Thomas Kuhn, a well-known physicist, philosopher, and historian of science, is regarded by many as one of the most influential thinkers of the 20th century. In 1962, Kuhn wrote a book titled *The Structure of Scientific Revolutions* which transformed not only the philosophy of science, but the actual way in which scientists approached their work.

One of the more profound concepts introduced in the book is the role of what Kuhn called “paradigm shifts” in the evolution of scientific thought. He defines a paradigm shift as “an important change that happens when the usual way of thinking about or doing something is replaced by a new and different way.” Kuhn argues that it’s these dramatic shifts in thinking that induce periods of rapid scientific advancement. This evolution of commonly accepted beliefs is called the “Kuhn Cycle” (shown above) and applies to many other areas outside of science.
The implication of the paradigm shift concept I find most interesting is that nothing is truly ever “known”; scientific facts are merely transitory opinions which can never be proven absolutely true or false.

I mention Kuhn in this month’s MIR because the paradigm shift concept is part of the mental model we use (something we call regime change) to view markets. It’s applicable to what’s happening now.

Regime change, in its simplest form, is the idea that market cycles are driven by narratives. Narratives are the opinions and beliefs of various participants in the market. In each cycle, one to a few narratives dominate all others (we call these the dominant narratives). And it’s these dominant narratives that make up market regimes.

The process of regime change is similar to the Kuhn Cycle. It’s something we refer to as the “Soros Cycle” because it was George Soros’ work that first got us thinking about the importance of narratives in markets.

The Soros Cycle plays out like this:

An established regime exists and is comprised of a few dominant narratives —>

Narrative drift begins as information starts to challenge accepted fact, which leads to data cherry picking and growing cognitive dissonance —>

Narrative crisis hits because reality has diverged too far from the dominant narrative for the regime to be sustained (narratives always lag shifts in reality) —>

Narrative revolution finally happens when reality forces the majority of people who were reluctant to admit they were wrong to adopt a new narrative —>

Regime change occurs when a new narrative becomes dominant and accepted by the majority of market participants. It’s reinforced by reality which eventually brings us full circle back to the established regime.

We’re in a narrative crisis right now. The accepted wisdom of the last few years has been dominated by narratives of “secular stagnation”, the “central bank put”, and “lower for longer”. These narratives were predicated on the belief that interest rates in the western world would stay near zero for a long time. In fact, many financial pundits and academics seriously stated that “rates might not rise again during their lifetimes”.

2
This lower for longer regime drove markets to price assets (particularly bonds) for an environment where the possibility of inflation and thus rising rates was virtually zilch.

Like all market narratives, this belief was only true for so long, but now reality has changed… which means the dominant narrative must change as well.

Our team used to be unrepenting bond bulls at the beginning of the year when no asset manager wanted to touch treasuries. But over the last few months we saw that the approaching reality didn’t fit the lower for longer narrative — we recognized the regime shift and flipped our opinions and positioning accordingly.

The new market regime will be predicated on the following narrative drivers:

- **Inflation is coming:** Low unemployment equals a tightening labor market which results in increasing wage growth (this cycle should continue for the foreseeable future). Inflation will be buoyed by base effects (which we’ll discuss shortly) from both a bottom in the commodities market and recent low inflation growth.

- **Fiscal spending:** The focus will shift from central banks to governments as the driving force behind both the next leg up in global markets and GDP growth.

- **Deregulation:** This applies primarily to the US at the moment, but Trump’s proposals for deregulation and tax reform are likely some of the first to get passed through the Republican controlled congress.

- **Protectionism:** We’ve been writing about the international shift from cooperation to protectionism and beggar thy neighbor policies. This will drastically affect certain sectors and industries (it’ll benefit some and harm others) and ultimately hurt global productivity growth. We expect this trend to accelerate in the coming year.

- **Rising rates:** Inflation pressures, plus fiscal expansion, combined with across the board tax cuts, means we’re at the very beginning of a rising rate environment. This is very important because it’s a secular shift that will confound many market participants in the years ahead.

- **Fed falls behind the curve:** The Fed has bought hook, line, and sinker into economist Larry Summer’s theory of “secular stagnation”, which is why they’ve been so reluctant to raise rates. Academic types are notoriously slow to react to regime changes. Combine this with the real possibility of the next president further politicizing the Fed and you have a likely scenario that the Fed falls dangerously behind on inflation.
What’s the new dominant narrative that’ll form to create the next market regime? I don’t know. It’s too early to tell. But understanding the fundamental drivers behind narrative creation will at least give us an idea of where things are going and how to position for them.

This chart from Merrill Lynch lays out the asset and narrative rotation at work.

### Base Effects

The base effect is an economic term used to describe an issue one’s confronted with when gauging inflation. Inflation is measured by the amount prices have changed since a previous date, called the base price. The base price can dramatically affect the present measurement of inflation if it was abnormally high or low.

The base effect applies to any measurement that calculates the change in something over a period of time. Take earnings, GDP, and trade growth for examples.

The base effect will have a large impact on markets this coming year. This is because over the last year and a half we’ve seen large declines in many key data points. Going forward it won’t take much of an improvement from these already low levels to make thing look like they’re going well.

Take earnings for example. Here’s the following from Factset (emphasis mine): “For Q4 2016, the estimated earnings growth rate for the S&P 500 is 3.3%. If the index reports earnings
growth for Q4, it will mark the first time the index has seen year-over-year growth in earnings for two consecutive quarters since Q4 2014 and Q1 2015.”

The market experienced an earnings recession over the last 18 months. The bar is low for the next three quarters which should make for easy earnings beats that’ll fuel bullish narrative development.

One of the biggest drivers of the past earning recession was the cratering commodity sector. But now with commodity prices starting from such a low base, it won’t take much of a rise to accelerate inflation. Again, low hurdle = easy win.

We’ll also see this base effect impact beaten down emerging market economies. They’ll not only benefit from bottoming commodity prices, but also the base effect in their high rates of inflation and low GDP growth. Both extremes should make for favorable comparables in the months ahead.

The 2017 market will basically be like a hurdler competing on hurdles that are only 18 inches high. It’s an easy win that everybody will be cheering for… as if they were normal height.

And it’s in here that I think the seed of destruction for this bull market is baked.

**Pavlov’s Dogs**

Most of you are probably familiar with the term “pavlovian response”. Here’s a short explanation via Wikipedia:

> Classical conditioning (also known as Pavlovian or respondent conditioning) refers to a learning procedure in which a biologically potent stimulus (e.g. food) is paired with a previously neutral stimulus (e.g. a bell). It also refers to the learning process that results from this pairing, through which the neutral stimulus comes to elicit a response (e.g. salivation) that is usually similar to the one elicited by the potent stimulus.

The idea, now a central part of behaviorism (a school of psychological thought), was first put forth by Ivan Pavlov in the early 20th century. Pavlov trained his dogs to associate the ringing of a bell with the assumption that they were about to be fed. The dogs quickly developed the biological response of salivating as soon as they heard the bell rung, regardless of whether or not they actually received food.

Now look at the chart below:
This chart from BofA shows how the market continues to set new records in both the speed and aggressiveness in which it “buys the dip”.

The market has developed a strong Pavlovian response:

**Market Selloff = Bell**

**Salivation = Buy Dip**

George Soros laid out why this may be short-term positive but long-term dangerous (emphasis mine).

> Every bubble has two components: an underlying trend that prevails in reality and a misconception relating to that trend. When a positive feedback develops between the trend and the misconception, a boom-bust process is set in motion. The process is liable to be tested by negative feedback along the way, and if it is strong enough to survive these tests, both the trend and the misconception will be reinforced.
The last three major selloffs were caused by important geopolitical events. Events, that before they occurred, were viewed by the market as risky if a certain outcome occurred. These events: Brexit, Trump, and an Italian No vote, all resulted in that “certain risky outcome”, yet markets responded with more aggressive dip buying in each event.

Now here’s why this is important. The overwhelmingly positive market response to each event signals to the populist movement that protectionism and nationalism are economic positives, while geopolitical unions and free trade are not.

It also serves as a signal to investors about the strength of the market (ie, if Brexit and Trump can’t send the market lower, what can?)

The signaling is likely to invigorate the populist movements and their leaders. It will push them to be more aggressive in asserting their policies because they see rising prices as validation. This feedback loop between populist politics and markets will strengthen with each dip bought. This means that the more positive the market’s response, the more aggressive we should expect populist movements to become.

And that’s where things become a problem. In the long-term, protectionism (ie, trade wars and anti-immigration policies) are economically bad. This is a fact. The world will become a poorer place if we erect barriers to both trade and the flow of people between nations. The last time the world entered a secular protectionist regime was in the late 1930’s. Historically, increasing economic non-cooperation between nations eventually leads to armed conflict.

Which brings us to today. We find ourselves at a point where the market and its narrative are becoming overwhelmingly optimistic. This should lead to volatile moves higher in the indices in the coming months. At the same time, that optimism is sowing the seeds for its own end; as reality diverges from narrative once again, eventually leading to another regime change. Here’s Soros to sum things up:

A positive feedback is self-reinforcing. It cannot go on forever because eventually, market prices would become so far removed from reality that market participants would have to recognize them as unrealistic. When that tipping point is reached, the process becomes self-reinforcing in the opposite direction.

Nearly half the S&P’s revenues come from overseas. Enacting tariffs on imports would result in retaliatory responses. Trade wars first lead to higher prices and then inflation.

Forcing companies to keep manufacturing jobs in the US will raise production costs. Those production costs will be passed through to the consumer in the form of higher prices, which
means more inflationary pressures and higher rates. Higher rates means higher financing costs and tighter liquidity.

The bull narrative will go on until these higher rates force the economic reality of protectionism onto market participants. Then this whole self-reinforcing process will work in reverse. My guess is that this won’t happen until the ten year is yielding between 3.25 and 3.5%.

Around The World

Italy: Hell NO

The populist/nationalist theme continues to play out across the globe — first it was Brexit, then it was Trump, and now it’s the “No” vote in Italy.

This past weekend Italian voters said No to a referendum on government reforms put up by Prime Minister Matteo Renzi’s administration. But more than just being a No to reforms, this vote was a No to Renzi’s government, a.k.a. the establishment. Renzi has since tendered his resignation and the odds of nationalist parties like the Five Star Movement and Northern League taking over in 2017 have increased.

Italians are upset. It’s a similar story in Italy as it is in Britain and the US. A majority of the populace feels that the establishment has done nothing to help them in recent years. Unemployment in Italy has stayed high since financial crisis and in response Italians have only gotten further austerity measures passed down from the EU. The continued economic problems have caused a number of social issues as the public and political elite grew apart. The No vote was a message to the establishment that they wouldn’t be accepted any longer.

The vote was also a warning shot hurled at the EU regarding their current arrangement. As we’ve explained in previous MIR’s, Italy is in the midst of a banking crisis. The country’s banks have a severe non-performing loans (NPLs) problem to the tune of $387 billion. A lot of these NPLs also have direct exposure to other large European economies like Germany and France, making the situation a contagion risk for the entire EU.
The EU has been negotiating potential solutions with Italy for over two years with little progress other than heightened tensions between German Chancellor Angela Merkel and Renzi. Many of the EU’s solutions involve the Italian people making sacrifices for the “greater good”, meaning austerity measures and the like to keep the bloc intact. Throwing out Renzi with the No vote was a way to tell Germany and the rest of the zone that the Italians don’t care about the future of the EU. From now on, it’s all about Italy.

The difference between this No vote and Brexit/Trump is that the polls actually got it right. There was no surprise here. Italy’s government fully expected the referendum to fail and were prepared for it. Markets expected it too and priced it in. That’s why we didn’t see much downside movement in Italian bank shares after the decision. Many banks actually saw their prices rally because the expected occurred.
Has the market finally learned from all the “surprise” political results this year? Considering the positive reaction to recent events, it may be so…

In Austria over the weekend, the nationalist Freedom party lost to a pro-European independent. Far right Norbert Hofer was beaten by Alexander Van der Bellen by a narrow 0.6% margin. This is good news for the EU. Even though he won by just a hair, Bellen’s triumph is a sign that the bloc may survive for some time longer. (But the fact that 47% of Austrians still voted for Hoffer shows that the nationalist movement is far from defeated and will likely take over sooner or later.) Markets had a positive reaction to the result.

As we explained in the last MIR, everyone and their mother has been bearish on the Eurozone regardless of the bloc’s improving economic data. And all this negative sentiment has created an opportunity to profit for those willing to be contrarian and buy. Sure the Eurozone is screwed in the long-term, but in the short-term, things aren’t as bad as they seem. It now looks like the market has fully priced in investor bearishness as both “good” news (Austria vote) and “bad” news (Italy vote) have caused prices to rise.

Draghi tends to agree. He recently explained to Spanish newspaper El País that "Political uncertainty is dominant. [But] so far we've seen that in the short-term the response to these uncertainties has been more muted than people expected." This confidence is part of the reason he felt comfortable giving pundits a bit of surprise at the latest ECB meeting.

On Thursday the ECB agreed to extend its QE bond buying program until the end of next year, but to slow purchases from €80 billion to €60 billion a month starting in April. The slowing of purchases is not what the majority of economists and analysts expected. They believed the
political uncertainty caused by the Italian referendum was too big a risk to chance any type of tightening.

The debate among pundits now is whether this meeting marked the beginning of the end of QE. Draghi of course downplayed the reduction in purchases saying that “there is no question about tapering. Tapering has not been discuss today.” His semantics are expected considering “taper tantrum” risk.

In our opinion, this absolutely is tapering. It makes sense that Draghi would start now with the economic data supporting him. Total unemployment in the Eurozone has finally dropped below 10% for the first time in 7 years and inflation expectations have steadily crept higher. The eurozone’s five-year inflation swap rate is now at 1.7%, its highest level since December 2015.

It’s too early to tell exactly what the market thinks. It still needs time to digest the news but we feel this might be a bit of an overreaction on the markets part.
The changes the ECB announced to its QE program will also help banks. Draghi said they would start buying bonds with maturities of one year, down from their previous minimum of two years. This is a signal that the ECB may start focusing on lowering the short-end of the yield curve which is better for banks. Banks make money by “lending long and borrowing short”. Higher interest rates on the long-end increase their profits while lower interest rates on the short-end decrease their costs. This helps their net interest margin (NIM). The better the NIM, the more profitable the bank.

Deutsche Bank (DB) has continued to rally since we covered it in the last MIR. We’re looking to add a position on a pullback.

Credit Suisse (CS) also looks attractive on a break of the $15.85 level.
EUFN, the European Financial Sector ETF, is another good way to get exposure to Eurozone banks. We’d be interested in getting long on a weekly close above $19.08.

The strong action in the financial sector has also helped push the Eurostoxx 50 index (FX) breakout. We’re interested in going long at these levels.

We’ve also recently seen a breakout in the Greece ETF (GREK). This falls under the same theme of an improving economic picture within a backdrop of overly bearish sentiment.
Japan: Doubling Down

While the ECB may start to tighten, the BOJ is still easing in every way it can. The bank recently re-committed to protecting rates by offering to buy unlimited short-term government bonds at a fixed price. This is the bank’s first big step in their yield curve control initiative to keep short-term interest rates low while allowing longer-term rates to rise.

This announcement in the midst of rising global rates reaffirms the BOJ’s resolve to control yields. Governor Haruhiko Kuroda recently explained that “interest rates may have risen in the U.S., but that doesn’t mean that we have to automatically allow Japanese interest rates to increase in tandem”.

The growing interest rate differential between Japan and the rest of the world will continue to put pressure on the yen. We’re keeping a close eye on the currency for another entry point when the bullish dollar trend resumes. Out of all the major currency pairs, we think USDJPY has the largest potential to run. We’re interested in entering a position on a break of the 116.41 level. (As USDJPY moves higher, the yen weakens.)

Currency weakness also acts as a tailwind for Japanese equities. A weak yen makes Japanese exports more competitive which means higher sales and fatter bottom lines for corporates. You
can see below how equities have been rallying in tandem with the depreciating currency. The recent breakout above the $47.12 created a great entry point into the larger bull trend.

The Trump election could be another factor that pushes Japanese equities higher. Trump’s focus on fiscal spending is shining the spotlight back on Abe’s original “fiscal arrow”. Japan already has a massive debt burden with low tax revenues, but Trump’s strategy in the US may give Abe the cover he needs to give fiscal spending another go.
India: “Modi-fied”

Just as millions of Americans felt “Trumped” by November’s election results, millions of Indians felt “Modi-fied” at the exact same time.

On November 8th, Prime Minister Narendra Modi announced that all 500 and 1000 rupee notes would be taken out of circulation (1000 rupees is about $15) in an effort to stymie India’s rampant black market. To understand just how massive this move is, consider that these notes account for 20% of India’s GDP and 80-90% of all its transactions. This is an enormous piece of the economy being uprooted.

These rupee notes can now only be used as coupons of deposit at local banks up until December 30th. And deposits over 250,000 rupees (which is only $3,700) will be heavily scrutinized to prove taxes have been paid. Money that’s found to be untaxed will be taxed the full amount, plus a 200% fine. Basically, if the money is black, you won’t get it back.

This announcement came as a complete shock to the populace, but its “flash bang” nature was necessary to ensure its success. Any warning of the coming changes would allow people to preemptively find new ways to hide their cash. The shakeup it caused was substantial, which is to be expected considering that the black market makes up a third of the country’s $2.4 trillion economy. And while this ploy seems to be effective so far in clearing out the black money, it has come with some negative short-term consequences.

First off, retail consumption has taken a huge hit. The problem with making these notes obsolete is that most consumer transactions are conducted with them. While the old notes are being replaced with new 500 and 2000 rupee bills, the timely mechanical execution of this exchange is difficult. It’s nearly impossible to complete without putting the brakes on the economy. Broad based cash shortages have been severely hurting normal day-to-day transactions. The lack of liquidity has even caused many local markets to revert to inefficient barter systems, dampening economic activity even further.

This liquidity crunch has an even bigger impact on the property market where most deals are done in all cash (mostly black). Property prices are expected to plummet. Nothing is selling because no one is able to buy anything without these notes. The entire real estate market has grinded to a halt. Our team has been hearing stories from various family members in India currently struggling with their real estate investments because of this. Long-term projects with deals lined up years in advance have collapsed in just days with the new ruling. No one wants to do business when there’s no liquidity.
Considering the slowdown in these two essential economic sectors, India’s economic growth is expected to slow significantly. Transaction costs have shot through the roof and productivity is getting killed each day as consumers are stuck in massive ATM lines trying to exchange their notes. Brokerage house Ambit Capital “expect[s] GDP growth to decelerate from 6.4 percent in H1FY17 (as per Ambit estimate) to 0.5 percent year-on-year in H2FY17 with a distinct possibility of GDP growth contracting in Q3FY17”. Investors have preemptively been removing their money from India in anticipation of the slowdown. Economic data has also already begun to show damage with the latest PMI numbers coming in at 52.3 in November, a decrease from 54.4 in October.

We’ve praised Modi’s strength as a leader in the past and cited him as one of the primary reasons we’re bullish on India over the long-term. This recent demonetization play further solidifies our belief. The negative short-term consequences are exactly that — short-term. Modi made a strong and effective move by forcing a “hard reset” on the economy. His choice to take temporary pain now for future prosperity is the exact opposite of what we see most short-sighted, politically motivated government officials do. **Modi’s medicine is exactly what India needs.** His plan is to force the hoards of informal money back into the system. Not only will this increase the tax base (only 1% of the population currently pays income taxes), but it’ll also significantly increase bank liquidity.

India’s banking sector has significant problems with liquidity and nonperforming loans. This has been restricting lending to smaller enterprises and individuals, slowing the economy. In the past the central bank has tried injecting money into the system through open market bond purchases but this was limited. The inflow from demonetization will be far more effective in revitalizing the sector. Within just the first week and a half, $22 billion was brought into the system. Brokerages are estimating that $45 billion could brought in by the December 30th deadline.
Clearing the massive amounts of black money and the subsequent corruption that plagues the Indian system is essential to the country’s economic success over the long-term. You can't expect much foreign investment and development when you’re forced to bribe someone even to get a simple driver’s license. We’re excited about investors turning bearish on India. We believe they’re wrong. The current route in equity prices will only give us a better entry to the longside down the line.
Deep Dive: Weed Stocks — Still Smokin’

We’ve been asked quite a bit lately about our thoughts on marijuana stocks.

To be honest, until now, we really didn’t have an opinion. It hasn’t been an industry we’ve paid much attention to.

So we figured now would be a good time to dig in and find out if there are any trades to be made… or if it’s mostly just hype.

I occasionally get asked by my old buddies in the security industry if I’m interested in working various high-threat gigs. Not too long ago, one of them asked if I wanted to work a part-time assignment helping a large West Coast medical marijuana distributor safely transport their cash from different dispensaries to a Federal Reserve bank (commercial banks are unwilling to hold their deposits due to marijuana still being illegal federally).

The pay being offered was a solid six-figure income, which again, was only for part-time work. I thought this seemed high (no pun intended) until I found out how much the company was doing in sales. It was a lot. They had been around for roughly four years and were already doing close to a billion in revenue. They could afford the high paid security.

This obviously got me thinking that there may be something here. To follow is what we found.

The Macro State of Marijuana

The macro outlook for the marijuana industry is changing fast and mostly in ways that bode well for its future.

Twenty-six states and the District of Columbia have now legalized marijuana in some form or another (ie, for recreational or medicinal use). The trend towards full legalization is unlikely to abate anytime soon.
The big reason why, of course, is money — lot’s of it. And not necessarily the money the marijuana companies are set to make, but the state governments that are looking for a windfall by taxing this new industry. For example, Colorado, the first state to legalize marijuana in 2014, brought in $70 million in “green” taxes for the 14’-15’ fiscal year. That’s roughly double the tax revenue generated from alcohol. And as of August this year, the now billion dollar marijuana industry in Colorado has already produced more than $124 million in tax revenue for the state.

This past January I travelled through Denver for the first time in years on my way to do some ice climbing with a group of veterans up in the mountains. The landscape had completely changed. There was construction going on all over the place and there were more dispensaries than Starbucks. It was a bit excessive if you ask me, but it serves as proof of the product’s strong market demand.

Anyways, other state legislators, almost all of whom are presiding over horrible deficits and ridiculously underfunded state pension funds (the US’ underfunded pension crisis is massive and real and is something we’ll cover in a future MIR), have been watching Colorado closely as the answer to their self-induced woes.

Now before the November election there was only a handful of members of Congress who presided over “legal weed” states. But with the vote to fully legalize in California, that count now stands at more than a 100 — nearly a quarter of congress. This will have a significant impact going forward.

Once these other states start seeing the tax money flow in from the marijuana industry, they’re going fight tooth and nail to keep it coming. The trend is, in my opinion, unstoppable.


And secondly, it’s not exactly clear where Trump personally stands on the matter. Before he became a politician he was quoted numerous times publicly stating that he thought marijuana should be legalized and taxed. But since he started running for office, this view changed to something a lot more ambiguous in regards to recreational use, while still favoring the legalization of medicinal pot. I don’t think this will be be a topic that Trump wants to rock the boat over; again, it’s all going to come back to the state budget gaps and underfunded pensions at the end of the day.
Here’s a chart via *Bloomberg Gadfly* that shows the estimated “recreational” marijuana demand in the US at approximately $45 billion annually; outpacing both the wine and candy industries. Combine this with the medical side that’s expected to gross roughly $7 billion this year and you have a very large market without clear, dominant winners.

**Sales So High**
Annual U.S. sales for a variety of vices

![Bar chart showing annual U.S. sales for various vices](chart.png)

Sources: Euromonitor International, Marijuana Business Daily

Note: Candy data is 2015, while the rest is from 2014.

The CEO of Privateer Holdings, a cannabis focused private equity firm funded by Peter Thiel (of Facebook and Paypal fame) to the tune of $75 million, recently said this about the present opportunity:

“This will shake out similar to the alcohol industry or the soft drink industry, where economies of scale are very important... You want to have first-move advantage, and I think it will be aggregated to just a handful of companies.”

Privateer Holdings is operating on the following three fundamental beliefs:

1. **Cannabis is a mainstream product consumed by mainstream people.**
2. **The end of cannabis prohibition is inevitable.**
3. **Brands will determine the future of the cannabis industry.**

Considering the way things are unfolding at the moment, it’s difficult to argue with that premise. So called “vice” stocks are historically very good long-term performers in the market, with tobacco stocks leading the group by a wide margin.
The above chart shows what a $1 dollar investment in Altria (largest US tobacco company) and the S&P 500 back in 1968 would equate to today. Quite the outperformance.

According to financial writer Morgan Housel, “One dollar invested in tobacco stocks in 1900 was worth $6.3 million by 2010. That’s 165 times greater than the average industry.” Looks like there’s some truth to what Napoleon said about men being more easily governed through their vices than their virtues… vices are obviously pretty darn important to us.

Now I don’t expect the marijuana industry to grow quite as large as the tobacco industry (though it’s possible). But even if it remains just half the size, there’s enormous investment opportunity here.

**The Micro of Marijuana**

Marijuana is currently a frontier market that’s at the beginning stages of transitioning into a mature market. The problem with frontier markets is that there’s a ton of horse dung for every one ounce of viable investment opportunity. And there’s really not much of a history to help the investor discern between the two.

That’s why when investing in an extremely young industry, you need to treat your trades/investments like out-of-the-money option plays. Only put a position on that you’re okay
losing completely. If you lose 100%, so what, but if you 1000x your position or more, then it ends up being a pretty nice trade.

We went through pretty much all of the listed, over-the-counter (OTC), and Canadian TSXV traded marijuana plays. Since there’s little financial history and many of these are startups, we had to evaluate the stocks in terms of the management teams’ experience and credibility. We looked at their ability to execute, the prospects of their stated business mission, and their financing power to carry out said mission. Not easy metrics to evaluate a stock on — definitely something I’d prefer not to do.

Below are the two stocks that we believe to be the most interesting at this time. They descend in order from very speculative to extremely speculative.

GW Pharmaceuticals (GWPH) is a UK-based drug company that’s likely to be the first to gain FDA approval for a marijuana-derived pharmaceutical. They just completed stage-3 trials with successful results and are expected to send their application to the FDA sometime next year.

The company specializes in the research, development and commercialization of a range of cannabinoid based medicines. It’s primary product is Sativex, which is a spray that helps treat...
symptoms from a variety of illnesses including: Multiple Sclerosis and also neuropathic and cancer pain. Their other products seeking FDA approval will target diabetes, schizophrenia, and epilepsy.

I have a relative who’s suffered from severe epilepsy her entire life. It debilitated her to the point where she has had to remain under her parent’s care well into adulthood. A couple of years ago they read on the internet about the wonders that Epidiolex (GWPH’s epilepsy drug) was having in preventing seizures. Since they couldn’t buy it within the US, they ordered the drug through an online agency. The drug, according to them, has worked wonders and is leaps and bounds better than every pharmaceutical they previously tried.

It’s estimated that if approved, Epidiolex could do $3 billion a year in sales by itself. GWPH’s current market cap is just under that amount. The company is planning to partner with drug giants Novartis and Bayer once US drug policies become more relaxed. The company is still a gamble, but in the marijuana space it’s the most legitimate and credible bet around.

Aphria (APH on the TSXV and APHQ on the OTC market) is a Canadian marijuana producer and one of the few listed pot stocks that’s already turning a profit; which is why it’s already up over 320% this year and now has a market cap of more than $400 million.
The main reason I like this pot stock is because of its management team, particularly its CEO Vic Neufeld. The guy has a lot of admirable experience. Neufeld was formerly the CEO of Canadian vitamin company Jamieson Laboratories Ltd. for over two decades. The company experienced immense growth under his stewardship and was eventually sold for $300 million in 2014.

Neufeld is investing in the company’s capacity to handle future demand — which he believes will be multiples of what it is now. Aphria is investing a quarter million dollars into its marijuana production capabilities which will more than triple its current output.

The company has also partnered with MassRoots (a large marijuana media and social network) to help build brand awareness.

The stock is incredibly expensive by any metric, but with recreational marijuana in Canada expected to be approved sometime next year, there’s a lot of potential opportunity for those few companies that properly execute and grab market share. Under Neufeld’s experienced guidance, I think Aphria could be one of them.

There’s no doubt that the marijuana market is still suffering from a bit of over enthusiasm driven by yield-starved investors. But that’s also how every industry looks when it’s transitioning from frontier to mainstream. So like we said at the beginning, investors need to approach with extreme caution.

Marijuana stocks should be treated as OTM option plays or actively traded in the more liquid issues on small size. We may be doing the latter in APHQC if it breaks out in nice volume from its current technical pattern.
Quant Review

Volatility Landscape

In last month’s MIR we explained our post-election plan to “sell the news”. The idea was simple. Investors would overprice tail risk into the election and once the uncertainty passed, they would unwind their portfolio hedges leading to a nice sell off in the VIX. Whether we got Hillary or Donald didn’t matter. Removing the uncertainty was all investors needed to gain their confidence back.

That idea paid in spades. You can see from our term structure indicator below, the curve went inverted (hit the purple trigger area) in the days leading up to the election. That was the signal to “fade the fear.”

![Volatility Term Structure](image)

We shorted volatility by going long VIX puts and have since enjoyed over 100% gains on the position. The nuttiest thing about the post-election VIX crash was that it was the 5th most intense tracking back to 2004! The only occurrences that beat it were a random day during the 2008 crisis, the Euro crisis, the flash crash, and a forgotten about time back in 2006 when the Fed was talking about inflation concerns.

See the table below:
The moves around Brexit made the top 20 list too. 2016 was a historic year for volatility trading and a telling signal of how much it’s changed since the advent of VIX derivatives and ETPs. Both professional managers and retail traders have become obsessed with these products. Volume has steadily increased since inception to the point that the most popular VIX products trade more shares per day than any stock on the S&P 500! Crazy right? Traders are throwing aside boring ownership in real companies for bets on psychology and sentiment (which is what the VIX really represents).
This explosion in popularity creates swings in VIX that dwarfs anything from 10 years ago. If the trend continues we can expect more and more crazy V-type bottoms where the market experiences intense mini flash crashes, followed by rip your face off rallies. This will only add stress to the passive buy and hold crowd, as they’ll have to deal with an intense one or two day “end of the world” drawdown. But from a volatility perspective, more participation, especially from people looking to gamble, should benefit smart VIX speculators.

It’s become trendy “to call the next 2008” to benefit from a huge payout should VIX hit 80. The fame and fortune that comes with calling a top is tempting to those trying to make a name for themselves in a crowded industry. On top of that, allocators have forced bullish portfolio managers to keep their drawdowns capped at an unrealistic level. Every time the market falls they have to offload risk to avoid hitting drawdown limits (even though it’s a losing hedge over time).

These behavioral drivers cause panic buying in VIX ETPs and SPX puts every time the latest macro event approaches (which seems to be about once a quarter these days). This has caused VIX to consistently overshoot the real amount of market risk on every down move. This sets up extremely lucrative short trades when the fear subsides and VIX crashes down to normal levels.

Betting on a higher VIX is a losing game in the long run. There are far more false signals than there are correct ones. The signals that do work only show up a few times a decade, which is why we tend to focus on the short side. We’ve done extensive research on the long side but have yet to find a truly reliable signal. If any of you have some ideas, we’re all ears.

2016 couldn’t have been a better year for short vol players.

The recession fears, Brexit, Trump, and Italian referendums were all opportunities to benefit from historic VIX crashes.

We’ll keep watching this theme into next year and time our short VIX with the term structure indicator. If our 1H 2017 bull market scenario plays out, we could see another year of good profits in our Income Portfolio.
U.S. Stocks

Nowadays it’s tough to find a reason to not buy U.S. equities. There’s a pile of indicators, fundamental and technical, pointing to sustained strength. The bears are running out of reasons to be bearish, other than general valuation levels, which are poor indicators of future 12-month performance anyway.

The Trump breakout in equities began the seasonally supported market bull-run. Historically, November and December have been fantastic times to go long. The last two months of the year come with a combination of slow holiday trading and end-of-the-year window dressing which creates a strong tailwind for stocks. The last thing Wall Street wants is a nasty year-end sell off that cuts their performance bonuses in half. The ones already up for the year hold pat, while lagging funds performance chase to avoid redemptions. That’s the funny thing about fund management. There may be asymmetric market risk involved with pressing longs into the end of the year, but for fund managers, the business risk of losing AUM from lagging in a bull market is a much larger threat.

We expect the “Santa Claus” rally to continue into Christmas and New Years. The graph below, courtesy of Nautilus, shows the seasonality stats for the last 30 years. December is the most bullish month, finishing up 23 times in the last 30 years.
On top of positive seasonality we have strong market breadth too. Around 70% of stocks are trading above their 50-day and 200-day moving averages.

This advance is being lead by high beta stocks and cyclical sectors which signals we’re entering a true “risk on” environment. The graph below is the ETF that tracks high beta stocks. It’s hitting all-time highs after making a full 50% retracement of the entire 2012-2014 rally earlier this year.

Money rotated out of defensive sectors and straight into financials and industrials. The dominant narrative continues to be that we’re entering a rising rate environment with a real estate builder as president. Whether or not Trump can follow through on his plans is still largely unknown. This rotation could easily be a false trend. But… the momentum is too strong to fade. We’ll stay focused on buying strong stocks in strong sectors until we get more clarity on Trump’s first 100 days.
We’ve recently started tracking Bank of America’s sell side consensus indicator to measure sentiment. It’s a nifty little tool that compiles Wall Street stock sentiment. You can see the latest update in the graph below:

It’s interesting that even with the strong rally in November, the indicator hasn’t signaled any type of “irrational exuberance”. It’s hovering in the buy zone (below the green line) and is working its way up into “neutral” territory. This supports the scenario of one more blow off top to tear down the “wall of worry” and move the rest of investors to the bull side. The bull bandwagon is filling fast… but it ain’t full yet!

And finally our recession indicator in the Hub, which plots unemployment against its 12-month MA and 36-month MA, has fallen below both averages once again. A recession is almost impossible until unemployment regains upward momentum.
There’s just too many indicators pointing to higher prices for us to be bearish, especially in the short-term. Bears will pull the valuation card like they always do, but valuations don’t have any predictive power in the near term. The chart below plots 1-year SPX returns against forward PEs. You can see dispersion all over, implying little correlation.

The current forward P/E sits smack dab in the middle at 18.2. There’s precedent for the market to move up as much as 30% AND down as much as 30% from the current valuation — not too helpful.

Evidence overwhelmingly lies on the side of the bulls for the next 3-12 months. We’ll need to see a significant turn in macro data and a breakdown in equity momentum before becoming bearish again.

**The Euro and The ‘99 Analog**

In more ways than one, the macro backdrop of today resembles the one from the late 90s. Trouble in Asia and Russia spread throughout financial markets causing the Fed to back off on rate hikes — similar to what we saw earlier this year when Yellen came out with ultra dove rhetoric to “stick-save” the markets near March lows. In the 90’s things recovered, the storm cleared, and Greenspan began tightening again into a ripping stock market.
During this time the Euro broke key support levels and sold off big time to a final low around 0.85 to the dollar. We once again have this same technical and fundamental backdrop in the Euro now. Key support at 1.0458 has a shot at getting taken out and sparking another strong move down. The chart below from Citi FX illustrates the analog.
We’re highly interested in continued stabs to the short side here. The Euro recently squeezed current shorts out on its third test of support after the Italian referendum news. We’re looking to enter a position below recent lows.

**Bonds**

Bonds have retraced the entire up move from the beginning of the year, putting in a potential secular top. The futures have been in a perpetual “oversold” reading for all of November and
December. Longs continue to try and pick a bottom with no success. The market is due for a bounce but the COT positioning data shows relatively mild readings. Hedge funds and institutional investors are at the middle of their 5-year percentile.

Longs hoping for a sharp squeeze are likely to get disappointed since there isn’t an overwhelming amount of leverage stacked on either side. We expect bonds to work themselves sideways for a while before making their next move higher or lower.

If you absolutely need to quench your contrarian bug, check out the January puts in TLT. IV is relatively high, making the put sale an attractive trade. You can take a shot on some short puts once historical vol (the pink line) rolls over. That will signal the beginning of a compression process where TLT is likely to range.
The yuan depreciated as much as 2.5% since last month (the yuan weakens as USDCNY trends higher). The currency has seen some respite from its downtrend over the last few weeks, but as January rolls around, we expect the devaluation to continue along.

It will not be a happy New Year for the Chinese government when currency exchange limits are reset for its citizens. Come January 1st, individuals will be able to exchange up to $50,000 worth of yuan into foreign currencies. With how much the yuan has weakened this year, you can bet the entire populace is patiently waiting to flood that quota. In January of 2016, the government’s foreign-exchange pile fell by almost $100 billion as citizens traded in their cash. We can expect an even bigger hit in 2017 with most of the populace expecting further yuan weakness in the future. China’s foreign-exchange reserves have already been hard-pressed this year. In November alone the stockpile shrank by $69 billion, the 5th straight month of declines and the worst since January. Reserves are now at the lowest level since March 2011.

These reserves keep dwindling even with increased currency regulation. The government recently enacted new rules restricting how much multinational companies could move out of China. These companies used to be able to sweep $50 million worth of yuan in and out of the country without documentation, but that number has now been decreased to $5 million.
The State Council also announced tighter scrutiny of Chinese companies’ overseas deals. As the Wall Street Journal reports: “Targeted for particular scrutiny by the pending measure are “extra-large” foreign acquisitions valued at $10 billion or more per deal, property investments by state-owned firms above $1 billion and investments of $1 billion or more by any Chinese company in an overseas entity unrelated to the investor’s core business.”

These efforts to clamp down on currency flight have sparked concerns that the government may also adjust the individual currency exchange quota in January. We don’t think this is likely. Back in 2007, the exchange cap was raised from $20k to $50k a person in an effort to open the economy. Reneging on that increase would send a signal that could do more harm than good because of the panic selling it would cause. The quota will likely be held steady and we’ll see the outflow come January.

Tracking

The following are a few trades we’ve mentioned in past MIR’s. We’ll continue to monitor their situations to look for new entry points on winning themes.

Long MTL

The Russian miner (MTL) that we first mentioned in October broke the $5.19 level and shot up another 30% before finally turning around. From the original $2.92 breakout, MTL climbed almost 130%. We expect the stock to consolidate sideways for some time as it digests these gains.
The top in bonds (TLT / ZB) came just a few days after we discussed the bubble in November’s MIR. The down move did not surprise us, but its relentlessness did. It’s been tough trying to establish a short position with how quickly prices moved. But as we’ve explained, a long-term generational top like this is a process, not a one time event. There will absolutely be another setup down the road. Bonds have a long way to go.
Short AUD/USD

Our short Aussie dollar play worked out thanks to post-election dollar strength. The initial thrust has now retraced about half way, where it will likely consolidate for a period of time before continuing its trek lower.

![Chart of AUD/USD](chart1.png)

Long DB

Since the $15.23 breakout level we were watching last month, Deutsche Bank (DB) has climbed almost 26%. We expect it to keep moving higher as we explained in the Eurozone section. A break of the $20.55 level would be a good area to either add to or establish a new position. The other option is to wait for a pullback to the original breakout.

![Chart of DB](chart2.png)
Long CS

Though a volatile ride, our previous target Credit Suisse (CS) travelled 16% from a break of the $13.90 level. The next area to enter is on a break of the $15.85 level.

Short FSLR

First Solar (FSLR) dropped over 30% from the retrace entry we were watching. It will likely continue to consolidate around this area until the broader market turns.
Below are potential targets we’re looking to execute on based off broader macro themes.

**Long IPI**

Intrepid Potash is another sentiment turnaround play. We entered the stock at $1.29 and the stock has risen nearly 100% in just a few weeks. IPI is the only US producer of potash and supplies approximately 10% of the country’s annual consumption. Potash is used as a fertilizer in growing much of our food supply.

Agriculture as a whole has been getting its teeth kick in the last few years. The sector has been plagued by over indebtedness and overproduction. Simply put, they borrowed and built too much. The sector has long been paying the price for this over supply.

When trading these cyclic commodity stocks the key is to focus on capacity shifts and not earnings. Earnings will always follow the turns in capacity and the stock price will lead earnings. You want to get in before the earnings have recovered, but after the washout has run its course. That’s the situation we believe we have here with IPI. Capacity has been coming off the market and soft commodity prices are starting to turn. IPI could be a $6+ stock or higher in half a year’s time.
Long LPG

Dorian LPG is a liquefied petroleum gas shipping company which owns and operates 22 modern VLGCs. This is another sentiment turnaround play and on a company with hard assets, which is another thing we’re looking for as we move into an inflationary environment.

LPG is run by one of the best in the business, John Hadjipateras. He’s a fifth generation shipper and knows the business better than anybody. He and the rest of the executive management team started loading up on shares earlier this year. Large relative insider buying is always a good sign when a stock is trading at depressed prices. With a TTM P/E ratio of 8 and the shipping market turning around, LPG makes an excellent value play that can provide buyers with a big payout.

Long WLL

Whiting Pete Corp is an oil and gas exploration and production company that operates in the Rocky Mountains and Permian Basin. This is a well run E&P company sitting on prime energy real estate. With the new administration coming into office and their promises to roll back regulation — specifically that concerning environmental regulation — we should see a sharp continuation in the energy stock recovery and WLL is one of our favorite plays on this theme.

One potential risk that will have to monitored closely is the dollar bull market. Should the USD continue its swift upmove from here, then the rise in oil prices is liable to reverse.
**Portfolio Snapshot**

### Macro Ops Strategic Portfolio

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<th>Asset Class</th>
<th>Position</th>
<th>Size</th>
<th>Cost Basis</th>
<th>Risk Point</th>
<th>Open Risk</th>
<th>Target 1</th>
<th>Beta (Yr)</th>
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### Metrics

**Exposure Breakdown**

- **Equity**: $106,611.00
- **Commodity**: $0.00
- **Fixed Income**: $9,400.00
- **Forex**: $0.00

**Total Open Risk**: $123,081.00

*Updated on 12/8

### Macro Ops Income Portfolio

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### Scenario Analysis/Stress Tests

- **Worst Case**: 
- **Worst Drawdown**: 

**Updated on 12/8**

### Macro Ops Tactical Portfolio

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### Metrics

**Exposure Breakdown**

- **Equity**: $45,692.92
- **Commodity**: $12,721.10
- **Fixed Income**: $0.00
- **Forex**: $0.00

**Total Open Risk**: $58,414.02

*Updated 12/8*
# Asset Allocation Weightings

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*For more information about real time portfolio updates please email alex@macro-ops.com*