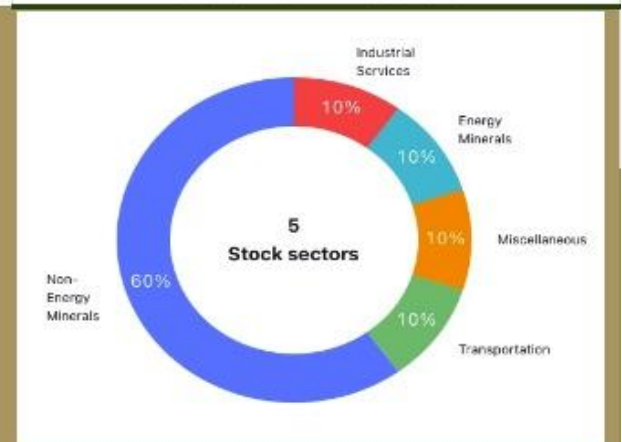
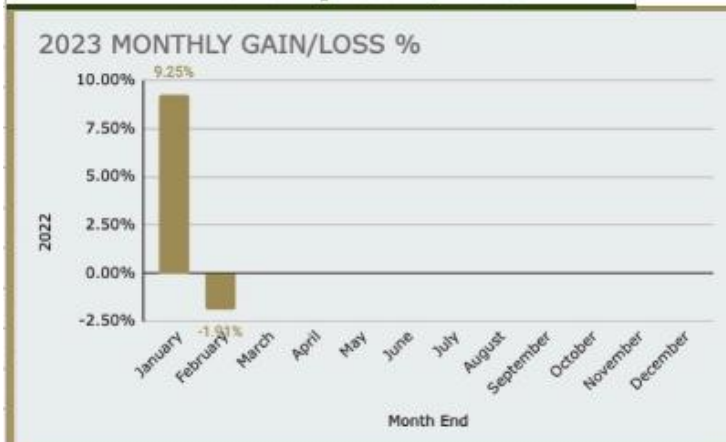


A Market Note: So Good It Hurts... (FOM.TSX, GOOGL, SPX)

Recent Trade Alerts						
Trade	Ticker	Description	P/L (bps)	Date	Sector	Notes
Buy Full	ZWK2023	WHEAT FUT	N/A	02-13-2023	FUTURES	
Buy Full	ETHUSD	ETHEREUM	N/A	02-15-2023	CRYPTO	
Add 2nd Leg	MLX.ASX	METALSX LIM.	N/A	02-15-2023	METALS	
Sell Full	ZWK2023	WHEAT FUT	-60	02-15-2023	FUTURES	
Sell 1/2	LEU	CENTRUS EN	70	02-16-2023	ENERGY	
Add 2nd Leg	FOM.TSXV	FORAN MINING	N/A	02-16-2023	METALS	

YTD Monthly Gain/Loss

Portfolio Allocation



A few things I'm looking at heading into this week.

One, our Weekly Nervous & Numbe indicator (located on the Volatility tab on the HUD) is within a **hair's breadth of triggering a sell signal**. And the daily N&N triggered a sell signal last week. The signal value is higher when signals line up across both the weekly and daily timeframe, as they are now.

The N&N indicator tracks the relative movements between the SPX and the VIX. A high reading (> red horizontal line) means investors are getting nervous, which typically leads to a selloff. And vice-versa for low readings below the green horizontal.



Second, our resilient US economy and higher for longer rate theses, are no longer the contrarian takes they were a few months ago. This is quickly becoming the popular consensus as the incoming data completely negates the H1 recession and “immaculate disinflation” narrative.

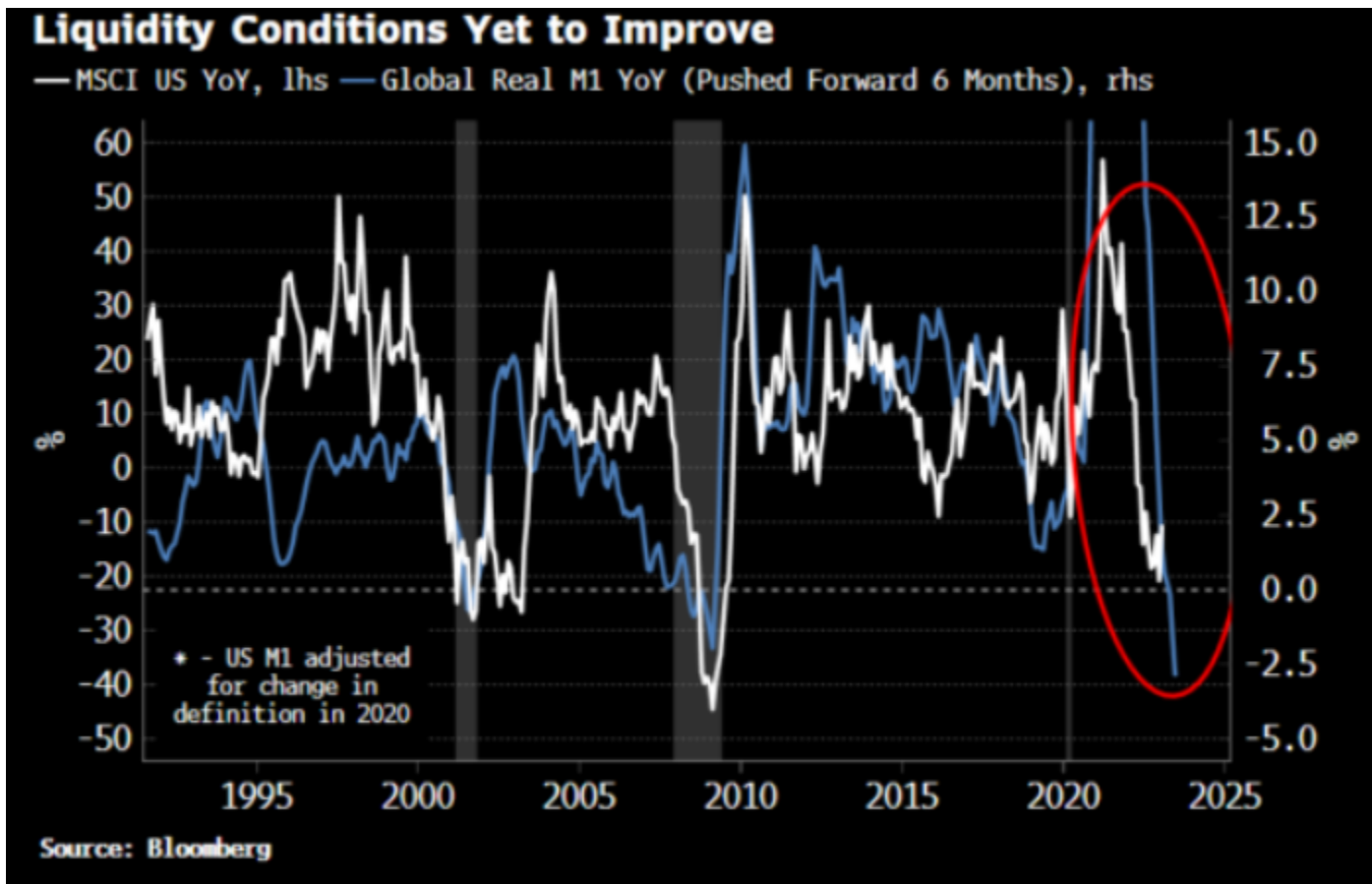
We are back in the environment where Good = Bad, as stronger econ data means a more hawkish Fed and higher rates.

And since monetary policy works with a long and variable lag this means that the better the data now, the harder the fall will be in the second half of this year.

Our base case since last October has been that while we are in a primary bear trend and a recession is highly likely in late 23', the positioning in the market and broader narrative had gotten ahead of themselves in their bearish expectations.

A temporary improvement in liquidity conditions mixed with forced repositioning in the market is what's been behind this bear market rally over the last few months.

Pulling back, global liquidity conditions remain poor. And higher US rates mean it's going to get more so (chart via Simon White/BBG).



Lastly, if you take the inputs from both the CPI and producer price index, you get estimates for core PCE of 0.5% for January, which is an annual rate of roughly 6.5%.

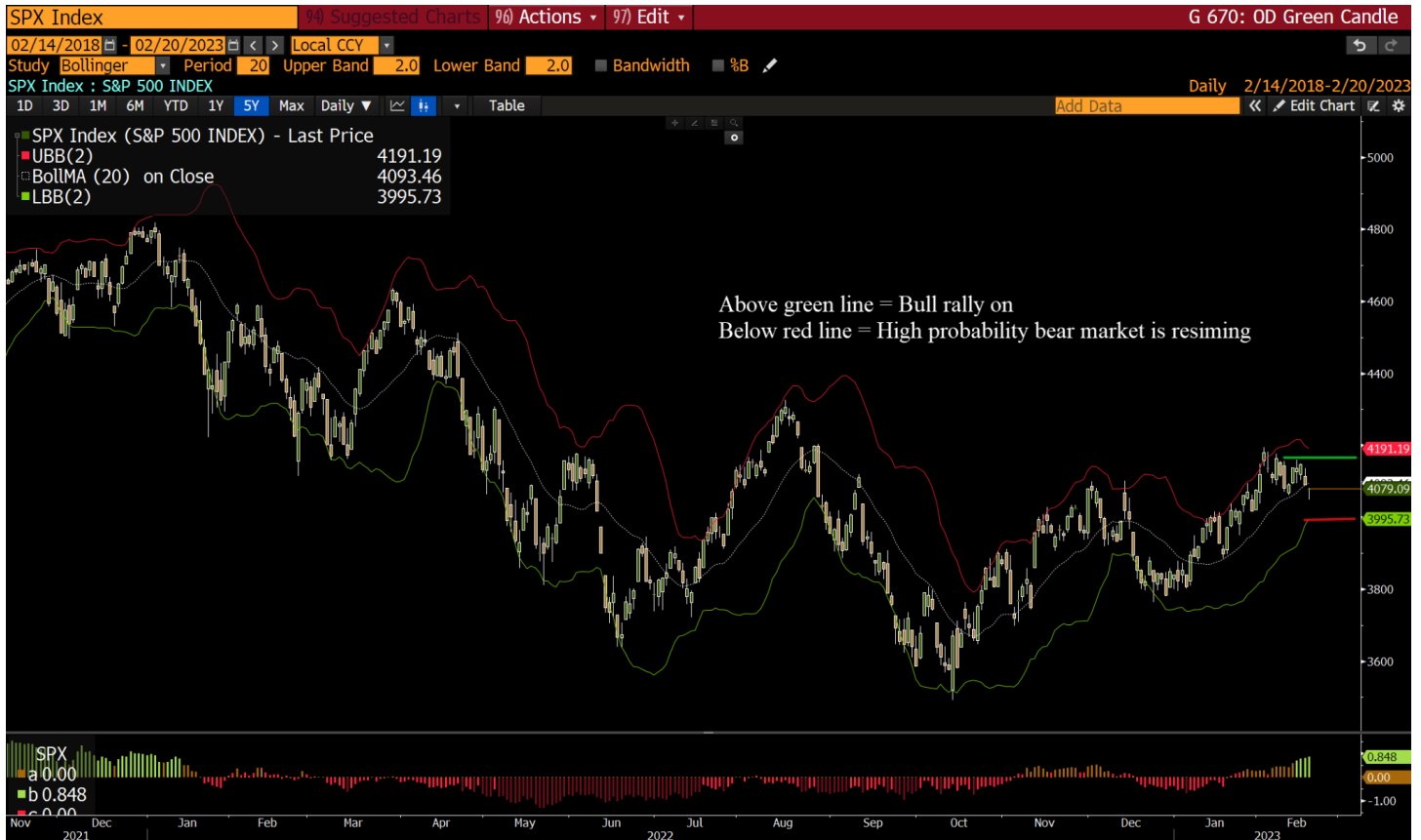
Again, the “immaculate disinflation” narrative is being bludgeoned to a pulp right now. But despite last week’s blowout PPI numbers and the subsequent jump in yields, equity markets held up relatively well.

So... **so far the technicals still lean positive**. The chart says this bear market rally remains in play. Breadth is deteriorating but not yet at levels that put the odds in favor of a major rollover ([see slide 7 of Trifecta Chart Pack](#)).

This could change this week and we’ll adjust if/when it does. And if yields keep rising at their current elevated rate of change, then it’ll just be a matter of time before we start the next leg down in equities.

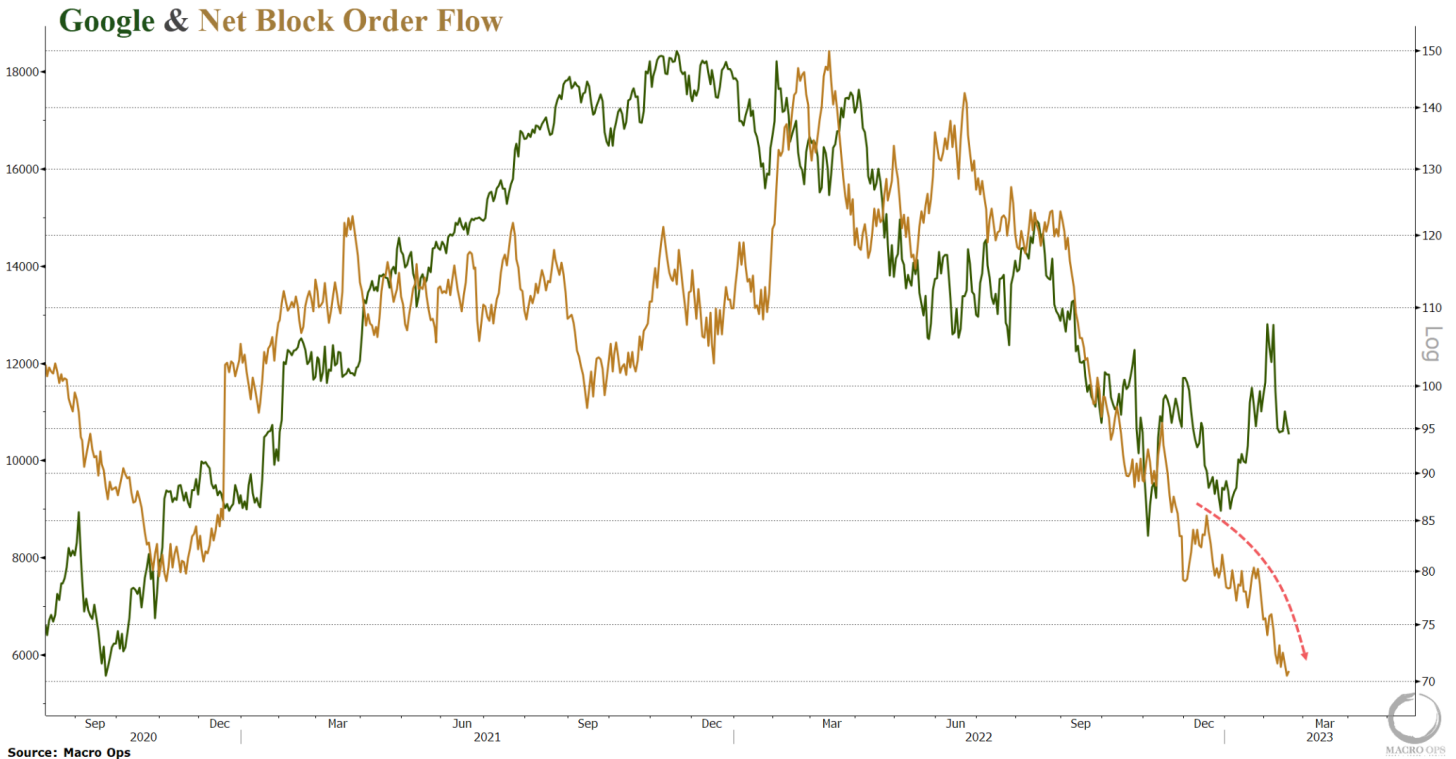
Here’s a daily of the SPX. We’re in neutral territory right now. If the price closes above the green line that’ll signal that the bull run is in play. A daily close below the red means we want

to get back to being fully positioned for a continuation of the bear market.



We're at 46% cash in the portfolio. We'll likely take some profits on our energy longs this week, and look to get that level back up near 60%.

We're also looking at adding some shorts. GOOGL is of interest here. Net Block Order Flows, which tracks the buying and selling of whales, continues to drop indicating that the big players have been *selling* into this rally.



This week I'm working on putting together a report looking at the three big policy moves we've seen out of the Biden administration (Infrastructure Act, Chips Act, and IRA). Combined these policies are set to dramatically shift the fiscal, economic, and geopolitical landscape. The impact on a number of key markets is going to be dramatic and long-lasting. Look for that report to hit your inboxes soon.

Also, I'm putting together a tutorial showing how I use the Currency tab in the HUD to weight the probabilities and stack conditional edges. I'll have that out to the group shortly.

Here's Brandon with a look at one of our largest equity holdings, Foran Mining (FOM.TSX).

Your Macro Operator,

Alex

Portfolio Intelligence Report (PIR): Copper & Foran Mining (FOM.TSXV)

This Friday, I interviewed our Collective’s own metals and mining expert, Adrian Godas. Adrian consults with mining companies helping them fundraise private placements and equity/debt issuances. He lives and breathes mining, particularly copper and tin.

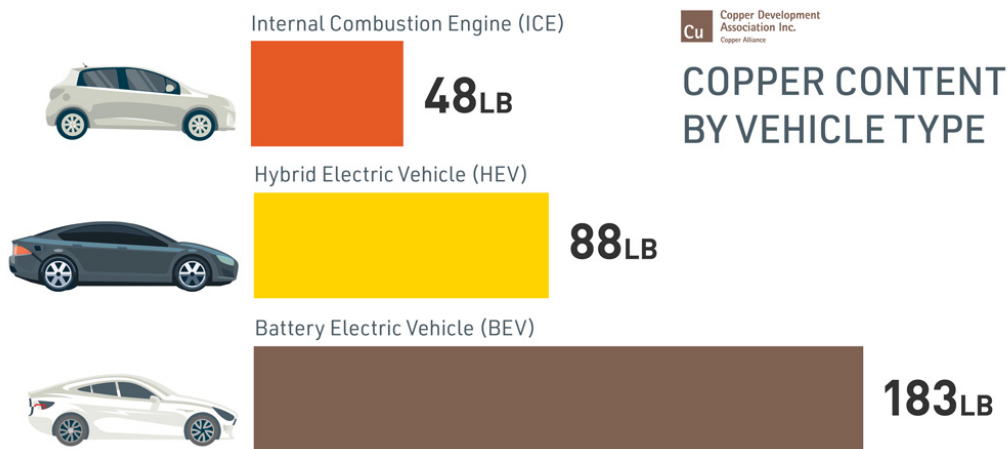
Adrian spent an hour dissecting the copper industry. We discussed supply, demand, and the main drivers for incremental copper demand and production growth. You will learn a ton.

Click the link [here](#) to watch the presentation.

Here are a few of my favorite highlights from the presentation:

- **Electrification from developing worlds and electric transportation (EVs) will drive massive copper demand.**

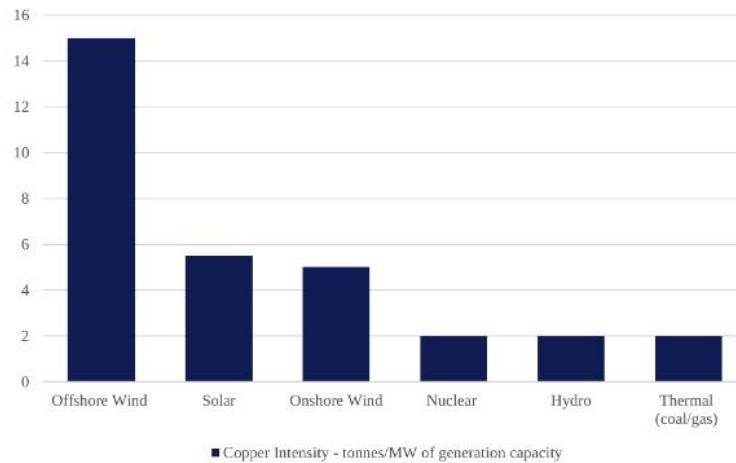
Copper is one of the most critical inputs in a world shifting to “green” energy. EV cars require 3x as much copper as standard internal combustion engines.



Source: Reuters

Offshore wind eats 15 tons per MW of energy produced. Solar needs nearly 6 tons per MW of energy produced.

Copper Intensity Of Electricity Generation By Type



Source: UBS

Then there's the demand for HVAC systems as more of the developing world rises into a "standard" middle-class living.

➤ **There is no better electric conductor than copper for the cost.**

One problem with commodity bull theses is substitution. In other words, if a commodity rises high enough, consumers (i.e., manufacturers) switch to a comparable and cheaper product to complete the job.

Today there are two potential substitutes: **aluminum** and **silver**. Aluminum is ~3x less conductive than copper. So while it's cheaper than copper, users require significantly more aluminum to achieve similar conductivity.

Silver is more conductive than copper, but it's **90x** more expensive than copper.

➤ **It can take decades to bring a new copper mine online**

Copper has a supply-side problem, starting with the new mine permitting process. Adrian mentioned in the presentation that it can take up to twenty years to bring a new copper mine online.

Project delays can set mine production back years. Not to mention weather and transportation issues from off-the-beaten-path mine sites.

The second major issue with copper supply is **declining copper grades**. A copper “grade” simply means the percentage of a rock that has copper deposits. The world’s *best* mines have around 3% copper grades.

Adrian noted that today’s mines are producing incrementally worse copper-grade deposits. The worse the grade, the more rock you have to mine to get equivalent tonnage. And the more money you spend per ton of copper.

For example, Chilean copper mines have had to double their investment to maintain **the same production level**.

Goldman Sachs estimates that mining companies will need to spend \$150B in capex to shrink the supply/demand gap. Here’s what that means for copper prices.

The Wildly Bullish Setup for Higher Copper Prices

Copper’s supply/demand imbalance is very bullish for underlying commodity prices. As mentioned above, declining copper grades force mines to spend more money on equivalent tonnage. This increases production costs and raises the bar for new project spending.

New mines show positive economics, around \$5.90/lb. Goldman Sachs sees that number climbing to \$6.80/lb by 2025. **Copper currently trades for ~\$4.10/lb.**

Enter Foran Mining (FOM.TSXV).

Foran is one of the most compelling copper plays in the market today. The stock trades at <3x run rate EBITDA assuming today’s copper prices, has zero debt, sports greater than 2% grade copper, and is run by a talented CEO who takes 100% of his compensation in FOM stock.

Foran Mining (FOM.TSXV): Getting The Big Things Right

There are four main factors to consider when buying a mining company:

- 1) **Competent and aligned management team**
- 2) **High-grade geology w/ long runway**
- 3) **Strong balance sheet**
- 4) **An attractive price**

FOM has all four factors and is one of the largest Strategic holdings in our book. Let’s break down each factor.

Competent and Aligned Management Team

Dan Myerson joined FOM as CEO in November 2020. Before that, he led Glencore’s Canadian Zinc business, one of the best metals trading firms globally. Glencore *only* hires exceptional talent.

Myerson first met FOM on a Glencore business trip in 2015 at the bottom of the copper Capital Cycle. It wasn’t until 2020 that Myerson joined FOM as its CEO.

My bet is that Myerson saw the capital cycle inflecting in metals/mining and wanted as much exposure to that supercycle as possible.

It’s why Myerson didn’t take a cash salary. All his compensation is in FOM stock.

Long Runway of High-Grade Geology

FOM sits on 65.4M lbs/year of 2.5% grade copper production between its McIlvenna Bay and Bigstone deposits. That’s high-quality, high-grade geology.

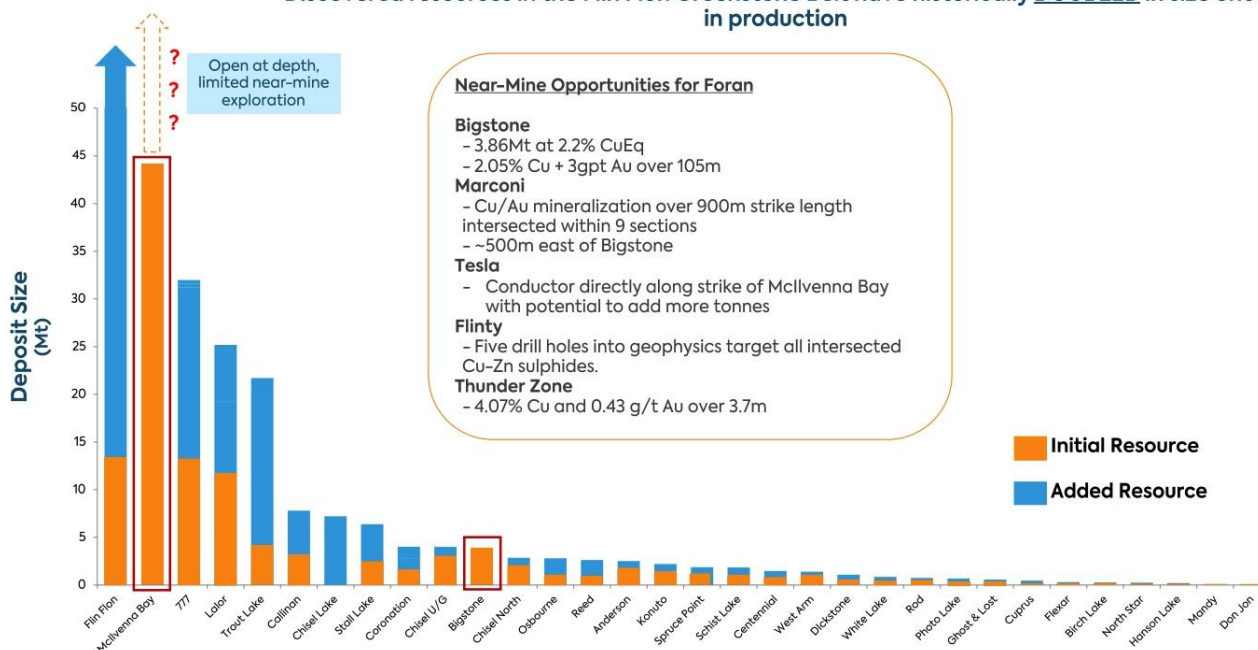
The company’s latest Feasibility Study also shows a potential reserve life of 18 years.

FOM operates within the larger Flin Flon Greenstone Belt. Discovered resources in this region have historically **doubled in size** once in production (see below).

Significant Opportunity For a Long-Life Mining Camp

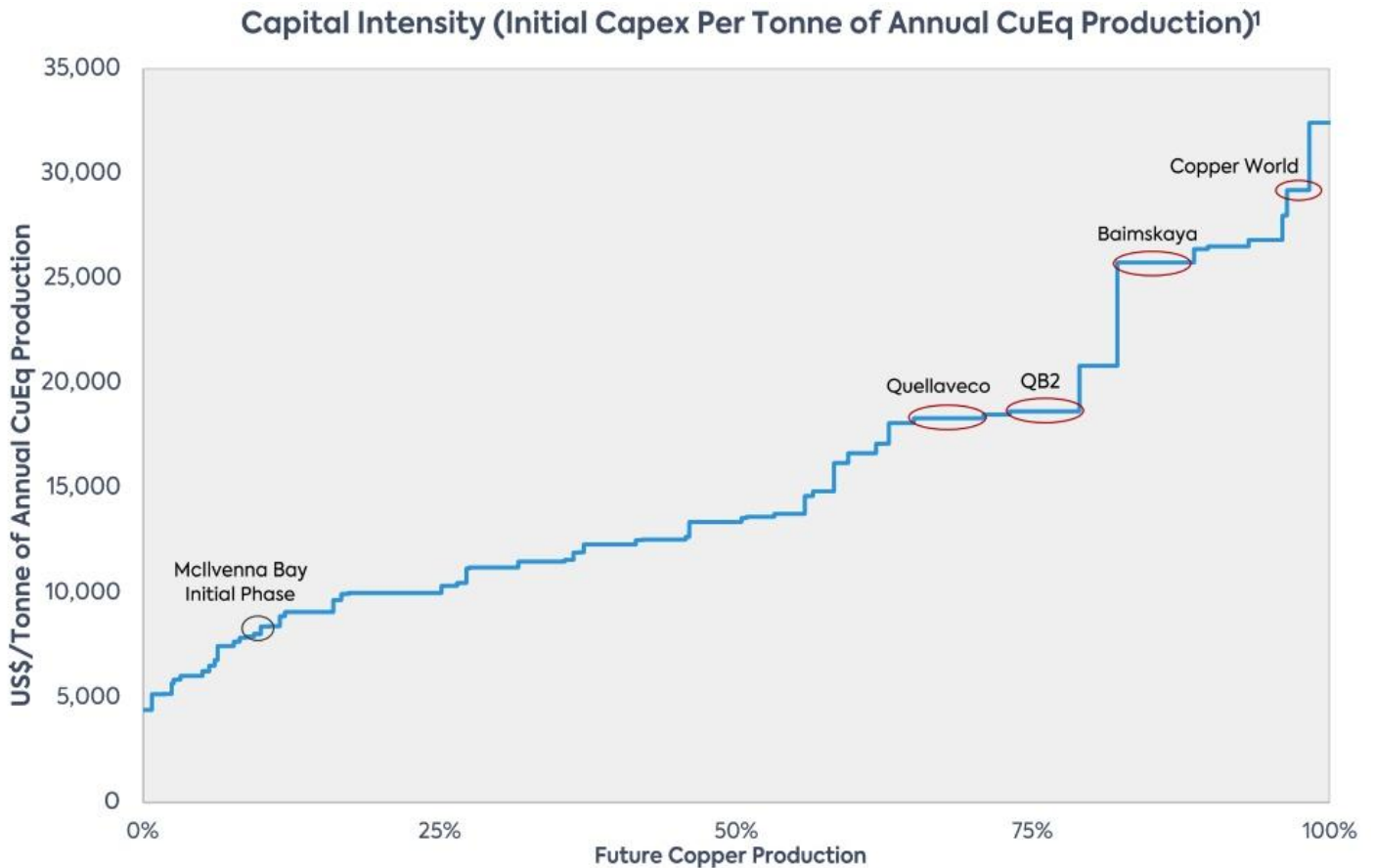
F O R A N

Discovered resources in the Flin Flon Greenstone Belt have historically **DOUBLED** in size once in production



Flin Flon has produced metals like copper, silver, zinc, and gold for over 90 years.

The company’s largest deposit, Mcllvenna Bay, also benefits from being close to strategic infrastructure. This infrastructure advantage reduces FOM’s operating costs, which are <\$10,000/ton.



This translates to FOM’s **All-In Sustaining Costs of only \$0.92/lb**. Most larger copper mines have All-In Sustaining Costs over \$2/lb, providing FOM a significant cost advantage over its peers. This means the mine can operate profitably at <\$2/lb copper, whereas other mines would wind down production.

Strong Balance Sheet

FOM has CAD 35M in cash plus another \$128M in net PP&E with zero debt on the balance sheet. It also has ~CAD 180M in cumulative net operating losses from 2018 that it can use to offset future profits.

An Attractive Price

The first thing we need to determine for valuing mining companies is **Net Smelter Rate** (or NSR). NSR is the cumulative price per ton of the mix of metals it sells. For example, FOM’s

mines produce copper, gold, zinc, and silver. NSR is a quick way of capturing the economics of every metal per ton sold.

In 2020, FOM reported an NSR of ~\$20/tn. However, in an interview three months ago, Myerson noted that the company's NSR is closer to \$250/tn.

Let's use \$250/tn NSR in our valuation, which assumes the following commodity prices:

- Copper: \$4/lb
- Zinc: \$1.20/lb
- Gold: \$1,600/oz
- Silver: \$22.50/oz

Here's how we get our profit estimates.

First, we take CAD 250/tn and subtract our annual life-of-mine operating costs of \$91M. That gets us ~CAD 159/tn in operating profit. Then we multiply our CAD 159/tn profit by our estimated annual production of 1.5 million tons to get **~CAD 239M in annual operating profit.**

FOM currently trades at ~ CAD 800M market cap. In other words, the company trades for ~4x base case estimated profits assuming the above commodity prices.

But remember, there is a decent chance copper hits >\$5/lb over the next few years, which is 25% higher than today's price and **could give us over \$300/tn in NSR.**

In that scenario, FOM would make over CAD 330M in profits annually.

Profitable copper mines can command 15-20x EV/EBIT multiples, especially in the middle of a commodity supercycle.

Assuming a 12x multiple on CAD 300/tn NSR, FOM would trade at a CAD 3B+ market cap. **That's 300% higher than today's current price.**

Portfolio Performance Update (as of 02/17)

- February: -1.91%
- Q1 2023: +7.33%
- YTD: +7.33%