A Market Note: How To Avoid Stinky Fingers…

When asked where he thought the market was headed over such and such time, my mentor would always reply with "the path of maximum pain… that's where she'll trade."

It's glib, yes. It's also <u>true</u>.

The market moves in the direction that'll hurt the most people most of the time. It has too. It's part of its nature, the pure mechanics of it. People caught offsides are what drive sharp trends. Shorts covering and going long create bullish moves. Overleveraged and complacent bulls running for the exits are what drive big selloffs.

This is why in playing the metagame, we always need to keep a pulse on the narrative, tracking positioning/sentiment and developing a feel for what the popular beliefs are (ie, We're in a TINA melt-up, this XYZ asset is *uninvestable*, this is a goldilocks environment, etc…)

It seems to me that there are three dominant/narratives at the moment:

1. **We're experiencing immaculate disinflation**
2. **A very mild recession has already started or will start very soon**
3. **This will lead to a soft landing**

All of these imply a bit of a rough patch for equities in the near term but a positive end to the year as inflation falls to the Fed's target and they begin cutting rates.

This is good, because we believe the opposite.

In this *Market Note*, we're going to reiterate why we're at a<u> tradeable bottom</u>, why it's asinine to think that this is a <u>cyclical bottom</u>, why a recession will happen but not until Q4 of this year, and why stocks will end the year lower (after a strong 1st quarter).

We're also going to discuss some developments in China, as that's a central piece to all of this. And we'll end with a look at a few of our holdings and some trade setups.

A Tradeable Bottom Checklist…

What distinguishes a pivot low within a bearish trend from an enduring tradeable bottom?

We can't answer that question with certainty in real time. But we *can* measure the weight of the evidence to give us a probabilistic feel, allowing us to make educated bets. Which is what this game is all about.

We can use a weight of the evidence approach to tell us whether this.
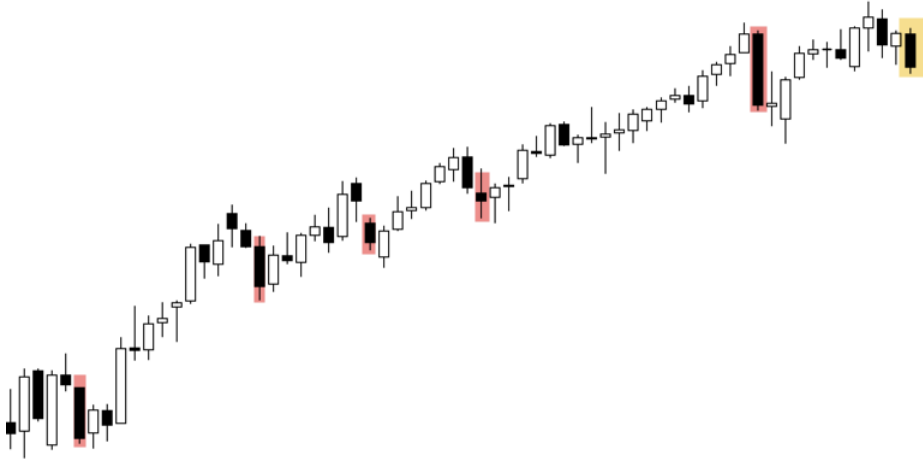
Is likely to do this.
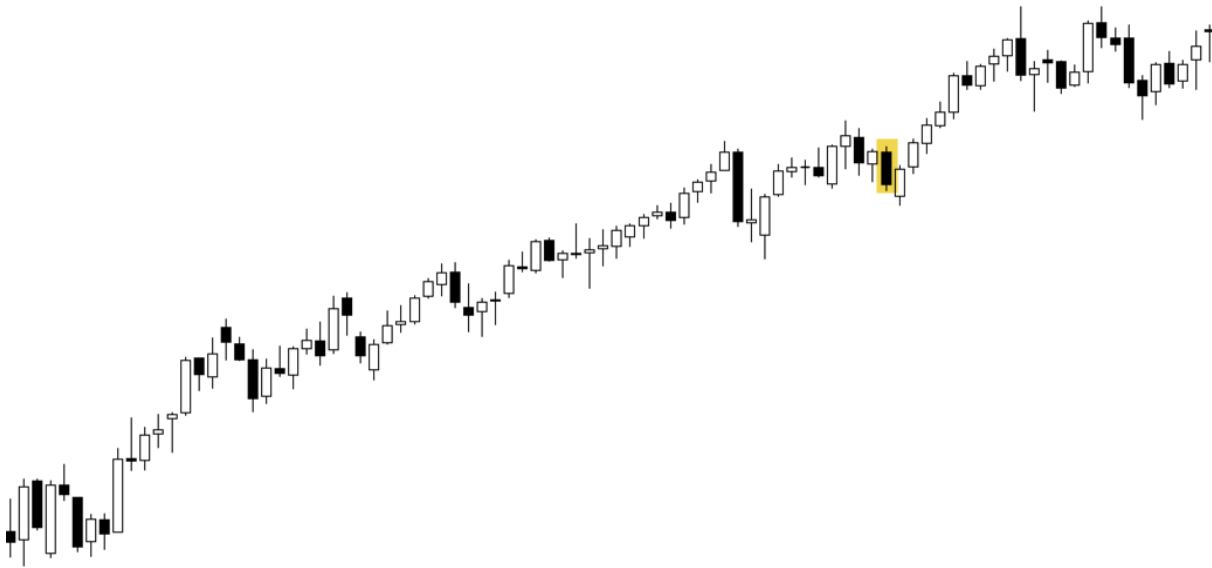
Or this…

This is the method we used to nail the latest bottom on October 13th, when everybody ([including my favorite twitter contra](#)) was clamoring to outdo one another with their bearish takes.

Chop wood, carry water…   3

Alexander Barrow 🪶 ✔ @MacroOps · Oct 13, 2022

There's plenty of noise out there so take it with a grain of salt, but...
Cyclicals vs Defensives, which have been leading the way down since Nov 21' are now leading the way up.

We'll have to see how today closes but looks like a **bottom** might be in now that CPI is out of the way
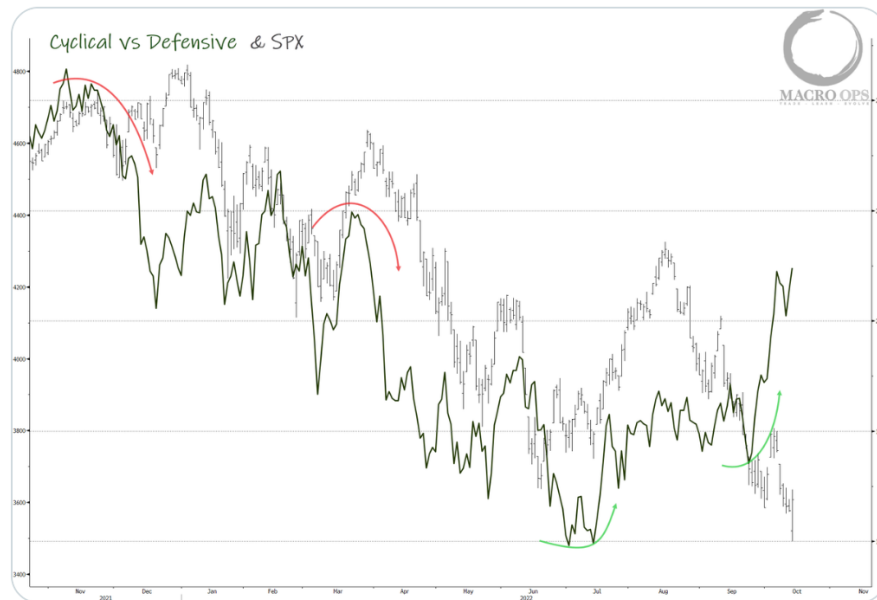
Let's jump to it.

Bottoms, like tops, are formed by a spike in collective emotions. These collective emotions lead to a sharp rush to buy or sell. This raft of over or under positioning <u>creates</u> the top or bottom. As the great late John Percival wrote:

> *Remember the last time you sold a [market] at what proved to be the bottom, or bought at the exact top? That wasn't just bad luck — nor even just foolishness. You and the crowd caused the bottom, or the top.*

Since we're <u>all</u> human, we're <u>all</u> subject to these emotions. Tops and bottoms never look or feel like tops or bottoms.

The narratives supporting the immediate trend are *always* overwhelmingly convincing at these points. This is what makes these larger turning points so difficult to trade. It's hard *not* to get caught up in the emotional undercurrents of the moment.

This is why we need a framework. A decision tree or checklist of sorts. One that allows us to efficiently and effectively weigh the evidence and make informed decisions.

Chop wood, carry water...

Those of you who've been with us a while know that we view technicals in a hierarchy of importance. This hierarchy goes something like this:

1. **Price**: The tape is the first and final arbiter of truth
2. **Trend:** A trend in motion tends to stay in motion, and a tape at rest stays at rest
3. **Breadth**: A measure of the strength and durability of the price and trend
4. **Market Internals:** Certain internals of the market lead the market both up and down
5. **Hard Positioning/Sentiment:** Quantitative measures of actual positioning in markets
6. **Soft Sentiment/Data**: Survey sentiment data, such as AAII and Investors Intelligence

And so it goes when analyzing a potential bottom. We overweight price action first and foremost.

There's a near-limitless space for nuance here. This is where experience and putting in the time to research, study and backtest pays off.

But we can infinitely improve our odds by continuously checking the market against these three quantitative points that help us answer the question: *what is the market saying?*

1. Is it holding key support levels or punching through them?
2. Is it making higher pivot lows?
3. Are great-looking sell setups failing and reversing around the midline or lower Bollinger band?

We'll run through a few examples at the end.

Leaders lead…

Then we can look at the larger trend. A chart that is trending tends to keep trending 80% of the time. And vice versa, a chart in sideways consolidation sees 80% of breakouts fail.

We can save ourselves a lot of headaches by mostly trading in line with the major trends. And this gives us a simple heuristic: significantly more evidence (and tighter risk management) is needed to identify and trade <u>countertrend bottoms</u> versus those that occur in primary up trends.

Identifying the primary trend direction is fairly easy, and you can adjust the inputs depending on the particular timeframe for which you operate. But we like the following:

1. Is the 150-day moving average angled up, sideways, or down?
2. Has the SQN Market Regime been primarily in a Bull, Neutral, or Bear regime over the past 30 days?
3. Is the Macro Regime in an Expansion, Slowdown, Contraction, or Recovery?

If your answers to 1, 2, and 3 are "down, Bear Volatile, and Contraction," you'll need more

evidence, *and* tighter risk control / smaller position sizing, when trading a potential bottom.

Breadth = strength…

Then we have breadth, which is a critically important input into this equation.

Breadth can be looked at in three ways **(1)** as a confirming/disconfirming participation measure of the broader trend, **(2)** as a valuable measure of overbought/oversold conditions, and **(3)** breadth thrusts as a confirmatory signal of a bullish trend start.

More broadly, a good way to think about breadth is like an advancing military force. Strong breadth is similar to an army with a deep and disciplined line (think old-school battles where fighters stood shoulder to shoulder). A disciplined 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 lose cohesion. It doesn't take much from the opposing force to break it completely. This is how major trend changes occur. 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.

Durable market bottoms are always marked by two breadth characteristics:

1. An oversold tape with oversold breadth conditions marking capitulative selling (percentage of stocks > 10 and 50-day moving average = sub 10% and 20%, respectively)
2. These oversold conditions are then followed by an improved tape and a cluster of breadth thrusts

Using our military analogy. A market bottom is akin to an enemy line of the Bear Army, pushing back the front line of our Bull Freedom Fighters. The enemy advances, our Bullish soldiers trip, fall, and some in the rear retreat entirely.

From our viewpoint, as the Generals standing on the hill overlooking the battle, this scene can look quite bleak. But we also know that even though it's moments like this which are potentially major inflection points, they're also part of the <u>normal</u> ebb and flow of the battle.

We need to see whether our lines break and our soldiers scatter like the French. Or whether they have some extra fight in them. Being the degenerate Generals that we are, we're placing bets on the outcome of this battle.

Lucky for us, we don't need to predict how our forces will fare. We can *wait* to see how they manage this crucial juncture in the battle *before* we place our wagers.

What we want to see is after our line gets pushed back, and things look grim. Is whether our soldiers can summon their reserves, can they summon the strength and will to stage a

counteract and thrust back into enemy lines, putting them back on their heels?

From our vantage point on the hill, if we only see one section of our line thrust forward, well, that's not too comforting. It means our line is pretty weak, our fighters are exhausted and on the ropes, and there's a greater potential we lose the battle.

But… if we see multiple thrusts forward, a cluster of counterassaults that drive the enemy back. Then that's telling… That means our army of bulls still have plenty of fight left.

It's easy to show strength when you're dominating a battle, but to stage an effective counterattack following a blistering assault, well, that's what shows mettle and a fighting spirit.
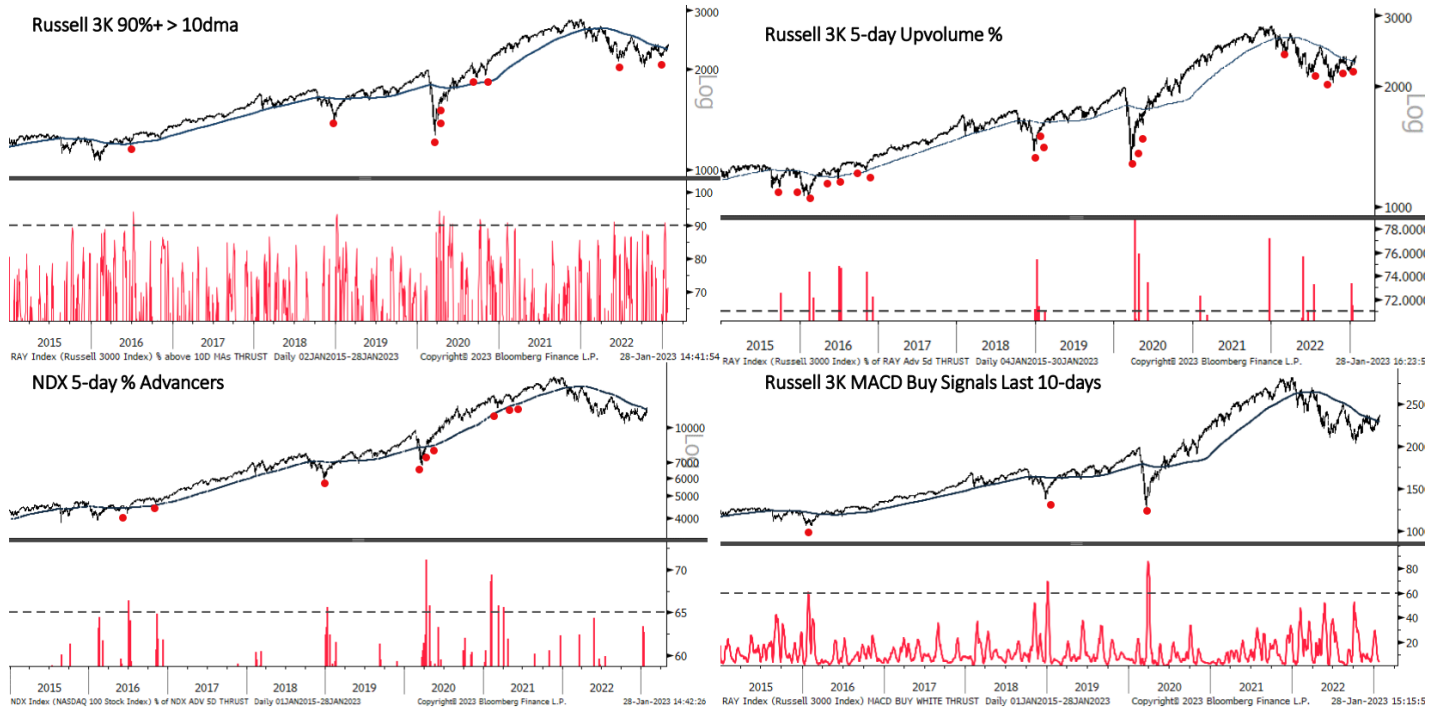
These two slides in our *Trifecta Chart Pack*, along with our Breadth tab on our Dashboard (aka: The HUD), give us all the information we need to determine both (1) whether oversold conditions exist and (2) whether there's been a cluster of thrusts recently.

Short-term Breadth

Breadth Thrust

● = Confirming Breadth Thrust

We'll talk more on this once we run through a couple of examples here at the end.

Also, our Breadth tab on our dashboard is being updated with additional measures of overbought/sold conditions, trend breadth strength, and thrust signals, including Whaley's Breadth Thrust and Deemer's Breakaway Momentum signal (BAM).

Follow the leaders…

Now that we understand the role of breadth let's talk about the leading nature of certain market internals.

Again, sticking with the military analogy. Just like every unit has a leader, and that leader helps drive unit cohesion and set the pace of the battle, the market has internal leads that also tend to move before the rest of the line follow suit.
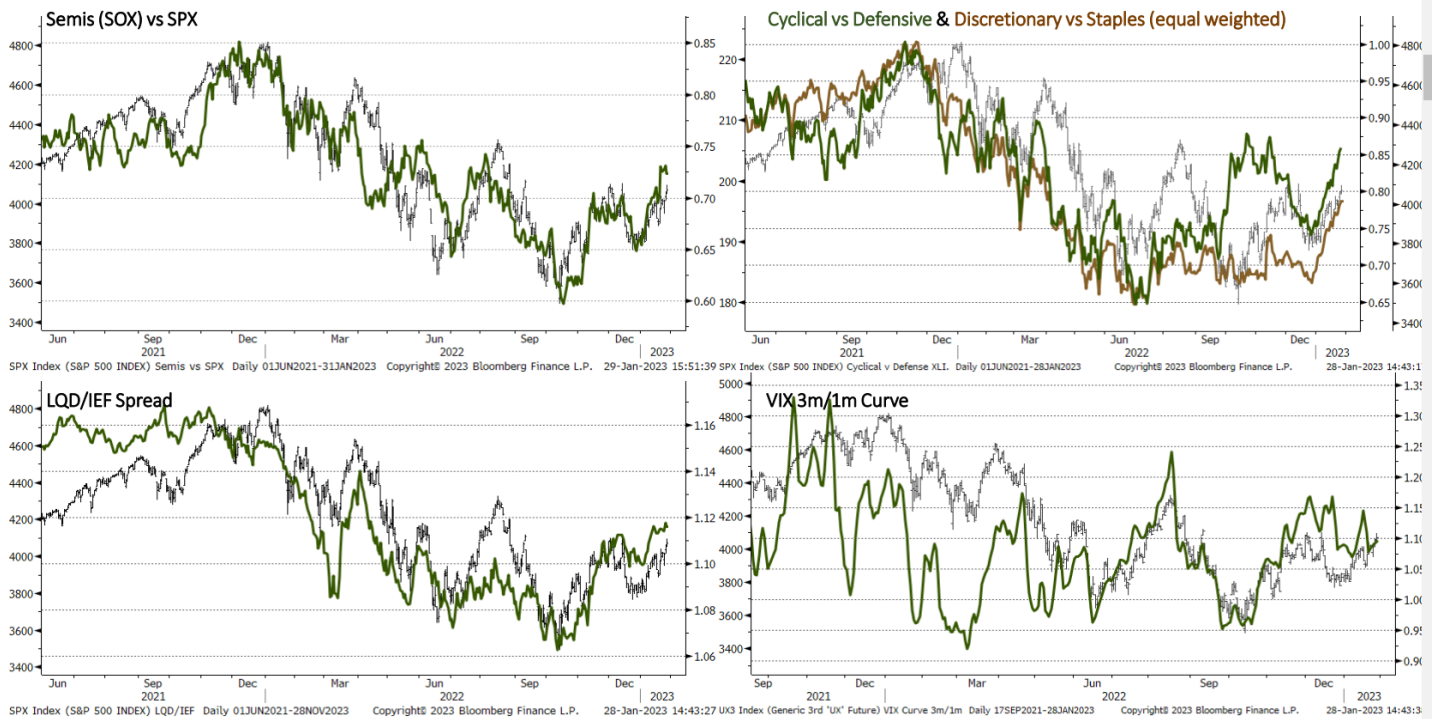
And so it behooves us to routinely check in on these leaders to see if they're leading and confirming or diverging from the broader market.

Our favorites to track are:

1. Semiconductors relative to the SPX

2. Cyclicals relative to Defensives
3. Consumer Discretionary relative to Staples
4. Ishares Corporate Bond Interest Rate Hedged ETF (LQDH)

Market Internals

Similar to breadth, it's about multiple confirmations. If the SPX is trading sideways, but cyc vs. def, semi vs. spx, and LQDH are all breaking out to the downside, then we should turn cautious and look for the market to soon follow suit.

However, if just one lead is turning down while the others trade in line with the market, it's not much of a signal. And we have to wait for further confirmation.

We'll talk more about this in our examples, but suffice it to say these internal leads often set the pace and direction for the ebb and flow of the broader market.

The time to zig is after everyone has zagged….

> *Something that everybody knows isn't worth anything* ~ Bernard Baruch

Remember the start of this piece, "the path of maximum pain… that's where she'll trade"?

The market is most likely to bottom when the <u>majority</u> of people expect it to keep going down. This is our last two hierarchy of technical puzzle pieces, positioning and sentiment data.

We can get more involved here and watch CNBC's *Fast Money*, scan through the front pages of the financial press, follow a number of highly popular Dumb Money accounts on Twitter, etc… in order to develop a solid feel for the larger narrative and positioning of the broader market.
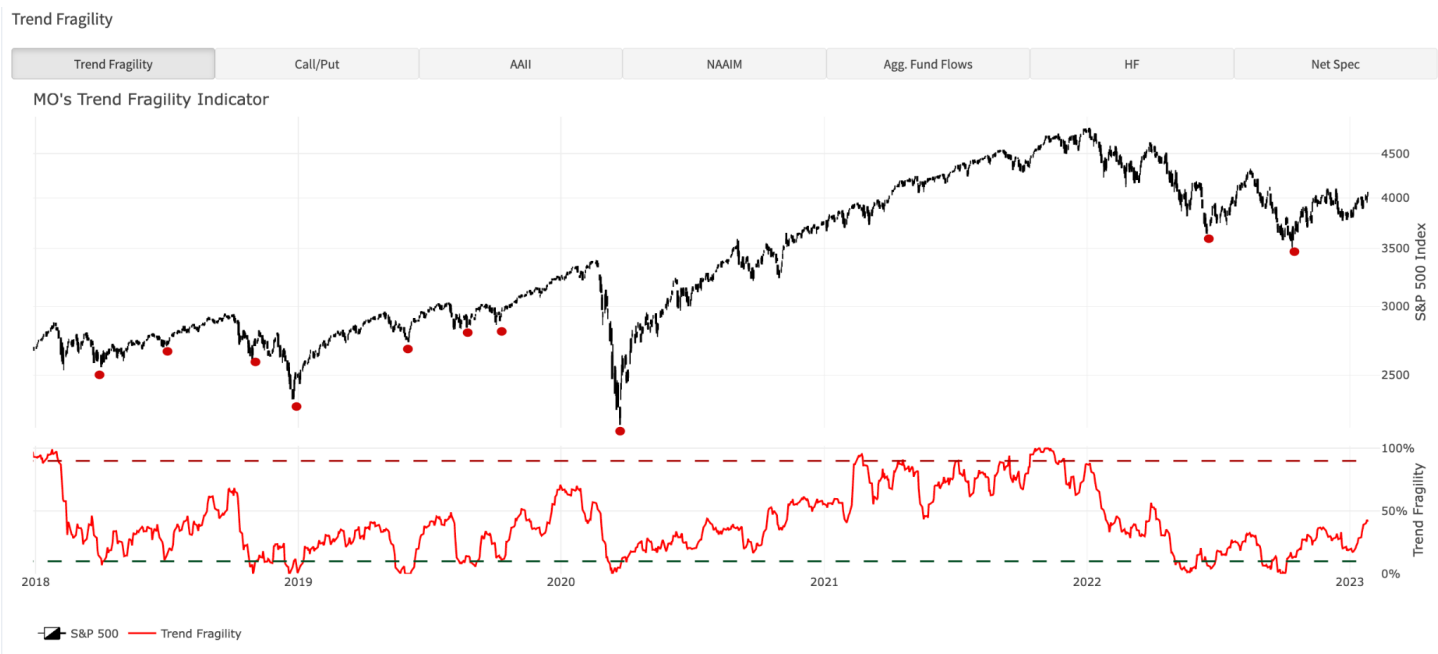
But, this isn't entirely necessary. We can get the MED — the minimum effective dose — by just looking at our Trend Fragility Tab on the HUD.

The TF indicator is a composite positioning and sentiment oscillator. The subcomponents are listed below the chart on the tab.

This gives us an excellent holistic view of where everybody is standing and whether there's any crowding or not on both the bull or bear sides.

For the purpose of bottoms, we want to see a reading below 10% (dashed green line). A sub-10 % reading means there's a bearish consensus (red dots mark past sub-10 % readings).

This doesn't mean the market *has* to bottom — we still need positive price action and confirming thrusts — but it is a strong indication that we're at or nearing a sizable bottom, and we should be on the lookout for the other inputs indicating a reversal is in progress.

Trend Fragility

| Trend Fragility | Call/Put | AAII | NAAIM | Agg. Fund Flows | HF | Net Spec |

MO's Trend Fragility Indicator

Alright, so now let's run some examples real quick.

Let's go through the bottoms of this past year, those that failed and the one that has so far stuck.

To start, we entered a Tightening Liquidity regime in early October of 2021 which then led to our MO Growth Composite Lead going from an Expansion regime into a Slowdown in Jan 22' and then into a Contraction regime in June.

The stats show that this is <u>the worst returning regime for risk assets</u>. It's the regime where bear markets and recessionary bear markets occur.

So our bias for the primary trend in the S&P was down. This meant that potential market bottoms required *greater confirming evidence* than usual. And risk had to be managed more tightly.

So while we can see that technically speaking, there were a number of *potential* bottoms throughout the bear trend last year. None of them stuck and each required ample evidence to make us even slightly interested in trying to play them to the long side.

Also, none of the potential bottoms through May ever cleared our three technical hurdles of (1) price action holding significant levels (2) putting in higher pivot lows, and (3) seeing great sell setups fail around the Bollinger midline and lower Band.

More importantly, we didn't even need to wait to see if these would fail, because our TF Oscillator didn't trigger the sub-10% requirement until June which is when the current bottom began forming.

And it wasn't until after the June low, a low that sparked a consensus bearish read along with deeply oversold market conditions, that we got two confirming breadth thrusts for the first time during this downtrend.
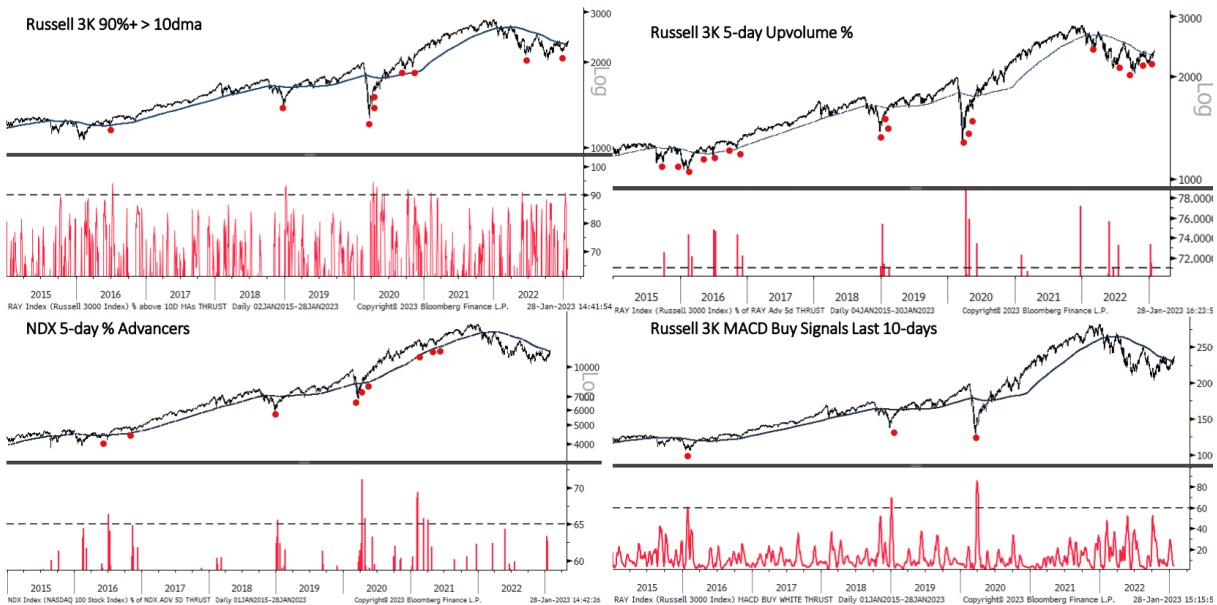
But none of our market internals confirmed the June bounce. This meant that the June rally would most certainly fail, which it did.

The picture began to significantly improve in October when <u>all four of our leads began turning higher, outpacing the market</u>.

The improving internals coincided with another sub-10% TF read that month, while the SPX began trending up as we saw consecutive sale setups fail around the midline of the Bollinger Band.

Market Internals
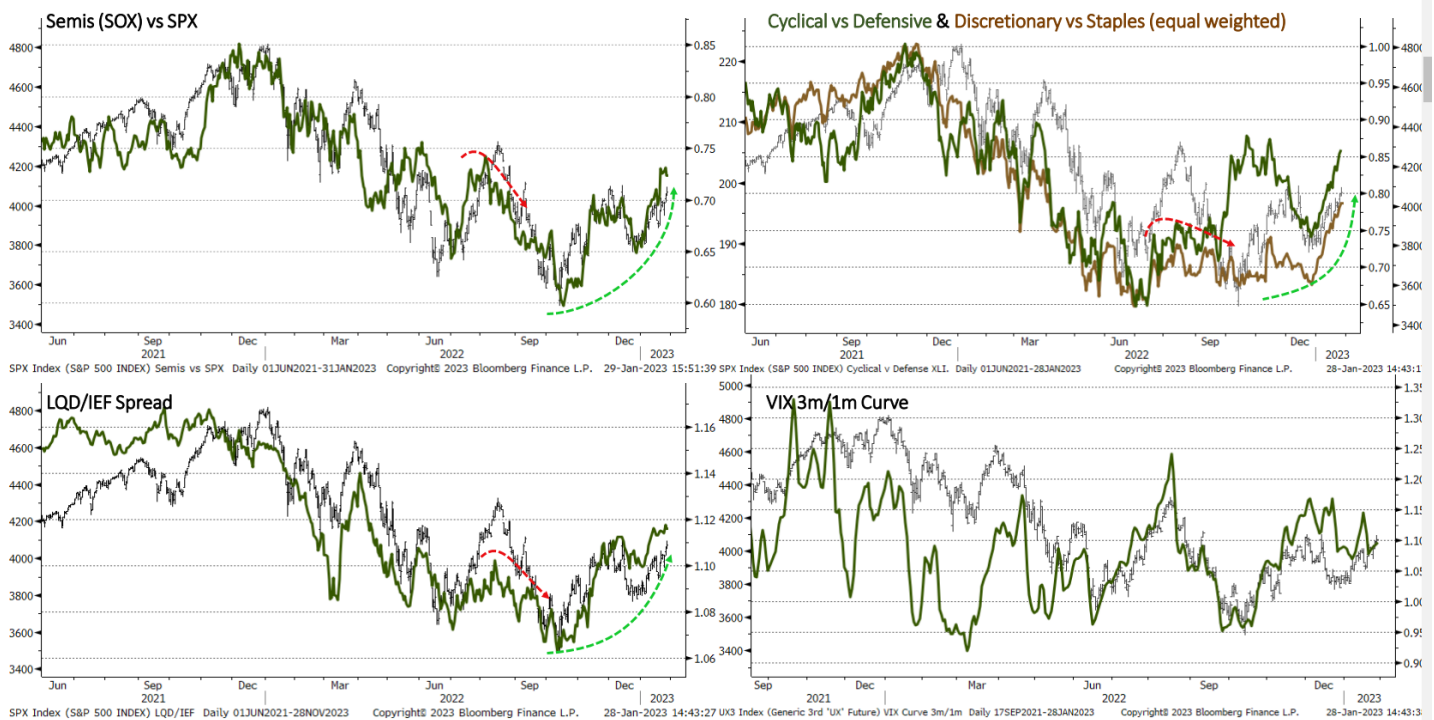
The evidence was building that a tradeable bottom was likely forming, but we still needed to see a cluster of Buy Thrusts confirming the reversal.

That came earlier this month when a handful of additional breadth thrusts triggered, including the less frequent Whaley and BAM thrusts (the less frequent a signal, the higher its value).

So every condition for a tradable bottom has been checked. We now just need to see price action further confirm what the indicators are already saying. It will do this by making higher highs and holding significant levels.

<u>This is why we can write with confidence that a bottom is in</u>, at least for a while. Our bet is that the recent October low holds for the next 2-3 months.

As always, nothing in this game is 100%. So consider this a 90% confidence level. And we'll gladly change our minds should the evidence change.

More importantly, following this framework will keep your emotions out of the game, help you nail tradeable bottoms, and prevent you from getting stinky fingers picking failed bottoms.

The Market Bottom Checklist:

1. **Price action:**
   a. Is it holding key support levels or punching through them?
   b. Is it making higher pivot lows?
   c. Are great-looking sell setups failing and reversing around the midline or lower Bollinger band?
2. **Trend direction:**
   a. Is the 150-day moving average angled up, sideways, or down?
   b. Has the SQN Market Regime been primarily in a Bull, Neutral, or Bear regime over the past 30 days?
   c. Is the Macro Regime in an Expansion, Slowdown, Contraction, or Recovery?
3. **Breadth:**
   a. Is the market deeply oversold (percentage of stocks > 10 and 50-day moving average = sub 10% and 20%, respectively)?
   b. Has there been <u>multiple</u> confirming breadth thrusts following these oversold conditions?
4. **Internal Leads**
   a. Are multiple leads confirming or diverging from the tape?
5. **Positioning & Sentiment:**
   a. Is the Trend Fragility score below 10%?

We're not in a recession, some nuance is needed here…

There's a lot of smart people who are forecasting that the US has already tipped over into a recession or will very soon.

I sympathize with these peeps. Because if you only look at a few of the popular and dependable recession indicators, such as the yield curve and ISM New Orders, without broader context of the

US Recession Odds Continue to Rise, Now at 70%

■ Odds of recession in next year
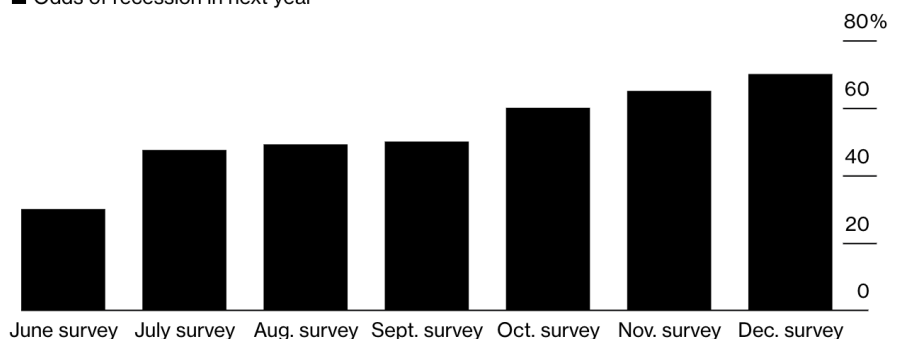
Source: Bloomberg

environment, or the inputs of what certain areas of the market are signaling, then you'd come to the same conclusion.

But, here's the thing… It's hardly ever that simple. Especially not now.

We're in a very wackadoodle macro environment.

Between China Zero-COVID shutdowns and reopenings, one of the fastest rate hiking cycles in history, inventory levels out of whack due to mismanaged expectations and demand extrapolation of consumers high on large stimulus checks, and so on…

This is not the environment to be looking at only a few economic indicators and then giving your high-speed hot takes, even though that has worked fairly well for the past 40+ years.

So let me run through how I'm thinking about all this.

Alright, yes. The economy has slowed down over the past year. Our Growth Composite Indicator (a composite of 11 different econ, market, and financial data points) rolled over in December of 2021, entering a Slowdown regime (blue shading) and then turned negative into a Contraction regime in July of last year.

This is a leading indicator of economic growth, just as the SPX tends to be. It often sniffs out the coming economic trends well in advance of even the SPX, as it did when it entered a Contraction regime in late 2019 and mid-2006, while the market continued to whistle past the graveyard.

MO Growth Composite Indicator
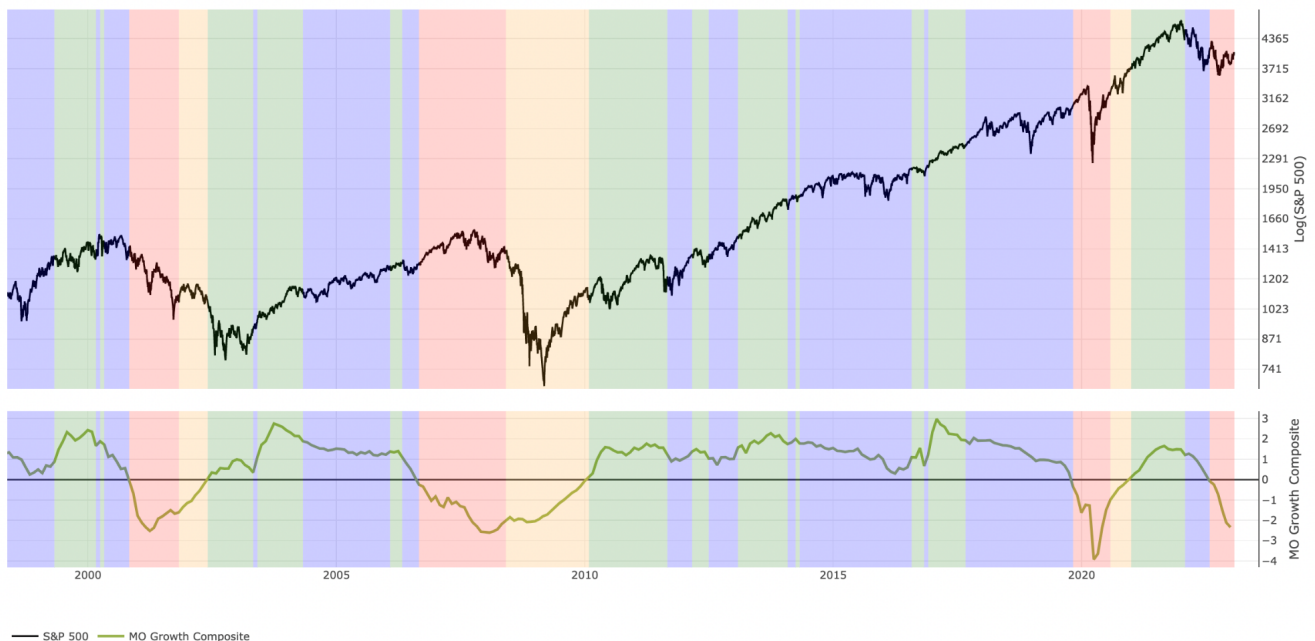
Okay, so this is a leading indicator. And this leading indicator is giving a very bearish reading. But, we have to remember that this indicator points to the broader trend of the economy and the market. It doesn't catch the 1-3 month wiggles in between. It's purposefully not designed to.

So this is helpful but let's add some context.

Most business/risk cycles die at the cross street of too much leverage/overspending and a hawkish Fed.

The hawkish Fed, in an effort to stymie inflationary pressures, raises the cost of capital in order to lower demand.

These higher rates and slowing demand meet head-on with leveraged positioning (amongst both consumers and investors) in the real and financial economies.

This starts to force unwinds of investments and positioning (i.e., business CAPEX and expansion plans, hiring, margining up to buy ARKK shitco's, household spending plans, etc…)

This kicks off a positive feedback loop with negative consequences, as demand falls, which causes risk-taking in the economy to pull back which leads to businesses cutting back on labor, which causes demand to fall even more, and so on and so forth.

I reiterate this so that we understand the sequencing of events that actually cause demand to fall to a point where a recession starts.

And, yes, it all begins with liquidity. Our Liquidity indicator in September of 21', preceding the top in the market and the MO Growth Composite flip from Expansion to Slowdown.


MO's Liquidity Indicator
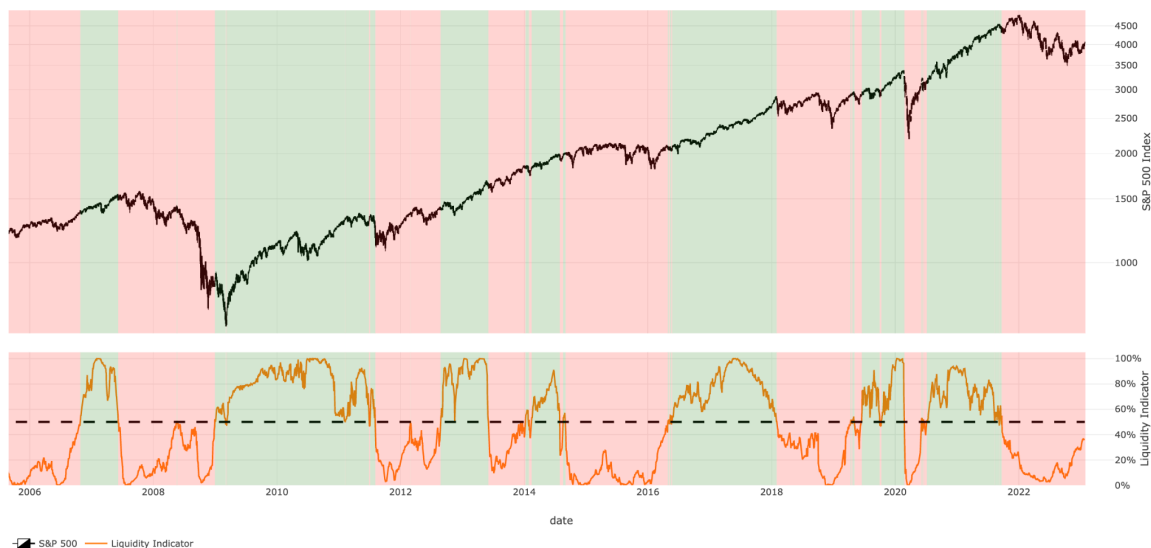
Michael Kantro of Piper Sandler has a useful framework for thinking about this progression, and the lead-lag relationships, amongst the various indicators of economic growth. It's called the Slope of Hope and illustrates the sectors of the economy that respond to rising rates first and those that follow.

It's Housing, New Orders, Profits, and finally, employment with an average 24-month lag from start to finish.
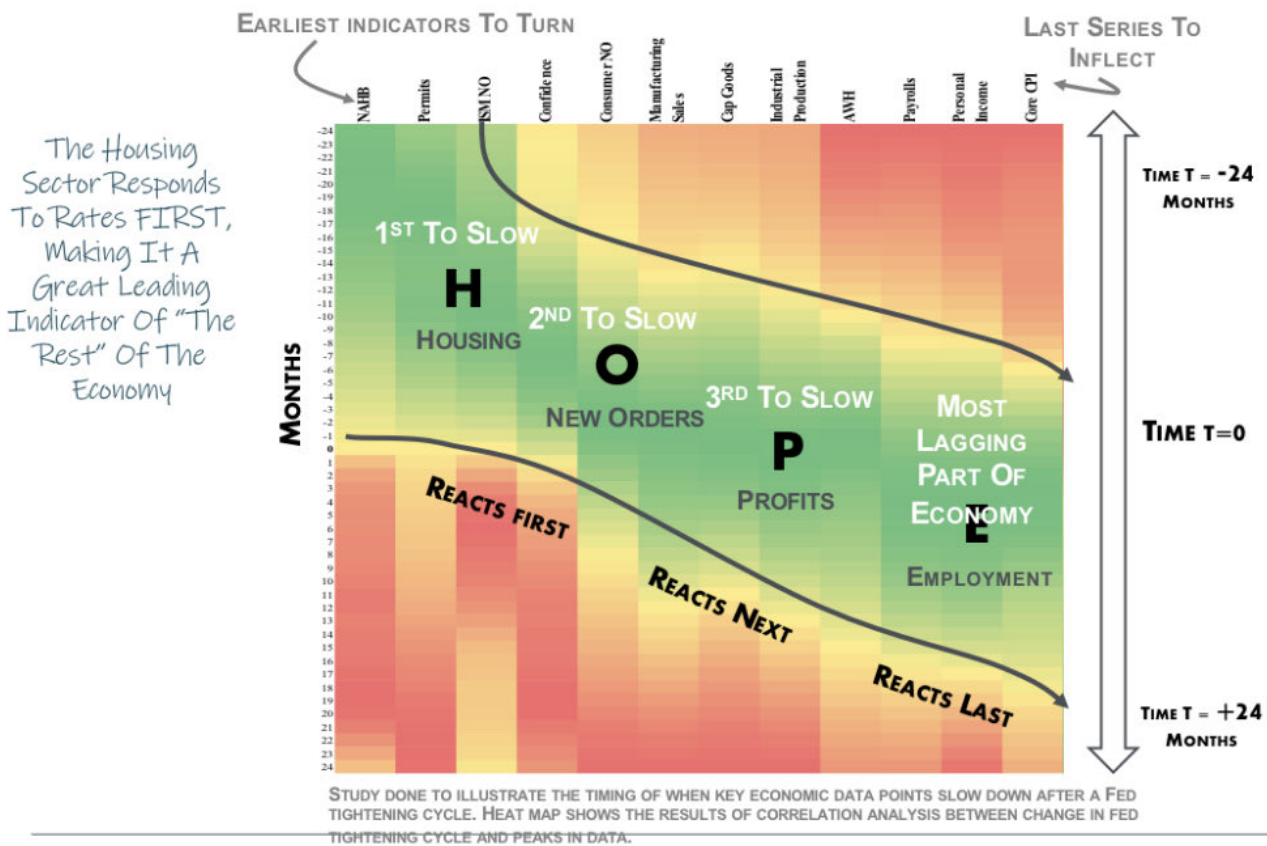
The most interest-rate-sensitive areas of the market (housing and autos) get hit first, which is logical considering these are the most expensive consumer products that require lots of debt to buy 'em.

We've already moved through Housing and New Orders in our current sequence and are now transitioning into the earnings contraction portion. So we're still a ways off from entering the employment part, which we can see in this illustrative chart below of the homebuilder's index (orange line) and initial claims (blue line).
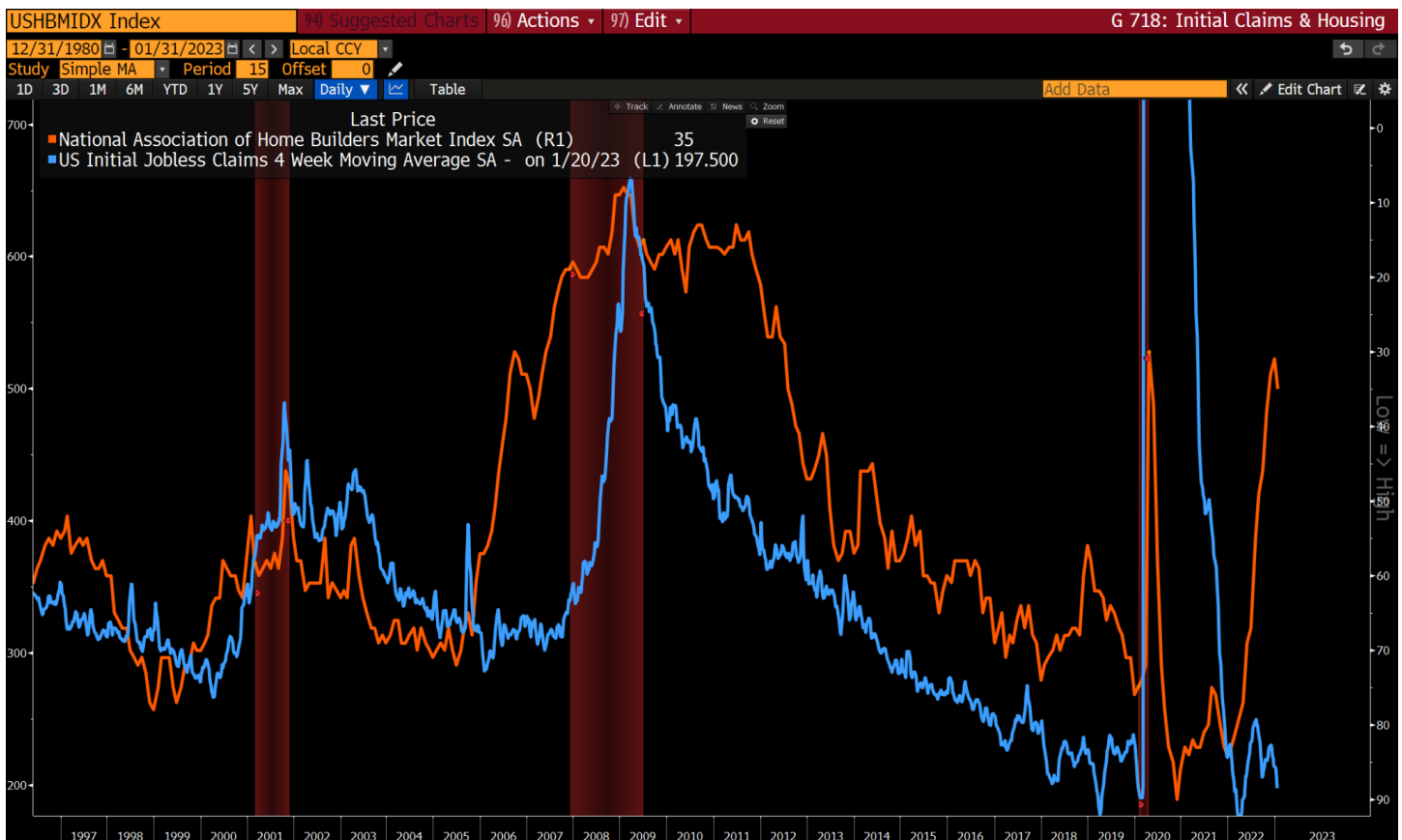
But here's one of the nuances that's important to this cycle, and makes our current macro situation quite unique and why typical expectations of indicator lag/lead times are likely to be a bit off.

Unlike past cycles, where consumers' overleveraged balance sheets get squeezed by rising rates leading to a pullback in spending. This time around, households are in much better shape due to lots of fiscal.

Real incomes ex-transfer payments have been going up for the last six months, growing at a 2.9% annualized rate. These are not recession levels or even pre-recessionary levels.

According to Goldman Sachs, the private sector has been running a surplus of total income to spending that's at a level that "is healthier than on the eve of any U.S. recession since the 1950s."

Chop wood, carry water...

I don't have the most recent data on this, but as recently as late last October, the WSJ reported that:

> **"U.S. households still have around $1.7 trillion in savings** they accumulated through mid-2021 above and beyond what they would have saved if income and spending had grown in line with the pre-pandemic economy, according to estimates by Fed economists. **Around $350 billion in excess savings as of June were held by the lower half of the income distribution, or around $5,500 per household on average**."

Household debt service payments as a percentage of disposable personal income

Note: Seasonally adjusted
Source: Federal Reserve via St. Louis Fed

Stock of excess U.S. household savings by income quartile
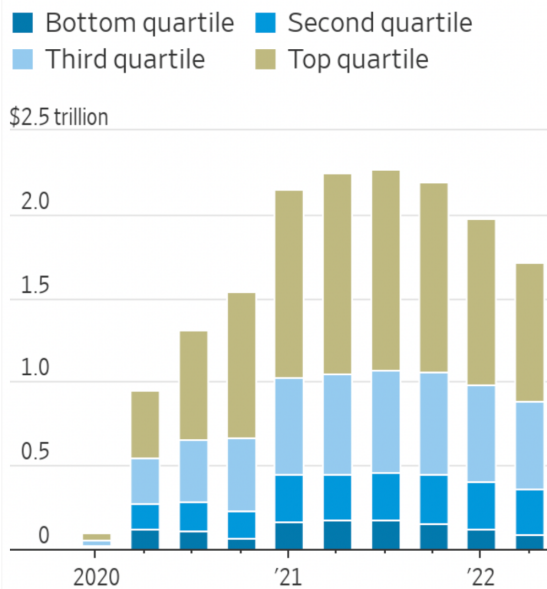
Source: Federal Reserve

There's also the fact that most businesses took advantage of the low rates in 2020/2021, locking in secular low borrowing costs. Again via the WSJ, apparently just "3% of junk bonds, or those issued by companies without investment-grade ratings, mature over the next year, and only 8% come due before 2025, according to Goldman Sachs."

We're living in unusual economic times…

This isn't to say that everything is hunky dory. It's not.

The economy is still mostly slowing. And it's going to continue to do so. The reason being is monetary policy. And though the Fed is expected to downshift gears to just 25bps hikes this coming week, 25bps hikes is still a hike. That's still a tightening of financial conditions.

And at some point, financial conditions will reach a level where the labor market begins to

unwind, and that's when we get the positive feedback loop of negative consequences (ie, a recession).

Again, that's a late 2023 discussion. Not a next six months discussion. There's still some juice left on the balance sheets of consumers.

10-year yields have fallen 80bps since October.

This has caused financial conditions to dramatically ease from where they were last summer, which happens to be right around the time the stock market started to bottom as well.

Liquidity
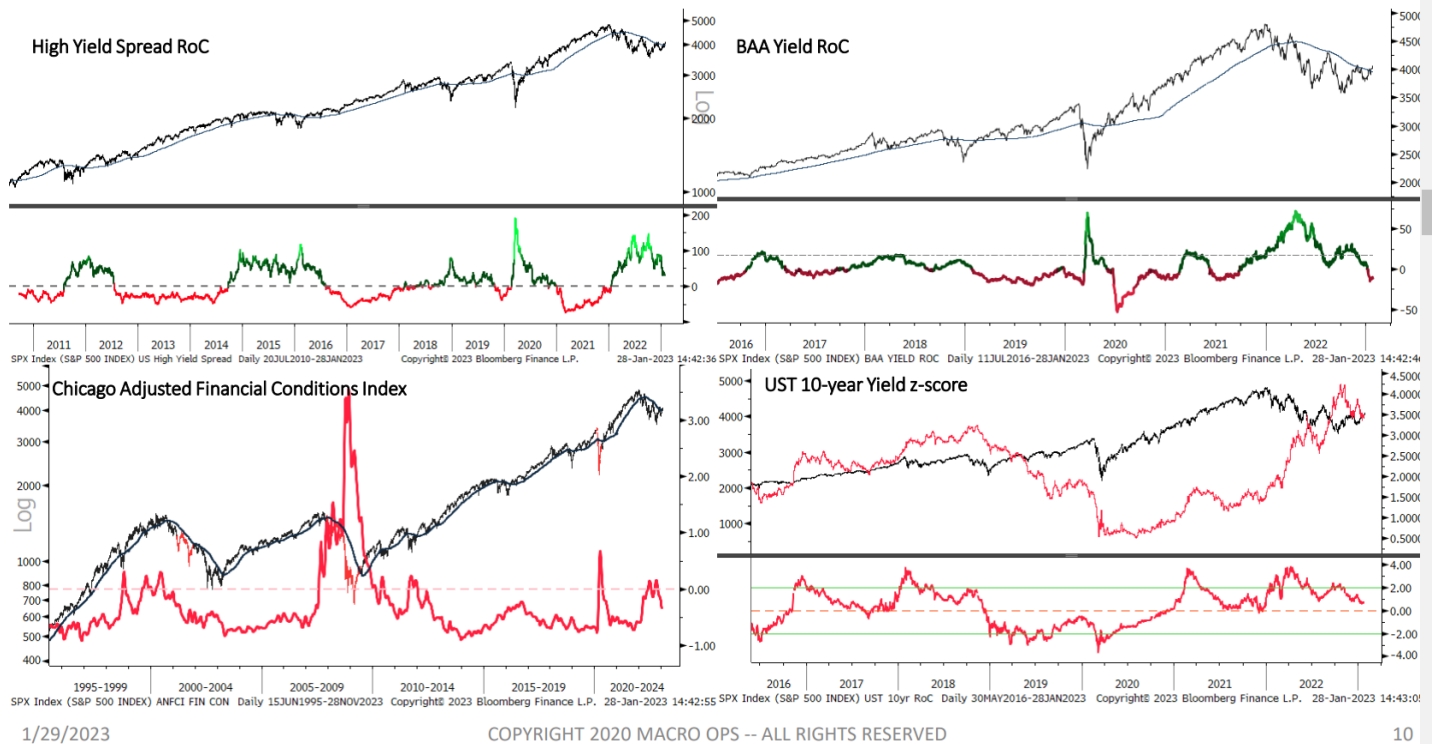
We're already starting to see a slight pickup in the housing market (mortgage apps and permits ticking up), as well as in autos. My realtor friends here in Austin are saying the market started picking up noticeably in early January after being completely dead for the prior five months.

This gels with our general thesis that consumers aren't fully tapped out yet. They've just delayed their purchasing activity for a bit. But they're normalizing to the higher interest rates and are starting to take advantage of the recent drop in yields.

This is why the market — which is smarter than we are (most of the time) — has been bidding

up Homebuilders, which have been outperforming the broader market since April of last year.
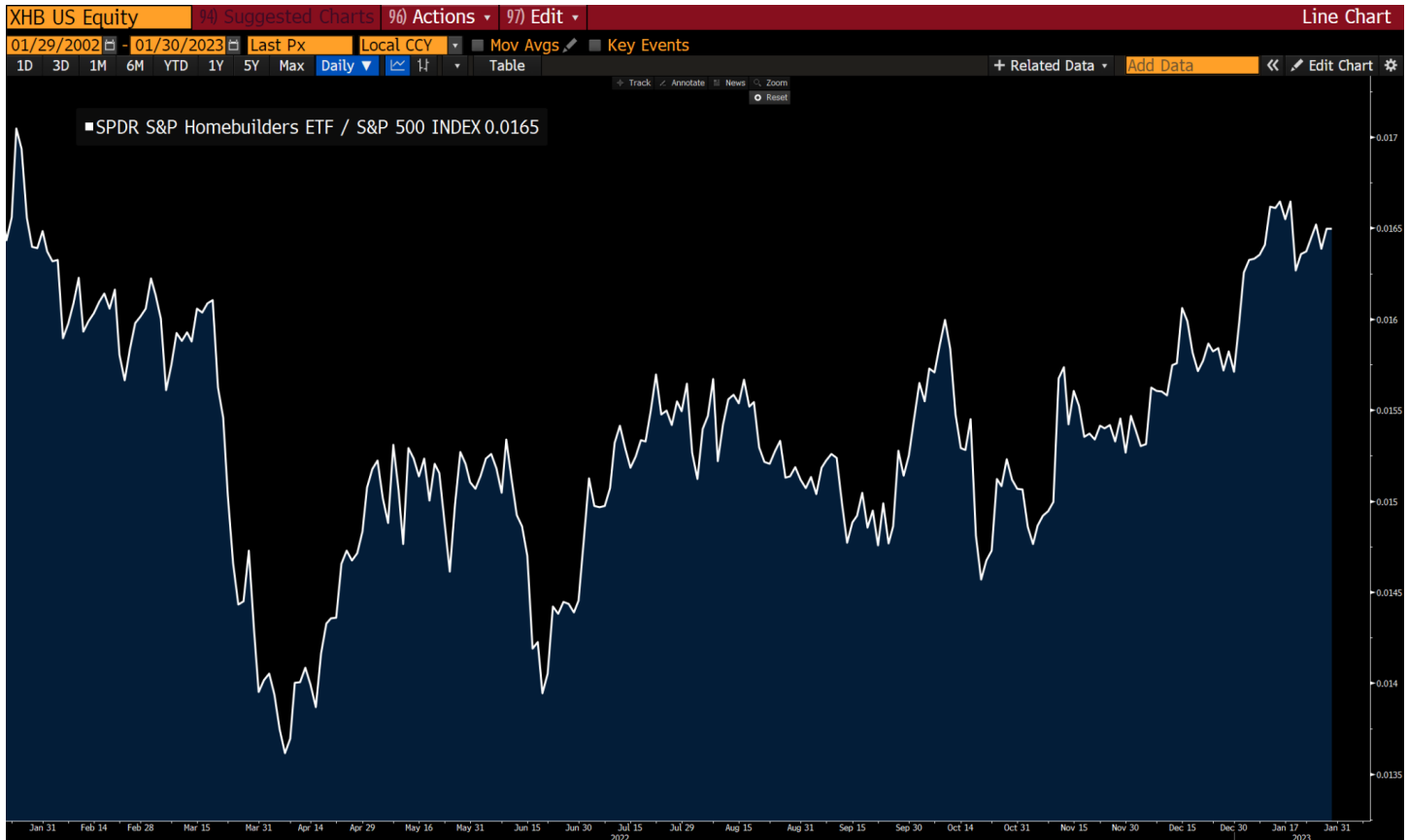
Last point…

China surprised everybody by pulling a swift about-face on its zero covid policies last month, saying suddenly "covid is now just mild flu" and throwing open their doors for business as usual.

I've heard some credible speculation from my China watcher friends that there may have been somewhat of a soft coup or reckoning from a group of the old-blooded dynastic power families against Xi last November. The idea is that this is what forced him to drop a number of his personal key policies (zero covid, property tightening, domestic tech control, hawkish foreign rhetoric).

We'll probably never know for certain, but considering the speed and extremity of these 180s on key policies, it seems quite plausible to me.

Anyways, this reversal in policies is hard to price in. But it's certainly a net positive for the global economy, not to mention commodities. Remember, going into the summer of last year

Chop wood, carry water…

approximately <u>14% of GDP in China was under restricted mobility, and another 52% of GDP under limited mobility according to DB.</u>

Figure 1: When will China start 'moving' again?   @MacroOps
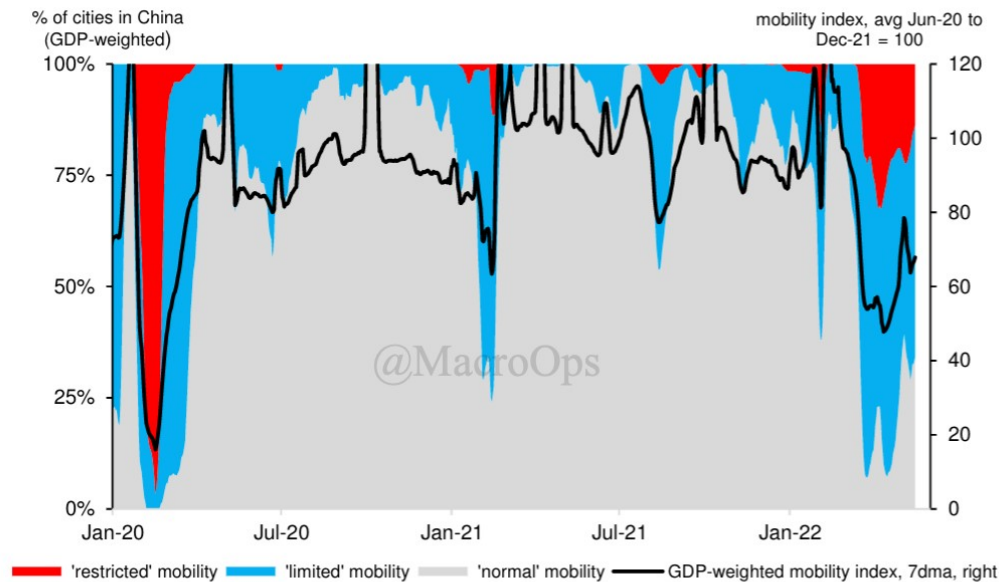
Source : Deutsche Bank, CEIC, AutoNavi
Note: We define a city as in 'restricted' mobility when its mobility reading falls to <30% of normal; and 'limited' mobility when the reading is between 30-80% of normal, defined as average level of mobility from June-2020 to Dec-2021.

I read somewhere last week, maybe it was BBG, that China's lockdown strategy had caused households to amass a sizable pile of savings, somewhere <u>north of $2trn USD equivalent</u> last year, if I remember correctly.

Now, because China has a very lopsided distribution of wealth, most of that cash is probably going to sit in the savings and investment accounts of the very wealthy. But it's still reasonable to expect that a good chunk of it will be spent on delayed purchases and services (travel).

This delayed demand impulse is already showing in the flight data from the top 20 Chinese airports (chart to the right via 3fourteen Research).

Total Number of Flights/Day in Top 20 Chinese Airports   Daily Frequency 2020-01-01 to 2023-01-20

Okay, so that's about all I have to say on that. But before we move on to the next section, let me end by tying this all off with my expectations for it all.

The market is too overweight a recession in the first half and therefore too bearish risk assets looking out over the next 1-3 months.

Balance sheets are still too strong, despite the quick rise in borrowing costs, consumers are not yet playing defense with their pocketbooks.

This means we should expect stronger-than-expected economic data over the next one maybe two quarters (watch the Economic Surprise Index, it's about to turn positive).

China's surprise reopening will also bring an added tailwind to global growth, potentially a sizable one.

But… this also means that expectations for much lower inflation, the now popular "immaculate disinflation" narrative, is awfully offsides. More resilient US demand, a big demand impulse from China, a USD that is now 10% off its highs, and a commodity sector that has a lot of markets in oversold territory, meaning we should expect the CPI to soon bottom out over the next few months (likely in the 3.5-4.5% range).

This suggests that the market's current expectations around rates are too dovish, as we should see higher for longer versus what's currently being priced in.

All in all, this should result in much tighter financial conditions going into the end of the year. And that'll tip us cleanly over into a recession. And depending on how sticky inflation is (more on that topic soon) there are decent odds that the recession will be a drawn-out one, in terms of duration though not severity (think 00'-02').

And that is the end of my ramble… Now, here's some trades.

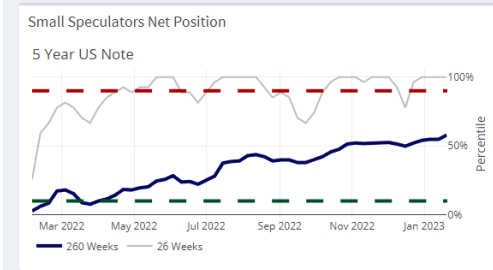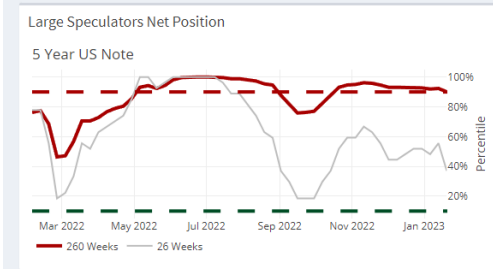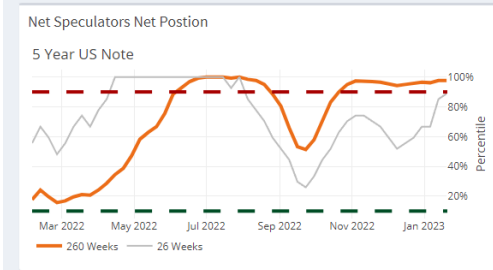5-year UST Notes have retraced back up to their top weekly Bollinger Band (chart to right is a weekly).

Overly bearish expectations have driven traders to crowd long back into bonds.

Our multi-chart view below shows that Net Spec positioning in 5s is in the 98th percentile (5ry OI adjusted). While at the same time, they are coming off 2std overbought levels in relation to both its 20 and 50dma.

Positioning

Net Speculators Net Postion
5 Year US Note

260 Weeks — 26 Weeks

Large Speculators Net Position
5 Year US Note

260 Weeks — 26 Weeks

Small Speculators Net Position
5 Year US Note

260 Weeks — 26 Weeks

Sentiment

Commercials Net Position
5 Year US Note

260 Weeks — 26 Weeks

Bollinger Band Width
5 Year US Note

Mind the Gap (200 Day)
5 Year US Note

Technichals

Seasonality
5 Year US Note

Mind the Gap (20 Day)
5 Year US Note

Mind the Gap (50 Day)
5 Year US Note

The play here is to wait for our shorter-term positioning oscillator (the grey line) to turn over, indicating Specs are liquidating their long positions (like what occurred back in August). While waiting for the tape to also confirm a break below its current retracement channel.

Chop wood, carry water...

5 Year US Note | Net Speculators Net Position

The global cloud computing ETF (CLOU) has broken out relative to the market. Growth stocks, which have been beaten to a pulp over the past year, are starting to jump quite significantly.
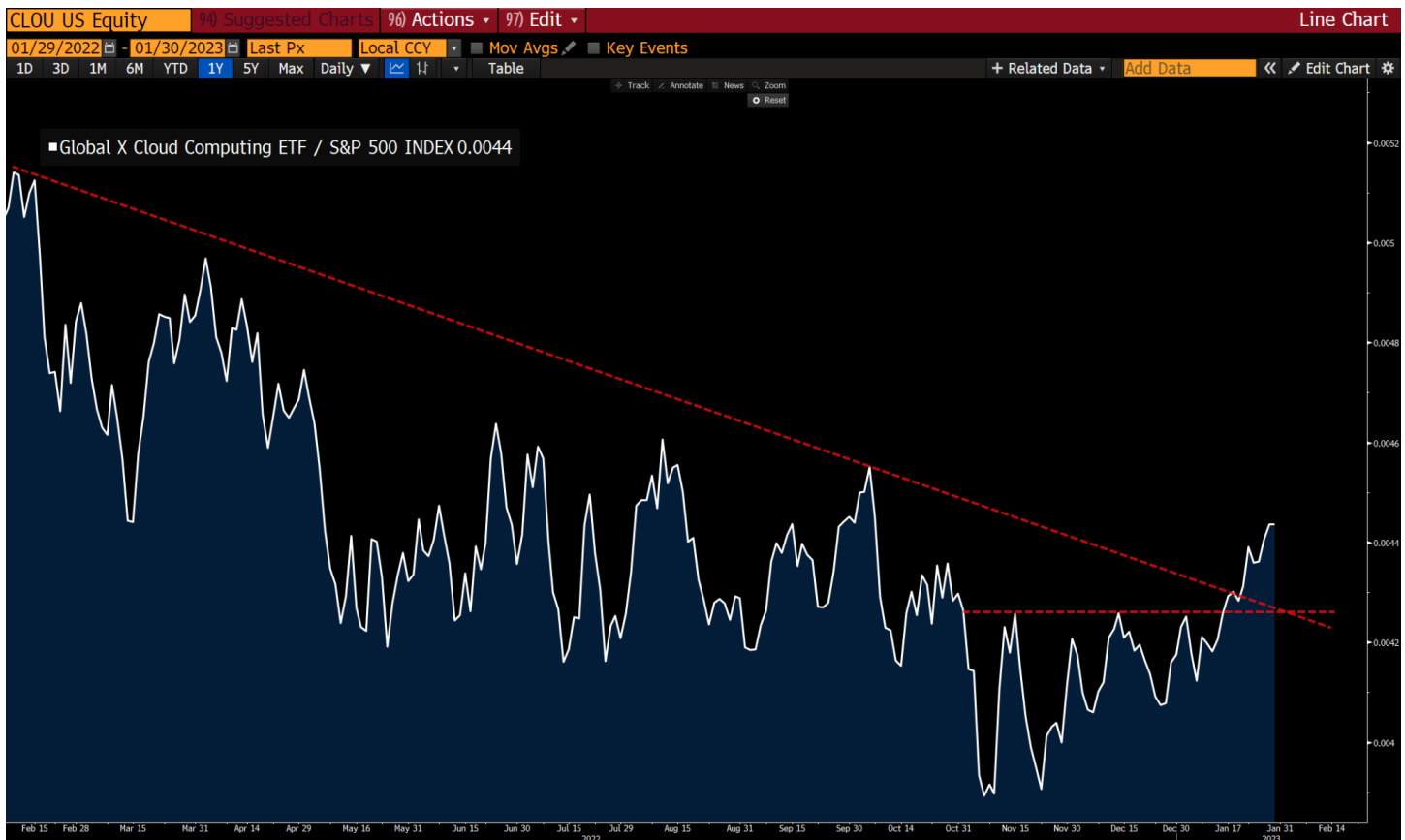
Now it's quite standard for stocks that have fallen 95%+ over the past 18 months to see large percentage spikes over short periods, that's just kind of how the math works out.

I'd wager that this movement is more rigor mortis than it is Lazarus, but that doesn't mean that a number of these stocks can't keep running over the next 1-3 months. We're looking at the high short-interest names, with improving technicals. We may put on a couple of short-dated OTM calls on a few names soon (in small size).

We were pulled into our Russell 2k long (RTYH2023) last week, as small-caps closed out the week near their highs.

The measured move on RTY is 2,145 or +12% above its current price.

Our equity book is currently comprised of oil & gas names, uranium plays, precious metal miners, and a tin miner.

All our stocks are trading higher than our cost basis. <u>Our current cash position is roughly 60%.</u> We want to keep that well above 40% as we navigate this Contraction regime. So we have a little more risk we're able to add to plays that meet our trifecta filter.

One of these that checks all the right boxes is uranium. Our buddy Kuppy wrote a good post updating the fundamental bull case for U stocks on his blog ([link here](#)). The uranium space has mostly traded sideways for the past 12+ months, after a nice bull run from 2020 to mid 21'.

Uranium names are showing improving relative strength, with many names getting closer to significant breakouts.

We'll likely be adding some size to this thesis soon.

Other than that, we're continuing to lighten up on our dollar shorts. Taking profits on what have been nice trends in long EURUSD and short USDCNH.

I expect that as US yields begin rising again, we'll see the USD turn back up for a bit and revert from its short-term oversold conditions.

On that note, we should be on watch to continue to lighten up on our precious metal longs. We've taken profits on this trade three times now. And while we're going to keep a small position on in gold, as we like this trade for the next 2-3 years. It's likely we see some reversion/consolidation for a bit. We may even short silver for a swing trade on a close below its recent sideways consolidation zone.

That's it for now.

I'll be out with a follow-up note outlining the trifecta bull thesis for crude oil looking out over the next few months.

Now here's Brandon with an update on our Tin play (MLX.ASX).

Your Macro Operator,

Alex

Portfolio Intelligence Update (PIR): MetalsX Limited (MLX.ASX)

This weekend we dive deeper into our tin producer, MetalsX Limited (MLX.AX), and unpack the massively bullish supply/demand imbalance in the "forgotten" base metal.

In short, tin stocks look ready to rip. Supply remains constrained as most miners operate in developing/unstable regions. Nobody wants to invest in new mines; if they did, it would take years to come online.

Demand continues to ramp as tin becomes a primary ingredient in "green energy" tech like lithium-ion batteries and renewable energy, as well as advanced robotics and advanced computing.

MLX is up 50%+ over the last month, a move we believe is still in the early innings as buying volume is its highest since May 2021.

A month ago, the International Tin Association released a webinar titled "Why Invest in Tin." It's a 14-minute crash course on the entire tin bull thesis. You can watch it [here](#).

Let's dive in.

Mapping The Tin Demand Algorithm

There's currently ~390,000 tons of tin demand from existing use cases like solders, chemicals, tinplate, batteries, and tin copper, with demand growing at ~2% per year.

Soldering represents 49% of current tin demand. This includes soldering semiconductor chips as companies crave even more energy from a smaller microchip surface.

Chop wood, carry water...

Global tin use by application, 2021
ITA estimates of global refined tin use share, tonnes

389,500 tonnes

- Solders — 49%
- Chemicals — 17%
- Tinplate — 12%
- Batteries — 7%
- Tin Copper — 7%
- Other — 8%
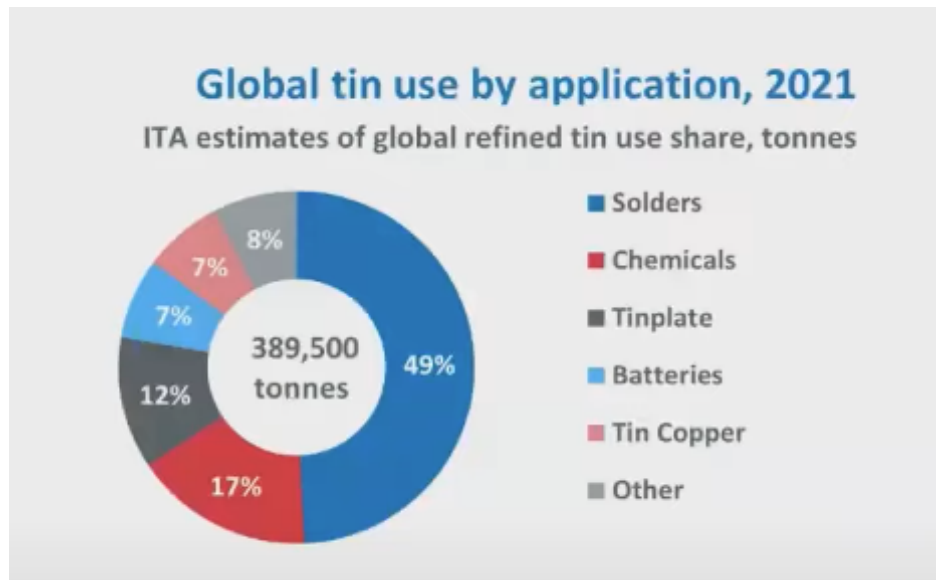
Semiconductors are the lifeblood of technology like AI, electric vehicles, 5G, advanced computing, healthtech wearables, etc. I expanded on this idea in my piece *AI & Semiconductors* back in October 2020. Here's a snippet from that piece (emphasis added):

> *"Semiconductors are the basic building block to any artificial intelligence application. These small pieces of hardware enable AI algorithms to store, run, and test more data.*
>
> *The rise of AI has flipped the semiconductor industry from a cyclical sector into a secular growth powerhouse. A few statistics point to this secular growth story:*
>
> - ***AI-based semiconductors will grow 18%/year over the next 3+ years*** *(5x greater than non-AI chips)*
> - *AI-specific memory chips command* ***300% higher prices than standard memory chips***
> - *By 2025, AI-related semiconductor technology will account for 20% total revenue*
>
> *Here's the main thing that matters:* ***McKinsey estimates that in an AI-led growth cycle, semiconductors can capture 40-50% of the revenue pie****. Remember, AI-based technology will represent roughly 20% of all revenue by 2025. This percentage should increase over time. That means semiconductors will generate 40-50% of a much larger TAM."*

Jeremy Pearce of the International Tin Association estimates that current use case demand will rise another 30-40,000 tons annually and will account for 2.5-3% annual growth over the next decade. That's *before* we account for future applications.
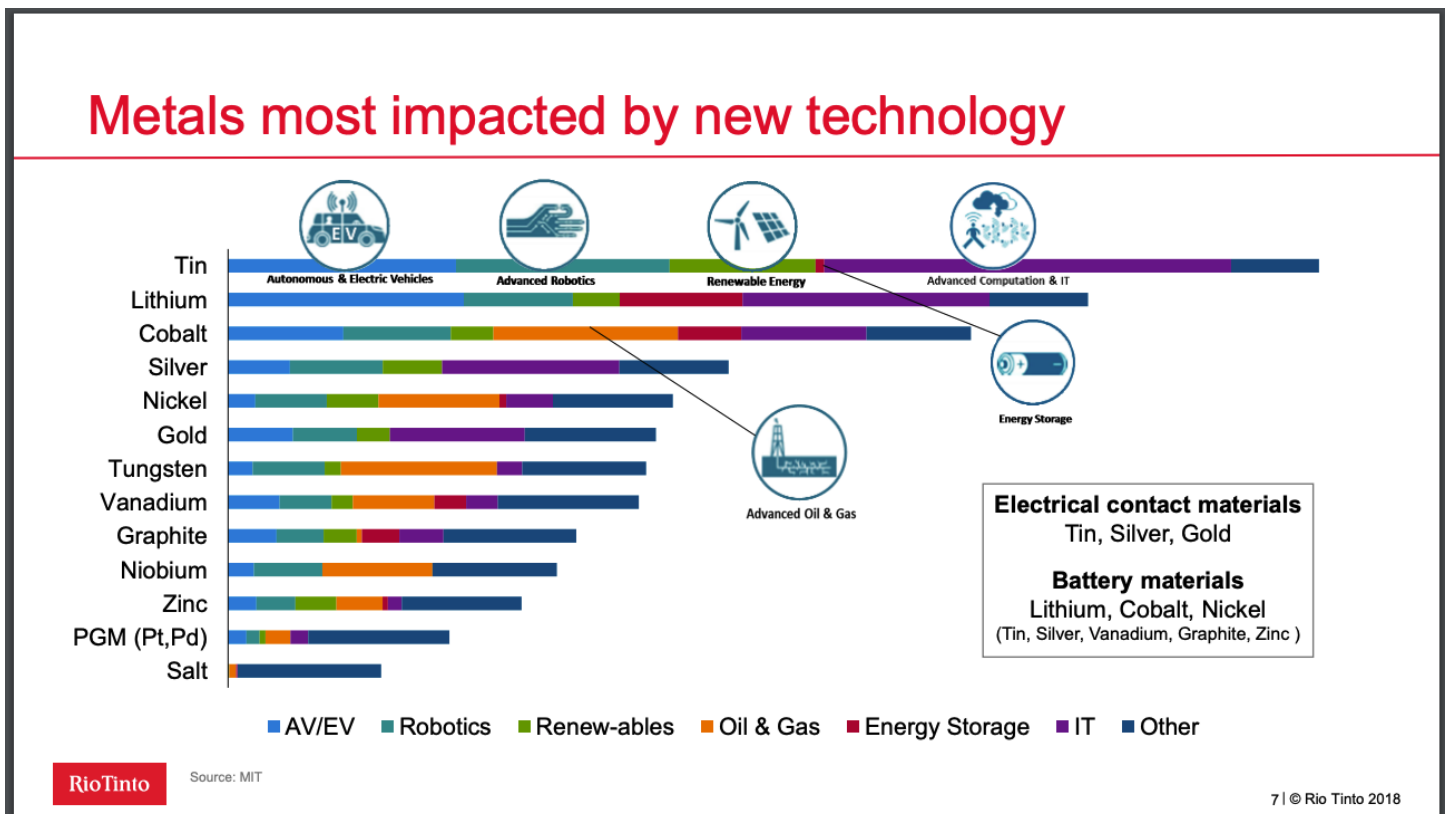
Future Tin Demand Drivers

There are four general categories of "future" applications for increased tin demand:

1) **Autonomous / Electric Vehicles**

Chop wood, carry water...

2) **Advanced Robotics**
3) **Renewable ("Green") Energy**
4) **Advanced Computation & IT**

Check out the 2018 chart below from MIT & Rio Tinto showing which metals will be most impacted from the above technologies.

Tin is on top, with most of the impact coming from IT and Autonomous / Electric Vehicles. Jeremy Pearce of the ITA explains *why* tin demand will soar in an AV/EV centric world (emphasis added):

> *"By 2030, a third of vehicles made every year will be electric. And the differentials are hard to see. All of your car is becoming a computer. So the amount of electronics required in electric cars is substantial.*

> *When you're charging a car you have to convert from AC to DC, which requires much more solder. You've also got lots of tin connectors and wiring as well as all the infrastructure like electric charging stations. All of that requires substantial amounts of tin. And we can't say with precision how much tin, but we're looking at around twice as much as we currently use in combustible engine vehicles."*

Another potential application for tin is in lithium-ion batteries. Stellar Resources explains tin's possible use case (emphasis added):

*"The main focus for tin is in the **positive anode electrode of lithium-ion batteries, usually made today of graphite on a copper foil.** Next-generation products are already adding silicon into the graphite to increase capacity. **Some will probably use tin**, either as an alternative or in addition to enhance silicon performance. For example, China's largest electric vehicle producer, BYD, recently patented a tin-cobalt technology for anodes."*

Last year's ITA presentation highlights the doubling of tin demand in EVs (see below).
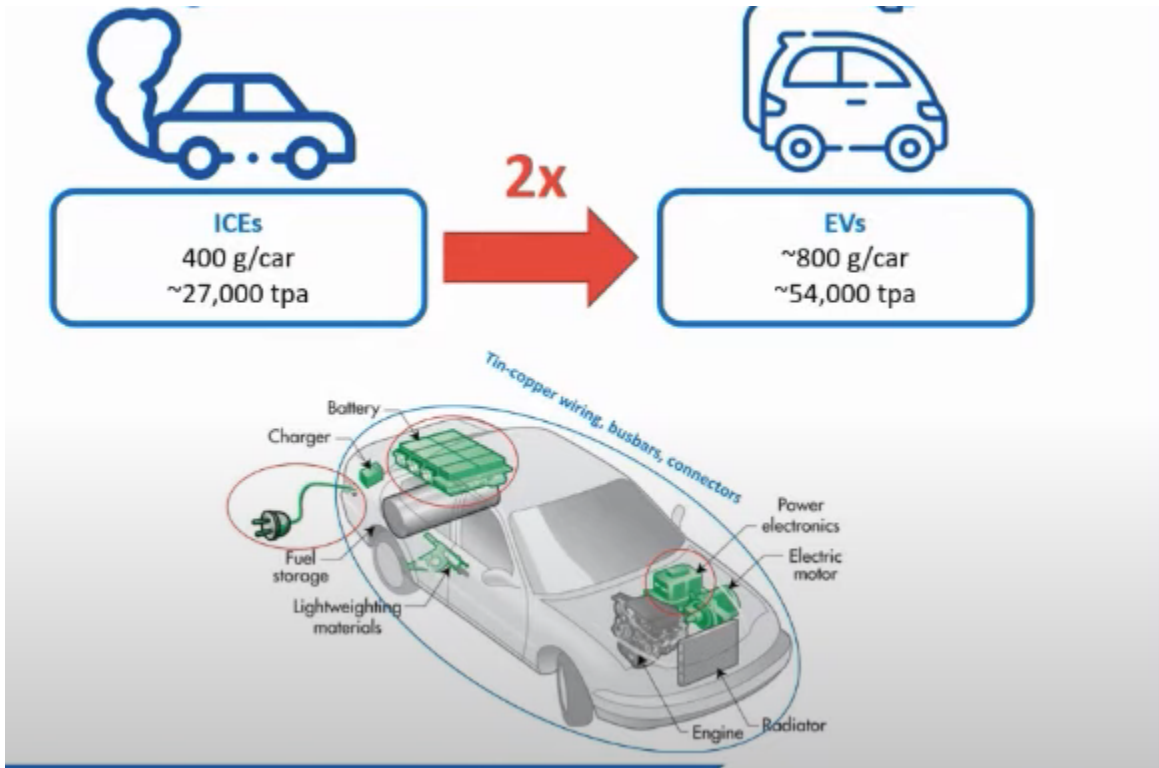
Solar (or green or renewable) energy is the second most significant driver of future demand with three primary drivers: **solar ribbon, Junction boxes/connectors,** and **PV electronics**.

Pearce estimates that by 2030 the solar industry will need *at least* 50,000 tons of tin to produce things like solar ribbons, junction boxes, and PV electronics. That's almost double 2021's demand of ~20,000 tons.
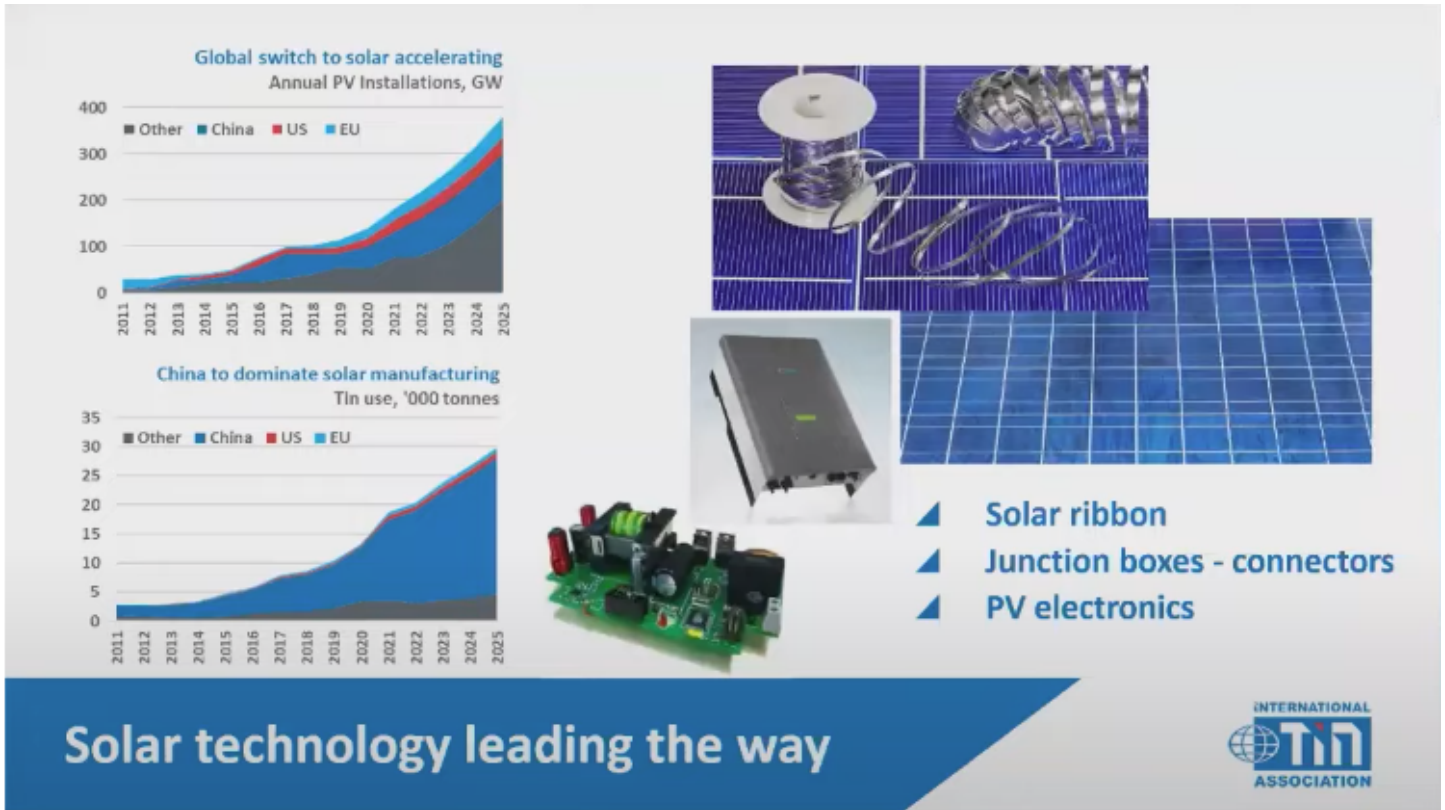
Solar requires so much tin because the entire goal of solar energy is to convert AC to DC. Doing that requires heavy electronics and massive amounts of tin to hold everything together.

What Will 2030 Demand Look Like?

Pearce and the ITA think that by 2030, the world will need 500,000 tons of tin annually. Remember, we produce only ~390,000 today.
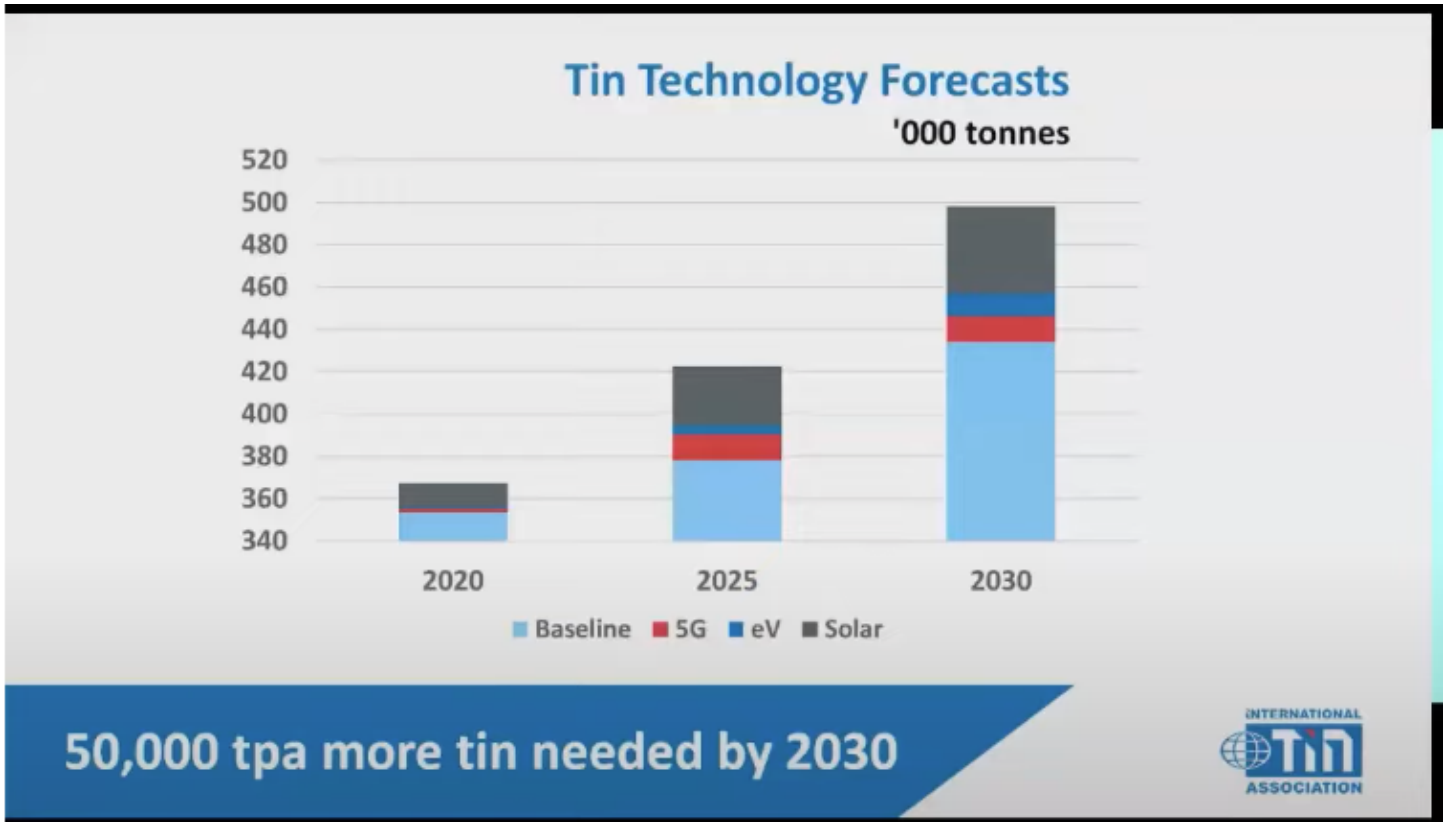
Future demand from EVs, solar, 5G and Advanced Computing should add another 2-3% in annual tin demand growth. This gives us a combined "growth algorithm" of 4-6% yearly tin demand growth into 2030, which is **2-3x higher than its historical average.**

Let's shift to the supply side.

Tin's Very Real Supply Problem

Tin production has stalled around this figure since the early 2000s. Check out the graph below.

World Tin Mine Production — '000 tpa
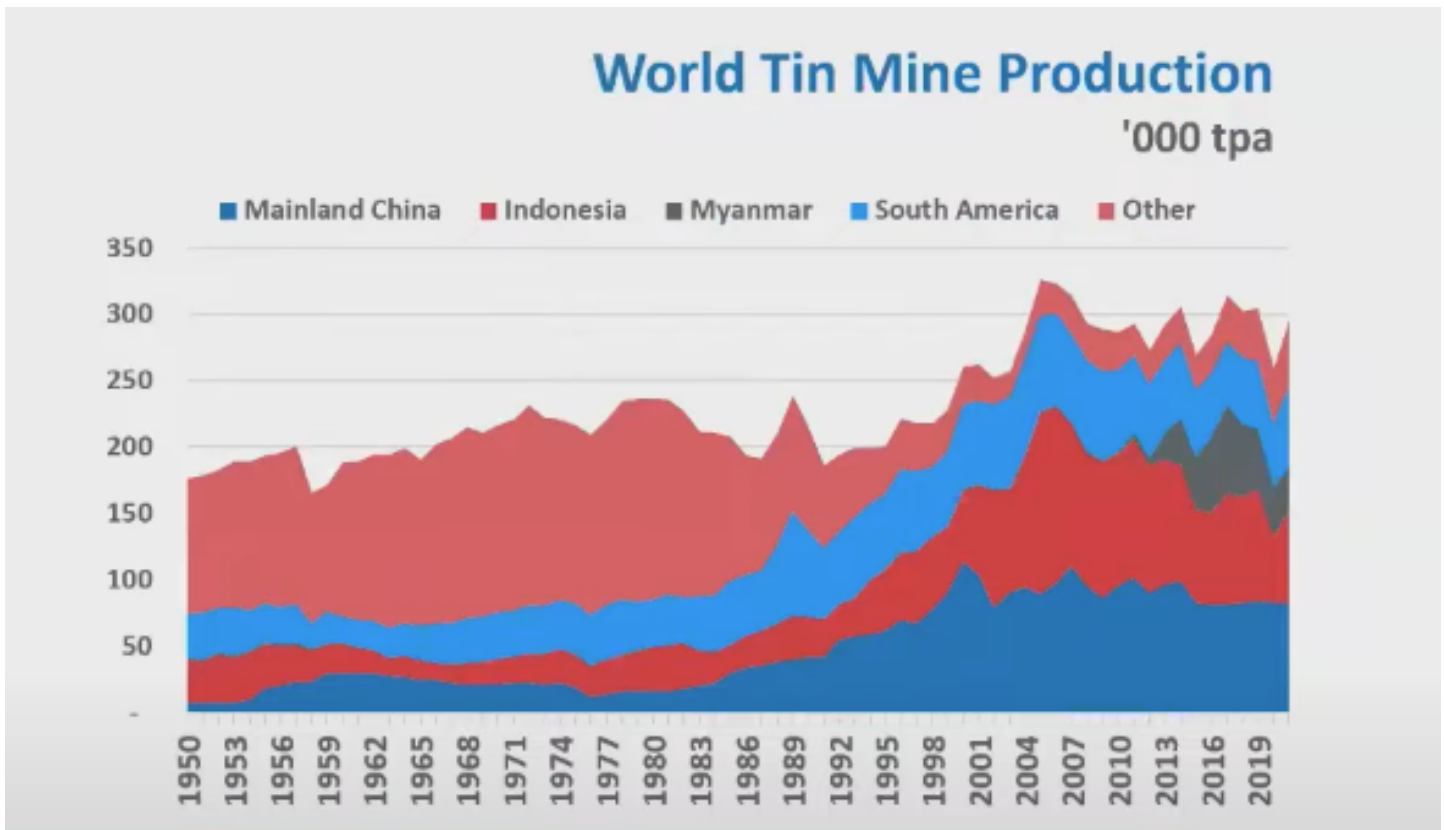
Global tin stocks (read: the amount of tin countries have in "inventory" for when they need it) are also decreasing. In 2004, the world had ~15 weeks of available tin supply. By 2021, that figure dropped to 6 weeks of supply (see below).

Global Tin Stocks — Weeks Supply

There are three reasons for tin's supply decline:

1) **Low tin prices**
2) **Long lead times for new projects**
3) **Underinvestment in new projects**

Let's start with low prices. Low tin prices disincentivize supply as mines sell their tin above their cost of production. This leads to massive cash outflows, rising debts, and mine shutdowns.

Eventually, the only companies left are ones with manageable (or no) debt, low production breakevens, and little competition. This new dynamic supports higher tin prices, increasing profitability for the surviving firms.

Capitalism dictates that competition eventually notices high profits, floods the market with supply, and competes away excess returns. Shouldn't that happen in tin? The short answer: **Yes, but it'll take forever.**

As the chart below shows, it would take **~10-12 years** for a new mine to come online.
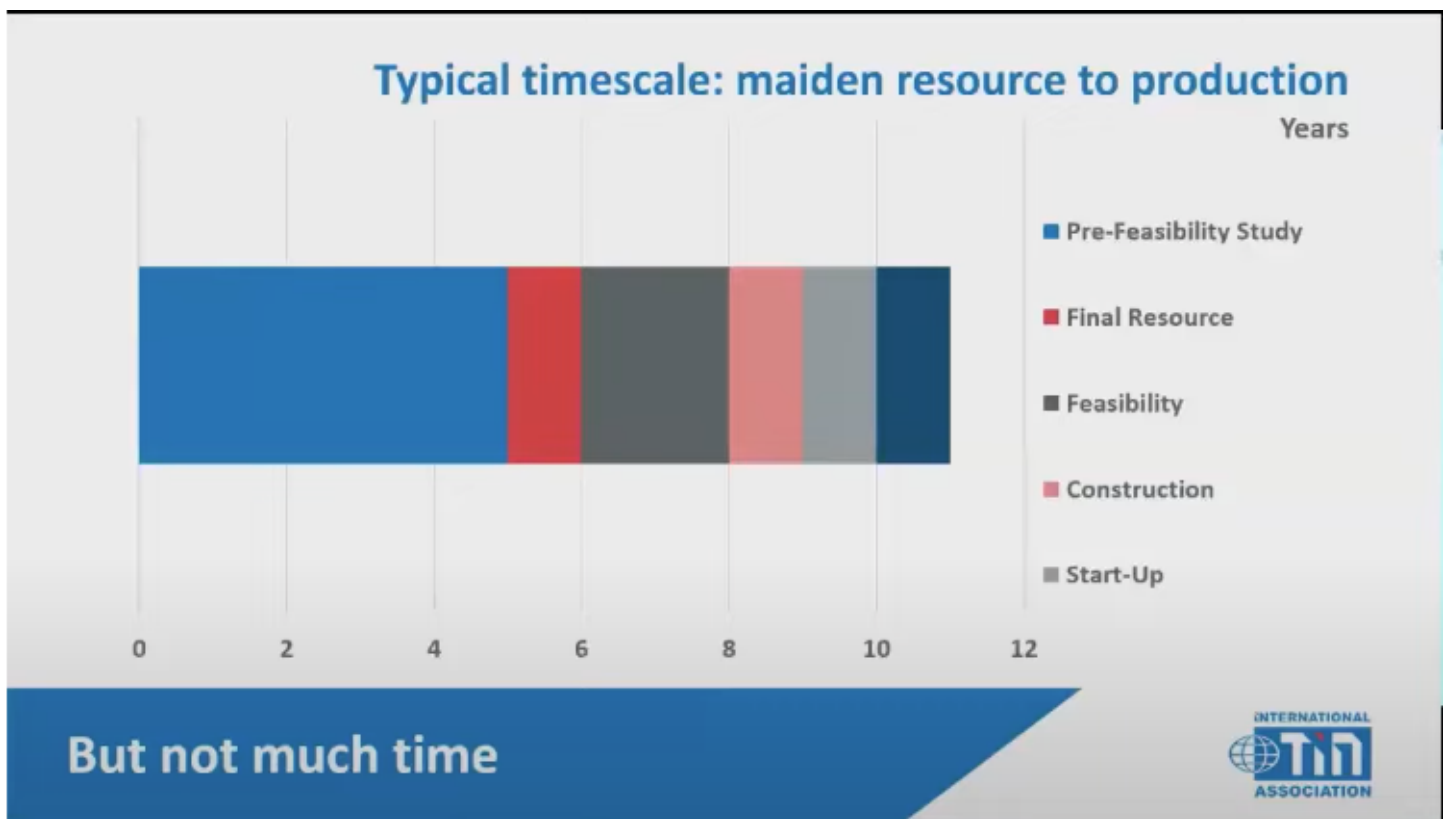
So what you now have is a decade-long window of high tin prices, little competition, and outsized profit margins. And the only way new supply comes online is through higher tin prices, as producers need some incentive to bring new mines online.

Chop wood, carry water...

The <u>current supply/demand imbalance creates a floor for structurally higher tin prices</u> and a once-in-a-decade opportunity for tin producers.

MetalsX Limited (MLX.AX): How We're Playing Our Tin Thesis

MLX has a straightforward investment thesis. The company is Australia's largest tin producer and one of the largest producers globally. MLX owns a 50% interest in the Renison tin mine in Tasmania via a joint venture with Yunnan Tin (or Bluestone Mines Tasmania Joint Venture).

The Renison mine holds ~120,000 Proved and Probable tin reserves. MLX produces ~8,500 tons annually, giving it a Reserve life of ~14 years. There's also double the current amount in "Measured and Indicated" tin resources.

MLX made a boatload of money last year on the back of high tin prices. The company generated AUD 228M in revenues, AUD 126M in EBIT (55% margins), and AUD 144M in FCF. Management used the excess cash to invest in capex and retire all long-term debt.

So to recap, MLX is a debt-free mining company that holds a 50% interest in one of the world's largest tin mines and produces 8,500 tons per year with ample reserves for future production.

The company released a new investor presentation (read here) which includes details to expand production from 8,500 to 10,000 tons annually over the next five years. MLX expects its All-in Sustainable Cost (or AISC) per ton to decline from ~$19,000 to $15,000 by 2025.

Suppose tin prices hover around $30,000 for a few years before falling towards ~$25,000 by 2027. Next, let's assume MLX produces its tin at ~$18,500 per ton on average over the next five years. Finally, let's assume the company produces ~9,000 tons annually.

That gives us ~$256M in annual revenues and ~$90M in FCF (35% margins). In other words, under those assumptions, it would take ~3 years for MLX to generate its entire enterprise value in free cash flow. And since the company has no long-term debt, management can freely allocate the excess cash to shareholders via dividends or buybacks.

Historically, these resource stocks trade around 3-5x free cash flow. But given the company's strong balance sheet, management's prudent capital allocation, and a secularly strong supply/demand environment, I think 6-7x EV/FCF is reasonable.

That gets us ~$700M in shareholder value, or ~90% higher than today's share price.

There's a decent probability that $30,000 tin is the floor for producers over the next few years. If that's the case, MLX would be worth close to $1B in shareholder value or 200% higher than today's prices.

MLX is perfectly positioned to capture the massive tin supply/demand imbalance. We'll look to add to our position in size in the coming weeks.

Portfolio Performance Update (as of 01/27)

- ➢ January: +8.32%
- ➢ Q1 2023: +8.32%
- ➢ YTD: +8.32%

Your Value Operator,

Brandon

The Macro Ops Portfolio
PDF: https://tinyurl.com/mo-portfolio

2023 YTD Return	8.32%		
Total Notional Exposure	46.10%		
Equity Exposure	36.80%		
Futures Exposure	9.30%		
Current Cash Value (%)	61.45%		
Total Capital At-Risk (%)	9.79%	Cumulative 3YR Return	83.00%
Total Drawdown Risk (%)	16.00%	Rolling 3YR CAGR	27.67%

Futures, Bonds & FX	Ticker	Contracts	Capital	Notional	Actual Risk	DD Risk	Cost Basis	Current Price	Current Stop-Loss	Initial Stop-Loss	Current P&L	R-Multiple (Curr.)	Total Notional	Total Risk	Total Drawdown Risk
Micro E-Mini Silver Futures	SILH2023	7	$165,410.00	9.30%	-0.04%	0.22%	$22.98	$23.63	$23.08	$21.35	2.83%	0.40	44.30%	0.62%	2.75%
Russell 2000 Futures	RTYH2023	3	$287,745.00	16.17%	0.41%	0.41%	$1,918.30	$1,918.30	$1,870.00	$1,870.00	0.00%	0.00			
Gold Futures	GCG2023	1	$96,450.00	5.42%	-0.35%	-0.01%	$1,806.30	$1,929.00	$1,932.30	$1,771.00	6.79%	-3.48			
Gold Futures (Second-leg)	GCG2023	1	$96,450.00	5.42%	0.12%	0.27%	$1,876.80	$1,929.00	$1,834.00	$1,829.00	2.78%	-1.09			
Random Length Lumber	LBSH2023	12	$162,525.00	9.14%	0.74%	1.36%	$458.90	$492.50	$419.00	$419.00	7.32%	0.84			
US Dollar/Chinese Yuan	USDCNH	-34,020	-$229,804.28	-12.92%	-0.29%	0.10%	$6.96	$6.76	$6.81	$7.02	2.90%	3.35			
Euro/US Dollar	EURUSD	192,786	$209,365.56	11.77%	0.04%	0.41%	$1.05	$1.09	$1.05	$1.03	3.30%	1.54			

Equities	Ticker	Shares	Capital	Notional	Actual Risk	DD Risk	Cost Basis	Current Price	Current Stop-Loss	Initial Stop-Loss	Current P&L	R-Multiple (Curr.)	Total Notional	Total Risk	Total Drawdown Risk
Strategic													#REF!	#REF!	#REF!

Thematic	Ticker	Shares	Capital	Notional	Actual Risk	DD Risk	Cost Basis	Current Price	Current Stop-Loss	Initial Stop-Loss	Current P&L	R-Multiple (Curr.)	Total Notional	Total Risk	Total Drawdown Risk
Paladin Energy	PDN.ASX	92,178	$52,541.63	2.95%	0.47%	1.04%	$0.46	$0.57	$0.37	$0.37	23.91%	1.22	36.80%	6.81%	11.50%
Sprott Uranium	U.UN	6,431	$78,072.87	4.39%	0.47%	0.61%	$11.73	$12.14	$10.44	$10.44	3.50%	0.32			
Peabody Energy	BTU	1,880	$51,235.65	2.88%	0.93%	1.05%	$26.12	$27.25	$17.28	$17.28	4.33%	0.13			
Foran Mining	FOM.TSXV	27,333	$67,512.45	3.79%	0.94%	1.49%	$2.11	$2.47	$1.50	$1.50	17.06%	0.59			
Centrus Energy	LEU	1,659	$67,492.04	3.79%	0.23%	0.98%	$32.71	$40.69	$30.19	$30.19	24.40%	3.17			
Vista Energy	VIST	6,727	$108,505.67	6.10%	0.94%	1.71%	$14.11	$16.13	$11.62	$11.62	14.32%	0.81			
MetalsX Limited	MLX.ASX	167,918	$52,054.61	2.93%	0.94%	1.23%	$0.28	$0.31	$0.18	$0.18	10.71%	0.30			
Eldorado Gold	EGO	7,988	$75,727.22	4.26%	0.94%	1.25%	$8.80	$9.48	$6.70	$6.70	7.73%	0.32			
Tidewater	TDW	2,347	$101,519.57	5.71%	0.94%	2.14%	$34.15	$43.25	$27.00	$27.00	26.65%	1.27			

Tactical	Ticker	Shares	Capital	Notional	Actual Risk	DD Risk	Cost Basis	Current Price	Current Stop-Loss	Initial Stop-Loss	Current P&L	R-Multiple (Curr.)	Total Notional	Total Risk	Total Drawdown Risk

Options	Ticker	Contracts	Capital	Notional	Actual Risk	DD Risk	Cost Basis	Current (Mid) Price	Current Stop-Loss	Initial Stop-Loss	Current P&L	R-Multiple (Curr.)	Total Notional	Total Risk	Total Drawdown Risk
AG JAN 19 2024 $20 CALLS	AG	237	$4,969.64	0.28%	0.93%	0.28%	$70.00	$21.00	$0.00	$0.00	-70.00%	-0.70	1.75%	2.36%	1.75%
PAAS JAN 19 2024 $45 CALLS	PAAS	660	$16,490.81	0.93%	0.93%	0.93%	$25.00	$25.00	$0.00	$0.00	0.00%	0.00			
HAL JAN 19 2024 $60 CALLS	HAL	67	$9,648.39	0.54%	0.50%	0.54%	$132.00	$143.00	$0.00	$0.00	8.33%	0.08			