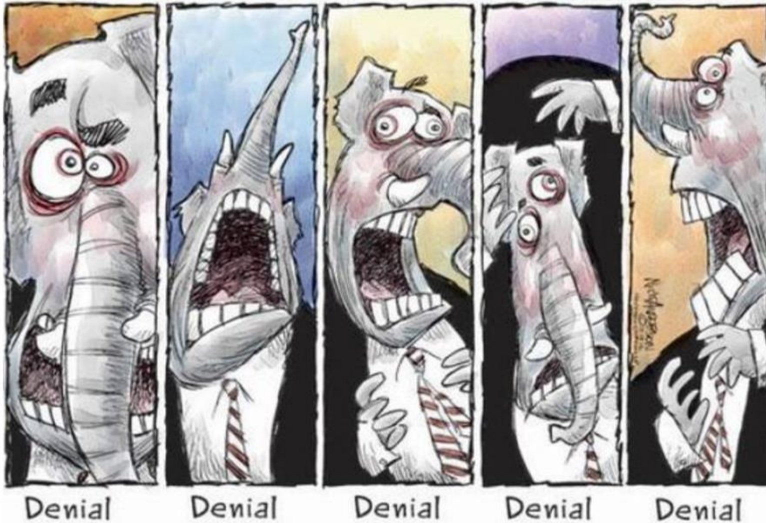
Market Overview: The Five Stages Of Disbelief



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The following is an excerpt from a weekly note we wrote back in September. It's a relevant primer to what we're about to discuss:

> *There is timing in the whole life of the warrior, in his thriving and declining, in his harmony and discord. Similarly, there is timing in the Way of the merchant, in the rise and fall of capital. All things entail rising and falling timing. You must be able to discern this. In strategy there are various timing considerations. From the outset you must know the applicable timing and the inapplicable timing, and from among the large and small things and the fast and slow timings find the relevant timing, first seeing the distance timing and the background timing. This is the main thing in strategy. It is especially important to know the background timing, otherwise your strategy will become uncertain.*
> ~ Miyamoto Musahi
>
> Miyamoto Musahi was a renowned Samurai and Ronin (meaning he served no master) in Japan during the early 17th century. He had a unique style of fighting with double blades which was apparently quite effective; he racked up an undefeated record of 60 duels. In his later years he wrote The Book of Five Rings — a work similar to Sun Tzu's Art of War that covers strategy, tactics, and philosophy through the scope of sword fighting, but that's also applicable to life in general.

> In *Five Rings*, Musahi talks about the importance of timing and maintaining one's awareness of the ebb and flow inherent to life and war.
>
> He hits on the importance of "first seeing the distance timing and background timing." The trading equivalent to these are price action and macro. Price action (distance timing) signals where things stand now and where they're possibly headed in the near term (0-3 months). Macro (background timing) tells us where the larger forces and imbalances are. It provides us with a gauge of where the large risks and opportunities lie. Both sections of time affect one another, so the ebb and flow of the battlefield (market) is constantly evolving in a reflexive loop.
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> Musahi notes, it is "especially important to know the background timing" because that is the more powerful force that will eventually bend and dominate the near-term. It's when these different timeframes line up that you get the most powerful and profitable trends.

At Macro Ops we're continuously gaming the distance (price action) and background (macro) timing of markets. Since the game is fluid, this becomes an endless process that we approach with humble curiosity.

It helps to start at the top with the macro to get an idea of what your background timing is. Knowing the direction of the larger currents makes it easier to surf trends with ease. It's best to keep it simple. As old Livermore would say, "the thing to do was to be bullish in a bull market and bearish in a bear market."

Let's walk through the anatomy of a bull and go over the tools we use to time macro. We'll then apply this framework to analyzing where we are today.

This process will ensure that you're bullish in a bull market and bearish in a bear market.

Simple.

The Five Stages of Disbelief

Bull markets progress in five stages: three up moves intermingled with two corrective moves.

Just to clarify, this isn't Elliott Wave Theory. To all you EWT practitioners… PLEASE don't email us saying we've labeled our 2 wave on the wrong pivot. We're purposefully rough in labelling these market stages. They aren't used for predictive purposes, but more so as an approximate rubric to help section and label different parts of a market advance.

Similar to how Bridgewater divides the long-term debt cycle into five different stages of sentiment and social mood, we've done the same, but with the short-term debt cycle.

We call these the **Five Stages Of Disbelief**.

A bull market advances as bears convert to bulls. The greater the disbelief in the rally, the more fuel it has to keep running. It only ends when demand is exhausted… which happens after most of the bears turn bullish. All bull markets constantly climb this proverbial "wall of worry".

In his latest book, The Socionomic Theory of Finance, Robert Prechter notes that, "Because herds are ruled by the majority, financial market trends appear to be based on little more than investors' mood… "Social mood" we postulate, is the net mood of the populace, shared through the herding impulse." This "mood" can be traced through the progression of every market cycle.

Each stage in the Five Stages Of Disbelief is marked by a distinct sentiment and social mood. Understanding and tracking this helps you stand apart from the herd as you objectively watch these stages unfold.

Let's break each one down:

1. **Stage 1 - Seller Exhaustion:** The bear market ends as selling exhausts itself. Fear is pervasive and dominates the news. Nearly all investors who stampeded for the exits are finally out. Most of the selling pressure is relieved. A new bull market now begins. Extremely depressed valuations create bargains as opportune buyers drive the market up swiftly. The advance is typically quick and marked by extreme disbelief. Social mood is pessimistic and the dominant narrative is filled with caution. Most believe the market still has further to fall. *(Each of the magazine covers to the right were published during each stage of the current cycle. You can see the clear progression of herd mentality and social mood.)*

2. **Stage 2 - Bearish Vindication:** Stage two begins when those who bought into stage one become skittish after quick gains. Social mood is still extremely negative and buyers begin to take profits as short sellers hammer the market on expectations of another leg lower. Those who sold at or near the bottom of the last bear market feel vindicated and pat themselves on the back for their wise prudence. Things look bleak.

3. **Stage 3 - The Balance:** The third stage starts to the disbelief of the majority. Social mood still remains highly negative. The news is bearish and there's plenty of talk about false rallies. But as this stage progresses, more and more bears are driven back into the market. One of the most powerful market forces, the fear of missing out (FOMO), starts becoming a driver of investor participation. The third stage is often where the meat of a bull market's advance occurs. It's relentless march higher converts more and more disbelievers into buyers. Social mood tends to balance out about half way through. There's still plenty of bearish talk, but there's also serious chatter about the economy improving.

4. **Stage 4 - Bears Last Stand:** Stage four begins as the remaining bears scream about a market top, exclaiming that this imprudent advance has gone on too long! Valuations are high and the Fed is raising rates. The market is *clearly* due to mean revert — or so the bears say. There's still a bit of negative news reporting, but on the whole, social mood has turned more positive than not. Stage four sees a minor

correction, but this is widely viewed as a buying opportunity. Since most investors didn't get into the market until the later part of the third stage, after missing much of the move, they're certain to not make the same mistake twice.

5. **Stage 5 - Bearish Capitulation and Euphoria:** The market advances once again, sounding the death knell for bears. Most of them finally capitulate and buy into the market. The pain of FOMO becomes unbearable during this stage. Pullbacks are shallow and quickly bought. Retail investors pile into the market and margin debt explodes as they leverage up to buy more stock. News and social mood escalate from good to euphoric. Stage five is also when the economy runs the hottest, creating plenty of confirming evidence for buyers to validate their bias. This stage progresses until buyers literally exhaust themselves as the market becomes crowded into unsound and overvalued positions.

It's not easy standing apart from "social mood" and recognizing it for what it is. We're socially herding creatures. It's seared deep into our evolutionary wiring.

It's funny how nearly every investor claims to be a contrarian. Obviously that can't be so. The truth is that the vast majority of us fall into the herd.

To turn to Robert Prechter again, he notes that "investor thought is not conscious reason but unconscious impulsion. The herding impulse is an instrument designed, however improperly for some settings, to reduce risk… not straying from the group induces feelings of safety and well being. Therefore, investors in the aggregate — whether they are buying in uptrends or selling in downtrends — are always acting unconsciously to reduce risk, thanks to the emotionally satisfying impulse to herd."

He's essentially saying that investors' real fear isn't losing money, but being apart from the crowd and losing money. A loss is much easier to stomach if the herd is losing with you. It's an interesting take and one in which we mostly agree.

Now let's turn our attention to this bull market.

It's currently the second longest bull going back to the 1940s. It's also been one of the most hated bull markets in history. This has been a positive. Remember, the greater the disbelief, the more fuel for the market to run.

This bull market has benefited from having to climb a Mount Everest of worry. The bears have been pervasive, relentless, and convincing in their dire predictions.

S&P 500 Bull Markets Since WWII

	Months it lasted	Total % gain
10/1990-03/2000	113	417
3/2009-unknown	96	249
6/1949-8/1956	86	267
10/1974-11/1980	74	126
08/1982-08/1987	60	229
10/2002-10/2007	60	101
10/1957-12/1961	50	86
5/1962-2/1966	44	80
5/1970-1/1973	32	74
12/1987-7/1990	31	65
10/1966-11/1968	26	48
5/1947-6/1948	13	24

Source: CFRA/S&P Global

FORTUNE

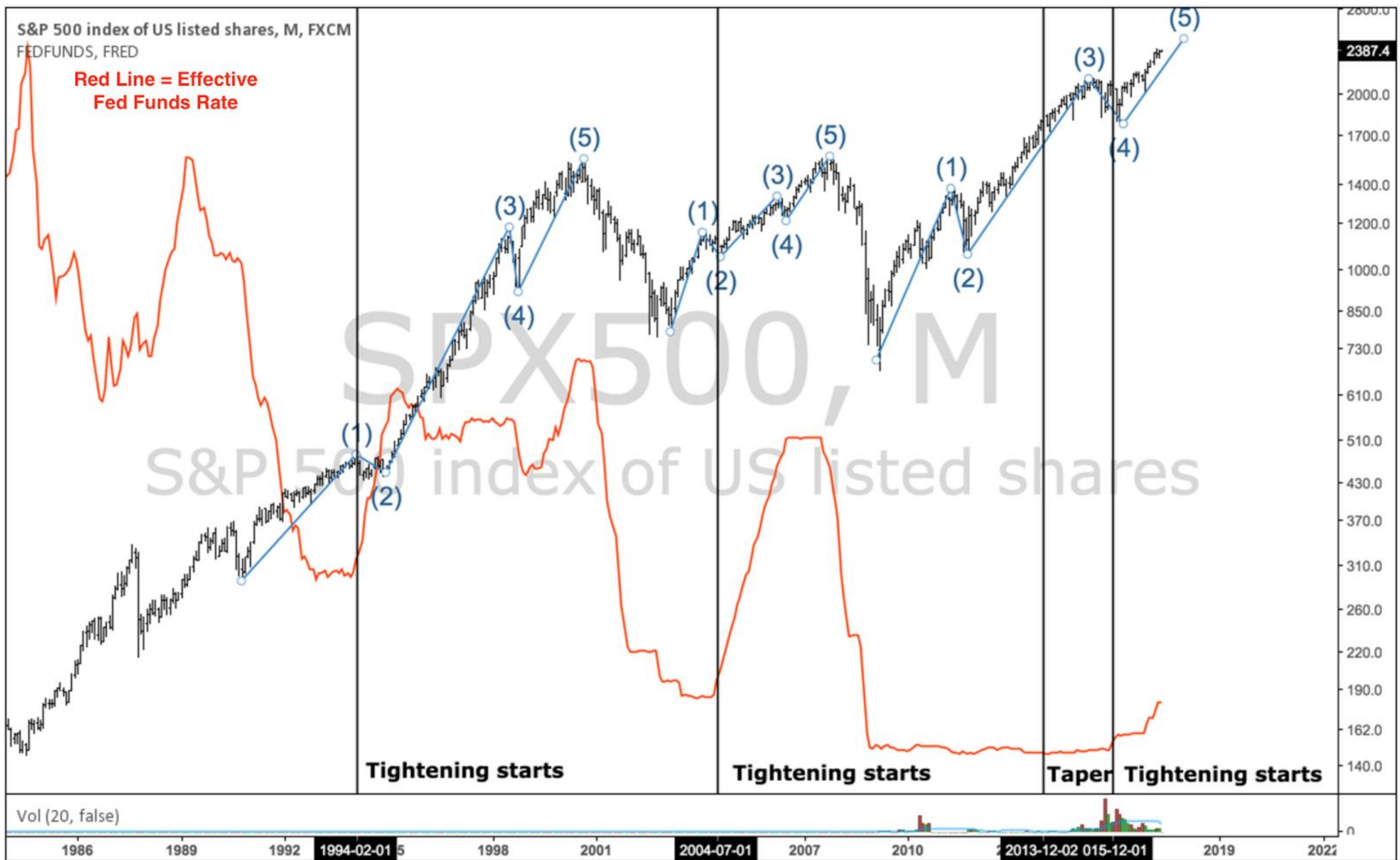
Social mood has been markedly low the entire cycle. The financial crisis of 08' deeply scarred investors as well as the consumers and business owners who drive the economy.

This is partly why the recovery has been so tepid. But this negative sentiment and slow growth have acted as enormous tailwinds for equity prices. This isn't just social mood, there's also a direct mechanism at work here.

Even — or we should say especially — our monetary authorities, as in the Fed, are susceptible to adopting the common thought and social mood of the herd.

Members of the FOMC who control credit and drive the short-term debt cycle are psychologically scarred from the Great Financial Crisis too. That's why central banks around the world have been so hesitant to take their foot off the gas and tighten.

Take the chart below for example. Typically the Fed begins to raise rates towards the end of the second and near the start of the third stage. But in this cycle, the Fed didn't even begin to taper its quantitative easing until well into the third stage. And it didn't start tightening until the end of the fourth.



Social mood and sentiment aren't just ephemeral concepts that mysteriously work their way through investor behavior to drive stocks higher and lower. There's a direct and logical mechanism in which they function. This all operates on a continuous reflexive loop — sentiment drives behavior, which in turn affects monetary and fiscal policy, which then impacts sentiment again.

It's a headache inducing concept, but that's why this game is hard. There's so many variables we need to track while at the same time overcoming our biological filters and cognitive shortcomings. That's what it takes to play the game at a higher level, from outside the herd.

Anyway, turning our attention back to today…

We first wrote in April of last year that we were entering the final and fifth leg of the bull market. The analog we used was 98'- 99'.

There were many similarities with the rise of the dollar and the collapse in commodities and emerging markets. The Federal Reserve also backpedaled on raising rates in both instances.

But the one big difference between the periods was sentiment. During the last few years of the tech boom, sentiment clearly reached euphoric levels. The market was missing this component at this time last year.

This is why we refer to this market as a three-legged bull.

It has until very recently, lacked the fourth leg of the bull which is extreme optimism. While we're seeing small pockets of excessiveness in some parts of the market, it's still a ways from the heady euphoria that typically marks the end of the 5th stage.

This is one of many reasons we believe there's still plenty of room for stocks to run. With only three legs this bull has walked more slowly than past cycles, and because of its missing leg, it's also likely to endure longer.

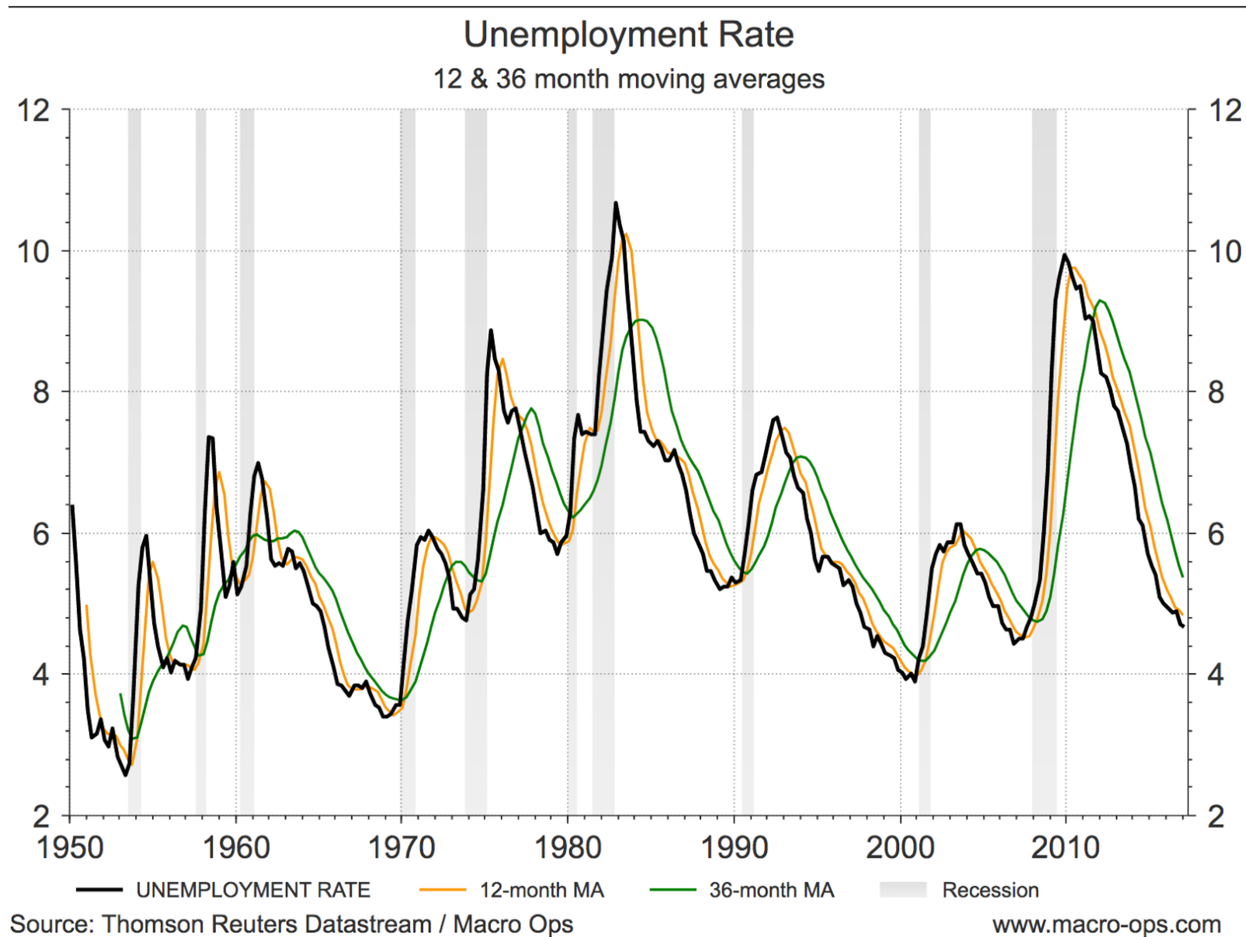
Late financial commentator Louis Ruckeseyer put it well when he said, "There was no shortage of terror and despair in the financial markets… It was all a bit reminiscent of the fable about the little boy who cried wolf. By the time one finally appeared, most people had lost their capacity to believe and be alarmed."

That is exactly how bull markets work. They climb the wall of worry, grinding down bears and doomsayers with every dip bought. This goes on until all disbelief has been annihilated and most participants have lost their capacity to be alarmed.

The play now is to stay bullish until the following indicators tell us when the fifth stage of the bull is finished.

We track a whole dashboard of indicators but the following four are all you really need to spot a recession and market top. Follow these and you'll have better background timing than the herd.

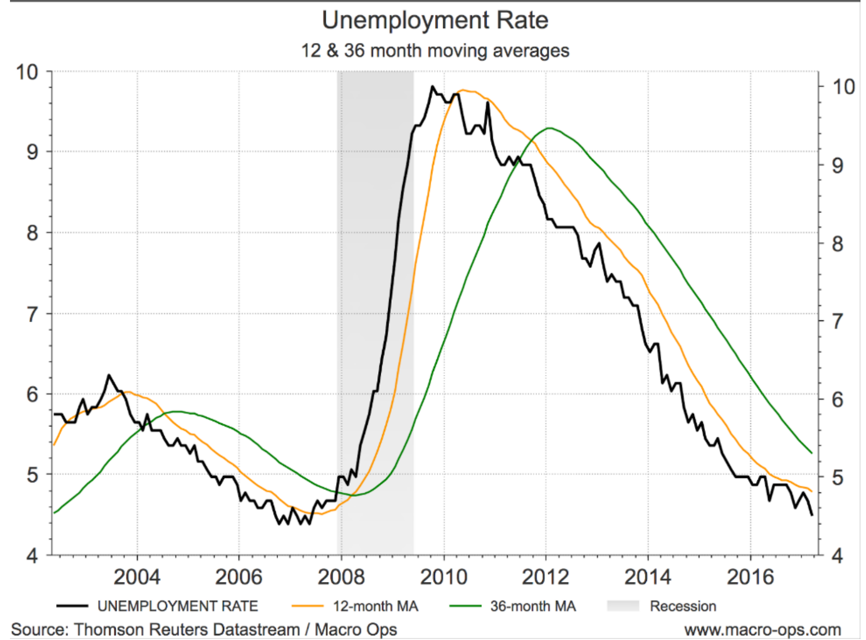
The Unemployment Moving Average Crossover



The above chart shows the US unemployment rate with an overlay of its 12 and 36 month moving averages.

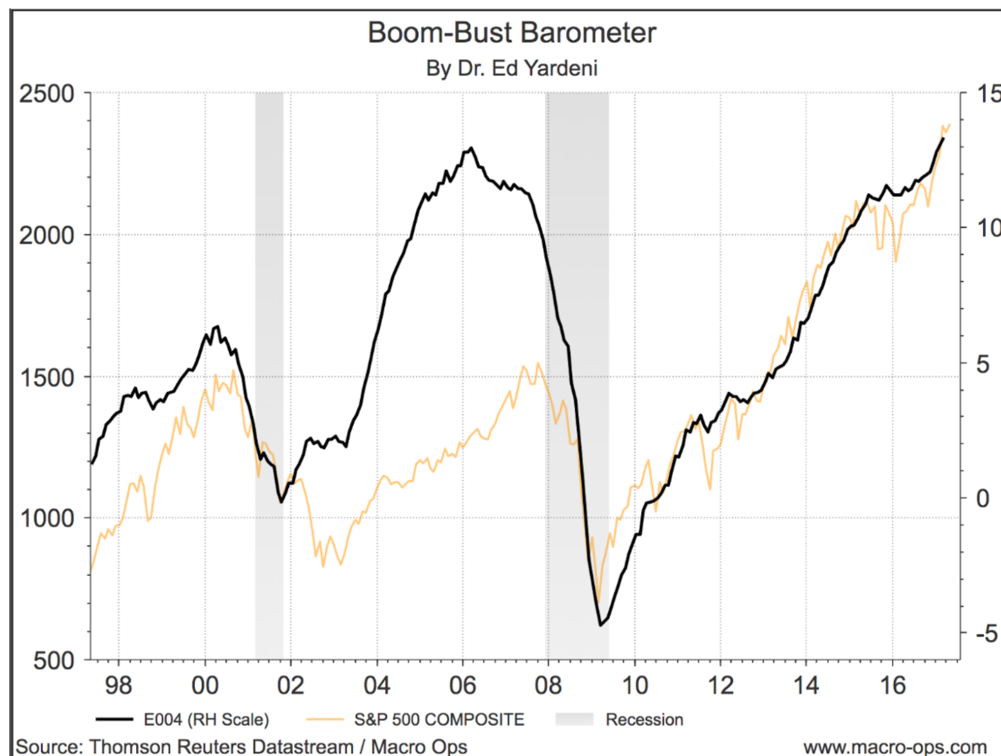
This is an excellent recession indicator and provides a good sense of where we are in the business cycle. The unemployment rate (black line) has crossed its 36-month moving average near the beginning of every recession. It also normally crosses its 12-month MA 6-months prior to a recession, with only two false signals going back to the 1950s.

This leading indicator has clear logic behind why it works. As the labor market tightens (ie, black line falls) wage pressure is created. More people working, with wages rising, means more demand for goods. This raises inflation growth and spurs the Fed to tighten. Tightening continues until demand is sapped and companies start laying off employees. That makes the unemployment rate shoot back up and the cycle starts anew.



We can see on the chart above that the unemployment line is still well below its 12-month moving average. The indicator shows that it's definitely late in the cycle, but there's still more room to run.

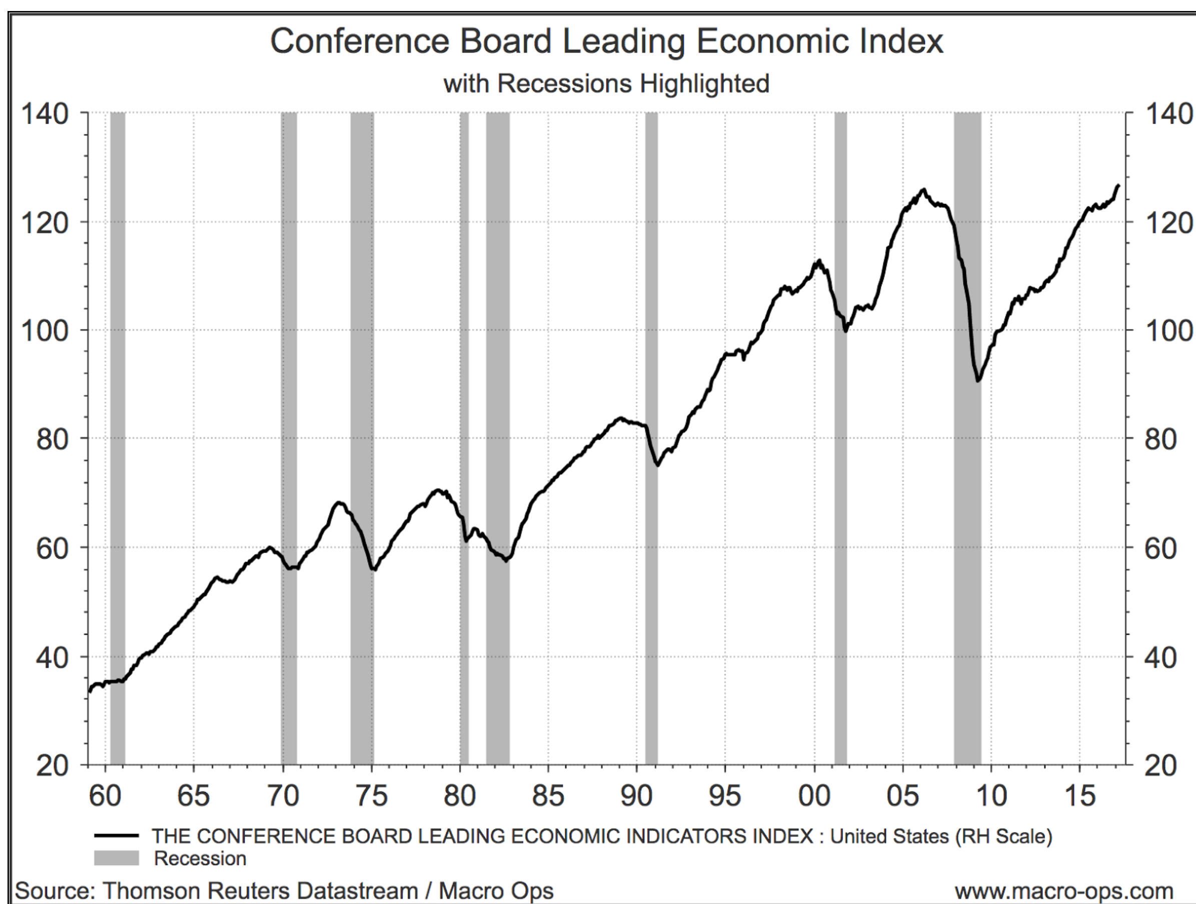
Yardeni's Boom-Bust Barometer



The Boom-Bust Barometer (black line) was made famous by Dr. Ed Yardeni. It's a simple but effective indicator to avoid large drawdowns in the stock market.

The indicator takes the CRB Raw Industrial Price Index and divides it by initial unemployment claims. The idea is that if commodity prices are going up while unemployment claims are going down (meaning the indicator is going up) then the stock market is on sound footing. This indicator is highly correlated to broader moves in the stock market. It's very rare to see large corrections when it's rising.

Conference Board Leading Index

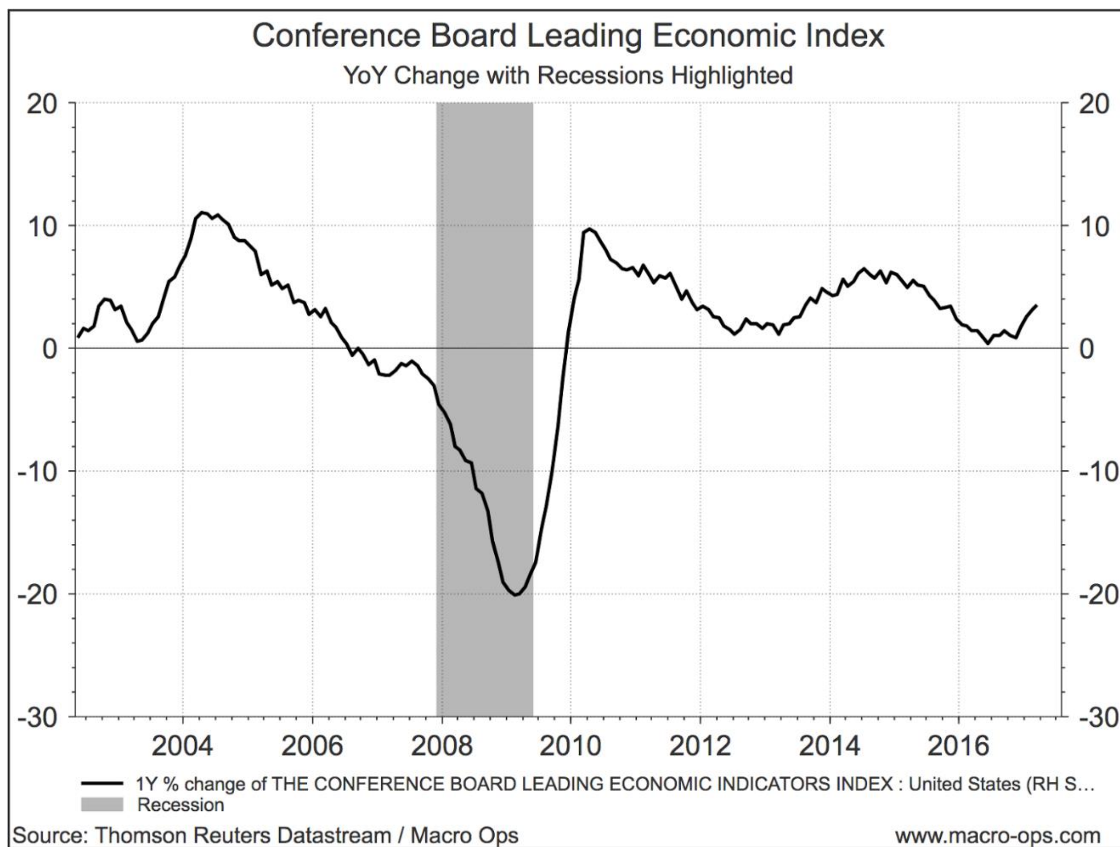


The Conference Board Leading Economic Index, or LEI as it's known, is put together by the Conference Board, an independent business and economic research institution. It's released once a month and is comprised of ten components including:

1. Average weekly hours, manufacturing
2. Average weekly initial claims for unemployment
3. Manufacturers' new orders, consumer goods and materials
4. ISM Index of New Orders
5. Manufacturers' new orders, nondefense capital goods excluding aircraft orders
6. Building permits, new private housing units
7. Stock prices, 500 common stocks
8. Leading Credit Index
9. Interest rate spread, 10-year Treasury Bonds less federal funds
10. Average consumer expectations for business conditions

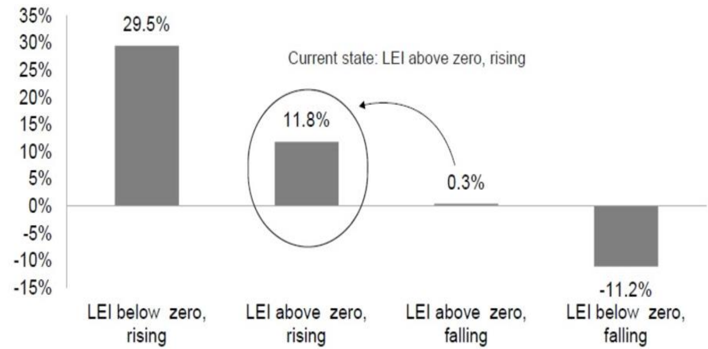
The LEI is an excellent leading index that signaled all eight recessions since its inception in 1959. The LEI has turned over and headed down an average of 10.5 months before a recession has occurred

The LEI is currently in a strong uptrend which is very supportive of further stock gains. Another way to view the LEI is on a year-over-year (YoY) basis as shown below.

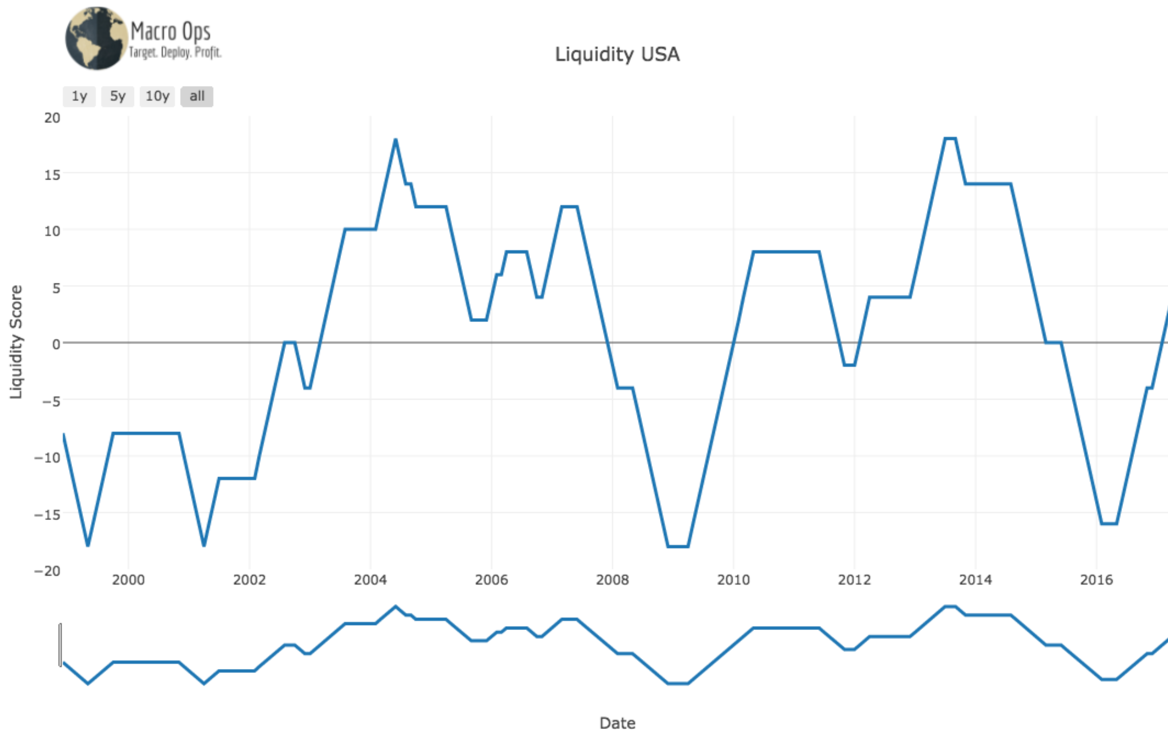


A study done by RBC (chart on the right) shows that in its current phase, with the LEI above zero and rising, average annualized returns in the S&P 500 were 11.8%.

This is just further evidence to suggest that we're still in the early stages of the fifth stage.



Liquidity and Credit Indicator



As Druckenmiller says, liquidity moves markets. That's why it's one of the most important factors we track. Liquidity is the ease at which credit is being created in the economic system.

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And since credit is the biggest source of demand in an economy, it's also the biggest driver of growth and markets.

There's a whole host of indicators we track in this space. The chart above is our liquidity indicator for the US. It's a derivative of the US corporate and high yield credit market. It does a good job of gauging risk-off and risk-on sentiment.

When the blue line is trending up, it's a positive sign and means investors are assuming more risk. This supports higher stock prices. The opposite is true when it's trending down.

It's currently in a clear uptrend which is inline with the three other leading indicators we've discussed. This is supportive of the broader market moving higher in the fifth stage.

The continuation higher doesn't mean there won't be volatility and drawdowns along the way. We expect there will be. Currently the markets remain overextended and overdue for a pullback.

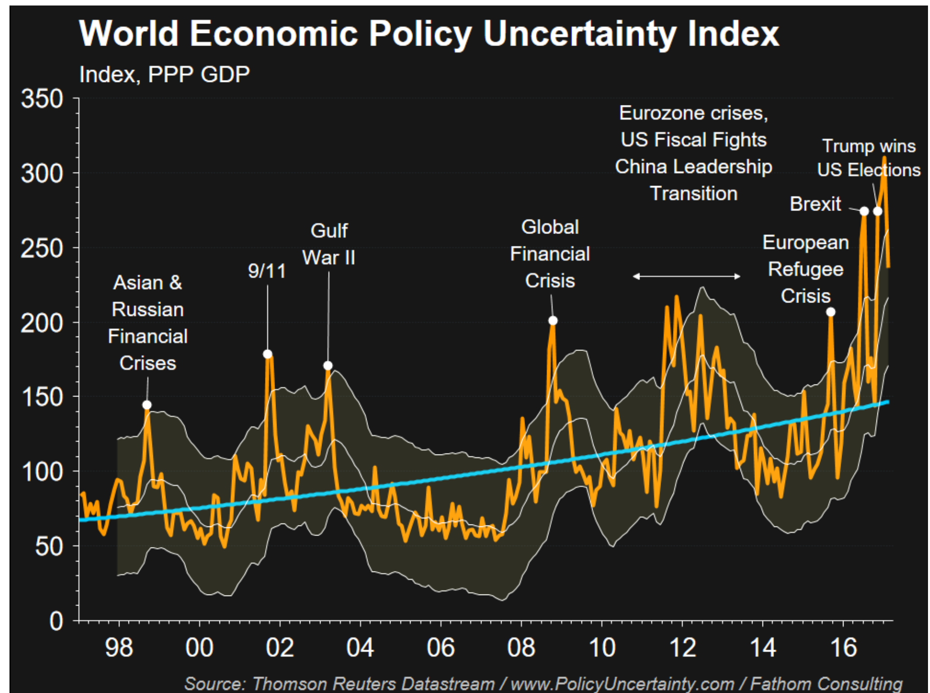
In playing this fifth stage we favor diversifying our long positions into international markets. Europe is our primary focus…

Europe: The Big Test

A big impetus for the next thrust higher will be the result of the final round of the French elections this Sunday.

We've covered the rise of populism and how it affects markets for some time now…

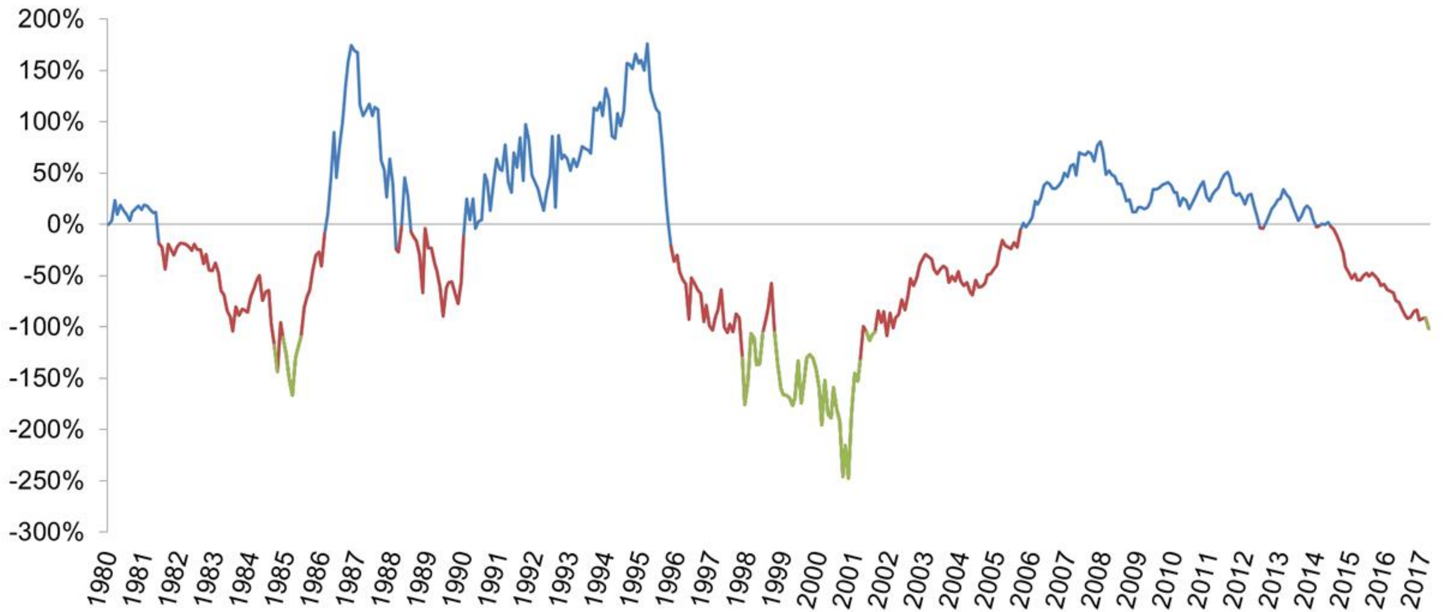
If Macron should win Sunday, as we expect, the populist threat should recede for the time being. The next contentious European election is Italy's. But that's not until the middle of next year. The Eurozone should be safe until then.



As we discussed in last month's MIR, the populist movement is cyclic with a tendency to swing back down towards its longer-term trend. We're still early in the secular populism trend, but the path there is hardly linear. It'll oscillate up and down.

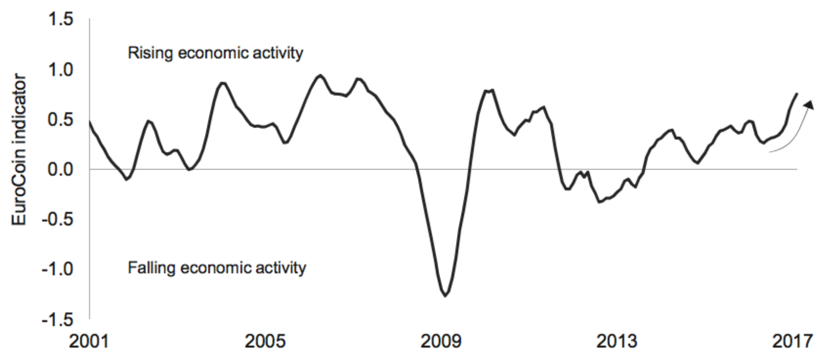
A Macron win will be a huge narrative boost that'll clear a major roadblock keeping investors out of European equities. The elections are partly why US investors have been pulling money from European ETFs in 13 out of the last 16 months. A Macron win will also boost the euro against the dollar. This will raise total returns for those buying European stocks and create the possibility of a positive, although temporary, feedback loop.

As we've previously discussed, there's still plenty of room for performance reversion to occur between the US and Europe. The chart below, via the CFA Institute, shows the rolling 10-year performance difference between the countries. The blue line indicates when European stocks outperform US stocks over the previous decade. The red line shows when US stocks come out ahead. And the green line shows when US equities outpace European markets to an extreme — which is what we're seeing today. As the writer of the article Michael Batnick notes "In the 44 previous readings when the spreads reached 100%, European stocks went on to outperform for the subsequent 10 years."

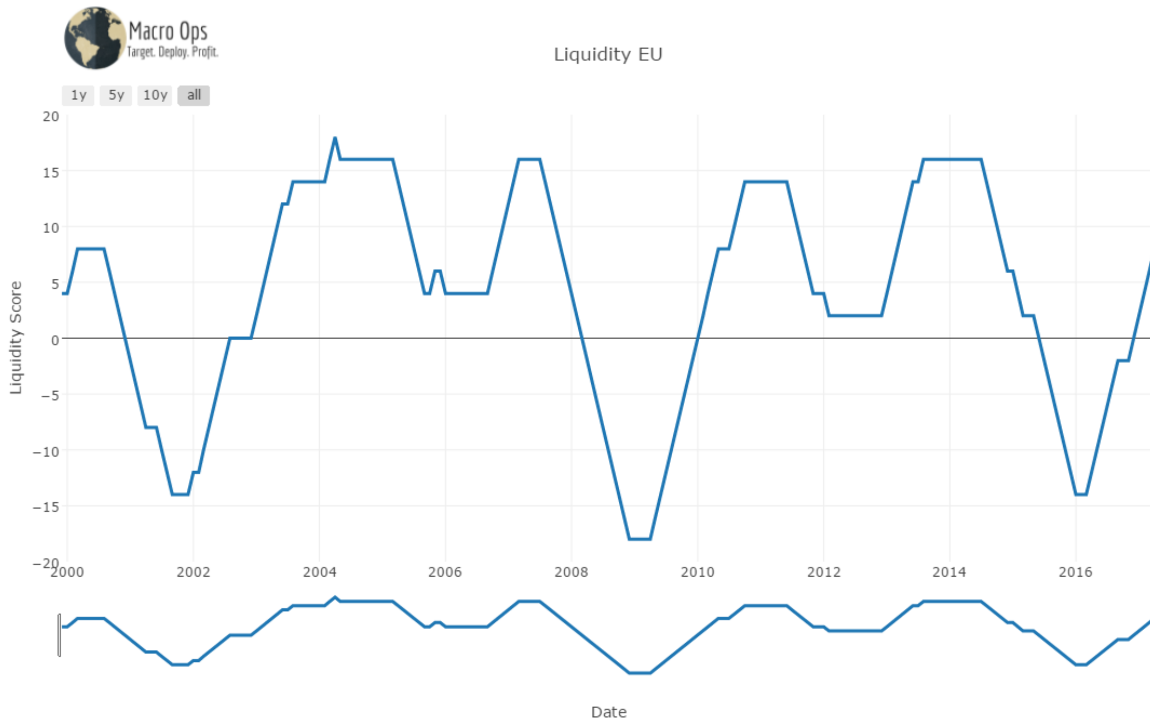


Data coming out of Europe is largely supportive of the recovery narrative. RBC's economic coincident indicator is in a strong uptrend.

First quarter earnings for European stocks are coming in solid. In total, first quarter earnings on Europe's STOXX 600 is expected to increase a solid 10.5% over the year prior. The companies that have reported so far have seen above average revenue and earnings growth.

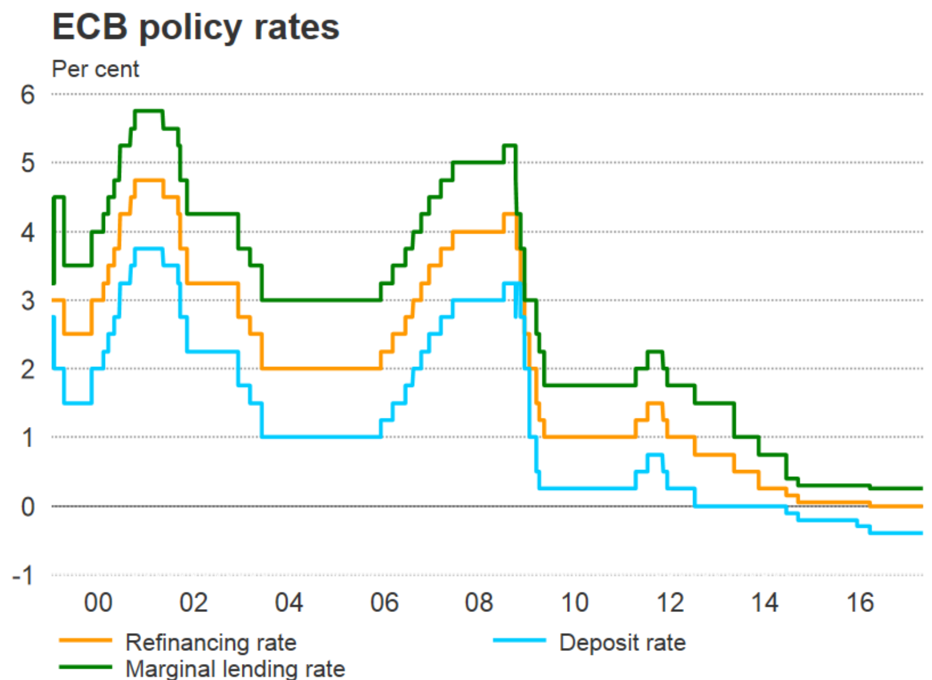


And finally, we can't forget to look under the hood of European liquidity conditions.



Just like in the U.S., credit spreads have continued to narrow in the Eurozone since the bottom in 2016. Liquidity conditions favor risk-on assets.

The other obvious thing to pay attention to alongside our liquidity indicator is ECB policy. As long as Super Mario keep rates low, the system will remain liquid. As of right now the ECB has never been more dovish than in any other time in history. All three rates are at all-time lows...



If history rhymes (it usually does) there's edge in betting on higher prices for Europeans equities in the months ahead. Favorable liquidity conditions place a bid under stocks as capital allocators take cheap money and pile it into higher returning assets.

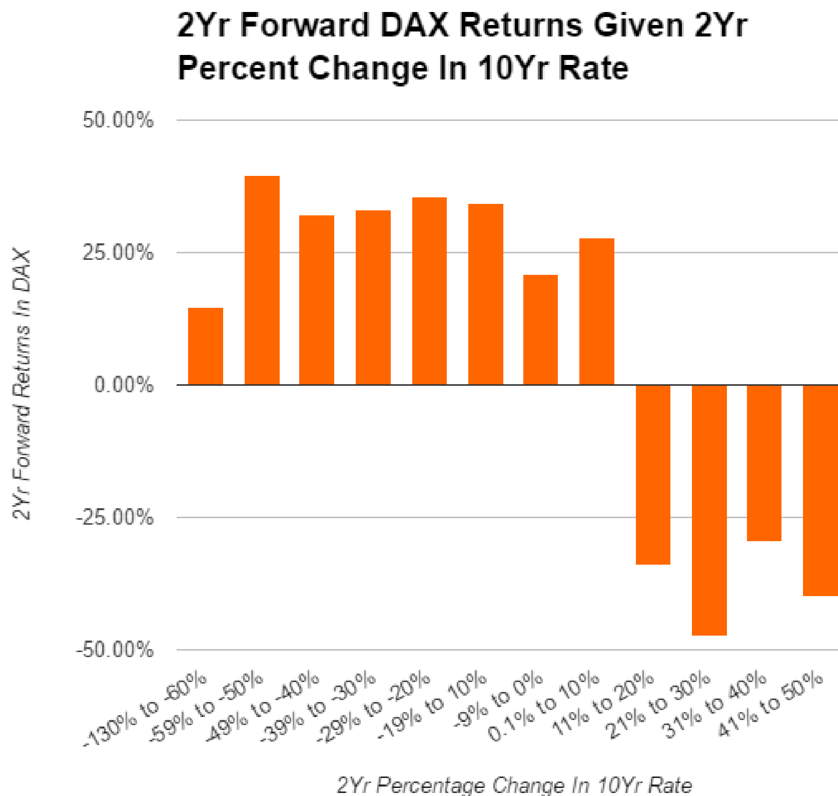
One thing we like to do at Macro Ops is verify our macro assumptions with historical data. It keeps us honest and free of incorrect biases.

Recently Operator Junaid from London helped crunch the numbers (from 1992 to present) on forward equity returns given various changes in interest rates.

We used the DAX as a proxy for European equity performance and the 10yr rate on Bunds was used for rates. Rate changes are in percent terms, not absolute terms. For example, a rate increase from 1.00% to 1.50% is a 50% increase in interest rates.

In the chart below you will see different rate regimes on the x-axis. For example, the -59% to -50% regime includes all occurrences since 1992 when the 10Yr German interest rate fell anywhere between 59% and 50% over the course of two years.

The y-axis then plots the 2yr *forward* returns of the DAX given the interest rate regime.



It ain't hard to see that falling rate regimes are good for equities while rising rate regimes are bad. You can see in the chart that as soon as the rate regime turns positive (the 11%-20% increase regime) stocks suck.

According to our study, if rates have been down trending, the probability of DAX trading higher is **88.89%**. That probability plummets to **36.51%** if rates have been increasing over the last two years.

Right now we're in the midst of an ultra-dovish regime. This means we should play for higher equity prices over the next 2-years. As long as liquidity remains favorable, stay biased to the long side. In future MIR's we'll update the group when liquidity conditions change and it's time to run for the hills.

All in all, the broader environment is supportive of higher European equities. And though we don't believe this is the start of a new cyclical bull in Europe, there should be enough tailwinds to advance the stock market well into the end of the year.

But of course, there's always that chance that Le Pen surprises with a victory. And with the way politics have played out over the last year, it really wouldn't be that crazy.

A Le Pen win would significantly distort the market outlook in Europe and especially its currency. It could also roil markets around the world.

We'll be buying long dated bond futures going into the end of the week. The ETF alternative is the iShares 20+ year Treasury Bond (TLT). This will hedge out our long exposure over the weekend and protect our downside should there be a Le Pen upset and subsequent large selloff next week. If Macron wins and markets go on a relief rally, we'll quickly close out the position Monday morning. We shouldn't lose much on the trade.

To sum things up… we're in the fifth stage of a slow and lumbering three-legged bull. Markets have so far been devoid of the mass euphoria that usually accompanies this stage, but this is slowly changing. Should Le Pen fail to upset the croissant cart this weekend, we'll likely see markets and sentiment pick up and drive this last stage higher.

Now let's get into some European stocks we're targeting that'll benefit from a Macron win.

Deep Dive: European Equities

Neonode (NEON)

Most investors pike around buying slightly undervalued stocks in well followed industries. They shoot for companies that *may* grow 15% over the next few years to *maybe* outpace the market by a hair and a freckle — making them a just a bit of cash.

This is the "safe" way to play the game… and it's lame.

This style of investing is why the majority fail to beat the market. They're stuck doing the same thing as everyone else, guaranteeing average results.

But lucky for you, you're part of the MO team.

And *average* isn't in our vocabulary.

Our goal is to find stocks that have the potential to double, triple, quintuple or more. To do this, we look where no one else is looking… the market graveyard.

Companies buried here have usually fallen on some rough times. These are the ones you'll find stuck in a hated industry (like the newspaper business) or harpooned by a one-off event like a lawsuit or large disaster (think Fukushima).

Investors wouldn't touch these companies with a 50-foot pole. Often they're likely to have been burned by the stock on its way down, and like elephants, never forget that pain. This leads investors to drastically overweight the past and more importantly, blind themselves to the future.

The reality is that not all dead companies stay dead and not all bad industries stay bad. Occasionally a phoenix arises…

It's at this intersection of a bad past and a brighter (though widely unrecognized) future that lucrative inflection points are born.

This is why we spend lots of time looking at companies that seem awful. These are the businesses that fell from the top of the ugly tree and hit every branch on the way down. Oftentimes the market's reasoning for treating these stocks like kryptonite is convincing; sounding both pragmatic and responsible. And 99 times out of 100 the market is right… but every once in awhile, you find treasure.

We believe we've found that 1 in a 100 exception in the following company. It has all the makings of a long-term superstock that should make our bottom line for years to come.

It's name is Neonode (NEON) and it's a technology company headquartered in Stockholm, Sweden.

Neonode develops and licenses user interfaces and optical infrared touch solutions. The company's proprietary technology is its zForce multi sensing platform that has a range of applications.

Did you get all that?

It's probably easier if you just check out this short video showing what their technology can do. Basically Neonode is helping bring Tony Stark's virtual computer to life.

Now before we dive into the details of NEON's business, let's first talk about its founder and CEO. Like famed hedge fund manager Julian Robertson, we like to buy stocks in companies with visionary leaders surrounded by strong management teams. This is especially true when digging through the market graveyard. You need superb capital allocators that'll drive their stock back from zombieland. NEON is an exceptional case in this sense.

Enter Thomas Eriksson, co-founder and CEO of Neonode. Eriksson is a computer engineer by training and a serial entrepreneur by birth.

He's a man who's consistently ahead of his time… almost to a fault. Here's a few of the companies he's started:

In 1997 he founded TE Industri Elektronik — a company that developed diagnostic equipment to help mechanics find and trace errors in a car's electronic systems.

Two years later, in 1999, he and four other engineers started Drive IT Systems. The company successfully launched a carpooling system that used GPS enabled terminals that were connected to both the internet and the cars. Users could use a web based IT system to book their rides.

Sound familiar? This dude created the first ride hailing tech. Eriksson built an Uber before the first smartphone or app ever existed!

Then another three years later, in 2002, he cofounded Neonode. The company's first product was a cellphone called the N1. It was the world's first gesture-based touch mobile phone. This was the first time you could directly touch a phone's screen with your fingers to swipe, select, and navigate your way around… all without any buttons! This was revolutionary for its time.

In fact, you know Apple's "slide to unlock" feature that wowed everybody when it first came out? Neonode developed and patented that exact technology and used it on the N1… a full three years before the first iPhone came out.

Neonode never sued Apple for the $100's of millions in licensing fees it's likely owed simply because it can't afford too. Though many have made the case that it should (example here).

The phone was well reviewed but this small Swedish tech company lacked the size and connections to bring it to mass market. You can read an old review of the original Neonode phone here.

Four years after the company's founding, unable to match the firepower of the Silicon Valley giants, and then pulverized by the release of the iPhone in 2007 — which again, ripped off Neonode's tech — Eriksson was forced to shutter the company and file for bankruptcy in the fall of 08'.

But luckily he didn't hang up his boots for good. He decided to start Neonode back up again in 2010. Eriksson knew he had something valuable in his patented zForce technology.

zForce competes in the gesture-based technology space which includes any touchscreen that doesn't have mechanical buttons. This includes everything from smartphones to tablets and e-readers. There are three main competing technologies in this space — capacitive, resistive, and infrared (which is what zForce uses).

Capacitive and resistive technologies are similar. Both require a glass overlay on top of a screen to operate. Capacitive tech, which is what most phones use, works off distortions in the screen's

electrostatic field caused by human touch (which is why you can't use your smartphone while wearing gloves). Resistive tech simply measures where pressure is applied.

Infrared technology (which zForce uses) doesn't need an extra glass overlay. It uses infrared lasers that cover the display. It can turn any surface into a gesture screen, even the air.

zForce has a number of key advantages over competing technologies. It's low cost, has extremely low power consumption, produces the best image quality (since it doesn't require a glass overlay that causes glare), works on all surfaces in all temperatures and climates (even underwater) and has extreme adaptability. The pros and cons are shown on the chart to the right.

ZFORCE AIR TECHNOLOGY | 15

Comparision

Feature / Technology	Resistive	Surface Capacitive	Projective Capacitive	zForce®
Low cost solution	✓	×✓	×	✓
Multi touch support	×✓	×✓	✓	✓
Finger touch support	×✓	✓	✓	✓
Pen support	✓	×	×✓	✓
Gestures	×✓	✓	✓	✓
Low power consumption	✓	×✓	×✓	✓
Weight of 10" tablet	>150 grams	>200 grams	>250 grams	25 grams
Not sensitive to RFI / EMI	✓	×	×	✓
Bezel Height	Flush	Flush	Flush	> 0.4mm
Building Height (10" tab.)	>1.5 mm	>2.0 mm	>2.0mm	0.8mm
No need for calibration	×	×✓	×✓	✓
Viewable in sunlight	×✓	×✓	×✓	✓

✓ = Yes ×✓ = Not Good × = No

A drawback is that it's susceptible to registering accidental touches. It also isn't as precise as capacitive touch — though it's getting pretty close. These reasons are why capacitive has won out in most smartphone touch interfaces.

Now that you understand more about zForce, let's get back to the Neonode's story.

As we said, Eriksson restarted NEON back in 2010. The new business was comprised solely of licensing its zForce technology to e-readers like the Amazon Kindle and the Barnes and Noble Nook. For a while it dominated this market and owned over 80% of market share. But the problem was that this wasn't a super profitable business and e-readers never saw hockey stick growth. And at the same time, NEON kept pouring money into R&D to further develop its technology.

As a result the company saw years of losses and missed targets. Shareholders have been used and abused…

To stay alive, NEON repeatedly issued shares and diluted the daylights out of their stock. Take a look at the chart to the right where the yellow line marks the amount of shares outstanding. This is NOT where you want to see parabolic growth.

If you go back and read old conference calls and quarterly letters you'll see management consistently claim that cash flow positive was just around the corner, only to come up short again and again.

Investor discontentment eventually drove NEON's market cap from just under $300M in 2014 to $76M, where it sits today.

So why we're looking to buy a stock that's treated shareholders so poorly?

Fair question.

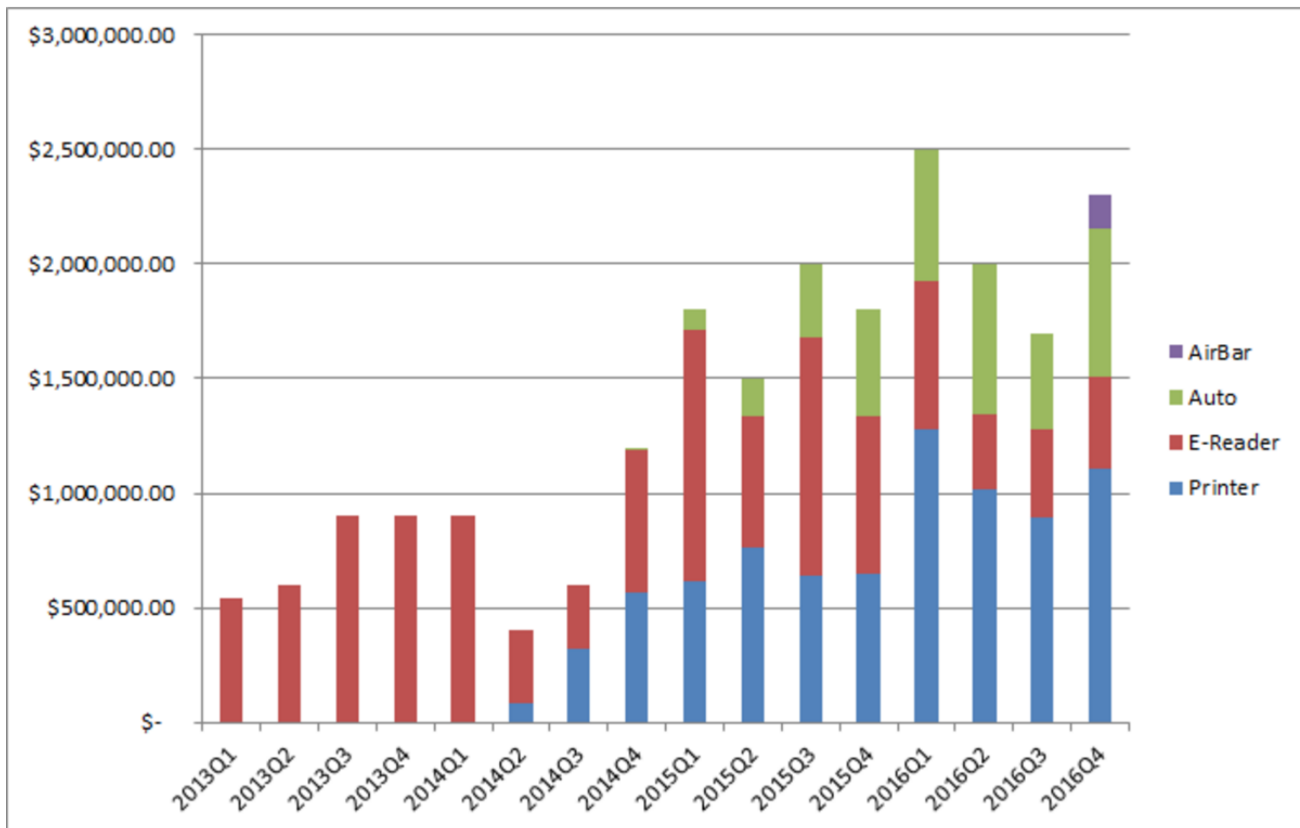
When you see management abuse equity holders like this you normally want to run for the hills. The small cap space is bereft with weasley management that like to treat their companies as their personal checking accounts.

But Neonode is a different case. We're willing to make an exception.

Eriksson knows he has a great product. It's just that its market has been stuck in infancy, at least until very recently. It's similar to how his ride sharing tech and gesture phone were also early.

But looking at the numbers and where the market is now, it's clear Eriksson was right for holding on this long.

The chart below shows NEON's quarterly breakdown per revenue stream. Up until the middle of 2014, the company was completely dependent on its e-reader licensing business. It then started licensing its tech to printer OEMs (original equipment manufacturers) and automotive OEMs. And last quarter it released its first consumer product in the Airbar.



Here's the overview of each industry from largest current revenue source to smallest:

Printers

Printers are moving to touchscreen interfaces. Eventually all new printers will have this technology. This trend has been great for NEON, who dominates the space with over 44% market share of all printers with displays (including those with non-touch interfaces). In 2016 over 8.8 million printers shipped with NEON's tech. This amounted to a 56% annual increase over the year prior. NEON's dominance in this market is expected to continue well into the future.

Automotive

NEON's zForce technology is now in 36 launched car models along with a number of other planned vehicle releases in coming years.

Brands like Volvo, GM, Suzuki, Mercedes, and Ford are all using the small Swedish company's tech. The most prominent use for zForce is in the dashboard infotainment center, but it's also being used as gesture control for closing the tailgate or opening a door and even in using the steering wheel.

You can watch a concept video here that shows some ways auto OEMs are planning to use zForce. And here's the steering wheel technology AutoLiv developed with zForce tech that was demonstrated at this years CES.

This area of business has been booming. Total vehicles shipped last year with zForce tech grew 167% yoy amounting to a total of 940,000 cars.

E-readers

Neon's e-reader licensing is bringing in a steady $400K per quarter. This section of its business isn't expected to grow much, but it should continue to earn roughly the same amount going forward.

AirBar

Airbar, NEON's first crack at a consumer product using its zForce tech, just hit the market last quarter. Airbar is a plug and play device that turns any laptop into a touchscreen. It's pretty cool. Check its short video here.

NEON only sold 9,000 units last quarter but that number should significantly increase throughout the year. Nothing like the Airbar has ever existed before. It'll take some time to get the word out and create demand. But things are off to a good start. AirBar was voted one of the best new products at CES this year. It also now being sold on Amazon, Walmart, and Dell. Over the last two months it's frequently sold out while consistently ranked as a top seller in its sub-category. The AirBar sells for between $65 - $80. NEON makes about $30 - $40 off each unit.

Note: We went to Best Buy and tested one of these and it was really cool. It works exactly how it looks in the video. The Best Buy employee told me it's been a hot product and they've had a tough time keeping it in stock.

Valuation and Investment Thesis

Looking at NEON's financials over the last three years makes it tough to get excited about the company. Especially when you factor in management's propensity to issue shares and miss targets.

Last year NEON only did $10.2M in revenue and lost $0.12 a share. It currently trades at a market cap of $76M which is over 7x sales. This isn't exactly cheap for a company that's seen 11% average revenue growth over the last five years.

It's for these reasons that the stock price was cut by more than half last year. The licensing business is boring and investors are focused on the AirBar as NEON's only real chance of stronger growth and positive cash flow.

But while the Airbar is a great product, it's a niche product. We think it'll serve as a bridge for NEON to start designing other consumer products with zForce technology.

In reality, AirBar isn't the reason to get excited about this opportunity. Investors are focusing on the wrong thing.

Like we said at the beginning, you don't value a company off the past, but on the future. The greatest opportunities come at inflection points where a bleak past meets a bright future. And it's NEON's bright future that makes it one of the best investments we've come across in a long while. This inflection point is based on two developments:

1. NEON is transitioning away from licenses to modules
2. Automotive represents a guaranteed huge and growing revenue stream for the company

At the end of 2016, NEON stopped entering into new licensing deals for its tech. Going forward it'll instead build its own zForce modules and sell them to OEM's. (OEM's previously either had to build zForce modules themselves or use Tier 1 suppliers.)

Instead of making $2.70 per auto infotainment license, or half that per printer license, NEON will now mass produce the modules they need in house and sell them to OEM's for 4-7x more. This will be a huge boost to NEON's top and bottom line. OEMs are happier as well because it's actually cheaper for them to buy the module instead of licensing the tech and build it themselves. And NEON makes a lot more money because it cuts out the middleman by not needing a Tier 1 supplier to build out their tech.

And this isn't even the most exciting part.

The market is focused on AirBar, but it's in Auto where the company has a clear and guaranteed path to growth. You'll rarely hear us say absolutes like "guaranteed" because hardly anything is guaranteed in this game. But NEON's future in auto is as close as you can get to a sure thing. Here's why:

There's a HUGE barrier to entry in the automotive supplier space. There are very strict and rigorous testing requirements for products to make it onto an auto manufacturer's platform. Car makers don't even accept a defect rate of 3 parts per million (0.000003%) and suppliers are required to pass up to 5 years of tests and quality controls to receive an OEM's blessing.

It's a huge advantage that NEON already received approval by a large and growing number of OEM's for its modules. This helps establish NEON's moat, which is something we always want to find in a potential investment.

Another, and even larger piece to NEON's moat, is the growing number of car platforms it's being included in.

Let me explain what this means.

Being a car manufacturer is a tough, competitive, low margin business. To compete and grow margins, all major OEMs are moving to producing a larger variety of car models off fewer platforms.

GM for instance has moved to only four mega platforms off which all its current cars are built. They used to have 20 platforms just a few years ago. Suzuki has reduced its number of car platforms from 8 to 3. Ford has reduced theirs from 15 to 9. There's an industry wide trend towards fewer platforms.

Remember, suppliers require a long and costly testing process in order to be included in these platforms. Because of this, once you make it onto an OEM platform, you're nearly guaranteed to be there for the next decade or more.

This is huge and it's not at all priced into NEON's stock. The market is completely blind to it.

zForce modules are infiltrating a growing number of new OEM platforms that will be used for the next decade or more. For instance, GM's D2XX platform, that includes zForce technology, is targeting a capacity of over 2.5 million cars in 2018.

NEON's tech is also included on Suzuki's primary auto platforms. Suzuki has penetrated over 50% of the fast growing Indian auto market. Chinese OEM's are including the technology as well. zForce is increasingly in all the right places (fast growing markets) and is gaining a larger and larger market share.

Like we said, this is a huge opportunity. As of right now, zForce is only being used in infotainment centers. But a number of OEMs are planning to include it in other areas like the steering wheel and rear hatch. So not only is NEON going to be in more cars, but it'll be in more devices *per* car. This is another huge multiplier for NEON which will already be seeing higher revenues from switching to selling modules instead of licenses.

Our base case is that NEON more than doubles its revenue this year to over $20M. This is a conservative estimate they can easily beat. NEON reports next week and we expect sales to

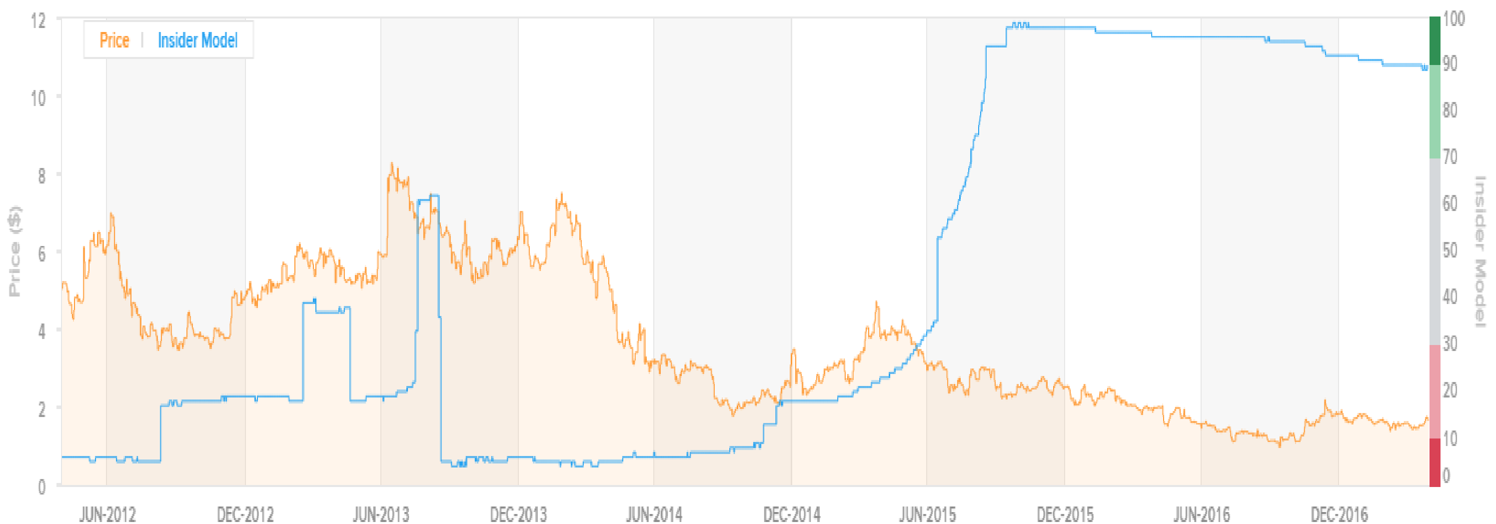
come in around $3M with earnings close to breakeven. Growth this year will be heavily backloaded because many new car models aren't shipping until the second half. The rate of growth should continue to pick up as the year progresses.

In reality, 2017 is just a ramp year to the company's lift-off growth which will start in 2018. NEON has a really long runway. So far it's just taxied onto the ramp.

The company has filed a new shelf agreement with the SEC for the right to offer up to $20M in new stock. (Their old shelf agreement is set to expire in June.) NEON is also considering a small IPO on Sweden's stock exchange.

We're not overly concerned with future dilution. The company will be cash flow positive this year for the first time in its existence. Registering a new shelf agreement is standard practice. It doesn't mean they'll make an offering. And an IPO in Sweden would likely be very small and only help increase the visibility of the stock.

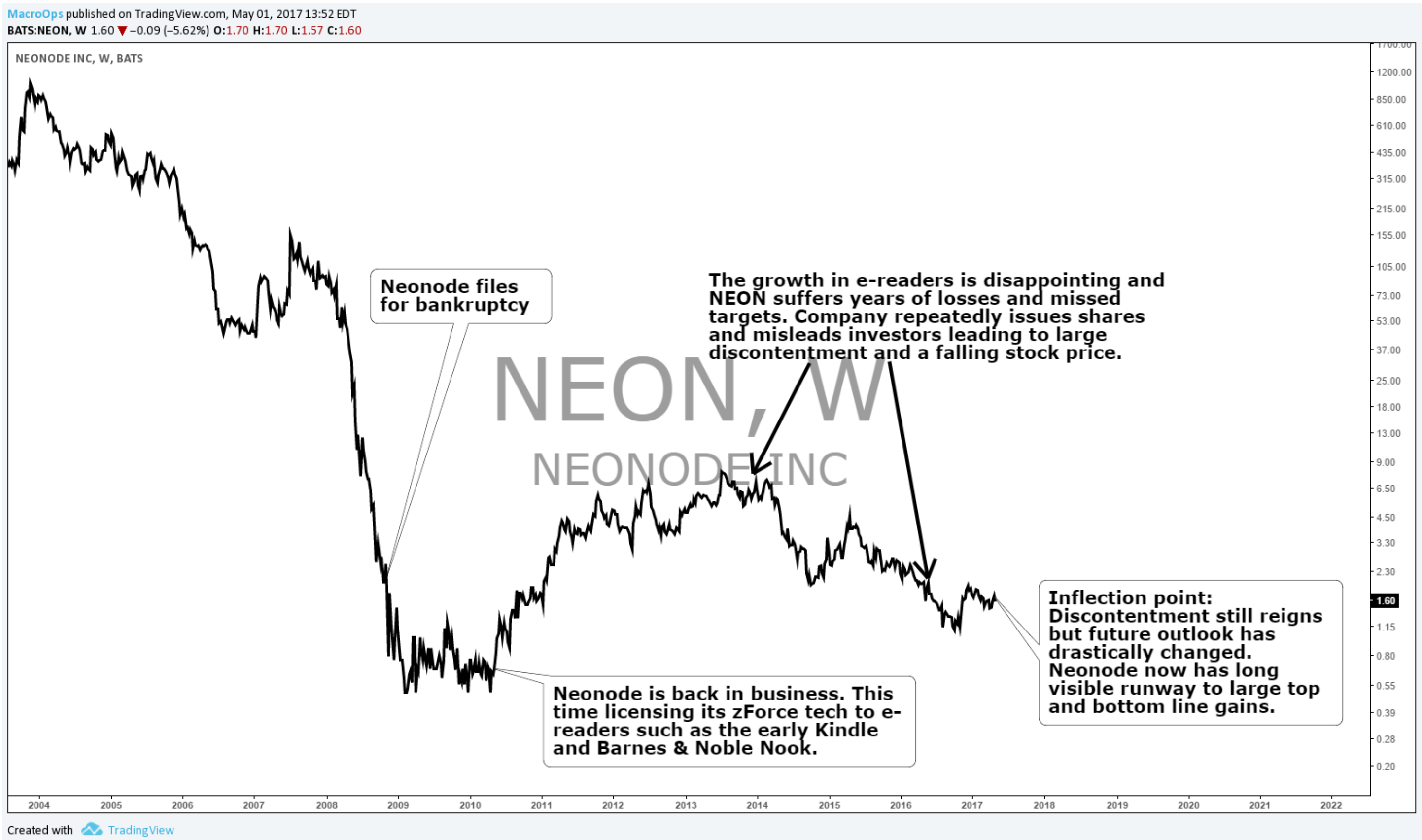
Also, Eriksson and other insiders now hold a substantial amount of stock, amounting to nearly a quarter of the company. Our insider buying model gives the company a high score of 90 (100 is perfect).



The time has finally come for Eriksson and Neonode. This year will mark a giant turning point in their future. With NEON's transition to modules and growing inclusion in the cars and printers of the future, it has practically guaranteed massive growth over the coming years. The additional revenue from AirBar and other consumer products the company is working on will serve as a kicker to help bring visibility to this horribly misvalued stock.

For the reasons stated, our base case is that the stock trades at over $3.20 a share by the end of the year. This is more than **110%** over its current price. And with the continued ramp up in its automotive module business, the stock should be trading well above $5 by the end of 2018. We consider these very conservative estimates.

We have a position in the stock with an entry price around $1.64 and a stop at $1.36. We expect price action to be choppy as the market wakes up to the new narrative. There's a decent chance we get stopped out of our current position. If so, we'll wait for another price action setup to take another swing. Because of the huge asymmetry of the trade, this stock is worth taking multiple shots at.



And now let me turn it over to Anish for the rest of our equity plays…

Fiat Chrysler Automobiles (FCAU)

We first covered Fiat Chrysler Automobiles (FCAU) in last month's MIR. Since then the company, whose fundamental story gave value investor Mohnish Pabrai the most "incredible orgasmic experience" he's had in over a decade *(you better step it up Mrs. Pabrai)*, came back to kiss its long-term support before rocketing 18% higher.

Part of this rally is due to Fiat's blockbuster earnings report on April 26th, after which shares jumped over 10%. The company reported earnings per share of $0.46, beating estimates of $0.41 on revenue that climbed 4% to $30.23 billion. Net income in the first quarter rose 34% over a year ago to $698 million, with operating profits increasing 11%.

Master operator Sergio Marchionne's turnaround plans are hatching flawlessly as he continues to stick it to the naysayers.

***Fiat** Voluntas Sua*… His will be done!

Everything from profits, to margins, and even debt are lining up to support his ambitious 5-year plan. Marchionne is well on his way to swinging the company to €4 billion in net cash by 2018. Net industrial debt was cut to €5.1 billion ($5.6 billion) at the end of March, below analyst forecasts of €5.9 billion. The company is on track to reduce debt to less than €2.5 billion by the end of the year.

Fiat continues to dominate in Europe too. In March alone the company increased sales by 17.7%, a stark contrast to GM whose sales fell 20%. Profits nearly doubled to €178 million as both the Alfa Romeo and Tipo brands grabbed market share. In particular, Alfa Romeo's new SUV *Stelvio* helped boost margins to **3.2%** from 1.9% a year earlier.

Speaking of SUVs, Maserati (another Fiat brand) saw their earnings jump to €107 million (!!) from just €16 million a year ago. A large part of this success is due to Maserati's brand new *Levante* — its first ever SUV.

Fiat also improved their earnings in North America, where as we explained in the last MIR, there are growing concerns over peak auto sales. Recent April numbers showed the 4th straight decline in US monthly vehicle sales. This raises the likelihood that 2017 marks the end of seven consecutive years of rising volumes. But most industry observers agree sales won't collapse even though demand is decreasing. Volumes should stabilize. Jessica Caldwell, an analyst at Edmunds auto-research explains, "Total sales are still strong from a historical perspective and

the decline is very gradual. It shouldn't really be seen as alarming." Either way, whether sales drop or not, Fiat is still a good value play.

Even in this environment where Fiat's North American shipments fell 6%, the company was *still* able to increase earnings by 1.1% and push their margins up a 10th of a point to 7.3%. That's the benefit of having a genius like Marchionne at the helm. He himself admitted that "competitive intensity is increasing" and that he's watching inventory levels "like a hawk". But even so, he's confident the auto lords won't resort to a price war like in 2007 that tanked the industry. "We've all collectively developed enough sense now not to cause repetition of the problem that we saw" back then, he said.

Fiat's stock is still trading near 5 times their 2018 earnings. This mispricing will eventually correct and those on board will profit heavily. A solid entry presented itself when price rebounded off the $9.70 level. The next entry area will be on a sustained break above the current resistance at $11.45.

Trivago (TRVG)

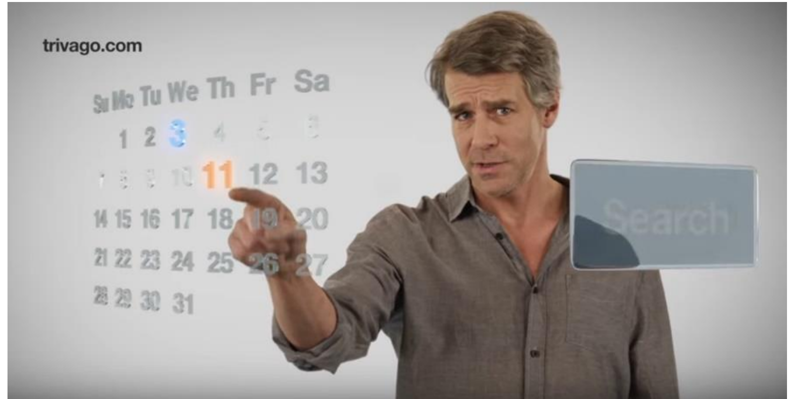
Recognize this guy?

If so, good.

If not, well… you probably will soon.

He's known as the "Trivago Guy" — the unexpected TV sensation that introduced audiences to [Trivago (TRVG)](), a German-based hotel search engine company.

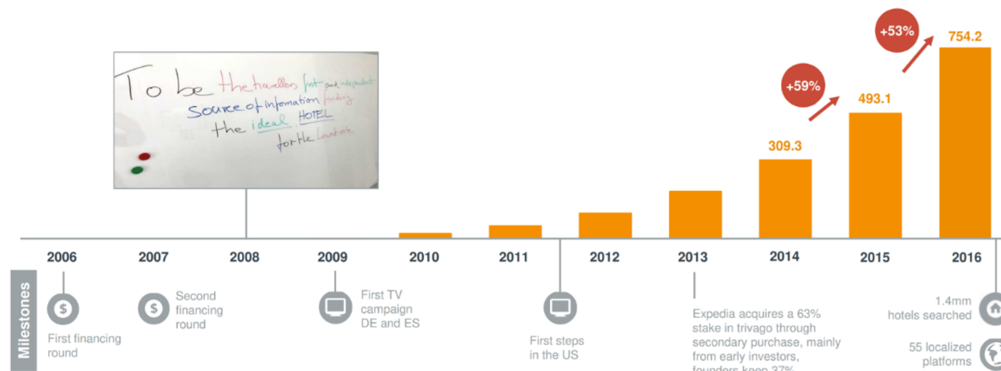
Trivago's business model is simple. It's a hotel aggregator with a solid (although wordy) mission to "be the traveler's first and independent source of information for finding the ideal hotel at the lowest rate."



Basically you go to their site, select a city, and they'll find you the best deals on hotels there. Trivago pools offerings from a vast number of competing online travel agencies (like Booking.com for example) and displays them on easy-to-see list where you can select the best price.

The company makes money by charging these travel agencies advertising fees for hosting their listings on Trivago's website. They use a basic cost-per-click model. An agency like Booking.com will pay Trivago for each Trivago-user that clicks and ad or listing to go to their hotel deal. This business model works because Trivago has quickly become the world's largest online hotel search site, comparing rates from over 1.4 million hotels and 250 booking sites worldwide. They report over **120 million visitors per month**. If you want to fill your hotels, you need to be on Trivago.

This model is a gangbusters one too as you can see from the company's explosive revenue growth:



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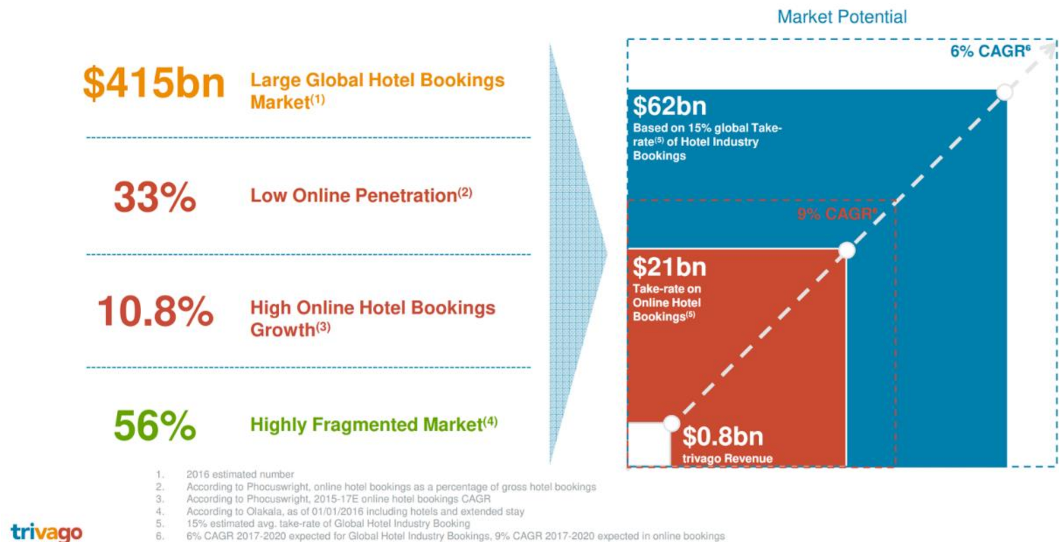
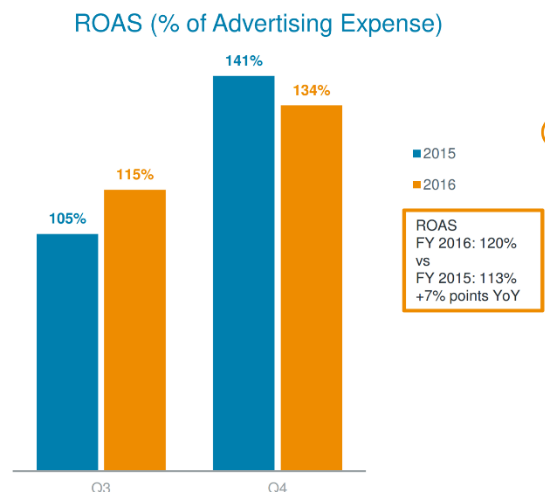
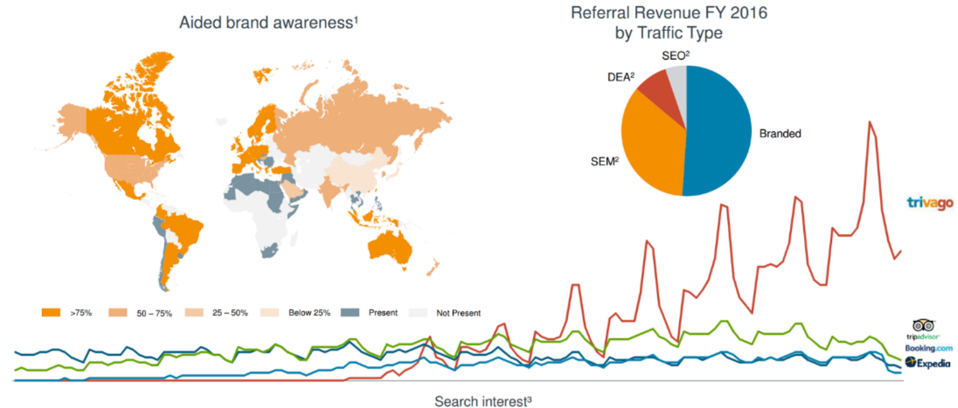
Their 50%+ annual revenue growth rate gives them a strong advantage in a market that's rapidly expanding. Currently **only 33%** of total hotel bookings are made online — probably a lot less than you thought. But this number is growing rapidly at a rate of 10.8% per year. Trivago has a lot of space to grow into. As CEO Rolf Schromgens explains, "our share is less than 5% [of the online market] so we see a lot of headroom for us to grow."



Trivago isn't profitable yet mainly due to their enormous sales and marketing costs. In 2015 they spent €461.2 million and in 2016 they spent another €674.7 million. About **90%** of their revenues go right back into marketing each year. Now even though this isn't optimal for the bottom line, the market is okay with it. They're fine with these expenses as long as they contribute to growth.

You can see below that Trivago's return on ad spend (ROAS) continues to improve year over year, from 113% in 2015 to 120% in 2016. The slight drop off seen in the 4th quarter is due to what the company called "interesting investment opportunities" that they threw more cash into than normal. They stated that these investments looked very promising so far… so we'll probably see the results of the extra spend in the next earnings report.





The graph to the right also shows how Trivago's search interest trounces other competitor sites. Clearly these guys are good at marketing. And a big part of that is because of the virality of the "Trivago Guy". He's so popular that Rolling Stone is writing articles about him. People can't help but be enthralled by this scruffy, hobo-looking, yet strangely handsome spokesperson of the company. The "Trivago Guy" has inspired Twitter hashtags, parodies, memes, think pieces about gender equality, and more. Some find him creepy and others find him irresistible. Either way, the end result is the same — they all know what Trivago is. And that's why it's such a successful ad campaign. The company has plans to milk this campaign for all it's worth while creating other "Trivago People" in the future. You can get the full "Trivago Guy" experience by watching him explain his website to you here. His refusal to wear a belt is awe-inspiring…

Now even though we're looking at Trivago like a high-growth stock, it's not yet priced like one. The stock's price-to-sales multiple is just 5.48. Competitor Priceline (PCLN) has a P/S of 8.6. And that's with a yearly revenue growth rate of *only* 16.5%! That's nowhere near Trivago's growth rate that's north of 50%.

Trivago is currently priced at $18.45. If we conservatively estimate that investors will push its P/S from 5.48 to 8.6, that'll equate to an $10.50 increase in its share price to $28.95 — **57% higher** than current levels.

Price has already ripped since Trivago's CFO came out last Friday and increased the company's full-year guidance. He explained that their strong start to the year increased their expectations of annual revenue growth from 45% to 50% in 2017. At this point, we don't want to chase prices. Instead we'll wait for either a consolidation to form or a retrace back to the 10-day moving average before entering. There's still a lot of room for this thing to run…

Update: Gaia (GAIA)

"Anyone can be confident with a full head of hair. But a confident bald man - there's your diamond in the rough."

— Larry David

Larry David… a man full of wisdom. Nowhere do his words ring more true than with Jirka Rysavy.

In case you forgot, Rysavy is the CEO of Gaia (GAIA), the new-age yoga/meditation video subscription service.

Rysavy is the same guy who lives in a tiny cabin in the middle of the Colorado mountains with no bed or running water. He's also the one that started and sold a number of successful businesses ranging from a billion dollar office supplies distributor to an organic market that was later acquired by *Whole Foods*.

Think Rysavy is *just* a bit confident in himself? You bet…

It's this confidence that lead him to return to Gaia after a long hiatus and completely turn the company around.

He got rid of its yoga apparel and travel business, leaving just a streaming service and lots of cash. He also increased his ownership stake to 38%. The guy puts his money where his mouth is. Like we said, confident.

The company is now benefiting heavily from these changes as shown through Gaia's latest earnings report released on Monday.

The company beat expectations. Revenue was up 51% to $5.8 million, trouncing estimates by $0.58 million.

Paid subscriber growth is on fire, increasing 58% to 247,300 from 157,000 at the end of Q1 2016. And what's even more impressive is that the **growth rate is exponential**. It continues to increase sequentially by 6%, up from 52% at the end of the fourth quarter and 46% in the third quarter. Management expects their growth rate to continue climbing and hit 62% in the second quarter, another 4% increase.

Their plan is for their subscriber growth rate to keep accelerating by 4% to 6% each quarter to eventually reach a ridiculous **80%** growth rate for 2017. But remember, Rysavy is one of those that likes to underpromise and overdeliver, which means management will likely beat their own expectations yet again. Based on their first quarter results, the company is already well above its targeted 80% growth rate.

And the kicker is that they're achieving this higher growth while continuing to reduce their costs. Total operating expenses in the first quarter increased to $11.8 million, beating their forecasts. In total their gross margins increased by 440 basis points to 85.8%.

Oh and also, as of March 31, 2017, Gaia has $45.4 million in cash, **zero debt**, and unencumbered ownership of its 12-acre, 150,000 square foot campus near Boulder, Colorado.

So what we're looking at here is a debt-free business that'll be growing at a rate of over 80% with 80%+ margins…

Betting on the bald bomber Jirka Rysavy is turning out to be very lucrative. Larry David was absolutely right.

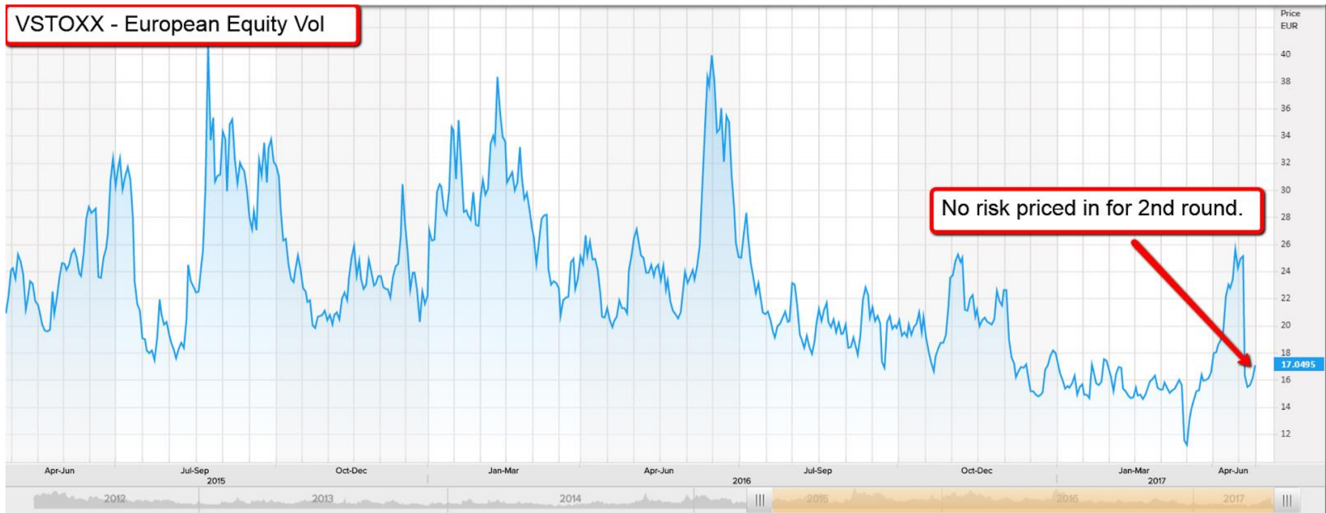
Gaia's share price jumped nearly 7% on its strong earnings release. We'll look to possibly add to our position on a significant weekly close above the $11.65 level.

And finally, here's Tyler with our Quant update.

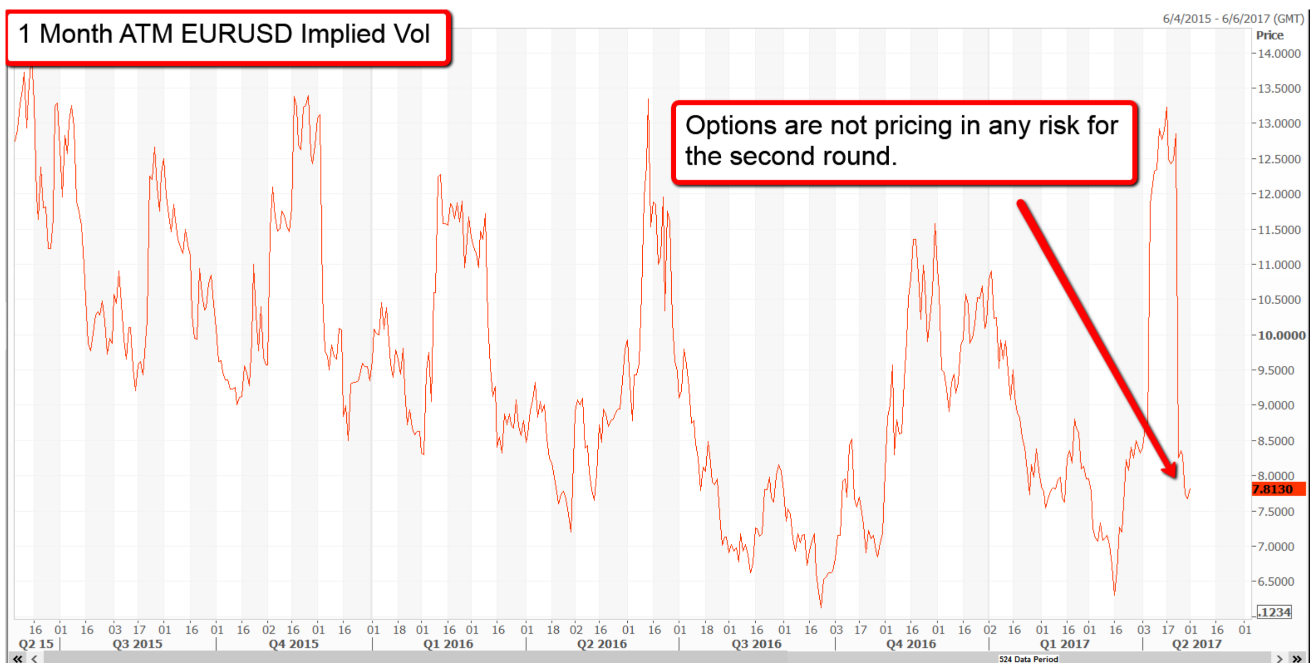
Quant: A Le Pen Hedge

According to European markets, Macron already won the election.

Volatility collapsed again...



EURUSD vol is back in the low end of its range...

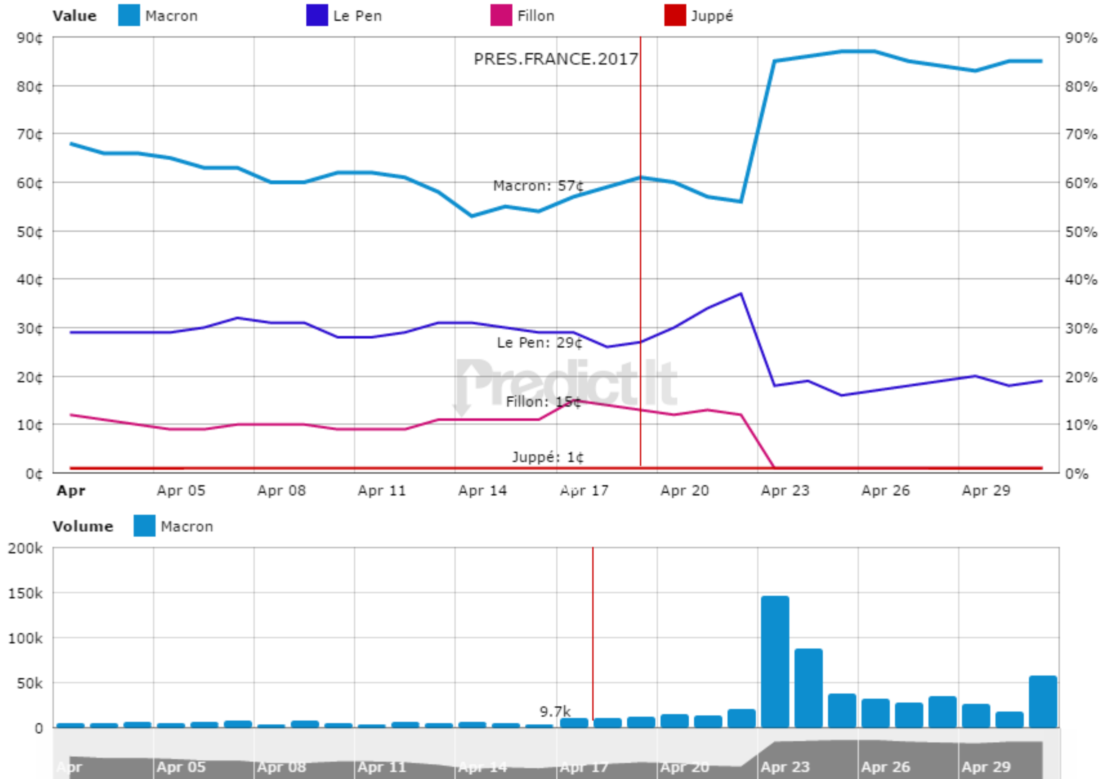


The market thinks the second round of French elections are a non-event.

Yet even so, this complacency doesn't mean Le Pen's chances are ZERO. She's still on the ticket and she'll fight like hell to pull off one of the biggest electoral upsets of the decade.

If she does win, the resultant market volatility will make Brexit look like a light drizzle.

Betting markets are giving her a 19% shot at taking the cake, with Macron still the clear favorite…



So we have the financial markets pricing a 0% chance of a Le Pen victory, but the betting markets are giving her a 19% shot — there's an edge here we can exploit.

The plan is to buy cheap Euro options that no longer carry the "Le Pen premium".

By getting a little creative, we can actually establish a ***cost-free*** hedging structure going into round 2 on May 7th.

Using FXE, the Euro ETF, we can purchase a 1x3 put back spread that should scratch or win small if Macron is elected, but win HUGE if Le Pen is elected.

It's a trader's dream — a true "win-win" scenario.

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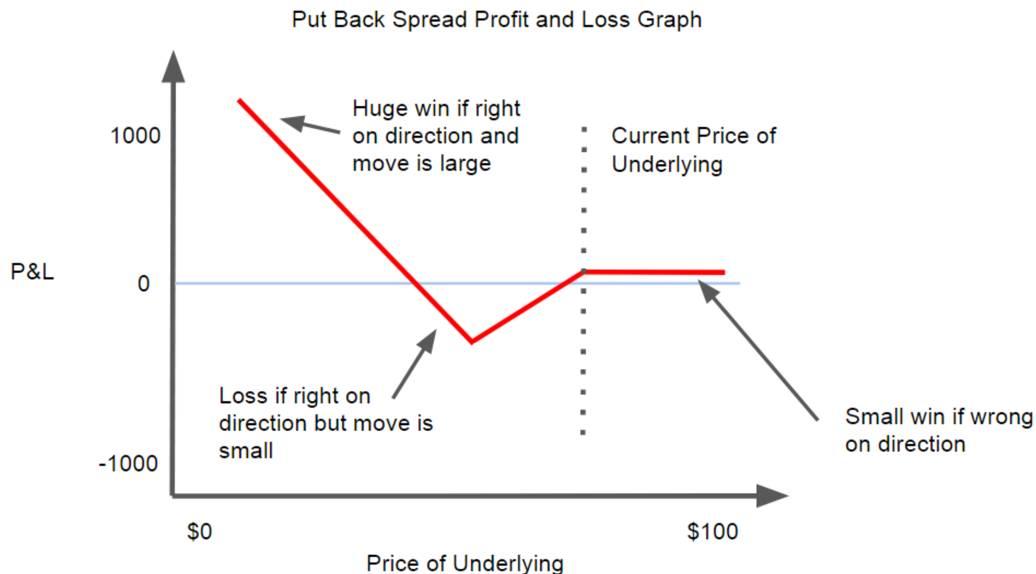
Target. Deploy. Profit.

Back spreads are interesting option structures. They win or scratch if you're wrong on the direction. They lose if you're right on the direction, but the move is only moderate sized. And they win BIG when you're right on the direction *and* the move is EXTREME.

Here's a simple diagram of how a put back spreads work:



This structure is perfect for a second-round hedge. If Macron wins as expected, the Euro should do nothing and the spread will scratch or win small. But if Le Pen wins in a huge upset, the Euro should tank big time and the spread should make a killing. There are very low odds of a scenario where the Euro has a moderate down move causing price to fall within the "max loss" area.

Right now our eye is on the FXE 105.5/103 put back spread expiring on May 19th.

It's currently trading for a $0.17 credit. We'll be able to take the trade off for a small gain if FXE rallies a bit after the election.

If Le Pen wins, our expectation (using Brexit as a rough guide) is that the Euro gets clobbered and ends the day down 10.00%.

A 10% drop in EURUSD will correspond with FXE trading around $95.00

If that happens the spread will appreciate to $13.67.

The worst case scenario would be FXE opening around 104 — but that would only come with a $0.30 loss.

So we're risking $0.30 to make $13.67, meaning:

This trade has a 45x return on risk.

You won't find another play with this kind of asymmetry.

The probability of payout is low… but that's how lotto tickets work. Anything with this type of convexity comes with a low probability of success. Size accordingly.

Trade Idea: Sell 1 FXE May 19th 105.5 Put and Buy 3 FXE May 19th 103 Puts For A $0.17 Credit
Close trade on May 8th.

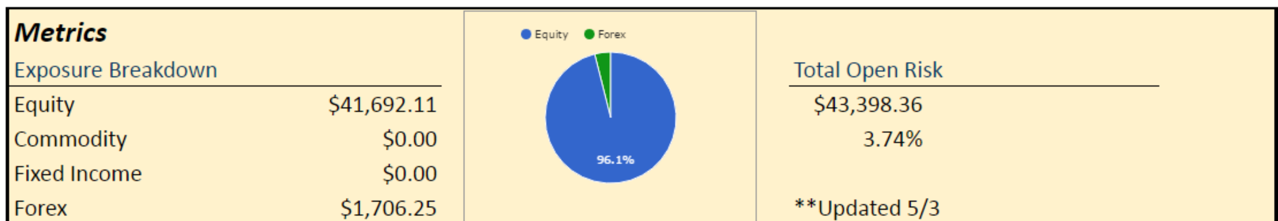
Remember, our base case is that Macron will win the election. We're positioned to benefit from that outcome. This Le Pen option structure only serves as a hedge to our risk-on holdings.

Portfolio Snapshot

Strategic Ops

NAV $1,161,393

Asset Class	Position	Size	Cost Basis	Risk Point	Open Risk	Target	Notional	Beta
Equity	Goldfield GV	1,000	$3.89	$2.52	$1,370.00	$4.50	$5,250	1.0694
Equity	GAIA	7,600	$9.88	$8.50	$10,488.00	$13.75	$79,040	0.4497
Equity	Videocon VDTH	2,900	$11.27	$9.26	$5,829.00	$17.45	$32,335	0.7855
Equity	Portugal ETF PGAL	8,000	$10.57	$9.98	$4,720.00	$11.75	$85,040	1.0467
Equity	NEON	39,545	$1.73	$1.36	$14,631.65	$2.50	$60,504	0.8957
Equity	SSYS	1,546	$24.45	$21.44	$4,653.46	$31.50	$40,528	1.4414
Forex	Pound Futures (GBPM7)	13	$1.2865	$1.2844	$1,706.25	$1.3300	$1,050,127	0.3216



Metrics

Exposure Breakdown	
Equity	$41,692.11
Commodity	$0.00
Fixed Income	$0.00
Forex	$1,706.25

Total Open Risk

$43,398.36

3.74%

**Updated 5/3

Volatility Ops

NAV $1,286,001

Asset Class	Position	Size	Cost Basis	Notional
Volatility	June 21st VIX Future	-18	$15.00	-$543,600
Equity	SPX May 18 2390 Call	9	$12.80	~
Forex	FXE Jan 2018 104 Straddle	80	$7.20	~

Scenario Analysis/Stress Tests

Max Loss -$350,000

**Updated on 5/3

Asset Allocation Weightings

Asset Allocation Weightings	Underweight	Neutral	Overweight
EQUITIES			
Large Cap Growth		x	
Large Cap Value			x
Small Cap			x
Mid-Cap		x	
International Equity			x
Emerging Market Equity		x	
Cyclical			
Materials		x	
Gold	x		
Commodities		x	
Consumer Discretionary			x
Financial Services			x
Real Estate, Domestic		x	
Real Estate, Global		x	
Sensitive			
Energy	x		
Industrials			x
Technology			x
Telecom		x	
Defensive			x
Consumer Staples	x		
Healthcare			x
Biotech			x
Utilities	x		
FIXED INCOME			
Preferreds		x	
Government Bonds		x	
Corporates	x		
Munis	x		
Long Duration			x
Intermediate Duration		x	
Short Duration	x		
High Yield	x		
TIPS		x	
Emerging Credit	x		

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