck" trade is in the bitcoin market. Believe it or not, there is now a Bitcoin ETF that trades on the OTC market. The ticker is GBTC. So if you don't have a means of buying bitcoin directly, you can still speculate on its price appreciation through this ETF. Check out the chart of BTCUSD and GBTC below.

We also had two updates to the long-term trend list worth talking about. U.S. large caps have gone from a bear designation to neutral. And gold has gone from neutral to bullish. Remember, we measure the long-term trend by the slope of the 200-day moving average. This is an extremely robust way to mathematically identify a trend. Most professional CTA's evaluate trends in this same fashion.

Asset Class	Long Term Trend
US Large Caps	Neutral
US Small Caps	Bear
US Treasuries	Bull
Emerging Markets	Bear
Gold	Bull
Oil	Bear
EUR/USD	Neutral
AUD/USD	Neutral
USD/JPY	Bear
USD/CAD	Bull
GBP/USD	Bear

And as a quick reminder, we're providing daily analysis in the Comm Center. You can find it each day in the Daily Commentary channel here.

Our newest Operator, Hector, also had the great idea to create an "Introduction" thread. You can find that here. Feel free to tell everyone a bit about yourself. And be sure to check out Hector's story. It's pretty badass.

Good luck in the markets this week. We'll see you in the Hub.