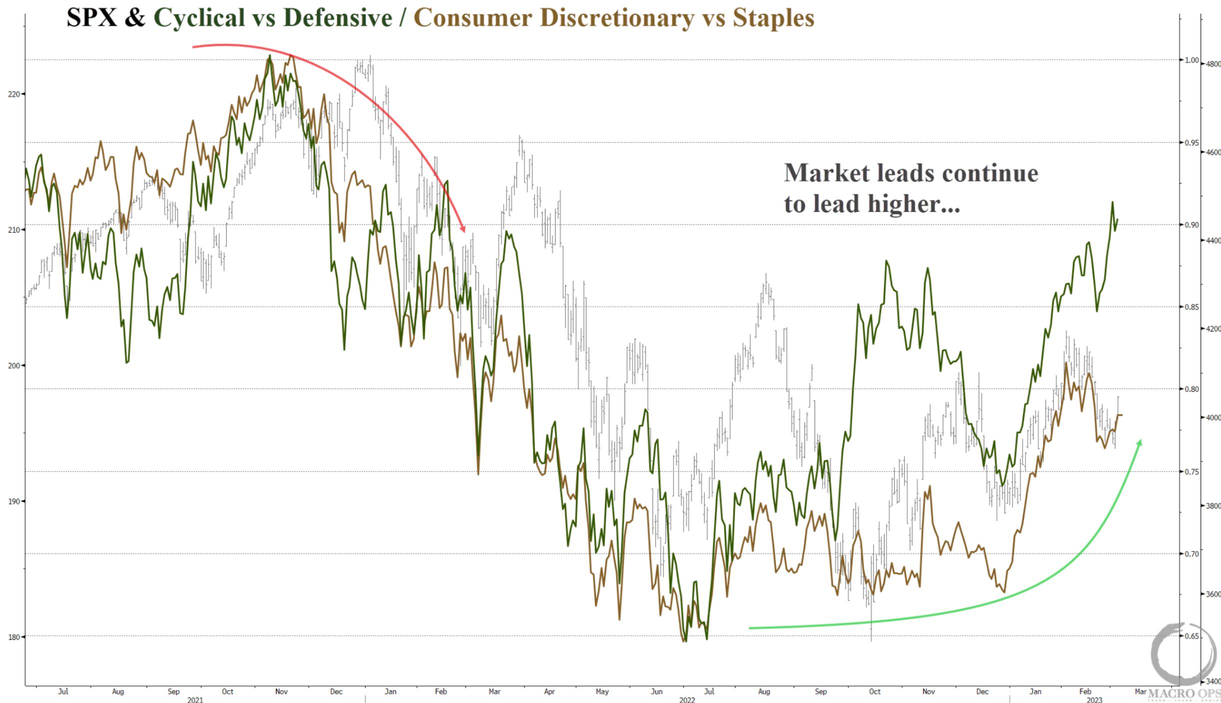
A Market Note: Leaders Lead…

Back in October when we began writing that an intermediate bottom was in place, one of the key pieces of evidence was this chart showing the relative performance of cyclical vs defensives (green line).



Cyc vs Def continues to lead the way up while Discretionary vs Staples continues to confirm.

It doesn't matter what you're bearish about, as long as these two are leading and/or confirming the move higher, the market is not going to roll over for any significant period of time.

Most new lows are in defensive sectors

Index/Sector	% One-Month Low	% Three-Month Low	
Utilities	90.00	66.67	
Real Estate	74.19	16.13	
Consumer Staples	53.12	37.50	← Defense
Communication Services	48.00	16.00	
Health Care	35.94	25.00	
S&P 500	32.93	15.97	
Financials	28.79	7.58	
Technology	27.63	9.21	
Consumer Discretionary	26.79	12.50	← Offense
Industrials	8.57	2.86	
Materials	6.90	6.90	
Energy	4.35	4.35	

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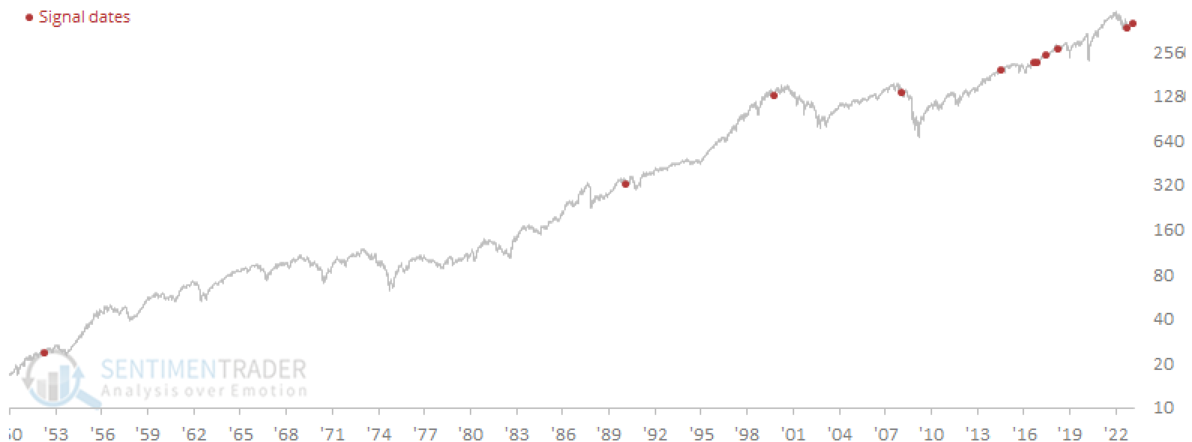
SentimenTrader showed in a recent report how the majority of new market lows are coming from the Defensive sectors and *not* the typical risk-on sectors. ST points out that "when three-month lows for the Consumer Staples sector exceed 35%, and three-month lows for the Consumer Discretionary sector are less than 16%, the S&P 500 shows a strong tendency to rally over the next few months. While the

January 2008 signal was a significant failure on a long-term basis, it showed a gain across several time frames."

S&P 500 after the % of 3-month lows for Staples > 35% but < 16% for Discretionary

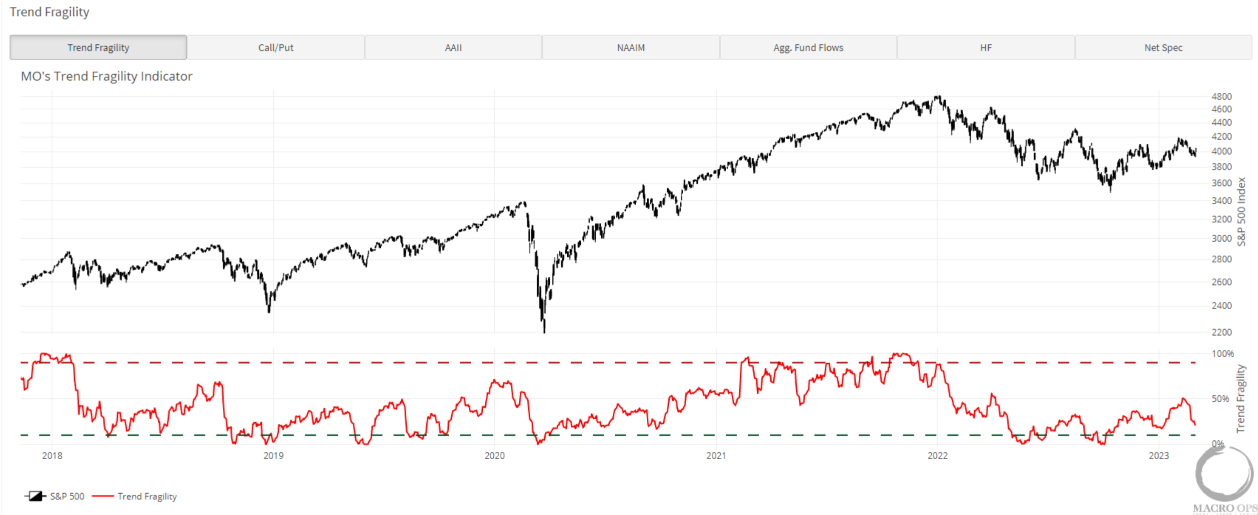


Dates of 10 Signals	1 Week Later (%)	2 Weeks Later (%)	1 Month Later (%)	2 Months Later (%)	3 Months Later (%)	6 Months Later (%)	12 Months Later (%)
1952-04-17	0.3	0.3	1.5	4.1	6.2	4.2	6.2
1990-02-23	3.5	4.3	4.2	2.4	10.6	-5.3	12.8
1999-10-01	4.1	-2.8	5.6	9.0	14.5	16.8	12.0
2008-01-23	1.3	-0.9	1.1	1.1	3.1	-4.2	-38.2
2014-07-31	-1.1	1.3	3.8	2.2	2.7	3.3	9.0
2016-09-09	0.5	1.7	1.7	0.6	5.6	11.5	16.9
2016-11-10	0.9	2.1	4.1	4.8	7.4	10.8	19.1
2017-07-11	1.4	2.1	2.0	1.5	4.9	13.4	14.4
2018-04-20	0.0	-0.3	2.4	3.6	4.9	3.7	9.9
2022-09-28	1.7	-3.8	2.4	6.6	1.7		
2023-03-01							
Median	**1.1**	**0.8**	**2.4**	**3.0**	**5.2**	**4.2**	**12.0**
% Positive	**80%**	**60%**	**100%**	**100%**	**100%**	**78%**	**89%**
Avg Max Loss	-0.1	-0.5	-1.0	-1.3	-1.8	-2.0	-2.8
Avg Max Gain	1.5	2.1	3.8	4.3	6.4	10.8	14.0
Z-Score	1.9	0.7	3.8	2.2	2.8	0.2	0.8

© SENTIMENTRADER Numbers are % return after signal; Risk = avg max loss; Reward = avg max gain; Z-Score +/- 2 suggests significance.

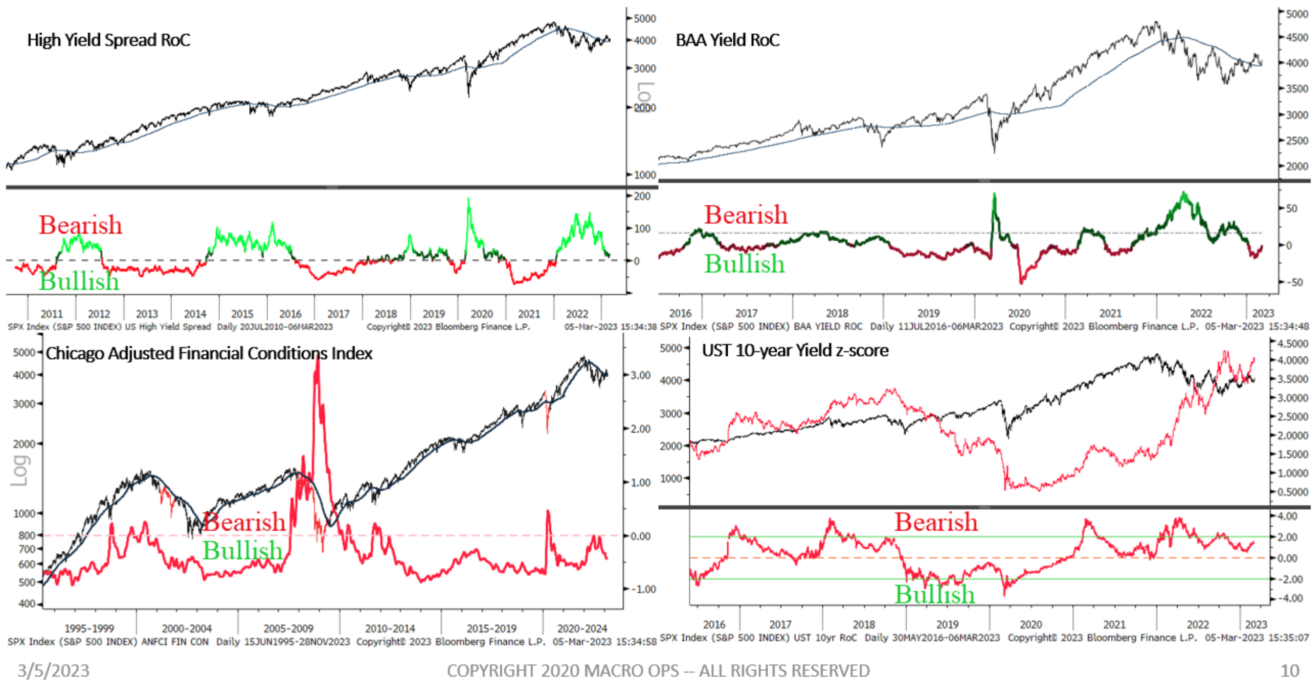
It's important to remember that the market, as a whole, is incredibly prescient most of the time. The only time it becomes dumb is when it's in a frenzy as a result of prices driving sentiment to extremes (ie, when parabolic trends create a popular consensus). That is not the case now.

Our Trend Fragility Indicator is in the 22nd percentile of its 3-year average. This is a composite indicator of positioning, sentiment, and flows. The current reading means that investors are bearish and remain skeptical of this rally.



In addition, financial conditions have *eased* considerably since their peak in illiquidity last summer. See the charts below.

The only rate of change chart we need to be somewhat concerned about at the moment is that of the 10-year yield (bottom right), which is getting closer to a +2std move. Speed bumps in risk assets tend to occur when we see that level crossed. But, in general, liquidity over the short to intermediate term is constructive for stocks.



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Big picture is we're still headed for a recession in the second half of this year, likely starting towards the end of the fourth quarter after household's deplete their cash savings which the numbers suggest will be sometime around September.

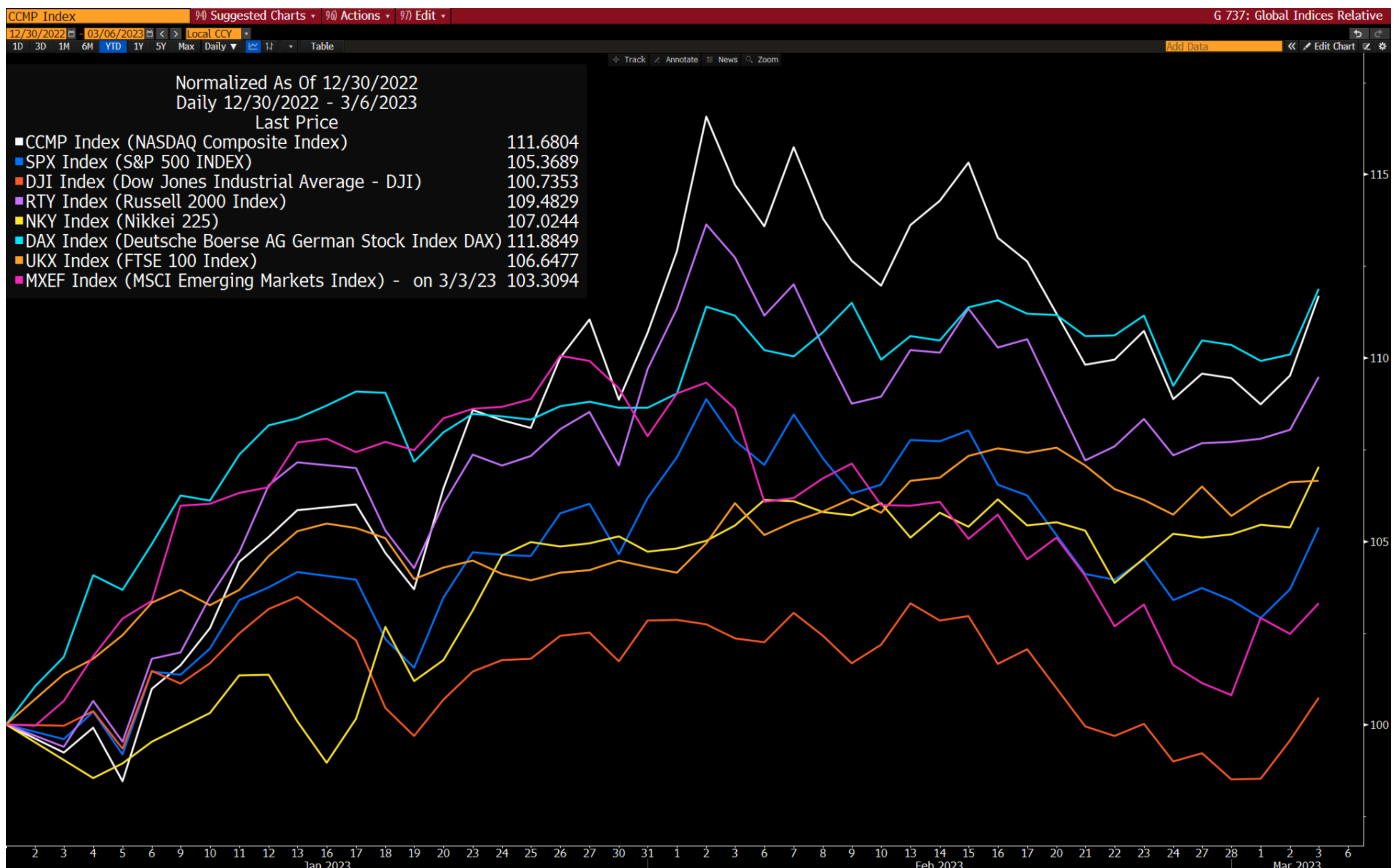
And with our *higher for longer rate thesis* playing out, the market remains vulnerable to positive surprises in the labor data, of which we have a slew of hitting this week (Jolts and ADP on Wednesday, jobless claims on Thursday, and then unemployment on Friday).

So this continues to be a difficult market to navigate, as far as equities are concerned. And it's likely to remain so for the rest of the year, and some.

Nothing to do other than manage risk, stay active on the tactical side, and be long what's working and short what's drooping. Chop wood and carry water…

Buy the leaders…

The best-performing of all the major global indices year-to-date has been the German DAX with the Nasdaq coming in a close second.



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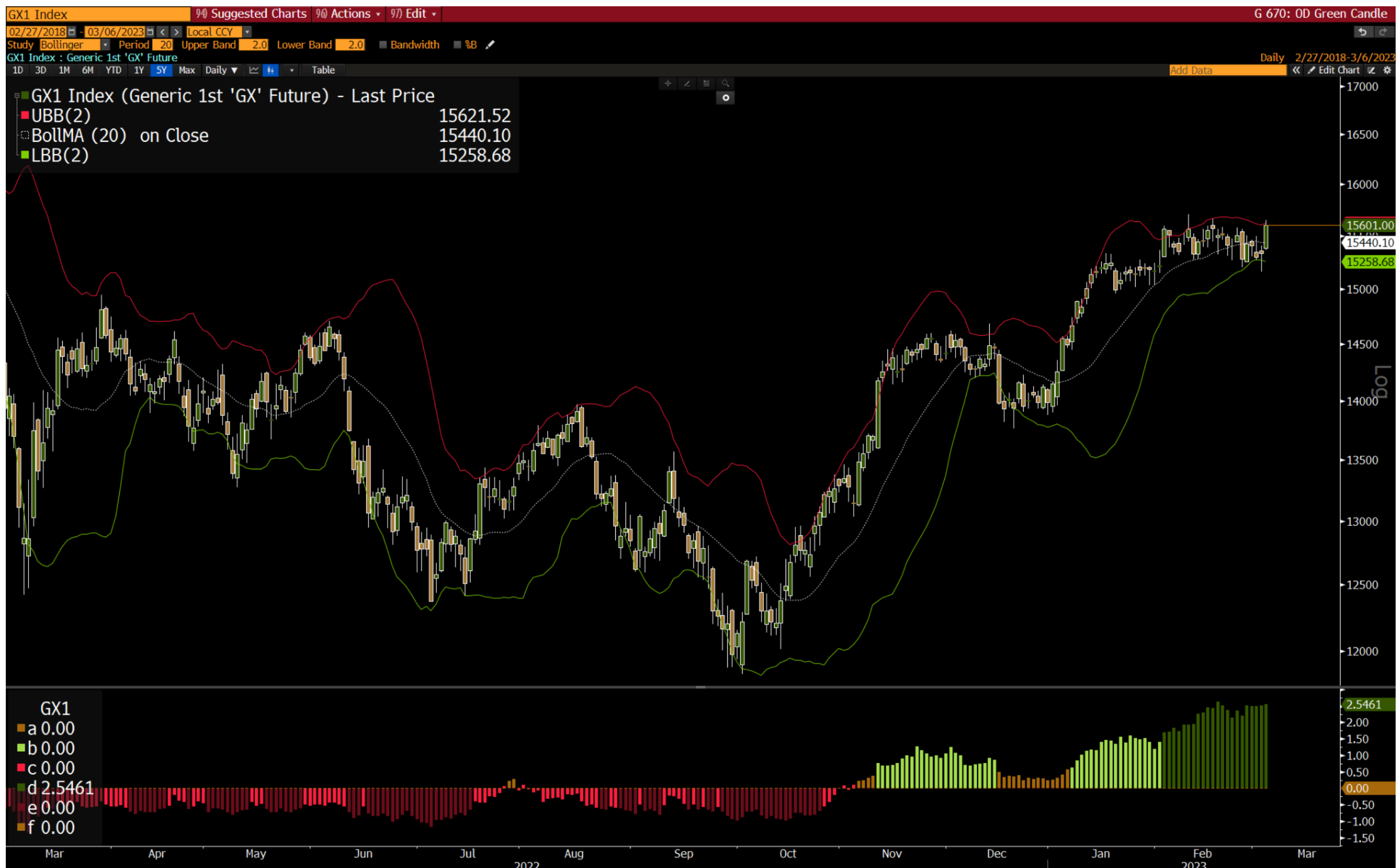
In general, you want to be long what's leading as momentum is one of the more consistent factors in this game. So if we were looking to take a swing at some index futures here (which we might this week) then the DAX and Qs would be the two places to look at first.

The technicals for the DAX are decent. The index is less than 5% below its Jan 22' all-time highs. It looks like it may be making a move to break out of a tight squeeze here (volatility compression). We'll need to see how tomorrow shakes out, but we could play a Buy Stop right above Friday's high and see if the market can pull us in.



One clear issue with this trade though is that the DAX is in an extended Bull Volatile regime, as shown in the lower panel on the above chart. The SQN score is currently over 2.5std which is a historically high reading.

When the SQN is this high, the forward returns tend to be worse than average over the following three months, which we can see in the graph below.

There have been 25 instances over the past 25-year years. Eight of these ended up higher over the following three months. And fourteen were losers with the average gain/loss of +7.9% and -11.5% respectively. There's a wide dispersion of results but that dispersion also strongly favors the downside.

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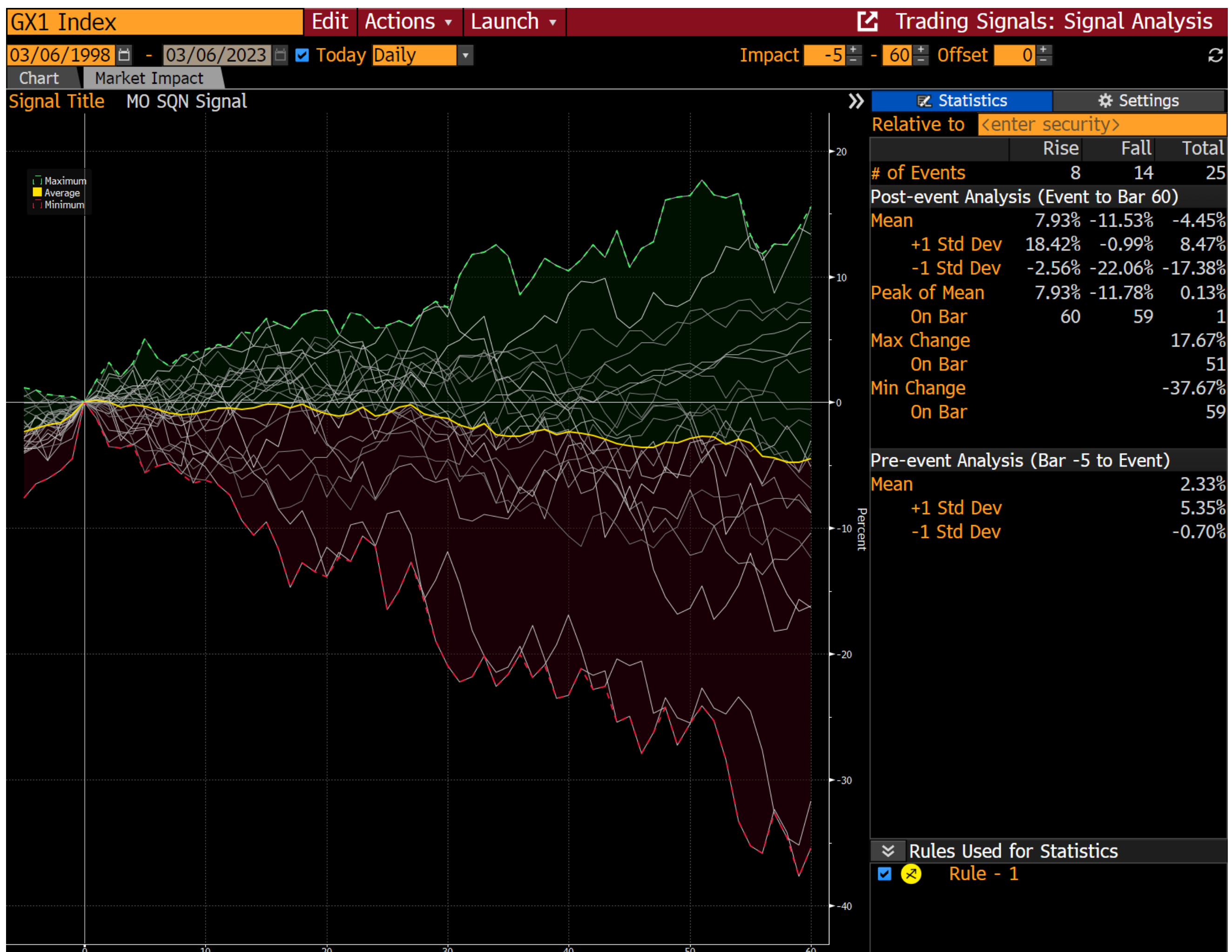

This fits with our general feel for the market right now, which is that we're likely one to three months away from a top in this broader risk-on move. So while we're getting stretched and longer-term forward returns don't look favorable, we can still go on a decent run before we peak out.

Outside of that, there's not much we're seeing that is immediately actionable. We're keeping a close eye on crude which continues to coil and we're watching some key USD pairs for potential long setups, but we're not quite there yet.

We'll be out with more soon. In the meantime, here's Brandon with a deep dive into a lithium play that has the potential to be another Foran Mining (FOM) superstock.

Your Macro Operator,

Alex

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Recent Trade Alerts						
Trade	Ticker	Description	P/L (bps)	Date	Sector	Notes
Sell 1/2	TDW	Tidewater	66	02-21-2023	Energy Services	Overextended
Sell Full	EURUSD	Euro/US Dollar	7	02-21-2023	FX	Closed below stop
Sell Full	RTYH2023	Russell 2000	-20	02-21-2023	Futures	Closed below stop
Sell Full	ETHUSD	Ethereum	-28	02-21-2023	Crypto	Reversed
Short	TSLA	Tesla	N/A	02-22-2023	Equities	H&S Retest
Sell Full	CLM2023	Crude Oil	-9	02-22-2023	Futures	Closed below stop

YTD Monthly Gain/Loss

Portfolio Allocation

Piedmont Lithium (PLL): A Trifecta Setup In Metals & Mining

We've spent the past two weeks exploring highly asymmetric *Trifecta Lens* setups in metals and mining. Here's a breakdown of the past two weeks' research with links to our write-ups:

➢ Tin and MetalsX Limited (MLX.ASX)

Elevator Pitch: *MLX made AUD 144M in FCF last year due to high tin prices. Management used the excess cash to invest in capex and retire all long-term debt.*

Our base case assumes the company produces ~9,000 tons annually. Currently, MLX produces 8,500 tons. We'd get ~$256M in revenue and ~$90M in FCF (35% margins). Under those assumptions, it would take ~3 years for MLX to generate its enterprise value in FCF. Management can then use the excess cash for dividends or buybacks.

➢ Copper and Foran Mining (FOM.TSXV)

Elevator Pitch: *FOM is a low-cost mining company that produces copper, gold, zinc, and silver. The company is trading at <3x EBITDA under base-case commodity price assumptions. FOM's CEO*

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previously ran Glencore's Zinc Department. He takes no cash salary. All his compensation is in equity. Management owns ~40% of the stock and is aligned with shareholders.

This weekend we continue our metals theme by highlighting a **Trifecta Lens Setup** in Lithium and pitch Piedmont Lithium (PLL).

Piedmont Lithium (PLL): Yet Another Trifecta Lens Setup

PLL is a pre-production lithium mining company.

The company will produce lithium hydroxide and spodumene concentrate ("SC6") from four main assets (discussed later), which it will sell to EV battery manufacturers like Tesla, Toyota, Ford, and GM.

The company meets all **Trifecta Lens Setup** requirements:

- **Macro/Sentiment:** The company owns strategic lithium hydroxide assets in the US, Canada, and Ghana. Lithium demand will rise to 650,000 tons *in the US alone* over the next two decades from electric vehicle demand. It takes up to **twenty years** to build and produce a new lithium mine in the US, guaranteeing a supply deficit (read: higher prices).

  The US government incentivizes EVs and promotes reshoring North American Lithium via the Inflation Reduction Act (IRA) and ESG/EV mandates, further bolstering macro sentiment.

- **Fundamentals:** PLL currently trades at a $1B market cap. Its mines are conservatively valued at around $5.6B, assuming the most bearish underlying commodity prices. A more realistic view of commodity prices would value PLL's assets closer to $14B.

  Back out the company's cash and equity stakes, and you can buy $14B in assets for <$800M.

- **Technicals:** The stock is in a two-year-long rectangle consolidation while underlying lithium prices have gone parabolic. There's tons of coiled energy in PLL's chart (see here).

Catalysts: The market will re-rate PLL higher as the company shifts from pre-production to off-take production in mid-2023. PLL is a low-cost producer with two strategic US-based assets and will disproportionately benefit from reshoring efforts.

Why Opportunity Exists: Still a pre-production asset, the market is worried about dilution/funding risks, lithium prices collapsing on the heels of increased supply/relaxed regulation for mining permits, and local geopolitical/ESG tensions around mining production.

The Perfect Macro/Sentiment Setup

Lithium has the highest torque on future supply/demand imbalance of any precious metal. If the ESG-mongers have their way, **lithium demand will increase 42x by 2040**. That compares to 21x for cobalt and 2.6x for copper (see below).

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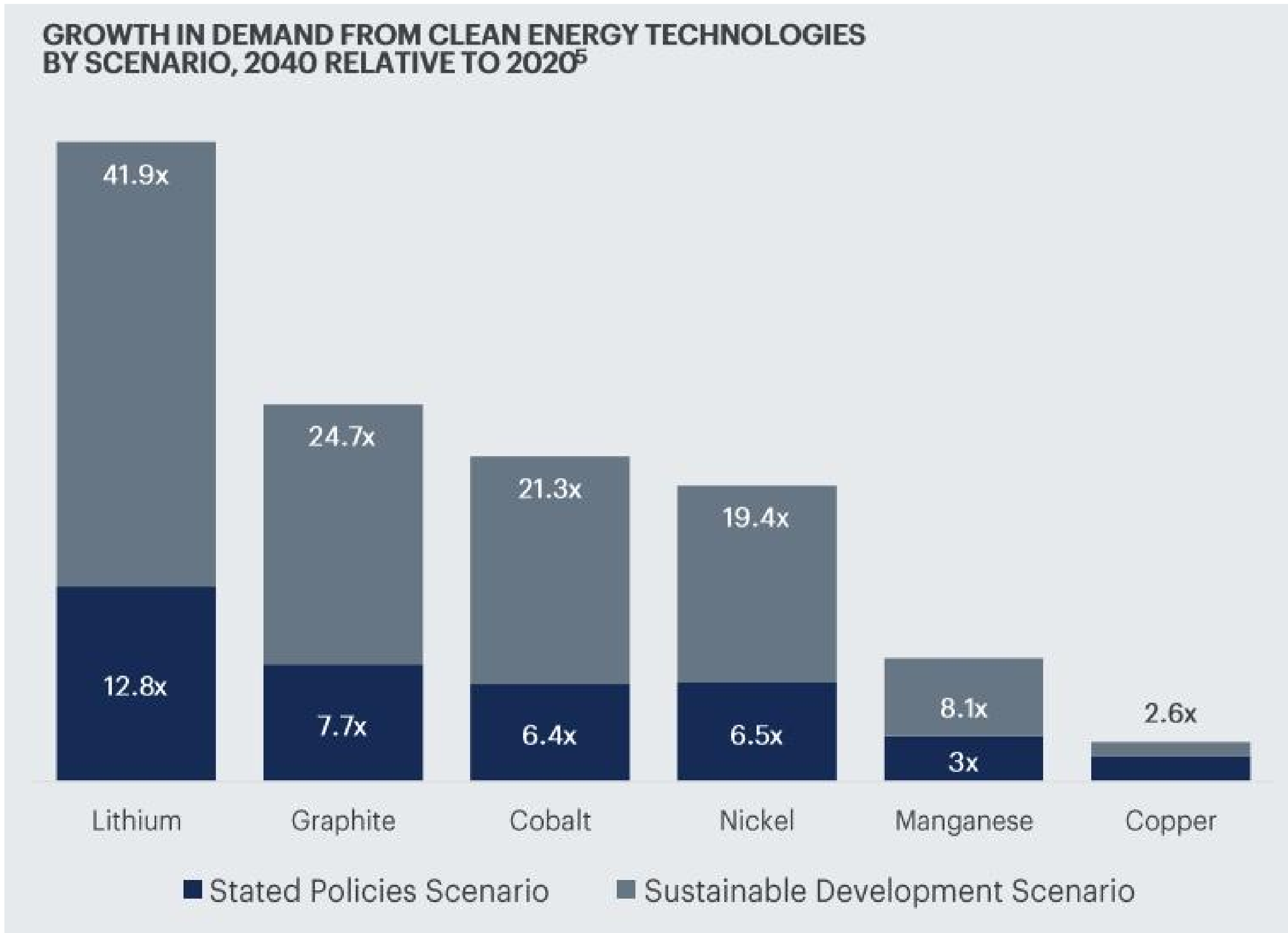

US battery capacity demand from EV mandates, the Inflation Reduction Act (or IRA), and reshoring drive this supply deficit.

Automakers like Tesla, Ford, GM, and Toyota have committed ~$60B to build EV battery capacity in the US by 2030. That translates to **>650,000 tons/year in lithium demand.**

As of September 2022, the US produced only 5,000 tons of lithium annually. Moreover, only five companies are estimated to produce US-domiciled lithium: Piedmont, Standard Lithium, Albermarle, Ioneer, and Livent.

The problem is that new mines are hard to build and can take up to twenty years to come online. So new supply won't come all at once. PLL, for example, doesn't expect to start producing from its Tennessee mine until mid-2025 and its North Carolina mine until late 2026.

By 2030, these five mines *could* produce up to 230,000 tons of lithium annually. But that's only a third of what US battery makers will need.

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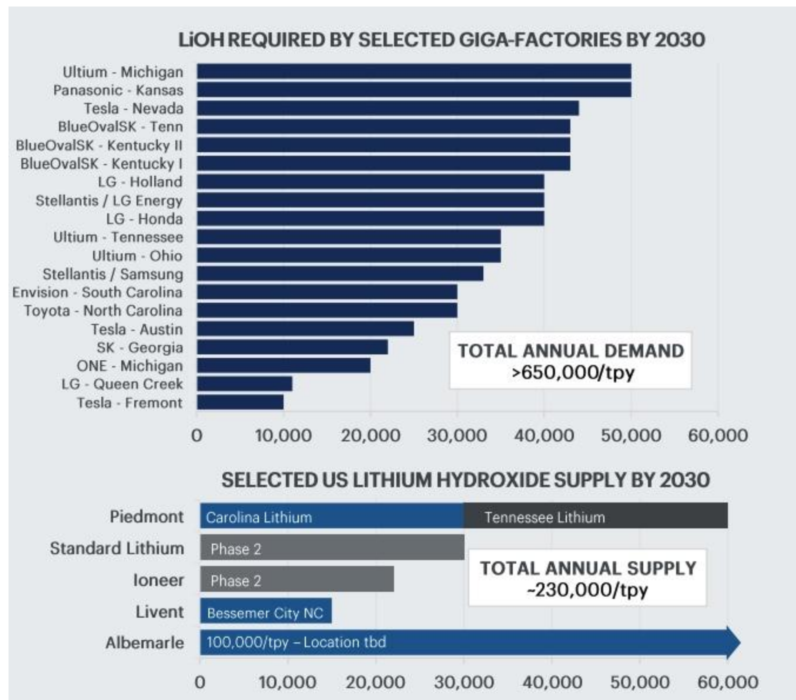
Put simply, supply will not meet demand over the next two decades. Higher lithium prices are the only way to clear a market like that. This is what's happening now, and it's causing a massive value divergence in lithium stocks.



Let's discuss valuation.

Cheap on Conservative Prices; Stupid Cheap on Anything Near Spot Prices

The typical way to value pre-production miners is through a Net Present Value (NPV) analysis. You assume an average sales price for the commodity, subtract your average all-in cost per ton (or pound), and multiply by how many tons (or pounds) you'll sell annually.

Mining companies perform NPV analyses during feasibility studies (PFS or DFS).

Take PLL's NPV analysis, for example. The company completed its study assuming $22,000/ton for lithium hydroxide and $1,200/ton for SC6.

The spot markets told a completely different story. Spot market prices for lithium hydroxide hit **$82,000/ton** and SC6 fetched **$7,900/ton.**

This is important because the higher the commodity price, the higher the profits.

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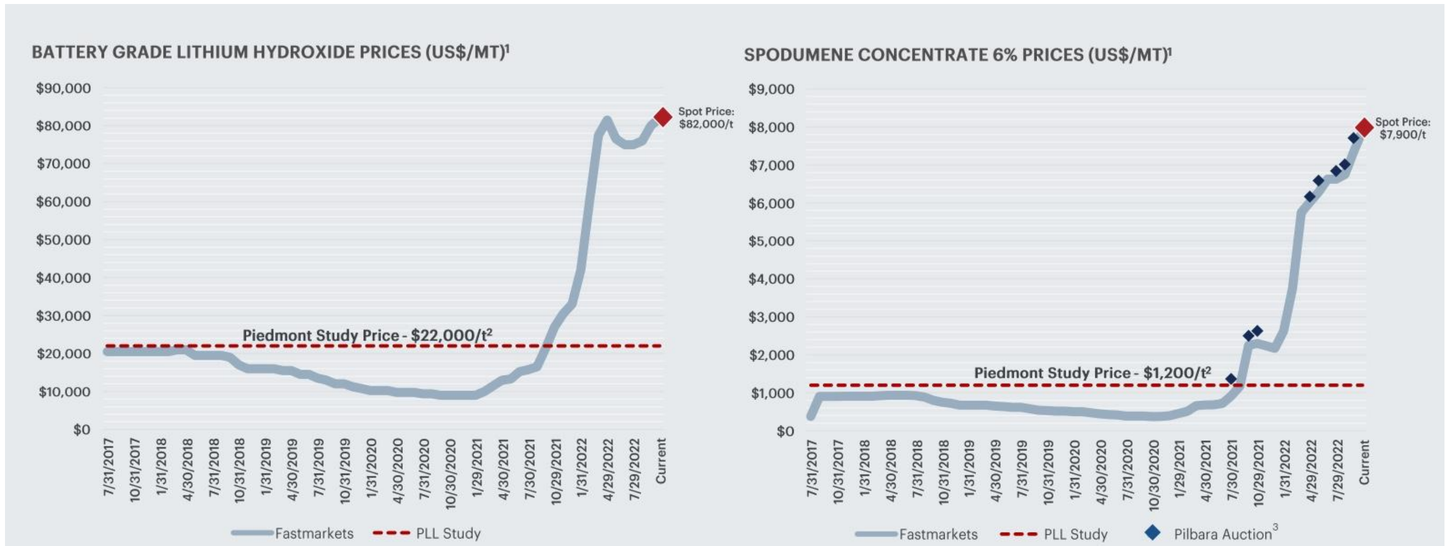

We'll use PLL's study price for our first valuation.

The company has four main assets:

- **Quebec:** 35% economic interest in Sayano Mining (SYA.ASX) w/ Offtake Agreement
- **Ghana:** 9.4% interest in Atlantic Lithium (ALL.LSE) w/ Offtake Agreement
- **Tennessee:** 100% owned Lithium Hydroxide producer
- **North Carolina:** 100% owned Lithium Hydroxide producer

If you want more detail on each asset, I recommend reading PLL's latest investor presentation.

Quebec Asset Value: $350M+

PLL's Quebec asset comprises 1.2B shares of Sayano Mining (SYA.ASX) and 25% of the Sayano Quebec joint venture. As of Thursday, **PLL's shares are worth ~$216M.** PLL also has an offtake agreement with Sayano.

The offtake agreement allows PLL to buy either 50% of production or 113,000 tons at prices no lower than $500/ton and no higher than $900/ton.

Suppose PLL buys at the ceiling ($900/ton) and sells at $1,200/ton. It would generate ~$34M in annual profits. Stick a conservative 4x multiple and get another **$136M in value.**

Ghana Asset Value: >$1B

The Ghana asset includes 9.4% of all Atlantic Lithium shares **(~$20M)** and a 50% offtake agreement over the life of the mine at spot prices. This vast mine (~255,000 annual spodumene concentrate production) has very low opex at $278/ton.

The mine currently has an **after-tax NPV of ~$1.3B.**

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Tennessee Asset Value: ~$1.7B

PLL's Tennessee mine will produce 30,000 tons of lithium hydroxide annually. The company assumes ~$10.6K in opex/ton. Subtract that from the $22,000/ton sale price, and you get ~$340M in annual EBITDA.

A modest 5x multiple gets us **$1.7B in value.**

North Carolina Asset Value: ~$2.65B

North Carolina is PLL's most prized asset. When complete, it will be one of the lowest-cost producers globally at ~$4,400/ton in opex and the lowest-cost producer in the US.

The mine has an annual capacity of 30,000 tons of lithium hydroxide. At a $22,000 average sale price, the mine would generate ~$530M in annual EBITDA.

Again, assuming a 5x multiple on that EBITDA, we'd get **$2.65B in market value.**

The final result of our *conservative* SOTP valuation is **$5.7B, or 500% higher than the current stock price.**

Let's see what happens when we value PLL's assets closer to spot prices.

$14B Valuation At Higher Spot Prices

Suppose PLL sells its lithium hydroxide and SC6 at a 50% discount to current spot prices.

The above pricing scenario is still **bearish** as the decade-long supply/demand imbalance promotes longer-term higher commodity prices.

We get $41,000/ton for lithium hydroxide and $3,950/ton for SC6.

Here's what our SOTP valuation would look like in this pricing scenario:

- **Quebec:** $560M
- **Ghana:** ~$3.4B
- **Tennessee:** ~$4.6B
- **North Carolina:** ~$5.5B

Total SOTP: $14.1B

Back out PLL's cash and equity stakes in Sayano and Atlantic and **you're paying ~$800M for four assets conservatively worth nearly $6B and more realistically worth north of $14B**.

Your Value Operator,

Brandon

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