The Consilience Report

The winds and waves are always on the side of the ablest navigators. ~ Edward Gibbon

Beware The Chihuahua...

(8/20/2020) In This Issue:

> *"Well over half the men who started the course with me many weeks earlier were now gone. At the beginning of this, the final test of the course, we were told to pack a rucksack that weighed at least seventy pounds and prepare for a long-distance movement through the Appalachian Mountains. There was no guidance on how long the movement would be or how long we would be given to complete it. For me, Stress Phase started at 2:30 A.M. when, in total darkness, I was dropped on a dirt trail in the middle of the mountains (aka nowhere). A Delta cadre member handed me a piece of paper with map coordinates on it and told me to "Find my way to the next rendezvous point (RV), and take all instructions from the cadre." And, oh, yeah, "Don't be late, and don't be light."*

This is former Delta Force Commander Peter Blaber recounting in his book "My Mission, My Men, and Me" his experience during the Delta Force's grueling final phase of its selection process, appropriately called the "Stress Phase".

About 15-hours into the maneuver Blaber was exhausted, near delirious, and not quite sure of his bearing after fighting his way through the thick vine-webbed underbrush of the Appalachian mountains. Needing to orient himself, he decided to make his way up a tree to see if he could spot the ridgeline that located his final rendezvous point. This was a bad idea.

Blaber was so discombobulated he forgot to take off his 70lb ruck before the climb up. As soon as he reached the top and was about to survey his surroundings, the thin branch supporting him and his gear gave way and Blaber plummeted head over heels to the ground.

He likely would have broken his neck had it not been for the arresting force of the vines that had been tormenting him throughout the mission. This was lucky. Unfortunately... this luck was short-lived. As soon as Blaber finished checking in with himself to make sure he didn't break any bones, he heard a noise.

> *I turned like an arthritic old man, head and upper torso as one. With the peripheral vision of one eye, I spotted a tiny black animal scurry out from under my ruck. How cool—a baby bear! Then my spider senses kicked in. Fifty or so feet to my rear, I heard the*

> *spastic scream of an enraged animal. It was violently thrashing the vines, and it was getting closer. Turbocharged by a heavy dose of fight-or-flight adrenaline, in one fluid motion I jumped up and bolted. What kind of screwed-up luck is this? Instead of finding my way out of the vines, I wandered into the middle of a black bear's den—and now I'm gonna get my ass torn apart.*

Blaber took off like a banshee out of hell but the sounds of the bear only grew closer. Knowing full well he had zero chance of outrunning a pissed off momma bear, he made a split-second decision. He came upon a cliff that led to a steep slope that ran for a couple hundred feet or so. Running at full bore, he jumped.

> *It was a magnificent leap, one I could likely never replicate without the motivational stimulus of an angry black bear on my heels. I landed on the slope precisely as I had hoped, at an angle, and feet first. But instead of rolling, my strength-sapped body betrayed me once again. I crumbled like a beanbag and immediately transitioned into a cartwheeling carcass. Arms and legs flailing violently, I rolled end over end. After a couple of hundred feet, I plowed into a medium-sized walnut tree and came to an abrupt stop. Once again, I conducted a quick survey of my limbs. Everything still worked. What about the bear? I wondered while maintaining statuelike stillness.*
>
> *Using the tree as a pivot, I pushed myself up on my knees and slowly scanned upward toward the edge of the cliff. There, slightly occluded by the bramble bush I had so magnificently launched myself over, was baby and mother searching the hillside for my carcass. As so often happens when you stare and focus directly at another living being, the mother abruptly snapped her head in my direction and locked eyes with mine. To my simultaneous horror and shame, I discovered that she—was a pig!*
>
> *Not a bear, or even a wild boar, but a freaking pig! Dirty and disgusting, it had likely escaped from a local farm. I had run for my life, and jumped off a cliff, all because I had jumped to the conclusion that my life was endangered by a nonexistent bear.*

Blaber had flung himself over a cliff in full kit and cartwheeled for a couple hundred feet because he was getting chased down by a staple of American breakfast. To further salt the wound, he realized he'd also lost his map and flashlight in the tumble.

He was now completely lost, without map or light, as bone-weary as ever, and with just a few hours left to make rendezvous. Failure of which would make the last few months of suffering all for not. And... he had <u>all</u> of this to thank for his mistaking Mrs. Piggy for an angry black bear.

Fortunately, Blaber made it to his destination by the very skin of his teeth. And he went on to become a decorated Delta Force Commander.

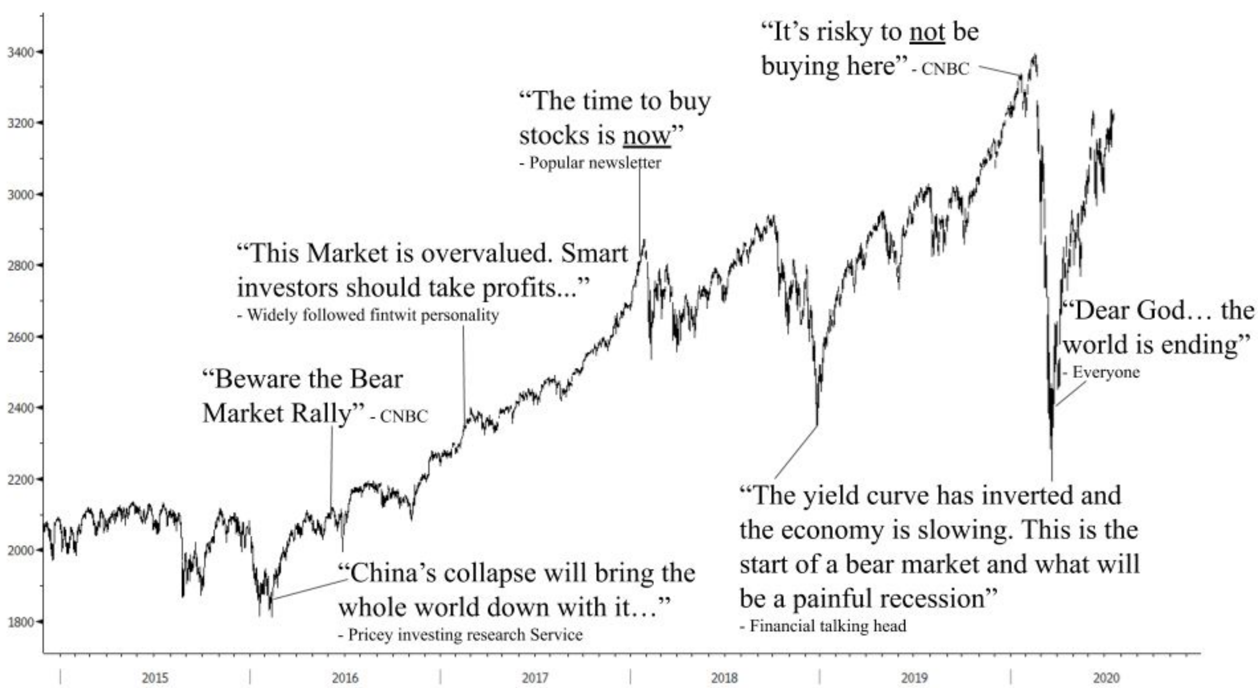
He attributes much of his follow-on success to an important lesson learned that fateful night. A lesson he now refers to as "Don't Get Treed By A Chihuahua".

Blaber writes:

> *It's been said that there are no mistakes in life, only lessons. Every mistake is an opportunity to ensure that we never make it again, especially when future consequences can be much more dire. When I saw the little black creature through the corner of my eye, my tired and frustrated mind took a shortcut. I decided it must have been a baby bear with a mother not too far behind. When I heard the spastic scream of the animal in the bushes, I decided it had to be the vicious growl of a mother bear instead of what it actually was—the vicious oink of a mother pig.*
>
> *My contextless response was to run for my life and jump off a cliff; I got treed by a chihuahua. <u>Getting treed by a chihuahua is a metaphor for making decisions without context. Context is the reality of the situation around us. Without context, our minds have a tendency to take shortcuts and recognize patterns that aren't really there; we connect the dots without collecting the dots first.</u> Overreacting, underreacting, and failing to do anything at all are all symptoms of "getting treed."*

Investors get treed by purse-sized yappy dogs, day in and day out. They make decisions without **effective context** before they've **collected the dots**. They mistake pigs for bears, minor dips for major crashes, and market tops for great buying opportunities.

Like Blaber on the final night of Stress Phase, they make biased decisions from points of emotion such as fear and greed. As a result, they have a tendency *to recognize patterns that aren't really there.*



This is a function of our cognitive wiring.

The brain is an amazing piece of hardware. It is comprised of roughly 90 billion nerve cells which are linked together by trillions of synapses. It is estimated that the human brain operates at approximately 1 exaFLOP. That’s equivalent to a billion-billion calculations per second, multiples faster than what the largest supercomputer can accomplish over any meaningful period of time.

But all this processing power takes up a lot of energy — a bit over 20% of the body’s total usage — making it by far the most energy-intensive organ.

Because of these large energy needs, the brain has evolved like the rest of the human body for maximum efficiency. After all, the primary driver of evolution is survivability, and energy sources (food), used to be scarce. So the human body evolved to balance a brain that can solve complex tasks — helping us move to the top of the food chain — with a need to efficiently use the body’s energy**.**

As a result, **we got a brain that’s awesome, but also lazy.**

It uses a host of cognitive tools (ie, heuristics, biases, anchoring, etc.) as a way to jump to conclusions without expending *too* much energy consciously thinking through every single problem it’s faced with.

For the most part, this system works great. The brain is *unmatched* in its ability to subconsciously perform pattern recognition and come to an adequate conclusion with little information.

For the many advantages that our brains offer though, they can be <u>extremely</u> dangerous to our trading capital.

That’s due to the following two reasons:

1. Our brains operate on pattern recognition and therefore like simple, linear answers.
2. Information overload results in **cognitive tunneling** (System 1 thinking) and our minds instinctively follow the path of least resistance when confronted with complexity.

The problem with “reason 1” is that markets are not simple or linear. They are endlessly complex and dynamic.

Therefore “reason 2”, following the path of least resistance in coming to conclusions, is the opposite of what you should be doing.

But it doesn’t need to be like this. As Blaber learned, there’s a way to overcome this evolutionary handicap. He writes:

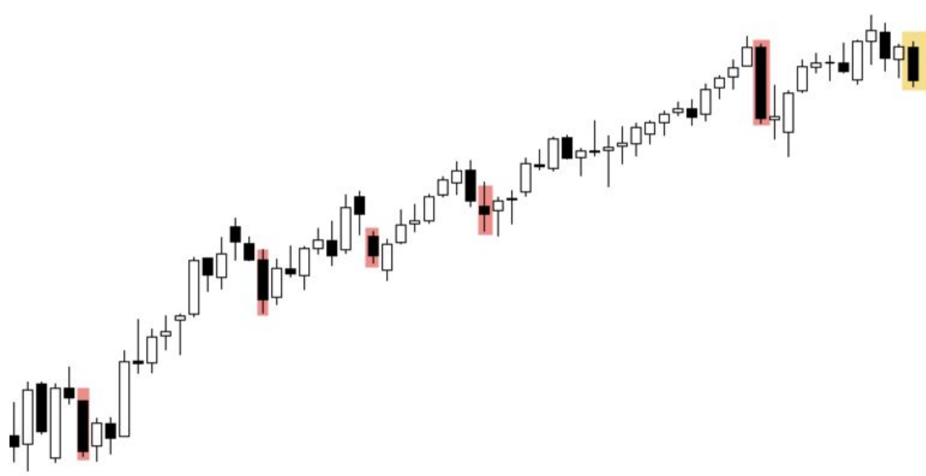
> *So how could I have known it wasn't a bear? Because there was another, more enlightening pattern tugging at the shirttails of my common sense as I fled that day. It was the pattern of being treed by a chihuahua—all those times in my life when I had made chowderheaded decisions without understanding the reality of the situation around me. My common sense was telling me to take time to look, listen, and question everything.* ***Common sense provides context, and context is common sense****.*

In this *report,* we're going to lay out a three-part-framework for establishing context in markets.

The framework will keep you from getting knocked out by every minor dip in a major trend. It will help you know when it's time to take profits and reverse your positioning. It's the framework I used to flatten my longs, buy a bunch of bonds, and go short the market in late February before the crash. It's the one I used to start adding some risk again shortly after the March 23rd bottom.

Is it <u>this</u> or is it <u>that?</u>

Price action is fractal. There's trends, counter-trends, and consolidations contained within every chart. This simply means that within every trend, like the one below, there are reversals and consolidations simultaneously taking place on various timeframes.



The difficulty in sitting tight and riding a trend out is when you get these little dips (highlighted candles). You don't know whether they're going to do this.

Or this…

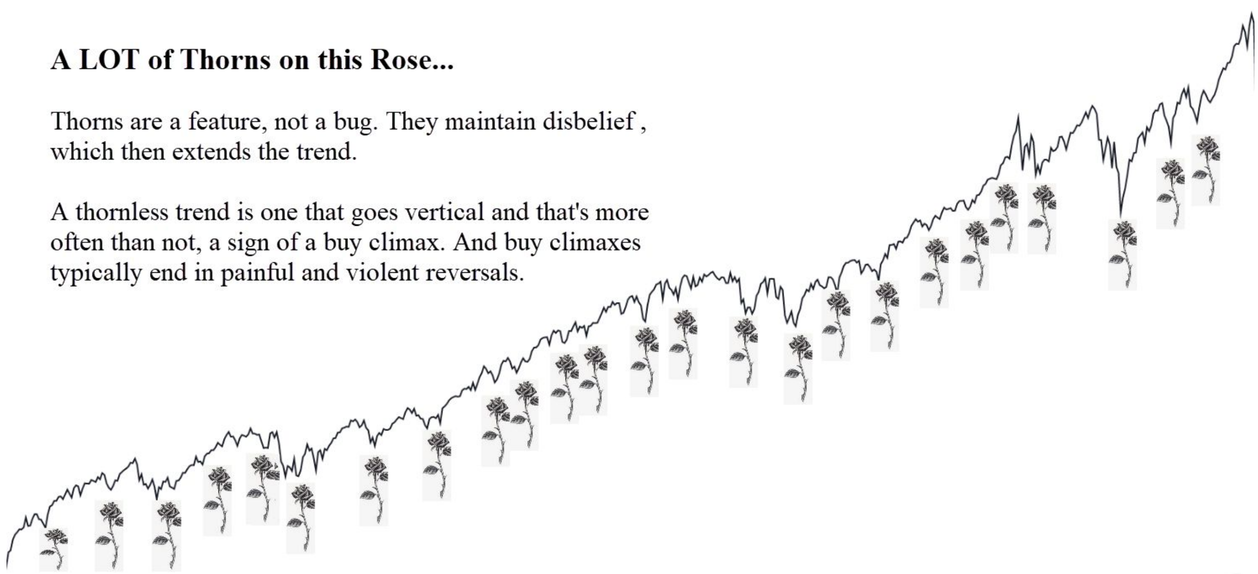
Most investors sit on the sidelines for the meat of the trends. They console themselves with ALL the reasons why the trend will end, and they expect every dip to be the BIG one.

By necessity, it *has* to be this way. [Trends are built on disbelief](). They climb a wall of worry and fall down the stairs of hope. It's the *conversion* of non-believers to full-on punch drinkers that eventually mark the major turning points.

The oscillations, the dips, the volatility along the way are the price the player pays to ride out a big move.

I can't remember who made the analogy (Ed Seykota, maybe?). But they compared a trend to a rose. To hold a rose you have put up with the thorns. Most traders think the thorns are poison-tipped and quickly drop it like it's a turd covered stick.

Experienced traders know that a thorn is an opportunity to enter or add to a position…



Thorns are a feature, not a bug.

They perpetuate the disbelief in the trend and keep positioning and sentiment from reaching a point of criticality that translates into trend fragility and raises the specter of a full-blown phase-shift (reversal). This is true for all complex systems as pointed out in this piece from [Quanta Magazine]().

> *A complex system that hovers between "boring randomness and boring regularity" is surprisingly stable overall, said Olaf Sporns, a cognitive neuroscientist at Indiana University. "Boring is bad," he said, at least for a critical system. In fact, "if you try to avoid ever sparking an avalanche, eventually when one does occur, it is likely to be*

> *really large," said Raissa D'Souza, a complex systems scientist at the University of California, Davis, who simulated just such a generic system last year. "If you spark avalanches all the time, you've used up all the fuel, so to speak, and so there is no opportunity for large avalanches."*

In markets, frequent dips help prevent major selloffs and effectively lengthen the duration of a given trend. Knowing this, as traders and investors, our process **needs to exploit and harvest the positive function of dips (thorns) and not let them shake us out of positions**. That's what the following framework aims to do.

The *Trifecta Lens* is a 3-part decision tree that operates off of simple: *if this, then that* conditional statements. The aim of which is to quantify our key indicators of breadth, liquidity, and sentiment in order to give us **objective points of context**. The result of which is it tells us whether a dip is a <u>**this**</u> or a <u>**that**</u>.

It looks like this:

1. Setup
2. Conditions
3. Trigger

The tipping point into multiplicity

A Setup is a technical point on a chart. In physics terms, it would be called the critical point, which is the zone at which a complex system sits between order and disorder. The area at which a phase transition can take place.

In our framework, the Setup is when the **price touches the lower band of a standard 20-day 2stdev Bollinger Band in an uptrend**. But, in reality, it could be a number of things, such as a Keltner or Donchian Channel break, a swing below a pivot point, a percentage move off new highs, etc…

The exact details are fairly unimportant and you can use something else that better fits your process and objectives. The key is that it's a critical point that shouldn't be too frequently hit because you'll end up with a lot of noise.

Many investors worry about a large selloff when the market is hitting new highs, which just boggles the mind, because new highs are an obvious trait of a bull trend. A bull trend contains many oscillations that vary in amplitude. Again, these are thorns and they're a *good* thing.

We don't care about dips to the middle range of the band, because those are noisy and are more often than not, a buying opportunity — remember Newton's First Law of Markets, **a trend**

in motion tends to stay in motion — statistically speaking, a trend will continue 80% of the time.

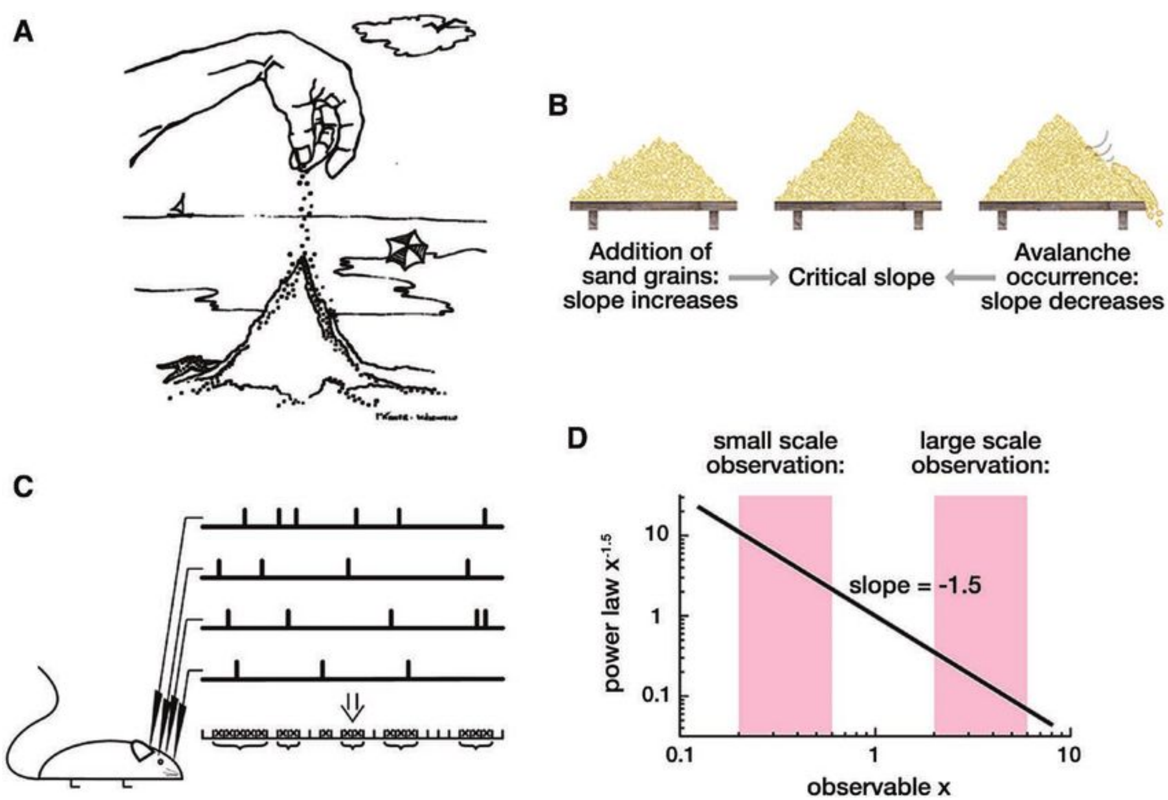
A larger selloff is what we're concerned with and it has to pass through the lower Bollinger Band. I know I'm making some obvious statements here, but bare with me as I build on the logic behind the framework.

So, it's only when the price hits the lower Bollinger Band in an uptrend that we need to follow through on the rest of our framework. In order to see if it's a this or a that… a dip or a potential crash...Otherwise, we should buy new highs; buy reversals after dips to the midline, buy because we have too much cash, buy because it's sunny out, etc...

A measure of potentiality

If our Setup is a measure of frequency then Conditions are a measure of the potential amplitude or the overall fragility of the trend at that point in time. They give the probabilities for a phase-shift, a reversal of trend.

To use the sandpile analogy, we can think of Conditions as a measure of slope. The steeper the slope the greater the potential for an avalanche.



We measure Conditions through a Trifecta of Breadth, Liquidity, and Sentiment. There is no panacea or perfect indicator in markets. It can't exist because if there was it would be arbed out and reflexivity would kill its value as a signal. Using the Trifecta approach of collecting data points from disparate areas of the market, we can holistically build out a more effective context.

So let's walk through each one.

The strength of the line

A good way to think of market breadth is like an advancing military force. Strong breadth is similar to an army with a deep and disciplined line (think of old school battles where fighters stood shoulder to shoulder). That line has strength and weight behind it. It can move and push through barriers.

On the other hand, when the line is thin and begins to fracture. It doesn't take much from the opposing force to break it completely. This is how major trend changes happen. Each issue in an index is equivalent to a soldier standing on that line. And that is what various indicators of breadth aim to measure.

The three breadth indicators used in our Trifecta Lens are:

1. NYSE New Highs / New Lows Index
2. Russell 3000 % Advancers
3. SPX % > 50dma

The conditional statements used for each one is:

1. If 30dma trending down & Index < 0.5 = -1. If trending up & Index > 0.5 = +1. If sideways = 0
2. RAY % Adv (20dma): If < 50 = -1. If > 50 = +1. If = 50 = 0
3. SPX % > 50dma: If < 50 = -1. If > 50 = +1. If < 10 = +1

We add these together to get a Breadth score. The score ranges between -3 and +3 with -3 indicating very negative breadth and +3, the opposite.

The strength of the current

Liquidity can be thought of as the trend in demand for risk. It's best measured by tracking what's going on in the credit markets. Since, as per our Hierarchy of Markets framework, credit markets are smarter than equity markets and more often than not, sniff out major trend changes before they show up in stock indices.

The three liquidity indicators used in our Trifecta Lens are:

1. Baa Yield z-score (50d)
2. LQD/IEF
3. Stock and Bond Ratio z-score

The conditional statements used for each one is:

1. W/in prior 30-days: If < -2 = +1. If > 2 = -1. If between = 0
2. W/in prior 14-day divergence w/ SPX: If > (positive divergence) = +1. If < = -1. No divergence = 0
3. W/in prior 30-days: If < -2 = +1. If > 2 = -1. If between = 0

The yin and yang

Exuberant sentiment and crowded positioning are behind nearly every major market selloff. Overly eager investors out over their skis are what sows the seeds for a reversal in trend. It's what drives the fractal risk-cycle and why there's an embedded yin & yang flow to markets. You can read more about how we think about sentiment here.

The three sentiment indicators used in our Trifecta Lens are:

1. Total Put/Call 10dma
2. z-score
3. AAII Bull-Bear

The conditional statements used for each one is:

1. W/in prior 30-days: If > 1.1 = +1. If < 0.85 = -1. If between = 0
2. W/in prior 30-days: If < -2 = +1. If > 2 = -1. If between = 0
3. W/in last 30-days: If < -20 = +1. If > 20 = -1. If between = 0

We add the Breadth, Liquidity, and Sentiment scores together once a Setup point has been observed. The cumulative points give us a final score which ranges from -9 to +9.

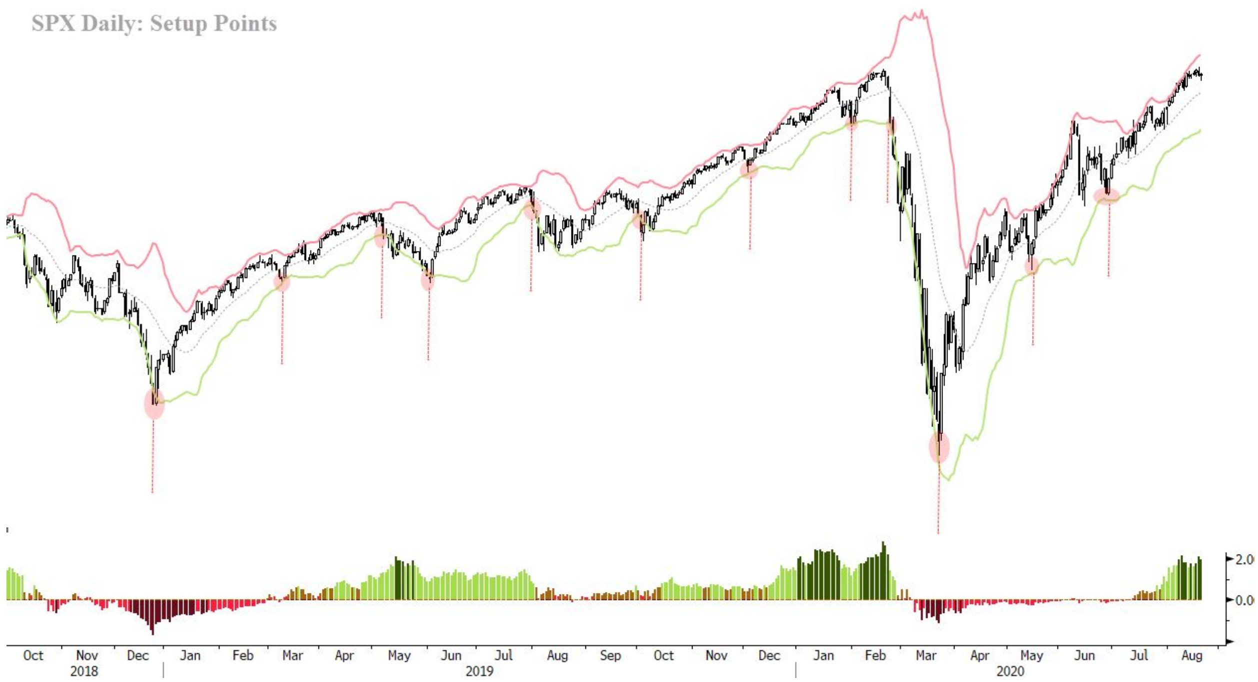
The tape tells all...

A Trigger is a setup bar that leads to an action; an entry, exit, add to, or reduction of a position. We're not going to dive too much into this concept today. We'll leave that for another time. But essentially, it's an additional and critical contextual point that precedes a trading action.

For instance, it could be a strong bullish reversal bar after a Setup is hit in a bull trend when the Conditions signal a high probability of trend continuation. And vice-versa, it could be a bearish follow-through after a Setup point is hit, indicating a high probability of further downside over the short-term, at minimum.

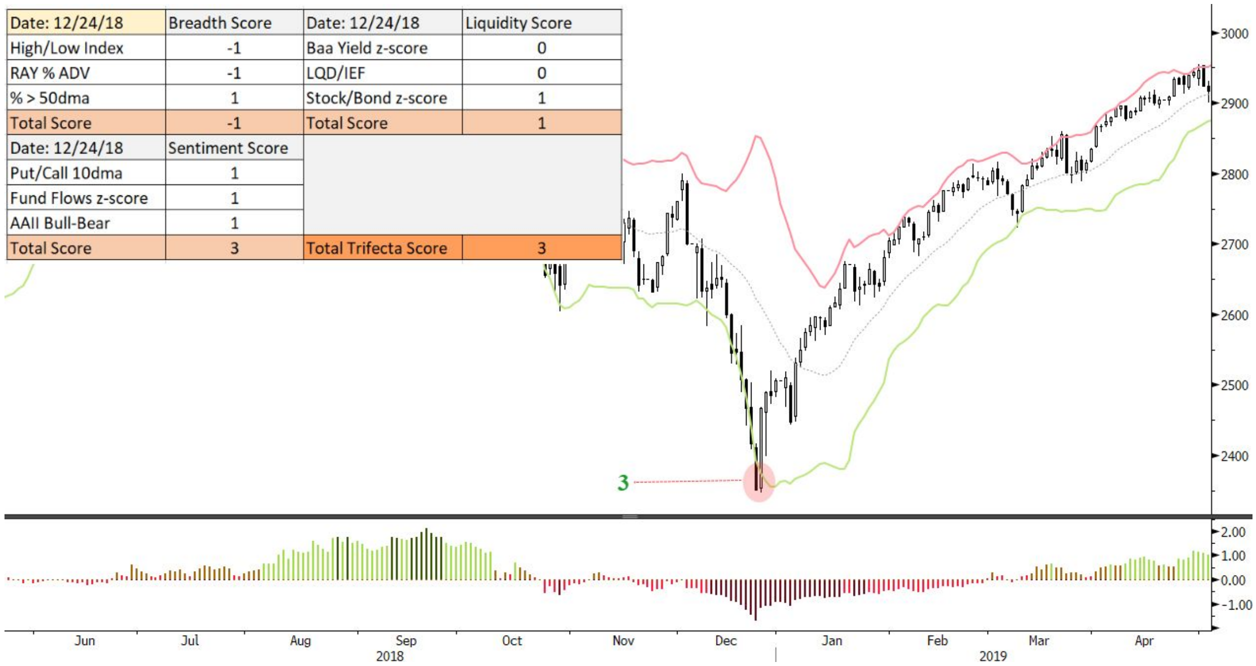
Putting it all together

Let's now go through 12 Setups over the last 18-months and see how this framework would have kept you in the trends and out of the crashes.



Beginning at the bottom of the December 2018 selloff when everyone was talking about recession, the [inverted yield curve](), and trouble in China.

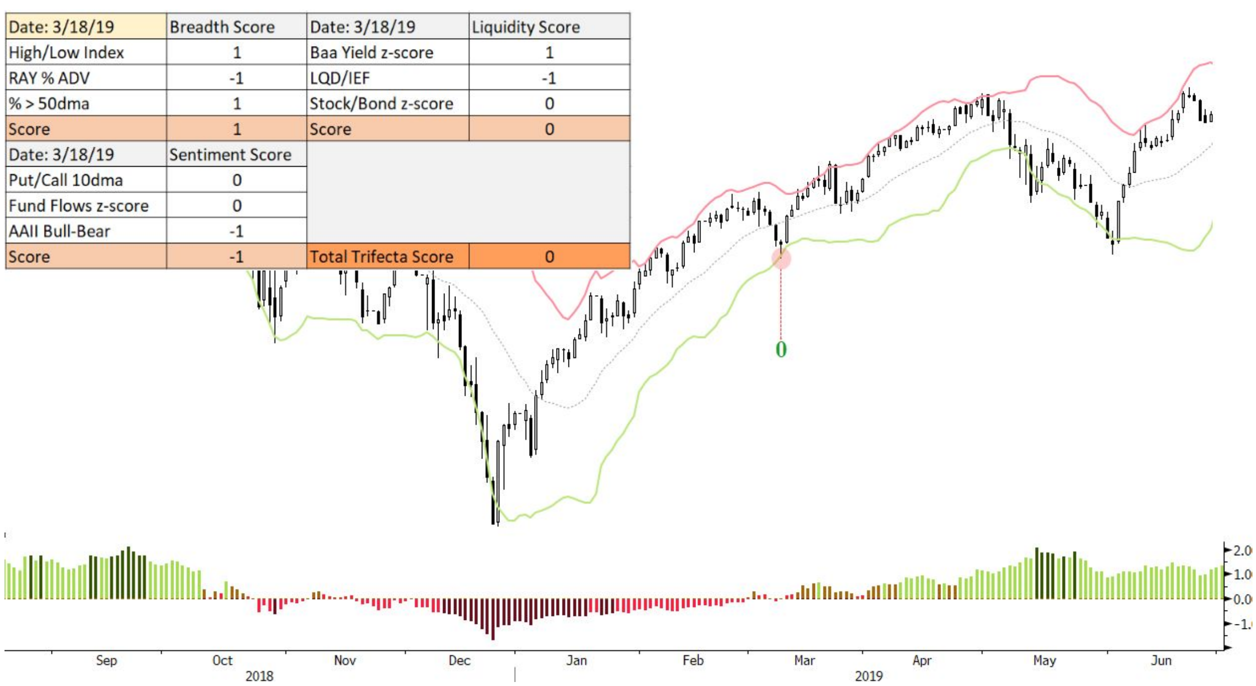
The Trifecta Lens gave us a score of +3. Any score from zero and above is bullish, so a positive three is a very strong reading. This reading was followed the next day by a large bullish reversal Trigger bar.



Date: 12/24/18	Breadth Score	Date: 12/24/18	Liquidity Score
High/Low Index	-1	Baa Yield z-score	0
RAY % ADV	-1	LQD/IEF	0
% > 50dma	1	Stock/Bond z-score	1
Total Score	-1	Total Score	1
Date: 12/24/18	Sentiment Score		
Put/Call 10dma	1		
Fund Flows z-score	1		
AAII Bull-Bear	1		
Total Score	3	Total Trifecta Score	3

In March 2019, when everyone was calling the rise off the lows a bear market rally and pointing to indicators of a global recession. Our Trifecta Lens gave us a score of 0 on the March 18th Setup.

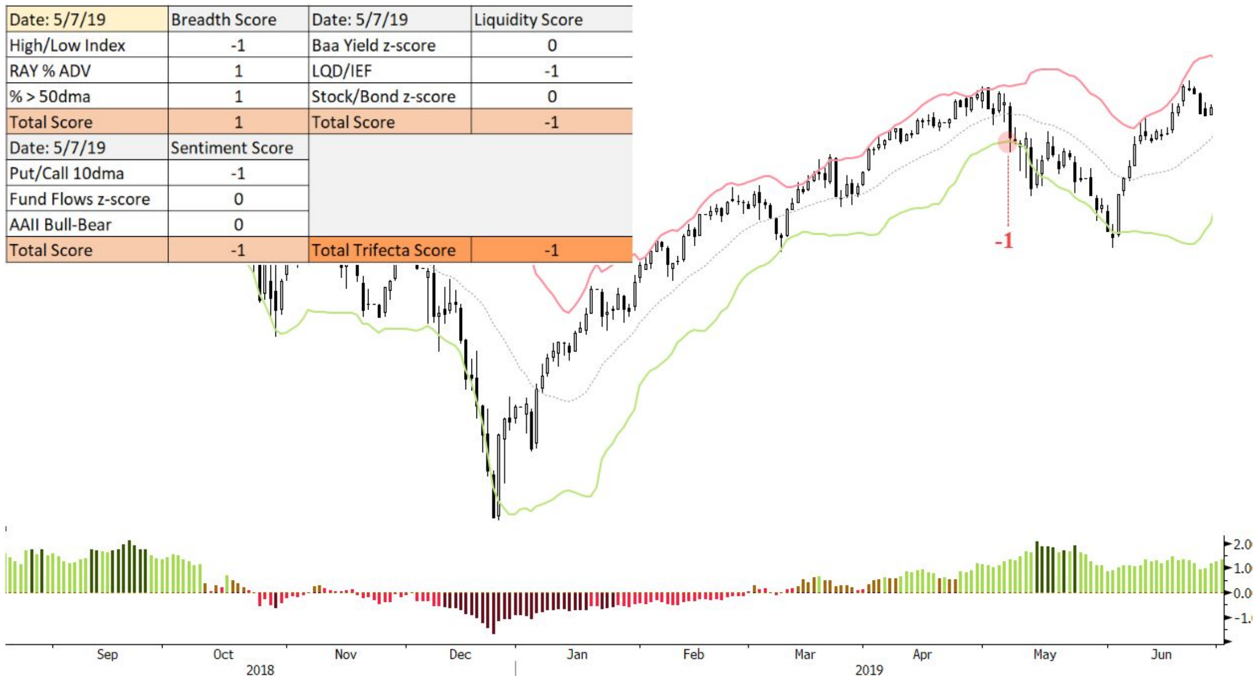
Again, this is a bullish score and it was followed the next day by a bullish reversal Trigger bar.



Date: 3/18/19	Breadth Score	Date: 3/18/19	Liquidity Score
High/Low Index	1	Baa Yield z-score	1
RAY % ADV	-1	LQD/IEF	-1
% > 50dma	1	Stock/Bond z-score	0
Score	1	Score	0
Date: 3/18/19	Sentiment Score		
Put/Call 10dma	0		
Fund Flows z-score	0		
AAII Bull-Bear	-1		
Score	-1	Total Trifecta Score	0

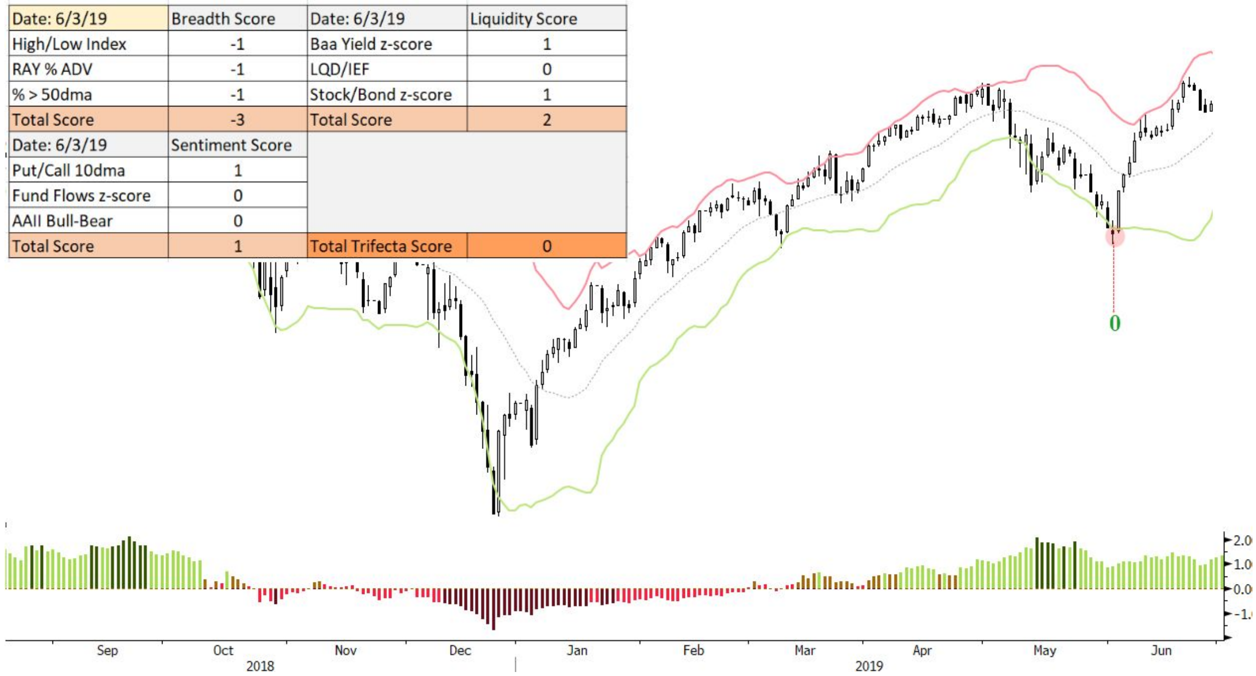
Nearly two months later we got another setup. The narrative was the same: [inverted yield curve](), China recession, liquidity issues, yadda... yadda... yadda…. On the May 7th Setup, we got a reading of -1.

This is a bearish reading indicating there's a higher chance of downside follow-through — which is exactly what we saw. But it's not an extremely bearish reading, one that would normally precede a major selloff or change of trend. Those typically occur at -3 or below.



Date: 5/7/19	Breadth Score	Date: 5/7/19	Liquidity Score
High/Low Index	-1	Baa Yield z-score	0
RAY % ADV	1	LQD/IEF	-1
% > 50dma	1	Stock/Bond z-score	0
Total Score	1	Total Score	-1
Date: 5/7/19	Sentiment Score		
Put/Call 10dma	-1		
Fund Flows z-score	0		
AAII Bull-Bear	0		
Total Score	-1	Total Trifecta Score	-1

Four weeks later, the selloff concluded with a reading of 0 followed by a large bullish reversal Trigger bar.



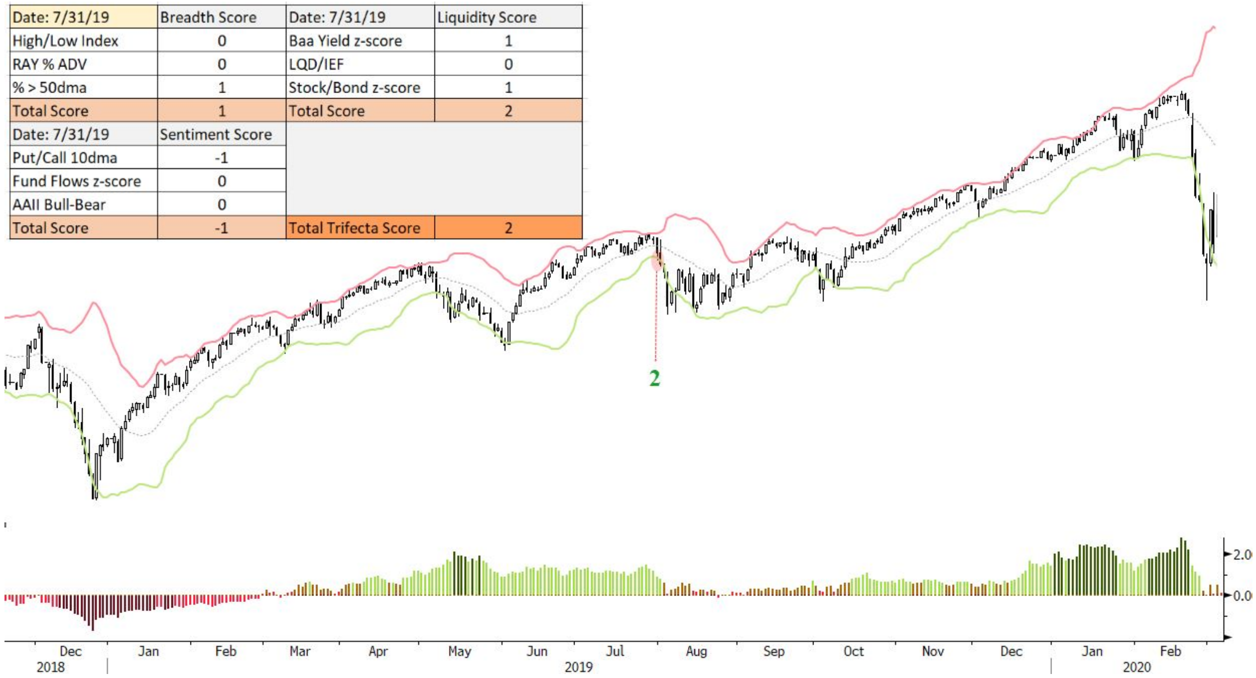
Date: 6/3/19	Breadth Score	Date: 6/3/19	Liquidity Score
High/Low Index	-1	Baa Yield z-score	1
RAY % ADV	-1	LQD/IEF	0
% > 50dma	-1	Stock/Bond z-score	1
Total Score	-3	Total Score	2
Date: 6/3/19	Sentiment Score		
Put/Call 10dma	1		
Fund Flows z-score	0		
AAII Bull-Bear	0		
Total Score	1	Total Trifecta Score	0

Towards the end of July, the whole [Repo Rate Hysteria] began kicking up, feeding the bearish machine.

This, of course, was a bunch of nonsense. Anybody who knew even a little bit about how the financial plumbing works, should have known that. Regardless, it didn't even matter, because the Trifecta Lens would have told you to stay long the trend.

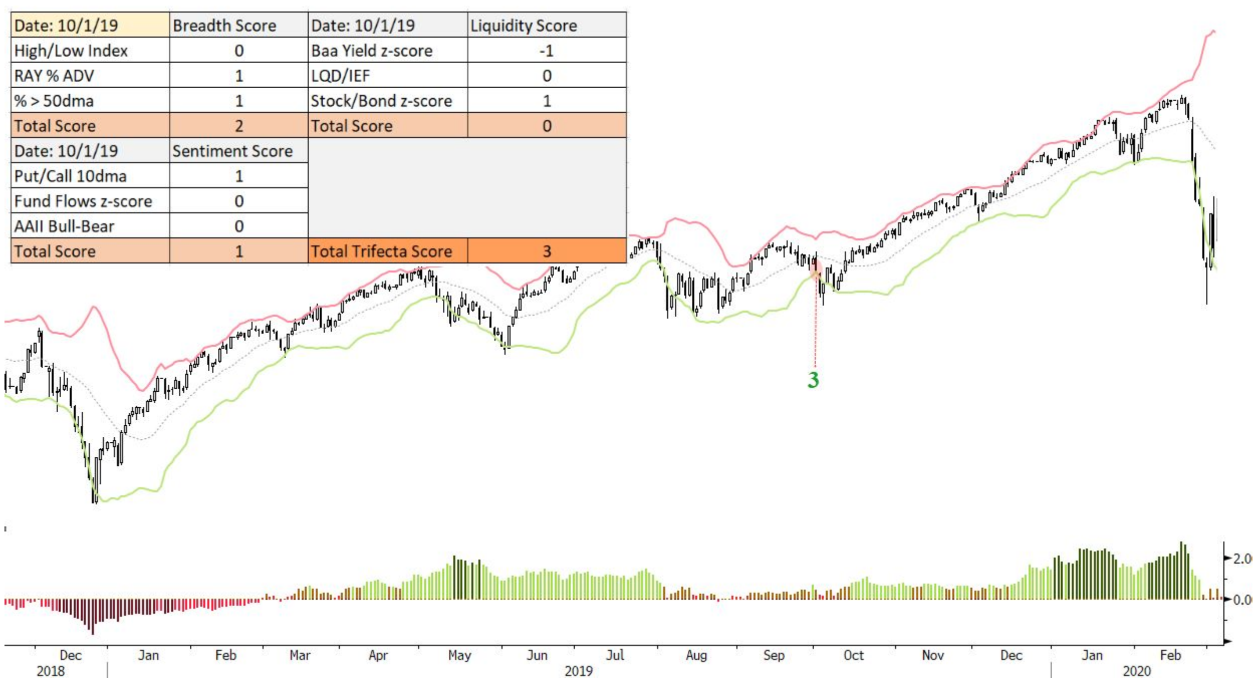
In the July 31st Setup, we got a reading of positive 2. There wasn't an immediate bullish follow-on Trigger bar, but it at least told you that the odds favored a minor pullback over the bear market everyone was predicting.

All you had to do was stay long and wait for a bullish Trigger to enter or add to your position.



Date: 7/31/19	Breadth Score	Date: 7/31/19	Liquidity Score
High/Low Index	0	Baa Yield z-score	1
RAY % ADV	0	LQD/IEF	0
% > 50dma	1	Stock/Bond z-score	1
Total Score	1	Total Score	2
Date: 7/31/19	Sentiment Score		
Put/Call 10dma	-1		
Fund Flows z-score	0		
AAII Bull-Bear	0		
Total Score	-1	Total Trifecta Score	2

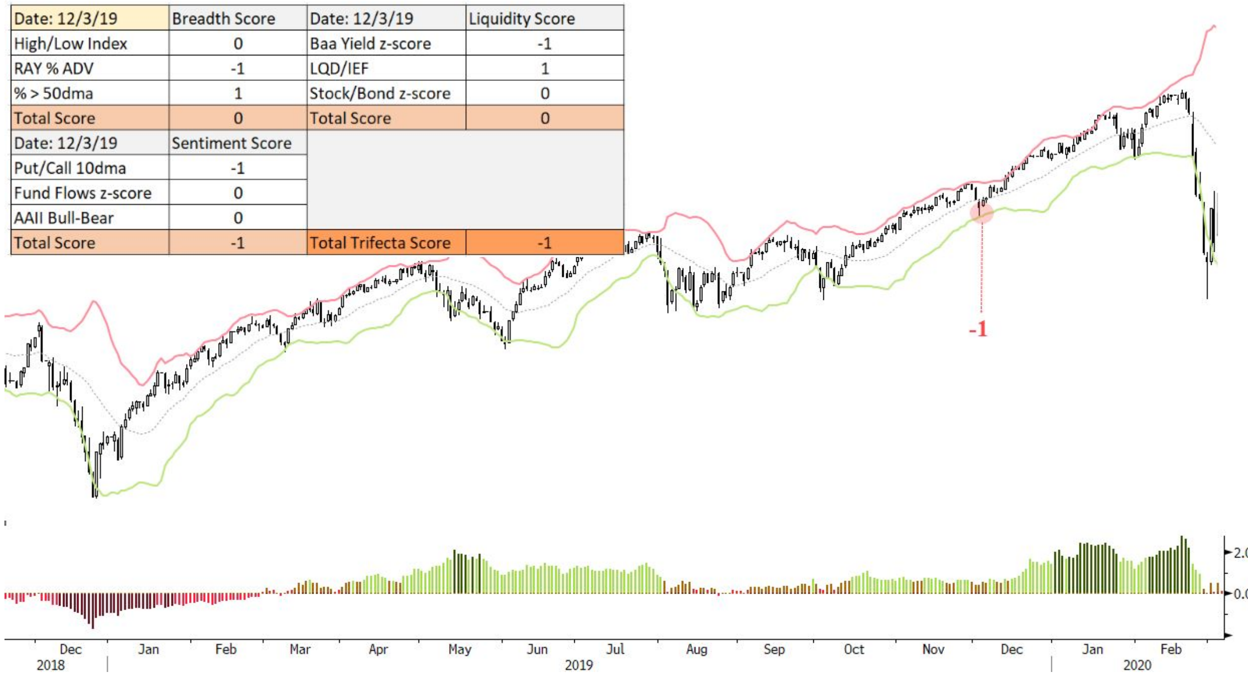
October 2019 was peak [Repo Hysteria]… We got a Setup on the first of the month and a very bullish reading of positive 3. Again, all you had to do was wait for a bullish reversal and buy/add to longs.



Date: 10/1/19	Breadth Score	Date: 10/1/19	Liquidity Score
High/Low Index	0	Baa Yield z-score	-1
RAY % ADV	1	LQD/IEF	0
% > 50dma	1	Stock/Bond z-score	1
Total Score	2	Total Score	0
Date: 10/1/19	Sentiment Score		
Put/Call 10dma	1		
Fund Flows z-score	0		
AAII Bull-Bear	0		
Total Score	1	Total Trifecta Score	3

In December of that year, our bullish tailwinds began to dissipate somewhat. And on our December 3rd Setup, we got a reading of negative 1.

A reading of negative 1 doesn't mean there's a high probability of a major trend change. It just means fragility has increased and Setups can turn into deeper pullbacks. That wasn't the case here as this was quickly followed by a bullish Trigger bar. So again, you wanted to stay long and add to your positions.

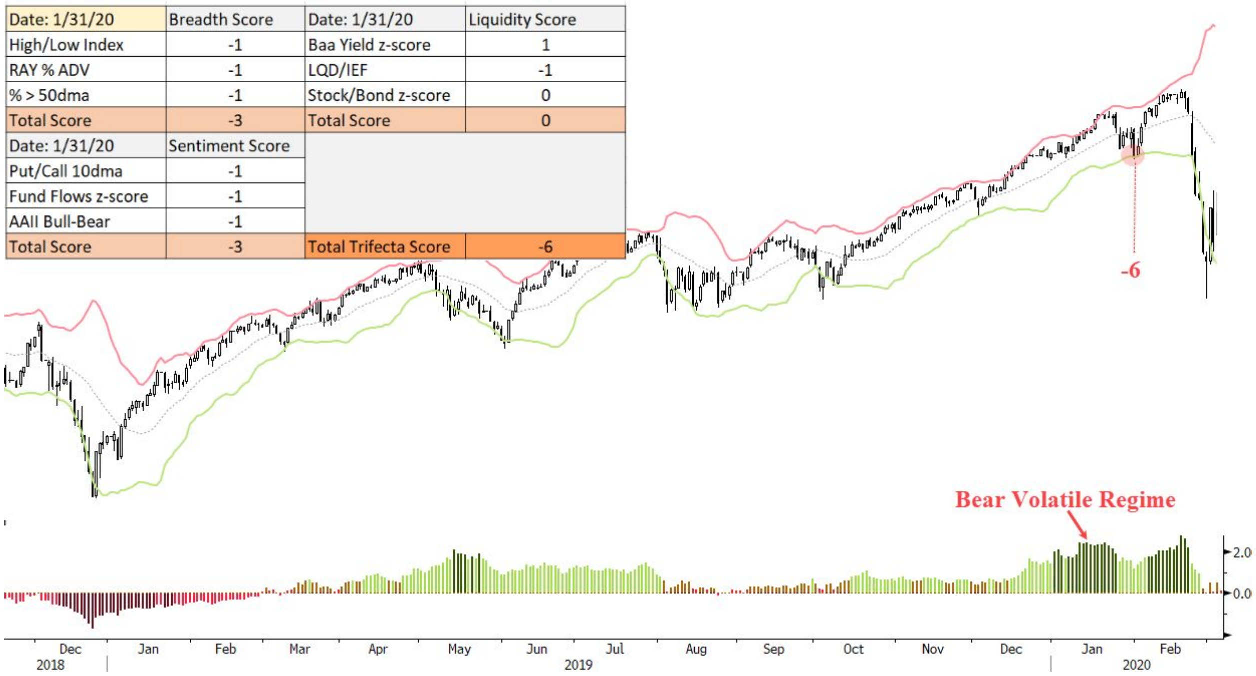


Date: 12/3/19	Breadth Score	Date: 12/3/19	Liquidity Score
High/Low Index	0	Baa Yield z-score	-1
RAY % ADV	-1	LQD/IEF	1
% > 50dma	1	Stock/Bond z-score	0
Total Score	0	Total Score	0
Date: 12/3/19	Sentiment Score		
Put/Call 10dma	-1		
Fund Flows z-score	0		
AAII Bull-Bear	0		
Total Score	-1	Total Trifecta Score	-1

The trend-fragility increased though… And nearly 2-months later, when the narrative was outright bullish and long positioning was at record levels, our Trifecta Lens gave us a score of negative 6.

Negative 6 is about as bad as it gets as it's very rare that all the indicators signal the same thing. This reading was coupled with a Bull Volatile Regime (shown by the SQN dark green bars). And Bull Volatile Regimes are hallmarks of major turning points.

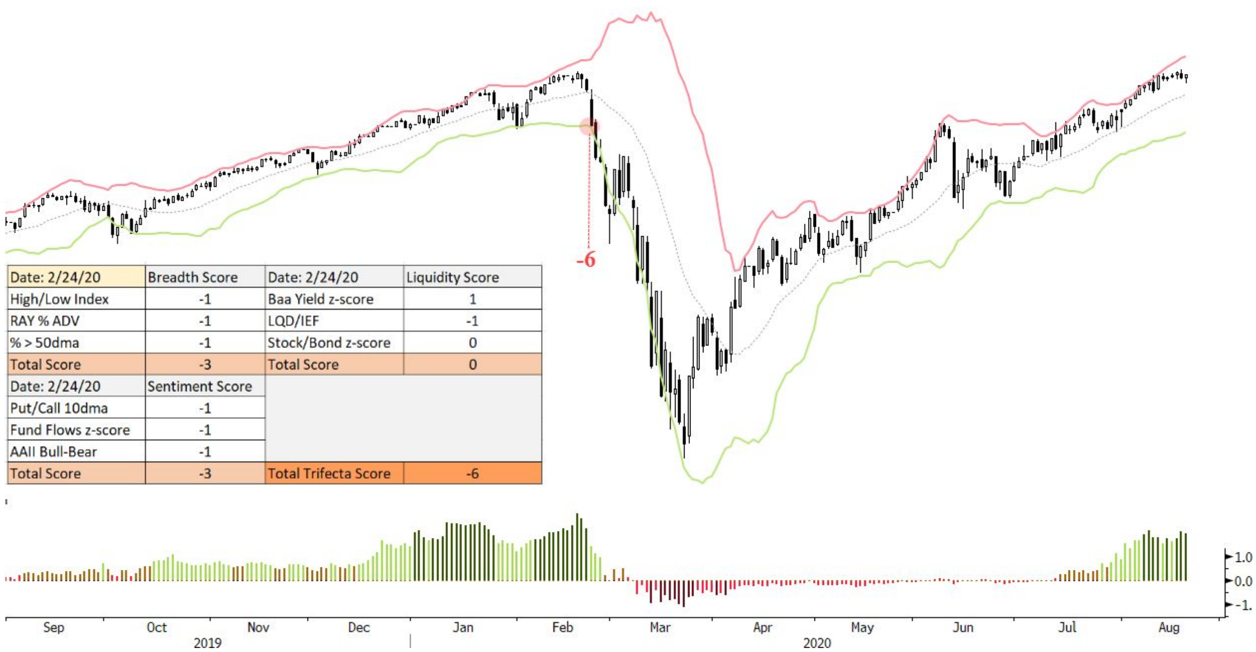
So though this Setup was quickly followed by a bullish reversal Trigger bar, it was a good spot to begin lightening up on risk, selling down positions, and looking to start hedging your book.



Date: 1/31/20	Breadth Score	Date: 1/31/20	Liquidity Score
High/Low Index	-1	Baa Yield z-score	1
RAY % ADV	-1	LQD/IEF	-1
% > 50dma	-1	Stock/Bond z-score	0
Total Score	-3	Total Score	0
Date: 1/31/20	Sentiment Score		
Put/Call 10dma	-1		
Fund Flows z-score	-1		
AAII Bull-Bear	-1		
Total Score	-3	Total Trifecta Score	-6

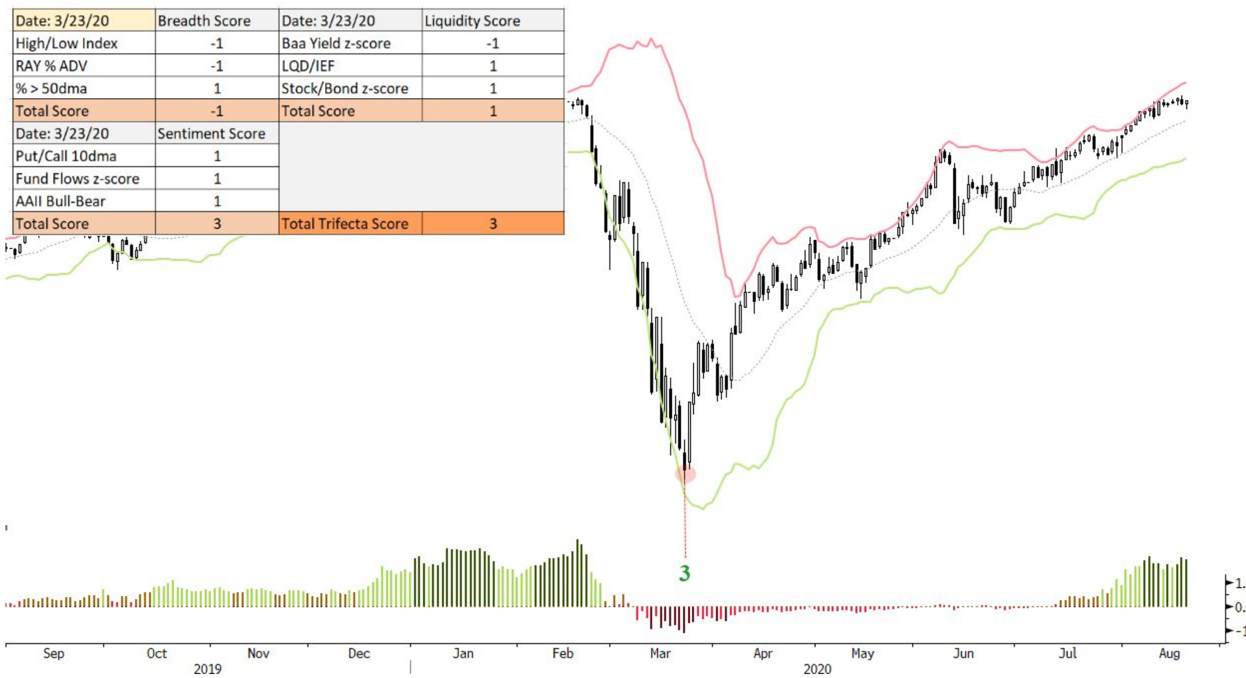
One month later we got another Setup. And this one gave us another **extremely bearish reading of negative 6**. Plus, it was preceded by a very large bear bar and then immediately followed by another one.

This was a clear signal to batten down the hatches and prepare for a large selloff and potential primary trend reversal.



Date: 2/24/20	Breadth Score	Date: 2/24/20	Liquidity Score
High/Low Index	-1	Baa Yield z-score	1
RAY % ADV	-1	LQD/IEF	-1
% > 50dma	-1	Stock/Bond z-score	0
Total Score	-3	Total Score	0
Date: 2/24/20	Sentiment Score		
Put/Call 10dma	-1		
Fund Flows z-score	-1		
AAII Bull-Bear	-1		
Total Score	-3	Total Trifecta Score	-6

The crash bottomed on March 23rd. While the **entire world was predicting a LOT more downside, our framework gave a reading of positive 3**. This was followed the next day by a very large bullish reversal Trigger bar.



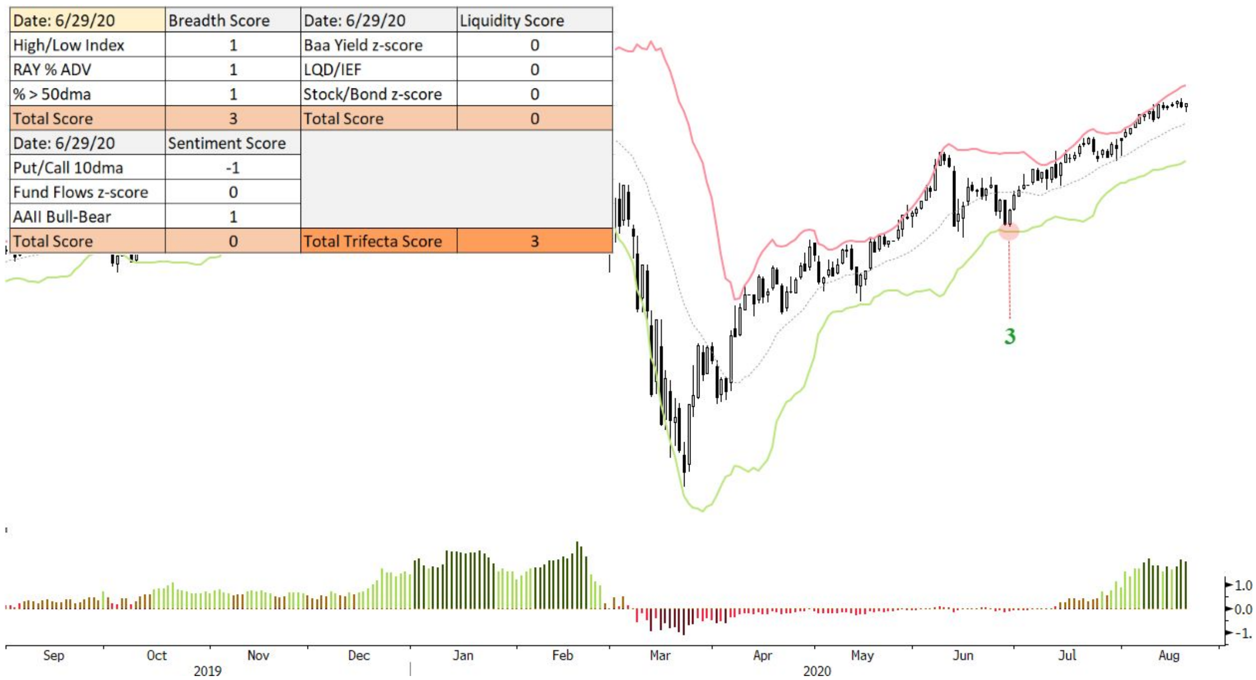
Date: 3/23/20	Breadth Score	Date: 3/23/20	Liquidity Score
High/Low Index	-1	Baa Yield z-score	-1
RAY % ADV	-1	LQD/IEF	1
% > 50dma	1	Stock/Bond z-score	1
Total Score	-1	Total Score	1
Date: 3/23/20	Sentiment Score		
Put/Call 10dma	1		
Fund Flows z-score	1		
AAII Bull-Bear	1		
Total Score	3	Total Trifecta Score	3

It was followed up a month and a half later by a reading of positive 6 during the May 14th Setup.

A positive 6 is about as bullish a reading as you can get. So… buy dips, buy rips, buy new highs.

Date: 5/14/20	Breadth Score	Date: 5/14/20	Liquidity Score
High/Low Index	1	Baa Yield z-score	0
RAY % ADV	1	LQD/IEF	1
% > 50dma	1	Stock/Bond z-score	1
Total Score	3	Total Score	2
Date: 5/14/20	Sentiment Score		
Put/Call 10dma	0		
Fund Flows z-score	0		
AAII Bull-Bear	1		
Total Score	1	Total Trifecta Score	6

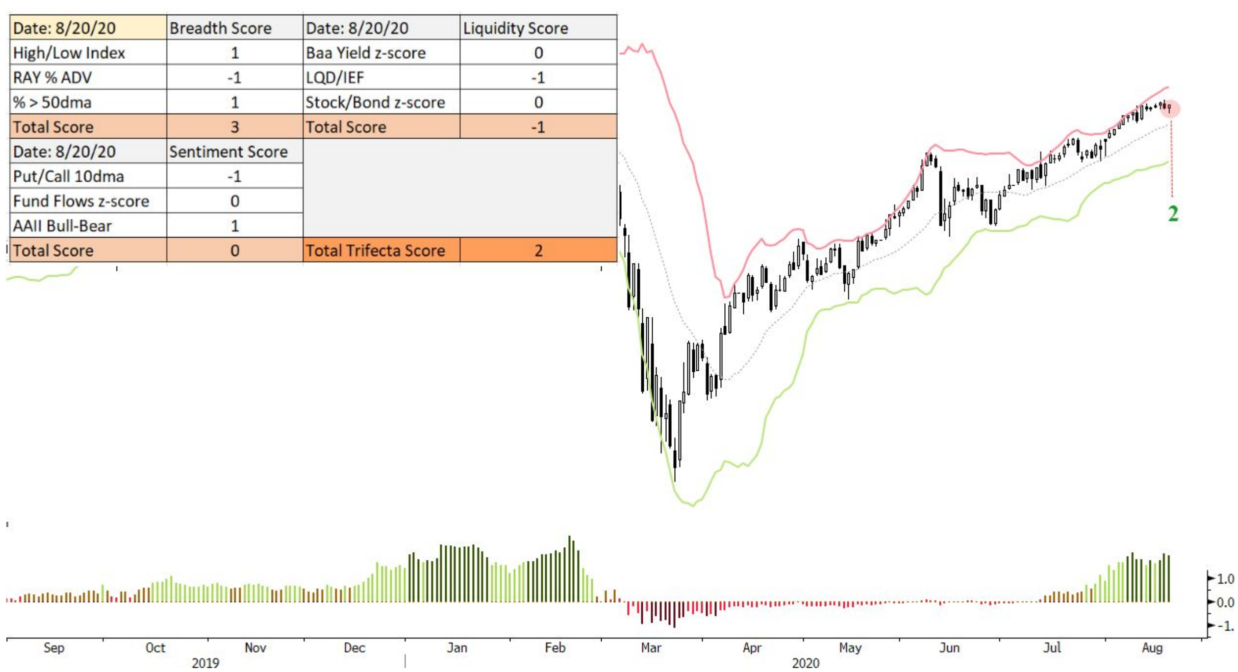
Again, a month in a half later, another Setup with another bullish reading, shortly followed by a Bullish Trigger bar.



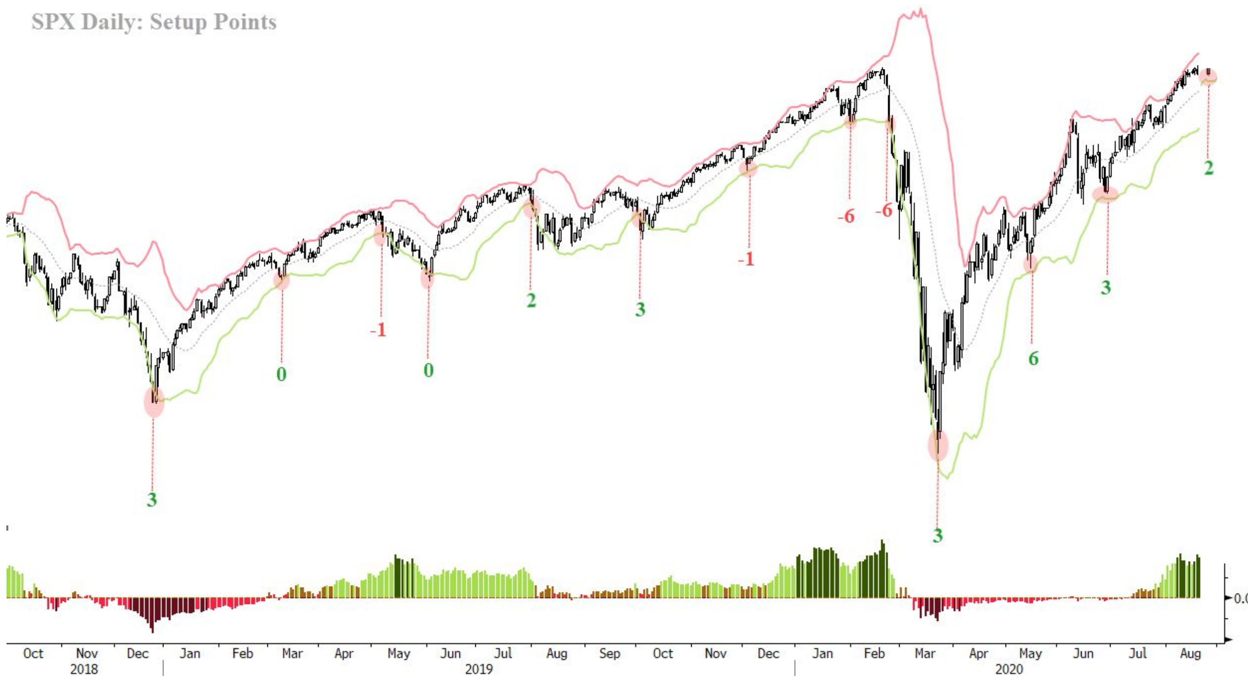
Date: 6/29/20	Breadth Score	Date: 6/29/20	Liquidity Score
High/Low Index	1	Baa Yield z-score	0
RAY % ADV	1	LQD/IEF	0
% > 50dma	1	Stock/Bond z-score	0
Total Score	3	Total Score	0
Date: 6/29/20	Sentiment Score		
Put/Call 10dma	-1		
Fund Flows z-score	0		
AAII Bull-Bear	1		
Total Score	0	Total Trifecta Score	3

And this brings us up to the present day… We're still in a primary bull trend. And though we're not currently at a Setup, our Trifecta Lens gives us a score of positive 2.

So while bullish tailwinds are dissipating they're still positive and the path of least resistance remains up, for now.



Date: 8/20/20	Breadth Score	Date: 8/20/20	Liquidity Score
High/Low Index	1	Baa Yield z-score	0
RAY % ADV	-1	LQD/IEF	-1
% > 50dma	1	Stock/Bond z-score	0
Total Score	3	Total Score	-1
Date: 8/20/20	Sentiment Score		
Put/Call 10dma	-1		
Fund Flows z-score	0		
AAII Bull-Bear	1		
Total Score	0	Total Trifecta Score	2



And there you have it… That's the Trifecta Lens for assessing the strength and durability of trends.

This is just one way to codify a framework for building context. And this framework, or something similar, doesn't need to be quantified (though, the more systematic you can be in your approach, the better). I can quickly eyeball all these indicators and decision tree them in a matter of seconds and arrive at the same place.

The important part is that we use the **entirety of the framework**; the Tape, the Breadth, the Liquidity, and the Sentiment to build a contextualized picture of what's *really* going on in the market. This prevents biases from creeping in, clouding our judgment, and leading to emotionally reactive decision making.

A recent example is all the very smart, yet *very* misguided technicians out there who've been sitting on the sidelines for the last couple of months calling for a market crash because Put/Call ratios have been extended. That was only a single piece of the puzzle. That's not context… That's **confirmation bias.**

Now, this framework isn't a crystal ball. It doesn't make predictions. It just gives context. Very valuable context that allows you to constructively assess the odds and probabilities. It empowers you to be proactive and not reactive to market moves. Most importantly, **it will keep you from getting *Treed*.**

> *Risk aversion and fear of the unknown are direct symptoms of a lack of context and are the polar opposites of audacity.* ~ Pete Blaber

Now here's Brandon talking about the Japanese Mother's Index and some companies that we think have a LOT of upside.

Your Chihuahua Tamer,

Alex

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Where no one else is fishing

Our job as investors is simple. We fish where the fish are. More importantly, we want to fish where *other* fishermen aren't casting their lines. What good is inefficiency if every investor finds the same result? What good is a fishing hole if every fisherman has their line in the water?

Japan's early tech / IPO scene is ripe with inefficiency and is our latest fishing hole without fishermen.

Japan *needs* its tech industry if it wants to compete on a global scale. With an aging population and smaller workforce, Japan will look to technology to save time, money, and resources.

Thrown Out With The (Bubble) Bath Water

Since the 1990 asset bubble, Japanese tech companies have been thrown out with the bathwater. Underfunded, overlooked. Nobody's wanted to touch them in over two decades. But if you look deeper, there are reasons to be excited about Japan's future. The country has the ingredients for strong economic returns:

- Manufacturing base
- Advanced technological know-how
- World-class infrastructure
- Large (and affluent) consumer market

Remember, this is the *same* country that introduced "just-in-time" supply chain management. The one manufacturing system studied the world over. There's countless examples of Japanese firms commanding market share and leading the world in innovation. Some examples of market-leading products include:

- Sharp & The Handheld Calculator
- Toshiba & Metal Oxide Chips
- Seiko & Mass Production of Quartz Watches

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

- Sony & The Walkman

These products were at the forefront of technology during their time. They pushed the needle of conventional wisdom. Nobody thought they *needed* a Walkman. Scientists and students used desktop calculators with external power sources.

The world wasn't *craving* these innovations. Yet Japan brought them to market.

Japan's innovative spirit rides shotgun to its global slowdown and aging population. But there's a new wave of technology-driven entrepreneurship brewing. A wave shifting cultural norms. Shattering career-employment and a labor-market dominated by large firms. It's a full-blown revitalization of the entrepreneurial spirit amongst Japan's youth.

And there's no better place to witness this transformation than Japan's Mother's Index.

Before we dive into the Mother's Index (and our list of potential investments), we should examine the history of Japan's start-up economy.

Not All Ecosystems Created Equal

Compared to the US's Silicon Valley, most countries' start-up economies feel small. Weak, even. That was true for Japan. In fact, traditional Japanese culture makes start-ups feel like they're competing with both hands tied behind their backs.

Taylor Beck wrote a great piece on this phenomenon for FastCompany. Taylor interviews Tetsuya Ohashi, PR manager of Japanese start-up Terra Motors. When asked about the challenges young Japanese entrepreneurs face, Ohashi didn't mince words (emphasis mine):

> *"There are limitations for young people in Japan ... Bosses don't take risks. Japanese workers can't challenge the boss. If you give opinions, they don't listen.* ***Bosses don't give young people opportunities: Only old men get to do interesting work.****"*

Japanese corporate culture is ageism on steroids.

Promotion by seniority rules in the land of the Rising Sun. It's not how competent you are. Nor is it a matter of who has the best ideas. Are you older than your colleague? If so, your word goes.

Ohashi continues his rant (emphasis mine):

> *"If you're stuck in a system that promotes by seniority, it's living a slow death,* ***like animals on a farm.*** *I wanted to be in a tough, competitive place."*

Given the backward incentives in many Japanese firms, young entrepreneurs flee the country. Seeking shelter in places like Silicon Valley. A place where their youth is a feature, not a bug.

Ohashi uttered three words when asked about the image of Japanese entrepreneurs:

- “Selfish”
- “Greedy”
- “Untrustworthy”

Ohashi suggests one reason Japanese cultures despises entrepreneurs: **Horie Takafumi**

Horie Takafumi was the Mark Zukerberg of Japan. Takafumi dropped out of a prestigious college to start a website, Livedoor. He wore t-shirts and unbuttoned shirts. He was the embodiment of the traditional, old-school Japanese business culture.

Then he went AWOL. The author reveals a few of Takafumi’s shenanigans saying, “after a decadent and public career, buying horses, hostilely taking over companies, running for office–when he was arrested for lying about profits to hide losses at Livedoor, and sent to prison for almost two years.”

Takafumi’s **one** screw-up was enough for Japan. In their eyes, *any* entrepreneur was a Takafumi. Waiting to explode, act out, and end up in jail.

Using Baseball As A Proxy For Japan’s Start-up Economy

What if baseball is the model for Japan’s start-up economy? What if all it takes is one entrepreneur -- a *good* one -- to reverse the stigma. Ohashi explains this concept through Japanese baseball players (emphasis mine):

> *“Nomo Hideo was the first Japanese baseball player to make it in the American Major League, in 1995–**but he was followed by a flood of players, like Ichiro Suzuki and Daisuke Matsuzaka–more than 50 in all so far.** Baseball had been huge in Japan since it was introduced there in 1872 by American professor Horace Wilson, but it was not until a century and a quarter later that Japanese pros started competing internationally.”*

In other words, Japan *needs* an entrepreneurial role-model. Young entrepreneurs want someone to blaze a path before them. Making their trek through the woods less unknown. That’s all it takes. One person.

That’s the exciting part. A massive culture shift doesn’t happen overnight. It churns inside one individual -- one soul. It lights a creative fire in someone’s mind. And like a fire, the curiosity spreads like embers to other branches of innovation.

As investors, our job is to find these businesses run by fanatical entrepreneurs. We give them capital in exchange for part ownership in their dream. Their vision. Where can we find these companies run by talented Japanese entrepreneurs? Look no further than the Mother's Stock Index.

The Mother's Stock Index

Japan's Mothers Index is the most neglected and dismissed area of Japanese equity markets. Very few outside investors venture into this exchange. Don't believe me? Check out this snippet from a 2016 FT.com article (emphasis mine):

> *"Also key — until now — has been the **comparative absence of foreign investors in Mother's stocks.** This has made them largely immune to the mass exodus of foreign capital from the main Japanese stock market in February when jitters over China and global growth prompted huge fund redemptions and cash calls that were met by selling out of highly liquid Japanese names."*

Dominated by day-traders, the Mothers Index feels more like a short-term casino than a long-term market for compounding wealth. **That's our opportunity.**

"Mothers" is an acronym for the phrase: *market of the high-growth and emerging stocks.*

Companies in the Mothers Index are young, technology-based, and small. Most of these companies are founder-led whose management team boasts significant skin-in-the-game. These companies are perfect hunting grounds for finding fanatical Japanese entrepreneurs.

Some industries that comprise the Mothers Index include:

- Telemedicine
- Robotics
- Ecommerce
- Artificial Intelligence
- Teleworking
- Cloud Services

These are industries that will grow **fast** in a post-COVID world.

But it's more than fast-growing tech-first industries. These companies are **small** and overlooked by Japanese & global institutions. Here's a snippet from a working paper on Japanese IPOs highlighting this phenomenon (emphasis mine):

> *"Institutional investors invest in companies with large market capitalization. Because of its low liquidity,* ***small-cap stocks are not eligible for these institutional investors.*** *Therefore, even analysts at stock brokerage firms that mainly serve institutional investors do not cover small stocks. According to the Tokyo Stock Exchange, while the coverage by analysts in June 2016 is 61.7% on the Tokyo Stock Exchange,* ***it is only 33.5% on Mothers.*** *On JASDAQ, it is only 11.3%. As institutional investors avoid these companies right after IPO,* ***it is mainly the individual investors, inclined to trade stocks in the short-term****, who invest in these companies, making share prices unstable."*

Just how small is the average company on the Mother's Exchange? Check out this snippet from Matthews Asia:

> *"The gap in startup funding is significant.* ***The market capitalization of listed U.S. companies is approximately six times larger than the market capitalization of listed Japanese companies****—but the disparity in venture capital is meaningfully more pronounced: Venture capital investment in the U.S. is more than 40 times greater than in Japan, as of the end of 2017."*

These are **tiny** companies. We're talking less than $10M market cap on average. No wonder institutions can't invest in these things! They can't even justify putting an analyst on a company that small.

Again, **that's our opportunity.** Small, founder-led, and positioned in industries with long tailwinds for growth. It's our bread and butter.

There's virtually **zero** sell-side analysis on these companies. In other words, you can't find investment write-ups on the internet for most of these businesses.

We're excited about this opportunity because it checks off all our boxes:

- Exciting industries with long runways for growth
- Lower share count

- Smaller market cap
- Founder-led with substantial skin in the game
- Little/no analyst coverage

Four Areas Ripe For Disruption & Innovation

We want to position ourselves to capture the potential growth in Japan's economy. We'll waste time and energy driving blind through the Mother's Index. We need guideposts. Road signs showing us where to turn. Luckily, McKinsey published a study on Japan's economic revitalization.

Let's highlight industries ripe for revenue and multiple expansion:

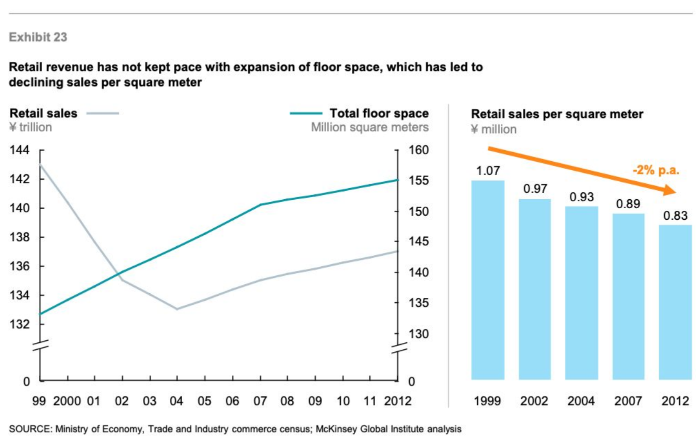
- Retail
- Financial Services
- Healthcare
- Technology

McKinsey had Advanced Manufacturing as one of its industries. But we're swapping that for Technology. Specifically software-based (SaaS) companies. It's not that I don't think there's value in advanced manufacturing. I don't think it's *as good* a business as many sticky, high-switching cost software companies.

Diving Deeper into Retail, Financial Services, and Healthcare

Retail

Japan's retail market remains highly fragmented and with little investment in IT solutions. In short, most Japanese retailers remain in the dark ages, relying on mail-order catalogs for sales growth. These mom-and-pop stores account for 47% of **total** retail sales.



Nobody's rolling these stores up because families don't want to sell. This makes it hard for individual stores to sell at profit margins. Think about the pricing power benefits one gets from scale (i.e., Walmart). No store on its own commands pricing power from its suppliers. Thus, prices stay elevated and margins compressed.

To make matters worse, many Japanese retailers opt for expanding floor space instead of upgrading technology.

This leads to decreasing sales-per-square-foot and sub-optimal capital allocation. In fact, the report reveals **71%** of all IT spending goes towards maintenance. *Not* new technologies.

You're probably asking yourself why Japanese retailers struggle. After all, they *live* in the birthplace of lean operations. The report notes (emphasis mine):

> *"A lean mindset, long a source of pride for Japanese auto manufacturing, is not sufficiently applied in retail. Customer buying habits lead to small average transactions, thus increasing the cost of sales, while wholesalers capture a large share of value through excessive intermediation."*

How To Fix & Where To Invest

A turnaround in Japan's retail industry will take a concentrated effort on three things:

1. Reduce the size of stores
2. Investment in *new* IT, not legacy maintenance
3. Understanding Customer Wants & Desires

Companies that solve the above problems are ones we want to invest in. This looks like:

- Automation and distribution centers
- Ecommerce platforms for small businesses
- Big data analytics
- Supply chain management software
- Customer data software
- Turnkey multi-channel sales platform
- online advertising and marketing
- Express delivery services

We'll be handsomely rewarded if we can invest in companies that drive further efficiency, productivity, and margin expansion for an entire industry.

Financial Services

Japan sports a **massive** financial services industry**.** It accounts for 5.3% of the country's **entire** GDP. The two main players in the financial industry are banking and insurance. The tandem generates 84% of the industry's profits and employs 70% of the industry.

Yet despite its size, the industry's fraught with low-growth companies, risk-averse clients, and lacking an online presence.

There are a few reasons for Japan's stagnant growth compared to other nations (from the report):

- Difficulty obtaining significant ROAs
- Limited appetite for risk (risk-averse)
- Intense competition

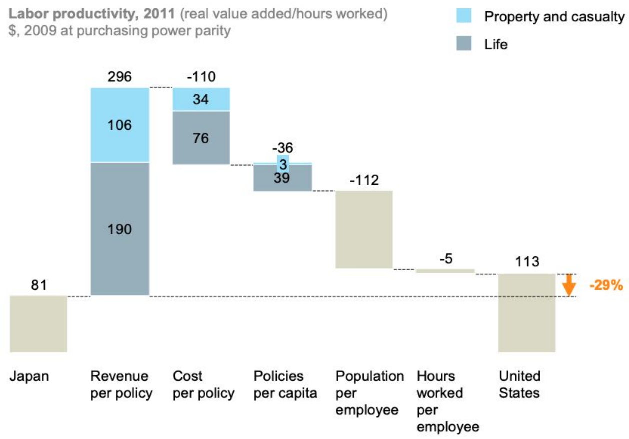
Culturally, Japan airs on the side of caution. We see this in their financial sector. Banks struggle to lend higher interest rate products and loans to consumers. Why? Risk-aversion. The 1990s collapse is fresh in the minds of many Japanese consumers.

As of 2012, more than **half** of personal financial assets remained in cash. That's **a lot** of money on the sidelines that aren't in financial products (which banks can charge fees for, etc.).

Along with risk aversion, McKinsey notes two other factors hindering Japan's financial sector:

Exhibit 29

The productivity gap in Japan's insurance industry stems from low revenue per policy for both life and property and casualty coverage



NOTE: Numbers may not sum due to rounding.

SOURCE: World Input-Output Database; Japanese Insurance Association; SNL Financial: Business Intelligence Services; Ministry of Health, Labour and Welfare; McKinsey Global Institute analysis

1. **Poor online banking product**

Japanese banks are *seriously* behind the online banking curve. Most US banks allow customers to open accounts, transfer money, apply for loans, and check their credit score. Not in Japan. The banks that *do* offer online services only allow customers to check their account balances and make remittances. That's it.

I don't see a clearer green light for a Japanese online banking disruptor than that.

2. **Low customer loyalty**

McKinsey surveys (2011 and 2014) revealed Japan as the country with the lowest levels of customer loyalty. McKinsey scored the survey based on responses to questions about new service offerings and if customers were willing to recommend their bank to a friend.

Given the sheer amount of data, banks have on their customers, low customer loyalty screams lack of innovation. Banks can use this data to leverage their product offering. Tailoring services and products to their customers based on individual metrics.

How To Fix & Where To Invest

Japan's banking and the financial industry can experience massive growth if it innovates and invests in time-saving technologies. Increasing customer loyalty and developing **good** online banking solutions are key to the industry's continued growth.
Additionally, many of Japan's back-office banking tasks can be automated with software. McKinsey cited a study that found the top 20-30 banking processes accounted for 40-50% of costs and 80-90% of activities. These activities include:

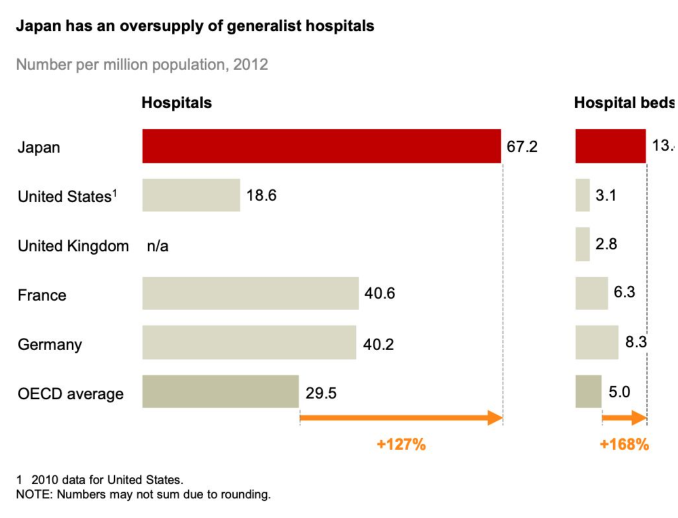
- Account openings
- Mortgage application processing
- Lending
- Customer requests
- Issuing Credit Cards

Given the above challenges, it pays to find companies dedicated to solving these banking challenges. These companies include **banking back-office automation, online banking turnkey solutions, big data customer analytics**, and more.

Healthcare

Japan spends **a lot** of money on healthcare (~8% of GDP). But it's getting worse. If current trends continue, Japan will likely spend 11% of their GDP on healthcare costs.

This makes intuitive sense. Japan's an aging country. Age brings about diseases, illnesses and extended hospital stays. These factors multiply to create a ballooning effect on healthcare spending.



It's more than age that's spiking healthcare costs. Until recently, Japan had weird government incentive structures. For example, the longer a patient stayed at the hospital, the greater the government incentive. Not surprisingly, this encouraged hospitals to keep patients longer than needed. That costs money, forcing hospitals to operate at economic losses.

You can see the effects of this backwards incentive structure in the graph on the left.

Japanese patients consult physicians an average of almost 13 times per year

The average hospital stay is three times longer in Japan than in other advanced economies

Patients also stay in hospital due to a lack of secondary care facilities (think rehab, out-patient, etc.). Long waitlists and high prices result in more demand than supply.
With 25% of the country's population above the age of 60, there's no time for the government & private sector to waste on innovating and increasing efficiency.

How To Fix & Where To Invest

Here's McKinsey's take on where innovation lies in the healthcare space (emphasis mine):
*"There are major efficiency gains still to be captured from **electronic medical records** and **big data tools**. Most hospitals already have solid technology systems in place, but the **key will be connecting these systems** and **ensuring interoperability across providers**."*

There's also a strong incentive to open out-patient facilities so hospitals can wean patients off main care. This means more elderly care facilities, physical rehabilitation clinics, etc.

Finally, telemedicine would greatly assist hospitals in reaching the more rural parts of Japan. It would also reduce the need for patients to visit the hospitals. Which frees up beds for more serious cases.

Given the above needs, it makes sense to invest in the following areas:

- Elderly hospice and assisted living centers
- Physical rehabilitation clinics
- Electronic medical records platform
- Integration technology for hospitals transmitting patient records
- Telemedicine services (conferencing software, etc.)

A Plan Into Action

We now have the mental pieces in place to take advantage of the shift in Japanese start-up culture and technology. We know which industries we want to focus on, and where to find specific companies.

This next section will cover specific companies within our target industries. These companies are young, founder-led, and technology-first. They solve *real* problems for their customers. All of them trade on the Mother's Index. And you won't find buy-side research on them anywhere else.

If you want to read more about Japan's start-up turnaround, check out these sources:

- Innovation and Entrepreneurship in Japan: Why Japan
- A Brief Overview of the Current Startup Ecosystem in Japan SVNJ Working Paper 2017-1
- Artificial Intelligence in Japan (R&D, Market and Industry Analysis)

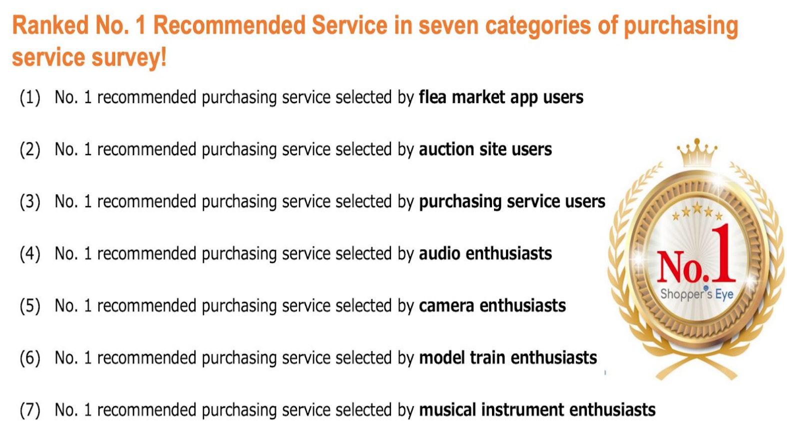
Alright, onto some investment ideas ...

Retail Investment Idea: MarketEnterprise, Inc. (3135)

Business Description: MarketEnterprise (3135) operates an online shop for reusable goods. It operates around 40 websites and mobile platforms. The company also sells items on Yahoo! Auctions. In addition, it purchases and sells used agricultural equipment. - *TIKR.com*

Thesis: MarketEnterprise (or ME for short) connects sellers of second-hand goods with buyers of those goods (antique shops, pawnshops, jewelry shops, etc.) via Oikura. The rise of COVID-19 pulled forward the demand for an online second-hand market place. Second-hand shops that relied on foot traffic **must now** gain an online presence to compete. Now, the company's transitioning nearly 30,000 customers to their online digital platform. The company's coming off three straight quarters of record sales and operating profits. **Assuming mid-range 25% revenue growth over the next five years and a 2.5x sales multiple, we think MarketEnterprise is worth ~35B yen (or 6,780 yen/share).**

Three Business Segments: 3135 operates three distinct business segments: 1) online second-hand stores, 2) Media business and 3) Mobile & Telecommunications business. Let's break each business down into its basic parts.



Online Second-Hand Stores (66% of sales)

3135 owns over thirty online second-hand stores ranging from medical supplies, musical instruments, agricultural equipment, cameras, and home appliances. It's the most popular collection of second-hand shops in Japan. Check out their ratings on the right.

3135's online shops field 46,000 purchase requests per month across 3.1M users. Customers have an average satisfaction rating of 99.50%.

Examples of their second-hand shops include PrivateBuyer, ReRe Rental, and ReRe.

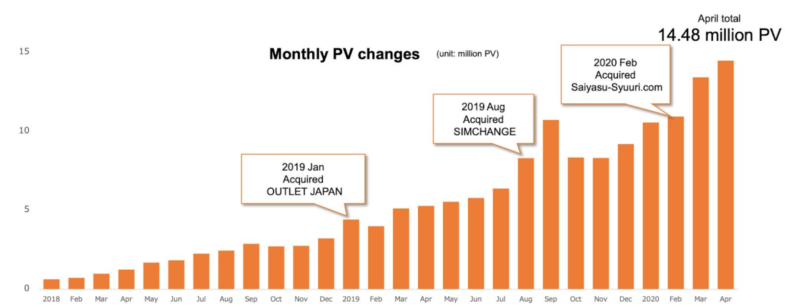
This segment grew revenue 13% YoY, but future revenue growth won't be as robust. In fact, QoQ revenue growth came in at a measly 1.1%. Despite slower revenue growth, operating profits grew 11% due to lower SG&A.

Media Business (5.4% of revenue)

3135's Media Business is a newer addition to the company's operating segments. The media business segment owns a collection of resources that help second-hand buyers find, research, and use their toys and hobbies.

For example, they have a site "Beginners" that helps people find hobbies they enjoy and provide the resources to engage in that hobby. They also have Takakuureru, a magazine that helps people buy, sell, and dispose of items they don't want. Finally, they own a website dedicated to providing consumers information on budget smartphones and SIM cards.

Revenues grew over 400% YoY, from 99M yen to 429M yen. Revenue and earnings growth are tied to monthly page views. ME's experienced rapid pageview growth over the last two years (see image on the left). As of April 2020 their sites generated over 14M monthly unique page views.



Two Ways To Make Money: Advertising & Cross-Selling

Given the nature of their content, the company can earn profits via two avenues: advertising and cross-selling. In the most recent quarter, the company generated 101M yen in revenue from outside advertisers. The rest (64M yen) came from converting those page views into buying customers from their second-hand stores.

Mobile & Telecom Business (31% of revenue)

The final business segment is mobile/telecom. It specializes in second-hand cell phones/smartphones and offers low-cost cellular data plans. The segment also offers low-cost WiFi programs. This business experienced nearly 200% YoY revenue growth (from 1.34B yen to 2.43B yen) last year. Only 25% of Japanese firms implement *some form* of telecommuting ability. And for companies with less than 50 employees, that number drops to 14.4%.

There are three main reasons why Japanese companies haven't adopted a more rigorous telecommute program:

1. The work is not suitable for telecommuting
2. In-house systems aren't ready
3. **Lack of telecommuting devices**

3135 solves this third issue for many SMBs. The segment ended 2017 with 10,000 retained line subs. By the end of April 2020, that figure grew to 55,000.

(Almost) Recession-Proof Business: What's It Worth?

It's easy to make the case that 3135 would hold up well during an economic downturn. People either have less money and choose to buy second-hand goods. Or they *need more money* and sell their own used goods for cash.

Either way, the company is the clear leader in Japan's online second-hand market. Shops that partner with ME receive an online presence and connection with >3M potential customers.

So what's a business like this worth?

The company's grown revenues ~15%/year on a 5YR CAGR. They're anticipating 10B yen in sales in 2020 (representing 18% growth). Let's assume the company grows 15% for the following two years, and then 10% for the remaining two years.

That gives us around 16B yen in 2024 revenue. The company's done around 40% GM and ~5% EBIT margin over the last few years. This gives us 6.4B yen in GM and 803M yen in EBIT. At the current price its a 6% EBIT yield.

Healthcare Investment Idea: CareNet, Inc. (2150)

Business Description: The company offers digital content services with the latest diagnostic/treatment methods, newly received information, and case studies to HCP members and specific targeted HCPs; e-Detailing to lead new HCP acquisition; outsourcing of rep activities. It also provides medical information, such as the latest medical news; serial articles by doctors on medical care expertise; and risk management, as well as information on various academic conferences. In addition, the company offers medical content, including continuing medical education services. *TIKR.com*

Thesis: CareNet, Inc. (2150) is a medical network-effect business connecting 150K+ doctors to continuing education, pharmaceutical product knowledge, and daily clinical best practices. It's a high-margin business that only gets better as more doctors join the platform. The company's also riding a long-term tailwind towards increased healthcare efficiency as the country's population ages. We think CareNet is well-positioned to capture doctors at earlier stages in their medical careers. This increases the LTV of each doctor added to the platform given the longer-term nature of the doctor's earning power.

Helping Doctors & Pharmaceutical Reps: The company offers doctors myriad resources to develop, hone, and improve their skills. Take PubMedCloud, an online source for the latest Japanese medical journals. There's also Doctors'Picks, a site dedicated to the latest news for every medical specialty. Doctors'Picks allows doctors to engage with other professionals to discuss the latest treatments, disease prevention, and more.

CareNet also offers CareNeTV, a medical continuing education channel. CareNeTV allows doctors to learn about surgeries, medicines, and clinical best practices from fellow doctors. Finally, CareNet offers CareNet Career to match job-seeking doctors with hospitals.

Think of CareNet as a doctor's one-stop-shop for everything she needs in her practice. Through CareNet she has access to medical journals, continuing education, and discourse with other doctors on topics that matter to them.

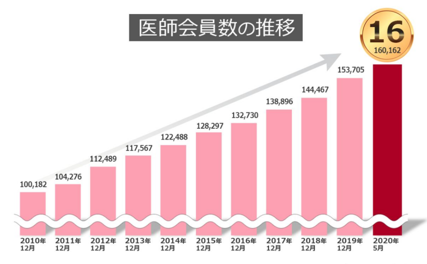
<u>The Benefits to Pharmaceutical Companies</u>

The company also provides services to Pharmaceutical Reps through MRPlus and Web Lectures. MRPlus connects doctors to pharmaceutical companies through educational videos on a pharmaceutical company's latest drug.

CareNet provides doctors with a story-like description of each drug, highlighting its efficacy, risks, etc. Everything's done over the internet in an on-demand way. This allows doctors to educate themselves on the latest drugs without wasting time entertaining pharma sales reps. It's an IT solution connecting doctors to the latest drugs that help their patients. All over the internet.

Finally, CareNet offers Web Lectures for Pharmaceutical companies. CareNet offers drug companies a targeted platform to host online lectures and seminars about their latest products. This is even *more* important as we enter a post-COVID world. Doctors will travel less to large seminars/meetings.

Growing Network Effects: Half of all Japanese physicians are on CareNet's platform, creating a large network effect. Each incremental doctor adds more value to the platform than the previous doctor. The more doctors on the platform, the more valuable the service. And the more doctors can't live without **being** on the platform.



Of the total 327,210 physicians in Japan (according to a survey by the Ministry of Health, Labor and Welfare in December 2019), 160,000 have become members, so that about half of the physicians in Japan can use our services.

Capturing More Doctors: CareNet is a great business with expanding gross margins and declining SG&A expenses. The company's grown GM 5% in five years (62-67%) while shrinking SG&A from 54% of revenue to 49%. CareNet did 592M yen in operating income last year (36% YoY growth).

Given the network-effect nature of the business, it makes sense for CareNet to plow everything they have into acquiring more doctors. And that's exactly what they plan to do. Check out this quote from their latest investor presentation:

> *"Operating income of medical content services decreased by 56.1% year-on-year as a result of active investment to strengthen production functions **with the aim of acquiring medical doctor members.**"*

We should see further operating losses from their medical content business as they expand the number of doctors on the platform.

What's It Worth: The company did 3.27B yen in sales last year and is tracking to hit 3.6B in 2020 (10% increase). CareNet can grow top-line revenue ~13%/year over the next five years as they continue to add doctors, expand their services, and provide succession planning for senior physicians.

Remember, CareNet's playing the long game. Their main goal is acquiring **young doctors** that have long career runways and large LTVs.

Here's what 2024 could look like under steady-state assumptions:

(JPY in millions)		Input Projections				
Fiscal Years Ending	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23	Dec-24
Revenue	3,268	3,595	4,314	5,004	5,604	6,165
% Growth	12.6%	10.0%	20.0%	16.0%	12.0%	10.0%
EBITDA	620	659	791	918	1,028	1,130
% of Revenue	19.0%	18.3%	18.3%	18.3%	18.3%	18.3%

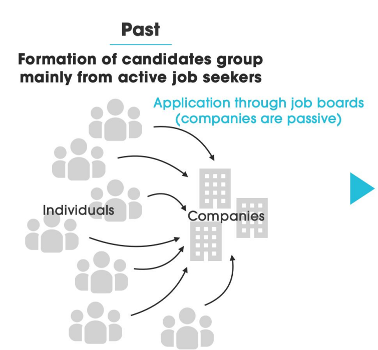
This would give us 842M yen in FCF by 2024 and 15B yen in Enterprise Value. Add cash and subtract debt and you have ~17B yen in shareholder value (1,622 yen/share). That's roughly where the stock is today. So no, it's not a screaming buy at the current price. But it's a great business and worthy of a spot on your watchlist.

If prices drop, you'll be glad you had the knowledge built up to take advantage of the opportunity.

"Bet On The Jockey" Investment Idea: Wantedly, Inc. (3991)

Business Description: Wantedly, Inc. engages in the planning, development, and management of business SNS services. It offers business card management applications. - *TIKR.com*

Thesis: Wantedly is a business Social-Networking-Site ("SNS") revolutionizing the way companies scout employees and individuals find passionate careers. They connect people and companies based on *shared cultural values*, not salary statistics. Their platform resonates with nearly 3M users and 35K companies.



Wantedly created a cultural shift where potential employees can "date" a company before committing to a job. The company's in the ***early innings*** of their growth curve (capturing <1% of their TAM) with a long runway for revenue and margin expansion. Finally, Wantedly's run by its founder/CEO. She owns 70% of the company (interests are *clearly* aligned). The stock tripled quickly after IPO but has since stumbled. **You can buy this business for <3x 2021 EV/Sales.**

The Death of Traditional Labor Markets: Traditionally, employers played a passive role in the hiring process. Companies cast job openings like bait on a hook. Potential employees act like fish -- rushing to bite the bait before their peers. Employers then sift through hundreds (or thousands) of applicants before interviewing/hiring the right candidate.

That's all changing in Japan.

There are three reasons for the death of Japan's traditional labor market:

1. Normalization of Switching Jobs

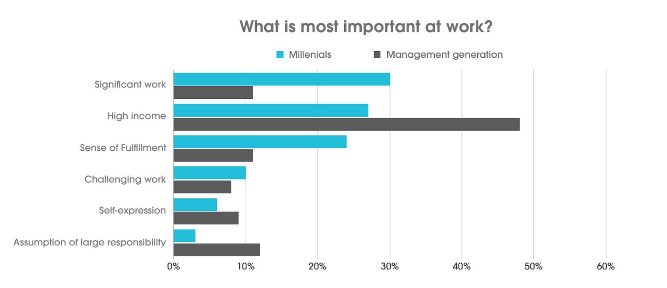
What was once taboo is now commonplace in Japan's labor market. Only 50% of new workers want to keep working at their current job. That's down from 64% in 2015. Conversely, 18.4% of new workers want to change their jobs "sooner rather than later." That number's up from 10% in 2015.

This means companies must find talent that aligns with their culture and mission. Why? Because it's easier to retain great employees if they believe in the company's vision and values. Salaries aren't as important as they were 20 years ago. Which brings us to our second reason.

2. A shift in Work Values

Japan's younger workforce cares more about culture, purpose and self-growth. When asked about the most important factors for deciding on a job, Japanese workers chose:

- Leveraging Skills/Experiences (>60%)
- Work with purpose (55%)
- Expectation for self growth (45%)
- Future prospects of the company (44%)
- Working style (43%)



Salary didn't even make the top five (42%).

The generational differences are staggering. Check out the graph above. When asked "what is most important at work?", older generations chose a **higher salary** almost 50% of the time. Millennials on the other hand choose a higher salary **<30%** of the time.

What matters most to millennials? Significant work (30%) and a sense of fulfillment (25%).

3. The emergence of Recruitment Marketing

Japan's shrinking labor force shifted power from employers to employees. Supply restrictions spurred increased wages, which makes the hiring decision that much more important. Companies must go on the offensive to attract and retain top-quality Japanese talent. Instead of passive acceptance of applications, companies must engage with potential workers and promote their company brand/culture.

Enter Wantedly.

The Wantedly Solution: Wantedly's core product, *Wantedly Visit*, connects workers and companies based on shared values, culture, and goals. There's no salary or benefits section. The platform allows workers to date companies before committing to full-time employment. It's a bold step out from traditional job board models -- but it's working.

Companies like Uber, Airbnb, Dropbox, and Amazon Web Services *all use* Wantedly to find their next great hires.

How It Works

Think of Wantedly Visit like a dating service. Companies and workers create profiles similar to dating sites. Each party shares their interests, values, and vision. Workers then browse potential companies to match with those that share similar beliefs. On the other side of the platform, companies promote their own brand through various content like blog posts, company updates, and creative job listings.

Wantedly matches workers to companies through Scout, their AI-based tool designed to help employers quickly find the perfect candidate.

At this point, Wantedly's service isn't that different from traditional job board websites. But it's this next step that gives Wantedly a unique advantage over its peers.

Date a Company Before You Marry

After a worker finds a company she likes, she reaches out and schedules a visit. Visiting a company before you apply is a great way to learn about the inner-workings of an organization. It also allows both workers and employers to determine if they're a good fit for each other.

You wouldn't enter a marriage with someone you've never met before, wouldn't you? Wantedly makes this possible in the workforce.

How Wantedly Visit Makes Money

Wantedly charges companies via a subscription-based (SaaS) model. Prices range from 45K yen/month to 200K yen/month depending on the tier. Contracts start at six months and cap at two years.

The company also generates revenue through Add-on services like Talent Scouting, content creation, and content promotion. As of Q3 2020, subscription-based revenue accounted for 80% of overall revenue.

Wantedly's Massive Addressable Market: There's three ways to think about Wantedly's addressable market:

- Non-Tokyo-Based Penetration
- Job-Board Market Penetration
- Total User Penetration

Wantedly has barely tapped into the 800B yen job-board market. The company generated 2.92B yen in revenue last year. That's less than 0.50% market penetration.

Not only are they underpenetrated in the broader job board market, but they also have room to grow in their core Japanese market. 80% of their Japanese business lives in Tokyo. The two other leading Japanese job-board companies generate 30% of their revenues from Tokyo-based businesses.

Finally, Wantedly puts its user-base market at 34M subs. That means they've only penetrated 7.5% of their addressable total users.

<u>Wantedly's Market Demographics</u>

Like we mentioned earlier, Wantedly positions itself as the go-to job matching platform for millennials. As of Q3 2020, 43% of their user-base is 20-29-year-olds. 32% of their users are software developers. These two demographics have the longest runway for growth, making the LTV of each user and company *that much* larger.

The Wantedly End Game: What would a mature Wantedly look like? How big can they get? Let's try and answer some of these questions. From a revenue perspective, they've penetrated less than 0.50% of their market. From a user perspective, less than 8%.

Remember, it's not the **users** that make Wantedly money, but **companies.** Wantedly hosts 35K companies on their platform. That's roughly 83K yen/company. Given they've barely scratched the surface (underpenetrated in Japan), what would revenues look like if they doubled their customer base to 70K companies? That translates into nearly 6B yen in revenue.

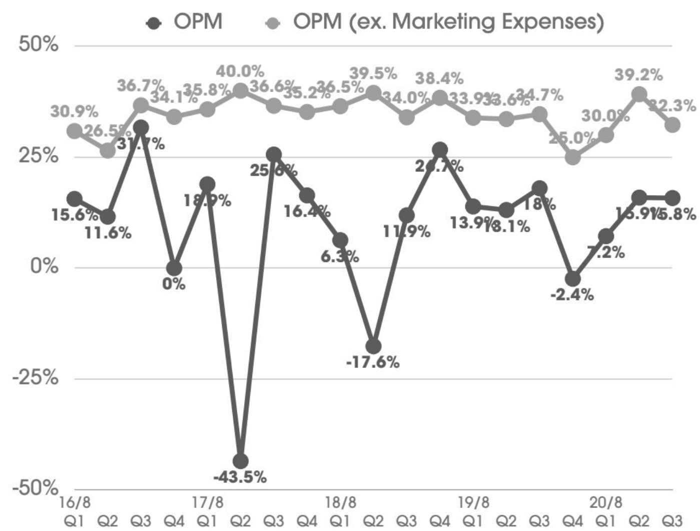
Or let us assume Wantedly captures 5% of their 800B yen job-board market. If they can do that, they become a 40Byen revenue business. Applying a 2x sales multiple gets us an 80B yen company or 10% of its addressable market size. Not completely unrealistic.

Operating Margin Assumptions

We can assume revenues based on market penetration and the number of paying companies. But what will operating margins look like in 5-10 years? We can have reasonable confidence operating margins will be higher in the future because of Wantedly's operating leverage.

Here's what I mean: Wantedlty is spending **a ton** of money acquiring customers for their platform. Which makes sense. The more customers they have, the more money they make and the more value the platform brings to additional customers.

Wantedly's SaaS model calls for upfront investment in revenues they won't recognize until months after acquiring the customer. This in turn distorts short-term operating profit by overemphasizing advertising and acquisition costs.



Once Wantedly achieves economies of scale, they won't **need** to spend gobs of cash on advertising and acquisition. That's when the profitability switch turns on and the company gushes cash.

Wantedly currently generates a decent 16% operating margin. That's *including* all advertising and hiring expenses (to grow team and platform). If we exclude advertising expenses, the company's operating margins jump to ~30%.

Current Operating Cushion and Core Operating Growth

Wantedly's current advertising expense distorts its long-term cash-generating potential. And we see it in its Operating Cushion and Core Operating Growth profiles. The company currently sports a 10% operating cushion (GM % - SG&A %). Subtract our Working Capital % and you're left with 8% in Core Operating Growth Profile.

This means for every $1 increase in revenues, Wantedly generates $0.08 in core cash flow. Not bad, but not great either.

Putting It Together (Valuation): The company's still **super young,** and the cone of potential outcomes remains **extremely** wide. But let's think about how much free-cash-flow they could generate in an ideal scenario.

Wantedly grew from 0.16% of its market to 0.365% in three years. Let's assume over the next ten years the company increases its market share to 1% of TAM or 8B yen in revenue.

Now, at this point, we're assuming the company doesn't need to spend tons of cash on advertising or growing out its personnel team. This allows us to generate 30% operating margins on that 8B in revenue, or 2.46B yen. Subtract our income tax and we're left with a little over 2B yen in NOPAT. Net out D&A/WC and we get 2.38B in free cash flow by year 10 (19% yield).

Steady-State Operating Cushion & Core Growth Profile

Wantedly's Operating Cushion and Core Growth Profile will benefit from a reduction in SG&A and advertising spend. Here's what their OC & CGP would look like (assuming they reach the point where they don't need to spend on advertising/hiring as they do now):

Core Operating Profile				
Metrics	**2029**	**2024**	**2019**	**2018**
GM%	100.00%	100.00%	100.00%	100.00%
SG&A%	70.00%	70.00%	89.29%	91.63%
Op. Cushion%	**30.00%**	**30.00%**	**10.71%**	**8.37%**
A/R%	-6.74%	-6.74%	-6.74%	-7.81%
Inventory%	0.00%	0.00%	0.00%	0.00%
A/P%	0.00%	0.00%	0.00%	0.00%
Prepaids%	4.04%	4.04%	4.04%	3.88%
Accruals%				
Deferred Revenue%				
WC%	**-2.70%**	**-2.70%**	**-2.70%**	**-3.93%**
Core Op. Profile%	**27.30%**	**27.30%**	**8.01%**	**4.44%**
$ Generated (Lost) for $1 I	$0.27	$0.27	$0.08	$0.04

You can see the operating leverage once Wantedly reduces advertising spending. Core Operating Profile jumps to 27%, meaning every $1 increase in revenue translates to $0.27 in core cash. At the current stock price, you're paying roughly <10x 2024 NOPAT for that cash-generating ability.

Jockey Bet & Risks: A bet on Wantedly is a bet on their founder, Akiko Naka. Luckily for us, she's a badass. Naka worked at Goldman Sachs before joining the early members of Facebook. It was at Facebook where she developed the idea of Wantedly. She's considered one of the leading female entrepreneurs in Japan, paving her own way in a society crippled by gender discrimination.

Almost all of Naka's wealth is in her Wantedly stake. She owns 70% of the company.

Your Value Operator,

Brandon

The Four Pillars Portfolio		YTD Return
		34.32%

The Core	Allocation
Large Cap Equities (/ES_F or VOO)	25%
Short-term Bills (/ZT_F or VGSH)	25%
Long-term Bonds (/ZB_F or TLT)	25%
Gold (/GC_F or GLD)	25%

Big Bets	Thematic	Cost Basis	At Risk	Risk Point	Last Price	Last Action
Cameco (CCJ)	Deep Value/Cyclical	$7.25	Above B/E	$8.50	$10.43	
Bollore (BOL)	Hidden Deep Value	$2.46	B/E	$2.46	$3.11	
Interactive Brokers (IBKR)	Value/Technical	$47.39	B/E	$41.14	$52.16	
Ammo, Inc (POWW)	Value/Growth	$2.30	150bps	--	$2.88	
Centrus Energy (LEU)	Deep Value/Cyclical	$10.50	100bps	$9.15	$17.20	8/6/20 Took half profits
~~Hello Fresh (HFG.F)~~	~~Value/Growth~~	~~$45.57~~	~~50bps~~	~~$41.58~~	~~$46.24~~	8/11/20 Exited full position
Dorian LPG (LPG)	Deep Value/Cyclical	$8.34	B/E	$7.59	$9.27	
Enlabs (NLAB)	Secular Growth	$27.25	100bps	$21.10	$30.00	
Revolve, Inc (RVLV)	Secular Growth	$18.71	B/E	$14.20	$22.29	
Frontdoor (FTDR)	Secular Growth	$44.22	100bps	$39.50	$43.04	
Gan, Ltd. (GAN)	Secular Growth	$24.76	100bps	$19.15	$24.89	
Nintendo (NTDOY)	Secular Growth	$62.71	100bps	$54.00	$62.71	
Cardlytics (CDLX)	Secular Growth	$86.07	100bps	$60.50	$86.07	
~~Silver (SI_U20)~~	~~Trend~~	~~18.88~~	~~100bps~~	~~17.78~~	~~24.215~~	8/7/20 Took full profits
~~Silver (SI_U20) Short~~	~~Countertrend swing~~	~~28.9456~~	~~B/E~~	~~30.2000~~	~~25.56~~	8/12/20 Took full profits
~~Silver (SI_U20) Short~~	~~Countertrend swing~~	~~26.275~~	~~50bps~~	~~27.2000~~	~~26.61~~	8/17/2020 Exited full position
CADUSD (6CU2020)	Swing	0.74515	B/E	0.73845	0.75445	
MXNUSD (6MU2020)	Swing	0.04191	B/E	0.04045	0.0454	
Bitcoin (BTCQ2020)	Trend/Breakout	10040	100bps	9230	12060	
Nikkei/USD (NKDU2020)	Trend/Breakout	23290	100bps	22440	23170	

