

CONTRARIAN CODEX

The biweekly newsletter for all the general
and commodity market news and updates
(07-09-2026)

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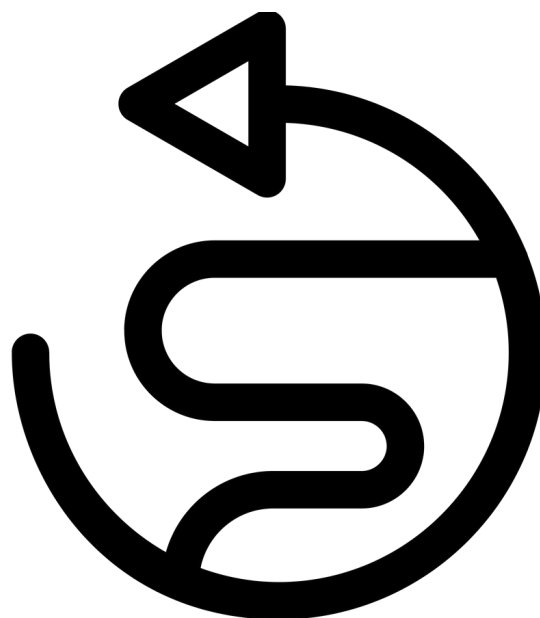
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CONTRARIAN CODEX

A PERSONAL NOTE

Welcome back everyone to another extensive newsletter and I hope that you all had a good and healthy weekend. For those of you who may have missed it, I just wanted to once again provide another quick update following the previous two in order to clear some things up for the coming weeks. At the moment I have been trying to find a good balance these days between supporting my family, grieving and of course work. I am happy to announce that I will after all be attending part of the WNA and reporting back on it for you all. I say part, because I will take the first flight back home on Friday to attend the viewing and the funeral over the course of Friday and the weekend.

For next week, I got 6-8 interviews planned that will be uploaded over the course of the month afterwards and into November, together with updates when needed and at least three extensive company analysis reports during that time. The reason I mention this, is that I will be traveling to the US with my wife for a few weeks (23rd of September through the 15th of October) to see the nature and take something of a breather after this year's health scare and recent personal circumstances. Given this schedule, I want to make sure the content pipeline is filled with interviews, updates and extensive analysis while I am away, but don't worry as I will always have my phone on hand to answer questions/share thoughts with you all when my wife is not looking, because I can't help myself and 'away from the desk' is never fully 'away from the desk', but with such a great community I wouldn't want it any other way.

Finally, I just want to extend another heartfelt thank you to you all. I am so grateful for all the kind messages and support I have received recently, it has genuinely helped both my wife and me a great deal. You are all amazing.

MACRO ANALYSIS SUMMARY

As I was trying to find that aforementioned balance, that also came in the form of working over the weekend to just get my mind off of things and that brings another extensive macro piece to the table (with an extensive oil piece, that took up most of my time two weeks ago, following closely behind later in this report). There is once again a lot to get into when it comes to the UST market and global bond markets in particular, as those impact literally everything around us and in the portfolio. When I say a lot, I really do mean a lot, so here are two pages of summary to get you started as always. The long end rises whether the committee hikes or cuts, so the only choice is how, and the road ends in de facto yield curve control, then the outright version. The 10-year closed near 4.72% after Jackson Hole, the 30-year near 5.21%, against 3.94% when the US attacked Iran. A hawkish Chair gave a hawkish speech and long yields went up, which falsifies the credibility story.

Volcker had a balance sheet that could absorb the cost. Federal debt ran around 31% of GDP then against north of 120% now, gross debt through \$40 trillion, interest roughly 10% of receipts then and closer to 21% now, net interest near \$1.2 trillion against something like \$5.6 trillion of receipts. The deficit was 2.6% of GDP then, and Fitch has the general government deficit at 7.4% in 2026 parked through 2027, widest of any AA-rated sovereign, on a measure hotter than the federal-only figure. Entitlements, defense and gross interest crossed above receipts around 2019 into 2020 and never crossed back, near \$5.6 trillion of revenue against a Big 3 above \$6.5 trillion for 2026. The one stretch that closed was 2020 through 2022 and inflation closed it, receipts inflating faster than outlays alongside a weaker dollar and a central bank buying the paper at 8% to 10% inflation. Hikes send nominal receipts down while indexed entitlements and repricing interest on a bill-skewed stack climb, issuance grows and yields go up anyway. The 10-year rises either way, so only the dollar separates them.

The net international investment position is roughly negative \$21 trillion, near 70% of GDP, with \$13 trillion to \$14 trillion of dollar debt owed offshore, so a rising dollar is a margin call on all of it. The FX-hedged 10-year for a Japanese buyer runs near negative 1.21%, and since mid-May a 10 to 15 basis point rise in the 10-year produced a 12 basis point decline in that hedged yield as hedging costs climbed faster. Higher yields are pushing the marginal foreign buyer out rather than pulling capital in. Either the 10-year goes far above a level everyone already calls too high or the dollar goes much lower, and with \$1.4 trillion of net supply over 2 quarters only one is survivable.

MACRO ANALYSIS SUMMARY

Swap spread funds are now the marginal buyer of the long bond at something like \$305 billion against under \$50 billion in 2022. Cayman relative-value funds levered 20 to 100 times on overnight repo took a net \$1.2 trillion of Treasuries from 2022 to the end of 2024, roughly 37% of net note and bond issuance, and around \$200 billion has unwound. That buyer is a market maker rather than an investor, so an equity selloff shrinks the whole book and the flight-to-safety bid lasts a day before yields grind higher with stocks falling. September looks like a coin flip against 30% market pricing. Waller hung the vote on 1 inflation report and the market took 12 points off the hike odds. Gulf Coast diesel cracks cleared \$100 a barrel in mid-August for the first time ever and have slipped only into the \$90s, and distillates near 107 million barrels are the lowest for the time of year since 1996, 12% under the 5-year average on a fourth straight draw. July core PCE is cited at 0.2% and unrounds to 0.246%, so the gap between holding and hiking is 0.004% and a rounding convention.

Term premium cannot arbitrate this, a residual that cannot separate a higher neutral rate from fiscal risk while Treasury buys the instrument out of the General Account, which is taking your temperature with your hand in warm water. Leverage ratio relief was finalized so the constraint would stop binding for any GSIB with a primary dealer, and the 30-year then hit a 19-year high on a buyers' strike from June, so the capital rule was never binding. Buybacks run \$4 billion a pop funded by fresh T-bills, refinancing the country into the front end while calling it liquidity support, which Treasury's own advisory committee warned against a year ago. July printed a record \$432 billion deficit, \$766 billion out against \$334 billion in, up 48% on the year. The 10-month deficit is \$1.8 trillion with 2 months to run, tracking above \$2 trillion, gross interest is \$1.17 trillion and up 15%, and customs duties went net negative for a third month as over \$33 billion of IEEPA refunds flowed out in July. Fitch has the \$41.1 trillion ceiling arriving around mid-2027, against a 3-3-3 plan the administration's own budget contradicts with deficits above 5% through 2029.

Higher rates feed the cost-push inflation the hawks want to kill and you cannot hike your way out of a cost problem your own hikes are half-creating, one that came from an oil war rather than an overheating consumer. Every time the 10-year tagged 4.7% these past 4 years, Treasury did something at some point that weakened the dollar and the yield went back under. What snaps the loop is more dollar liquidity pushed through side doors so nobody has to call it easing, and I would not bet against the fifth.

MACRO ANALYSIS

What better place to start this week's macro update than where we left off after the Jackson Hole update. For some much needed context before we dive into another encyclopedia worth of macro analysis, the 10-year closed around 4.72%, higher on the day by roughly 5 basis points, and the 30-year finished near 5.21%. I have seen a lot of takes on this and I have shared mine, which I will build upon again in this newsletter, but Luke Gromen also aught the intraday path on this and described the bounce as a scalded cat. A hawkish central bank chief delivered a hawkish speech, said the word hike repeatedly (even when he was literally just talking about hiking in the area, which is undeniably a funny way to mess with the algorithms) and long yields went up.

Where does that leave us? Well, for a good conclusion, we need to learn from history. Federal debt ran somewhere around 31% of GDP when Volcker took rates toward 20%, depending on which measure you prefer. Today it is north of 120% and the gross number recently punched through \$40 trillion. Interest consumed roughly 10% of tax receipts back then. Now it is closer to 21%, with full-year net interest running near \$1.2 trillion against something like \$5.6 trillion of federal receipts. The deficit was 2.6% of GDP then, and Fitch has the general government deficit widening to 7.4% in 2026 and staying parked there through 2027, the widest of any AA-rated sovereign on their books, seriously. That is the general government measure so it runs hotter than the federal-only figure most people quote and I would rather flag it right now that than have somebody email me about it again. Volcker got to break inflation because the balance sheet standing behind him could absorb what breaking it cost. Warsh does not have that and podium conviction does not manufacture it either.

You are in fiscal dominance, especially once True Interest Expense runs above 100% of receipts, which is Gromen's framing and a good deal more useful than the usual debt-to-GDP hand-wringing. Take entitlements, defense and gross interest, add them together, and compare that single number against everything the government collects. Back in 2016 revenues covered those 3 items with room to spare. They crossed somewhere around 2019 into 2020 and have not crossed back since, with revenues tracking near \$5.6 trillion against a Big 3 running above \$6.5 trillion for 2026. Every dollar of defense, every entitlement check and every dollar of interest and the government cannot cover them before it has spent a cent on anything else it does. There is exactly one stretch in the past decade where that gap closed and it was 2020 through 2022.

MACRO ANALYSIS

What closed it? Inflation, that's right. Receipts are a nominal number and they got inflated up faster than the outlays did, helped along by a weaker dollar, 8% to 10% inflation and a central bank buying the paper. Cuts that turbocharge inflation send the dollar down, send nominal receipts up, and improve the fiscal position, particularly if they are married to bank deregulation that lets the banks absorb more paper. The 10-year goes up in that world too, which everyone treats as the bad outcome and yet the fiscal arithmetic gets better because the denominator of every ratio you care about is growing faster than the numerator. Inflating the debt away is the only tool in the drawer with a demonstrated track record over the past 6 years, whatever you happen to think of it as policy. When the going gets tough, sometimes the best tool in the arsenal doesn't have to be the easiest.

Rate hikes that fight inflation send the dollar up and inflation down, which sends nominal receipts down while outlays keep climbing, because entitlements are indexed and interest reprices immediately on a debt stack that has been deliberately skewed into bills. The gap widens, the issuance grows to cover it, yields go up anyway, and yields in the UK, Japan and Europe etc etc you know the deal, go up alongside because they all fund in the same pool. Wash, rinse, repeat, until either a western debt crisis arrives or somebody injects a lot of dollar liquidity. The 10-year goes up in both scenarios, which is precisely why I keep telling you to track the dollar as well as the yield. The yield rises either way until someone does something, but only the dollar separates the two scenarios.

America's net international investment position stands at roughly negative \$21 trillion as of the most recent BEA data, call it around 70% of GDP, meaning foreigners own vastly more of America than Americans own of everywhere else combined. Gromen puts the figure closer to 85% and works from an older vintage of the series before the annual revision, so take your pick, the direction is identical either way. On top of that there is something in the region of \$13 trillion to \$14 trillion of dollar-denominated debt owed by borrowers outside the United States. A rising dollar is a margin call on all of it. So when Warsh talks the currency higher he crushes US receipts at home and tightens the screws on every foreign borrower who has to find dollars to service paper they issued when the dollar was cheaper. Those borrowers sell something to raise the dollars. Guess what the most liquid thing they own tends to be? I'll give you one guess because I have discussed that particular thing about 1750 times already... just this year.

MACRO ANALYSIS

Highly levered domestic hedge funds running the swap spread trade have become the marginal buyer of the long bond, a position I sized for you last week (or was it 2 weeks ago now?) at something like \$305 billion against under \$50 billion in 2022. A leveraged, funding-sensitive, stop-loss-carrying marginal buyer whose entire position depends on repo staying cheap and available. Bear with me. In a proper stress event that buyer does not step up. That buyer becomes a seller, quickly and all at once, and the thing everyone assumed was demand turns out to have been leverage wearing a demand costume and not a very good one either.

Warsh no longer gets to choose whether the long end rises, which is a conclusion I am glad to see Luke share with me. He only gets to choose how, via hikes or via cuts, and the road ends in de facto yield curve control followed eventually by the outright version. Yeah I know how that sounds. I also know that the alternative requires you to believe an issuer facing \$2 trillion a year, a negative NIIP, a levered marginal buyer and a Big 3 running above receipts is going to be allowed to discover the market-clearing price of 30-year paper. Nobody in Washington is going to permit that discovery, at least in my opinion.

Does the track record support any of this or am I just pattern-matching? Over the past 6 or so years, every single time the 10-year has tagged 4.7%, the Treasury has taken some action that promptly weakened the dollar, and the yield has gone back under. Honestly, 4 years of the same response beats any single data point I could hand you. To his credit, Luke, same as me, is also careful to note this is not yield curve control in the technical sense, because nobody names a level and defends it publicly. Functionally though, when the same yield keeps hitting the same number and the same response keeps showing up, arguing about the label is a poor use of anyone's time. I wrote last week that Warsh would manage the short rate and leave the long end to fend for itself, which parks the release valve in the currency. That pattern runs back years rather than days. FX-hedged 10-year Treasury yields for a Japanese buyer are still running around negative 1.21%, so a Japanese institution buying US paper and hedging the currency is volunteering to lose money. They either go unhedged and wear the FX risk themselves, or they stay home. Since roughly mid-May, a 10 to 15 basis point rise in the 10-year has produced a 12 basis point decline in the hedged yield available to those buyers, because hedging costs climbed faster than the yield did.

MACRO ANALYSIS

I had to read that one twice and my apologies if you have to scroll back to the previous page to do the same. Higher US yields have been making US paper less attractive to the marginal foreign buyer rather than more. Every textbook in the building says a higher yield pulls capital in. This one is pushing it out the door. Either the 10-year goes a lot higher than the level everybody already calls too high, or the dollar goes a lot lower to bring hedging costs down. Oh and before anyone asks, this is not a 1970's quiz show, there is no third door. Only one of those is survivable for an issuer with \$1.4 trillion of net supply to place over the next 2 quarters.

When Japan wanted to defend its currency and its bonds, it had Treasuries in reserve that it could sell to fund the operation, an asymmetry Luke flagged and one I have not seen picked up anywhere else. Bessent has no such luxury. To buy back old long bonds he issues fresh T-bills, which shortens the average maturity of the entire debt stack every time he runs the operation. That is refinancing the country into the front end while calling it liquidity support, and I flagged the bills skew for you when the refunding math first turned.

Moving on, July printed a record \$432 billion deficit, \$766 billion out against \$334 billion in, up 48% on the year even after stripping out the calendar quirk. 10 months into the fiscal year the deficit stands at \$1.8 trillion, more than the entirety of last fiscal year with 2 months still to run, tracking toward \$2 trillion plus. Gross interest on the public debt has run \$1.17 trillion through those 10 months, up 15%, and do note that is the gross figure rather than the net one I used further up. And my personal favorite, customs duties came in net negative for a third consecutive month, because the refunds from the Supreme Court striking down the IEEPA tariffs are flowing back out the door at over \$33 billion in July alone. The tariff revenue that was supposed to help close the gap is currently a line item widening it, at the exact moment 50% tariffs are going live with Canada and the matching retaliation is due within days. You could not script this if you tried. Fitch also has the US hitting its \$41.1 trillion statutory ceiling around the middle of 2027, so pencil that in as a scheduled crisis.

MACRO ANALYSIS

Set all of that against a 3-3-3 plan promising a 3% deficit, 3% growth and 3 million extra barrels a day by 2028, when the administration's own budget projects deficits above 5% through 2029. Bessent has told 2 separate congressional committees he can deliver something with a 3 in front of it. He is going to get his 3 alright, just not on the side of the decimal point he had in mind. Also remember I shifted my macro caution towards another hike? Well Warren Pies at the always brilliant 3F Research has hardened his September call and argues for the meeting as a coin flip when the market priced 30%. He now says that if oil is where it is going into the meeting, no realistic CPI, PPI or payrolls number stops a hike, with December crude less than \$1 off new highs. Nobody on the committee will say that out loud, which is rather the point of saying it for them.

Waller has since hung the whole September vote on 1 inflation report, inclined to hold if August shows continued progress toward 2%, while noting policy is only slightly restrictive and it would not take much acceleration to nudge him the other way. Growth solid, labor healthy, underlying inflation improving faster than the headline core suggests, upside risk still there from the wars and trade and AI. Give disinflation a chance, he said, and what does 1 meeting of waiting cost you? The market took 12 points off the hike odds on the spot, which is a lot of conviction to hand a single governor. Warren called it as dovish as Waller could be, then pointed out that hanging a policy decision on 1 print is what political pressure looks like from the outside.

The product market is the sharper version of his case and it has been climbing for months. Gulf Coast diesel cracks cleared \$100 a barrel in the middle of August for the first time ever and have only slipped into the \$90s, above anything printed in 2022. Distillate inventories came in near 107 million barrels, the lowest for the time of year since 1996, roughly 12% under the 5-year average and drawing for a fourth straight week. Refiners are running flat out and deferring maintenance to chase the margin, leaving the complex one hurricane from new records. Crude has spent 6 months looking at least somewhat contained, while the thing the voter buys broke out, and the FOMC reads the sign at the pump as 'number go up'.

MACRO ANALYSIS

Waller supplied the mechanism back in May with a coin-flipping analogy. If each price shock is independent, 3 in a row tells you nothing about the fourth. That only holds while people understand the process generating the shocks, and they do not. Transitory survives 1 shock, but it sure doesn't survive a sequence. Underneath the academic language he was describing a central bank losing John Q Public, at which point it moves whether or not moving is correct. He is on far firmer ground there than on any monthly print, and as Warren put it, nobody has the patience for the framework, which is that same pressure wearing a different costume. July core PCE gets cited at 0.2%. Unrounded, 0.246%. So the distance between holding and hiking is 0.004% and a rounding convention, and I would pay real money to watch that explained at a press conference because it sure is not happening. The fair objection is that it is 3 readings rather than 1, the 2 in hand plus the one about to land, which only helps if you skip what is inside the 2 in hand.

The crude move lands after the meeting and never reaches the print, true and beside the point, because the pressure travels through the number on the screen on the day they vote. A patient committee does not hike pre-emptively against inflation its own data has not shown. An impulsive one under pressure does exactly that, so the lag argument ends up supporting him rather than me. Warren also runs the December 2027 SOFR-implied rate against daily changes in the 10-year, 409 sessions since the start of 2025, giving a beta of 1.00 and a correlation of 0.83, which he reads as short rates moving the long end. Fair, and I have 2 observations. Both are forward-looking rates digesting the same news, so daily co-movement shows them processing information together rather than the policy rate anchoring the long end, and his own latest reading has the 10-year at 4.65% against a December 2027 SOFR-implied 4.04%. That 61 basis point wedge is the thing I keep pointing at, and a beta of 1.00 coexists perfectly happily with one grinding wider by the quarter.

Follow where this lands though as Warren expects a hike, and his own 7-cycle work has one adding roughly 12 basis points to the 10-year for every 25, so he expects the tightening and the long end rising with it. I expect the long end to rise whatever they do if they continue with the current playbook. Different cause, same yield, which is an odd sort of agreement and honestly, I am pretty glad with it. His path to a hold needed cold data with oil and products moderating together, and a governor just walked half of it in public while the products moderated not at all. All in all, it's still a coin flip and a damn dangerous one at that if it falls the wrong way.

MACRO ANALYSIS

How does Warsh come into all of this? A hawkish Chair was supposed to pull long yields down and instead they went up, which falsifies the credibility story directly rather than quibbling about coefficients and term premium cannot settle the argument the way Warren wants it to, because term premium is a residual, and a residual cannot distinguish between a market pricing a higher neutral rate and a market pricing fiscal risk while the Treasury is standing there buying the instrument with a General Account. Measuring credibility using the price of a bond somebody is actively supporting is like taking your temperature with your hand in warm water. He may still be right about neutral. I just do not think that measurement can tell us and his dismissal of the 30-year cuts against him too, because the 30-year may well be economically inconsequential while being politically decisive, given that it is precisely the maturity Bessent has chosen to intervene in.

The agencies finalized the enhanced supplementary leverage ratio changes with an April effective date and optional early adoption from January, specifically so the largest banks would stop being penalized for intermediating in Treasuries, and the regulators' own estimate was that the constraint would no longer bind for any GSIB with a primary dealer underneath it. The room was created and the 30-year then went to a 19-year high on a buyers' strike that started in June. Dealers have the balance sheet capacity and the bid still did not turn up, so the capital rule was never the binding constraint. Anyone waiting on a leverage-rule tweak to fix this is waiting for a package that already arrived in the mail yesterday.

Fun fact, before he had the job, Warsh argued for rewriting the 1951 Treasury-Fed agreement so that the Treasury Secretary would have to find any major change in Fed holdings acceptable, on the reasoning that a large balance sheet move is fiscal policy dressed up as monetary policy. He is not wrong about that, and it is a remarkable thing for a serving Chair to have on the record. But his own balance sheet preference is a smaller Fed tilted toward short paper, which pushes long yields up, which is the exact opposite of what Bessent needs from him. 2 Druckenmiller alumni are now running opposite ends of this, one wanting the long end higher as a disciplining device and the other spending a General Account trying to force it lower, with Druckenmiller himself going to the WSJ to criticize the intervention using some AI letter that was painfully obvious to read knowing it came from him.

MACRO ANALYSIS

A family argument with \$30 trillion of bonds for a dinner table and Treasury's own borrowing advisory committee warned about this a year ago, saying buybacks are appropriate for liquidity and inappropriate for reshaping the maturity profile, and that issuance is the proper tool for that job. Bessent is doing the thing his own advisors told him not to do, funded from an account nobody expected him to touch. He is neither joined nor blocked by the Fed, which I covered last week, so he simply continues alone, or that is what it feels like.

Warren increasingly expects a blue wave in the midterms, possibly a blue tsunami, and thinks data centers have become a live political issue and regarding the midterms, I am planning to issue a midterms seasonality update soon, so stay tuned for that. Anyhow, he worries the post-election rally everyone pencils in as a seasonal gift might not show up if the election result lands on the buildout, mostly because of how important the AI capex cycle has been to keep the market elevated. He also thinks a large lab IPO would be a negative for software and a positive for semis and hardware, on the basis that a \$2 trillion to \$2.5 trillion hole has already been blown out of the software space inside a roughly \$30 trillion stack, which reads as the market clearing room for the labs to walk into. None of that is my area and I am not positioning around it. The power demand underneath the buildout is very much our area though, and a political fight over data centers is a political fight over electricity.

Luke extends the same logic to US equities, which you short in gold rather than in dollars, and his read of the action after Bessent moved was equities up in dollar terms and down in gold terms, a regime he expects to hold through year end and into early next year. He described Bessent putting a gun on the table with the buyback expansion, which is roughly how I would put it too. The 10-year was at 3.94% when the US attacked Iran. It closed near 4.72% after Jackson Hole. That is what the entire episode has cost in funding terms and nobody has signed a peace agreement or even another break yet. The expanded buyback operations also begin as we speak, so we finally get a proper read on whether \$4 billion a pop changes anything at all.

MACRO ANALYSIS

I have no interest in pretending I know which one goes first honestly as both arms of policy pulling in opposite directions does not resolve by the bond market politely agreeing to behave, and it does not resolve through a Chair talking tough at a symposium in Wyoming, no matter how great the surrounding area is. The Big 3 outrun receipts in every scenario except the inflationary one and the marginal buyer is levered, all while the foreign buyer is hedged into a negative yield and every exit from this room has a currency on the other side of the door, and the people running it have taken that exit every single time the 10-year touched 4.7% for the past 4 years. I would not bet against the fifth, nor against every time that follows afterwards until they finally fix the structural issues.

So higher rates feed straight into the very cost-push inflation the hawks are itching to raise rates to kill. You cannot hike your way out of a cost problem that your own hikes are half-creating, and this whole shock came out of an oil war rather than an overheating consumer running wild at the mall. The tools the committee keeps reaching for do not fit the problem in front of them, at least not the way I see it. Everyone has their eyes glued to the front-end hike debate while the real damage all summer has been out at the long end of the curve. I told you back then the leveraged basis trade had blown apart, something like \$200 billion of it unwound and that the long end had lost a bid it had gotten used to leaning on. A Fed research note that came out last fall tracked the marginal buyer of Treasury notes and bonds back to a pack of hedge funds domiciled down in the Cayman Islands, running the cash-versus-futures basis trade at absurd leverage.

Between the start of 2022 and the end of 2024, right while the Fed itself was shrinking its own balance sheet and letting bonds roll off, these Cayman funds scooped up a net \$1.2 trillion of Treasuries and swallowed roughly 37% of all the net note and bond issuance over that stretch, near enough to what every other foreign buyer on the entire planet managed put together, which turned them into the single biggest foreign holder of US government debt, ahead of both China and Japan, and almost nobody was even paying attention while it happened.

MACRO ANALYSIS

Give that a second to sink in. The buyer that took down a full third of net coupon supply for 3 years running had nothing to do with pension funds or foreign central banks or anybody buying Treasuries because they wanted to own government paper for the long haul. It was a pack of relative-value funds levered anywhere from 20-100x, holding those bonds as one leg of an arbitrage and funding them overnight in the repo market. A buyer built like that behaves as a market-maker rather than an investor and a market-maker heads straight for the exit the second volatility makes the trade too dangerous to keep on.

You all know the sequence as the war kicked off, oil ripped, inflation expectations jumped, the trade turned dangerous, the funds started cutting the position and the long end lost the one bid it had come to lean on at the precise worst moment it could have picked. When your marginal buyer for a third of net supply is a levered fund that vanishes the moment things get hairy, the long end has no floor under it in exactly the conditions where you would kill for one. The old reflex of money bolting out of stocks and into the safety of Treasuries keeps letting everyone down for the same reason. If the marginal holder of those Treasuries is that very same leveraged crowd, then a proper equity selloff forces them to shrink the whole book, bonds and all, so the flight-to-safety bid turns up for a day and then flips into yields grinding higher while stocks are still falling. Trying to scare capital out of equities and into government paper is a fool's errand in this fiscal setting and I am sure policy makers realize this as well.

So what snaps the loop, then, if hikes are self-defeating and the long end has lost its buyer and an equity scare cannot ride to the rescue of bonds? More dollar liquidity, pushed through side doors so nobody has to climb up on a podium and call it easing. That is the job of the yen intervention and the FIMA plumbing I laid out in the macro drivers piece and the signal only got louder over the past week, with Bessent making it about as plain as a Treasury Secretary is ever going to make it that he will do whatever he can to stop long yields from taking off. When the man in charge of the debt tells you in so many words that spiraling yields are the one thing he flat out will not stomach, you take him at his word and then you go ahead and ask yourself what exactly he is willing to do to back that up.

MACRO ANALYSIS

Finally, and then I promise we are moving on from this week's macro analysis, the Yen. In short, the Yen Snaps Back and Washington gets what it asked for. The yen put in a 2% session against the dollar, back to roughly 155.50 after a month of grinding the wrong way. That was the best move since Tokyo and Washington went into the market together, an operation that burned a record \$96 billion and looked for a few weeks there like money set on fire. Apparently you do not have to defend a currency forever if you can convince the market you will finally pay people to hold it.

Swaps have nearly fully priced 25 basis points at the meeting later this month, with roughly 80% odds on another by December. Dovish noises from the Fed narrowed the gap from the other side and took 0.5% off the dollar index, because of course it did. Add short covering from speculators who have been paid to be short yen for years, plus chatter that Japan's \$1.8 trillion pension fund lifts its 25% domestic bond target, and you get a violent reversal. Sustainable? From what I can tell, not on positioning flows alone. Japan holds around \$1.2 trillion of Treasuries and something close to \$5 trillion of capital deployed abroad, most of it financed by borrowing at nothing and buying yield somewhere else. 2-year JGBs at 1.83% are the highest since 1995, and the long end just cleared a soft auction at a materially higher yield. Once domestic bonds pay enough, that money comes home, and it will not come home politely.

Washington is now openly lobbying a foreign central bank to tighten, having joined that country's intervention for the first time since 1998. Bessent wants a firmer yen, which works right up until Japanese institutions fund the trip home by selling Treasuries. Ueda hikes into that with a Prime Minister who once called the idea stupid and now nods along, because oil is expensive and 95% of Japan's barrels arrive by boat from a region currently at war. Hardly a free hand, the way I see it. Everyone is on watch for another operation around the holiday that follows the meeting, and Tokyo's currency official has moved from vague discomfort to promising a fight. Meaningful, sure, but the two most indebted governments in the developed world, however you want to measure it, are coordinating on the price of money because neither can afford the alternative. Fiscal dominance with better manners. The yen carry trade financed a decade of everything, and it is being unwound by a central bank taking orders from a foreign treasury right before our eyes people.

URANIUM AND NUCLEAR POWER

Current sentiment reading: 31

Observation: Following the end of the last newsletter that was uploaded on the 20th of August, we saw a quick pop upwards to the tune of around ~15% for URM and while we have since given back some of that gain, the combination of the powerful green candle and the subsequent 'higher low' for equities was enough to really drag upwards the sentiment readings once again. We are now up over 20% from the recent lows going into the WNA and I suspect that the sentiment will continue to improve over the coming weeks if the conference delivers on the excitement that I am hearing from various industry participants. The combination of this all, the relative price movement amidst still uncertain overall macro circumstances and the most important conference of the year just around the corner, makes for an outsized jump to the upside to the tune of 14 points. That may seem like far too much given we are only up ~6% since the last reading, but investors seem far more positive now.

- 0-10: Depression – Represents extreme negative sentiment, possibly due to adverse events or very poor market conditions. Usually indicative of a major bottom/capitulation.
- 10-20: Pessimism – Indicates generally negative sentiment with widespread concerns and low confidence. Usually seen at intermediate bottoms.
- 20-30: Caution – Reflects a cautious outlook with lingering uncertainties and hesitations.
- 30-40: Doubt – Shows a sentiment leaning towards the negative side but with some mixed feelings. If the trend is down, doubt usually shifts quickly to caution and pessimism.
- 40-50: Neutral – Represents a balanced sentiment, neither particularly negative nor positive. Where it goes after this (up or down) is very dependent on price behavior (i.e. are buyers stepping in on dips, or are they selling on intermediate rallies?)
- 50-60: Hope – Suggests a slight positive sentiment, with some optimism and positive outlook starting to form. This often provides the basis for another strong rally.
- 60-70: Optimism – Reflects positive sentiment with growing belief the rally can hold.
- 70-80: Confidence – Indicates strong positive sentiment with very apparent confidence.
- 80-90: Excitement – Shows very strong positive sentiment with high enthusiasm and expectations, most moves either turn around here to cool off or go absolutely parabolic.
- 90-100: Euphoria – Represents extreme positive sentiment, indicating the trade is getting very overcrowded with high retail participation and broad media coverage, which often leads to a market peak. This is what we only ever really see at the end of major moves.



URANIUM AND NUCLEAR POWER

There was honestly not a lot more to say that I have not already either described over the previous two reports or will be describing in the next WNA report, so it will be a very short uranium and nuclear power section (but don't worry, the WNA report will be extensive, at least from how things are building up ahead of the conference). Quick note on the numbers then, August month-end prices came in at \$97 for long term, which just keeps grinding up and it is dragging the spot price up with it as it closes in on the \$90's range. Meanwhile the 3-year and 5-year forward pricing also jumped \$3 to \$104 and \$105 respectively, which is good to see as the price trajectory remains firmly upwards and to the right.

Time for a whole bunch of nuclear headlines to cover. Starting with the news that regulators in South Korea are weighing a doubling of the license extension term for nuclear plants, from 10 years to 20. KHNP has 10 units queued for continued operation, 9 of them carrying licenses that expire before 2030, and the single approval so far bought Kori 2 another decade to 2033 after a 3-year safety review. Doubling the grant halves the regulatory workload per decade of operating life, and a life extension is the cheapest megawatt-hour anybody in this industry can buy, at least in my opinion. It converts into fuel demand immediately, because a reactor that keeps running keeps taking reloads, with no construction schedule to slip and no investment decision to wait on. There is more major news from Korea regarding a new tender, but more on that in the WNA report after I speak with some people at the conference.

A decree in France handed EDF environmental authorization to prepare the Gravelines site for 2 EPR2 units of 1,600 MW each, joining the 6 units of 910 MW already operating there. The text explicitly does not authorize creating the reactors, so this is earthworks, an intake channel and a rail terminal. The investment decision on all 6 EPR2 units is due around year end, Penly targets 2038, and Gravelines is second in that queue, which lands it in the back half of the 2040s.

The US Army awarded up to \$2.2 billion across 5 companies to own, build and operate microreactors at 5 installations on milestone payments running FY2027 through FY2031. Antares at Fort Bragg, BWXT at Fort Campbell, General Atomics at Fort Hood, Radiant at Fort Benning, Westinghouse at Fort Drum. Units run 1 MW to 20 MW, the Army expects north of 20 across Department of War sites once private capital joins, and the executive order behind it demands 1 reactor running by the end of September 2028. These get licensed by the Army rather than the NRC, which removes the longest pole in the tent for advanced reactors without anyone waiting on a rulemaking.

URANIUM AND NUCLEAR POWER

Honestly I thought that would just about cover it and then we got the Bruce Power news. CAD\$7.7 billion through the end of 2027 on operations and the Life-Extension Program, and 6 of the 8 units at Tiverton now carry an operating mandate out to 2064. Units 3 through 8, the Major Component Replacement fleet, with overlapping outages running until roughly 2033. Bruce already produces around 6,550 MW, and Project 2030 targets 7,000 MW through turbine upgrades and asset optimization rather than new concrete. Adding a reactor's worth of output without pouring concrete is about as good as capital allocation gets.

So what does 5 GW of heavy water reactor eat? Less than the generic figure implies. These are CANDU units, natural uranium, no enrichment, no tails assay to play with, UO₂ powder pressed straight into 37-element bundles. The 500,000 pounds per GW rule of thumb is built for light water reactors and carries enrichment losses that CANDU never incurs. Run burnup instead, roughly 7.5 GWd per tonne against 31% thermal efficiency, and you land nearer 140 to 155 tonnes of uranium per GW-year. Call it 390,000 pounds, or about 22% lighter. For reference, the WNA's generic figure of 163 tonnes works out to around 424,000 pounds, so 500,000 was already running conservative before any CANDU adjustment.

Units 3 through 8 are about 5.0 GW of the site. That puts them at 1.95 million pounds a year adjusted, against 2.5 million on the generic figure. Stretch it across 38 years to 2064 and you get 74 million pounds versus 95 million. The full 8-unit site burns roughly 2.55 million pounds annually today and closer to 2.7 million once Project 2030 lands, meaning Bruce alone eats something like 7% of Canada's current mine output. Cameco holds an exclusive arrangement covering 100% of Bruce's uranium, conversion and fabrication requirements, extended out to 2040.

The reactors run to 2064. Do the subtraction and you are looking at 24 uncovered years and roughly 47 million pounds of demand that cannot be deferred, hedged or engineered away, at a site whose owners just committed CAD\$13 billion of private capital to keeping it alive. That is absolutely massive and someone buys those pounds eventually, and I doubt it happens at 2023 prices. The previous base case here leaned on reactor retirements for a decade. This is 5 GW that was scheduled to die in the 2030s, now carrying 38 more years on the clock, funded privately, no ratepayer vote required.

OIL SUMMARY

There was a lot of work put into this week's oil sector analysis regarding the physical flows of the market, so much so that it requires a two page summary, although as always I would recommend you read through it if you care even a tiny bit about the state of the oil sector or how it affects global markets. The physical situation is worse than the price implies and the buffers that made that gap tolerable are close to exhausted, so the asymmetry from here favors upside surprises. Crude physically clearing the strait runs 4 to 6 million barrels per day (which is a conservative number and it could be closer to 8-9 million barrels per day according to the US, but let's run the numbers we have for now), total regional crude 9 to 10 million, total liquids with products, NGLs and pipeline routes 11 to 13 million, against a pre-war baseline of 22 to 24 million. Call the shortfall 9 to 12 million, partly offset by demand torn down and I hold that loosely for reasons I will get into.

Published estimates run from 2.8 million to 16 million for the same waterway in the same weeks, and most of that gap is definitional. Crude passing the chokepoint, total liquids out of the wider Gulf including Fujairah and Omani berths that never touch it, and total regional exports folding in Yanbu, Ceyhan and Syrian truck volumes are 3 separate numbers. Pre-war the strait itself carried 20 to 21 million of total petroleum liquids, 15 million of that crude and condensate. 2 independent methods converge near 4 million. USN minus Oman minus Fujairah gives 6.7 million past the blockade line over 7 days, less 1.6 at Fujairah and 0.925 at Oman, so 4.175 million through the strait, latest 7-day crude average 3.8 million. A transit table logged 703.9 million barrels over 174 days, 4.04 million per day. 185 of 695 outbound transits were Iran-linked, 27% by count, and with Iranian exports at zero the reasonable reading is that a large share of everyone else's crude moves on shadow tonnage.

The official figures do not reconcile with each other and that's the name of the game with this data. 750 million barrels across 116 days is 6.47 million per day, against 660 million claimed a week earlier, implying north of 11 million in a week when commercial trackers showed 3 to 8. The 16 million barrel night with 40 tankers had zero confirmed crossings, and Tehran said it permitted 3 Iraqi tankers. Officials may be quoting barrels per convoy movement rather than per day, since air cover is finite. Not the same as proving them wrong. Building from producers, Saudi at 3.23 million across 23 days, Iraq at 2 million all-route, Fujairah 1.6, Kuwait and Qatar at 70% of a pre-war 2 million, Oman 0.925 and Iran nothing, so 9.2 million, cross-checked at 9.5 the other way. Reaching 15 or 16 needs 5.5 to 6.5 million of products, NGLs and LPG on top, and July refinery throughput of 80.9 million ran nearly 5 million under the prior year.

OIL SUMMARY

Against myself, 2 VLCCs reappeared near Sri Lanka and lifted a 7-day average by over a million in one stroke, and if revisions like that are systematic my build is too low. Bypass covers about a quarter of the problem, 3 to 3.5 million against a hole of roughly 13 million. East-West hit a claimed 7 million in March, Yanbu ran 4.1 million in June against 973,000 a year earlier and took 92% of Saudi seaborne, ADCOP's doubling above 3 million is unlikely before mid-2027. Iraqi seaborne exports collapsed 97% in May to 96,000, and Ceyhan's 750,000 contractual minimum ran against an observed 226,000 in July. Iran went 893,000 to 156,000 to zero, roughly 10% of pre-war regional liquids and a third of the deficit on one estimate, costing Tehran its export revenue entirely while neighbors clawed back to 50% to 75% of normal.

LNG has no workaround. Down 95% year over year, Qatar down 96%, 18 cargoes against 509, an estimated \$24 billion of lost revenue, reportedly 17% of capability removed on multi-year repair timelines, allocations near 50% from a supplier holding 20% of global trade. European benchmarks jumped 35% in a day and LNG-linked prices are at their highest since early 2023 even as oil improves. As a European, delightful. So why is Brent at \$90 rather than \$150? Everyone runs the ADNOC playbook now, crude shuttled into Fujairah for ship-to-ship, transponders off past the blockade line and back on near Sri Lanka, the extra tonne-mile cost absorbed in freight rather than flat price. Underneath that, 8.2 billion barrels of stocks in January, a 400 million barrel coordinated release, draws of 3.8 million per day, OECD government stocks down 163 million to a 1990 low, the SPR at 289.7 million from 415 million, lowest since 1982 and 40% of authorized capacity. Demand contracts 420,000 to 104 million, 1.3 million under the pre-war forecast, Q2 down 2.45 million, Chinese gasoline destruction of 180,000 that one bank expects to be 70% permanent.

Roughly 550 million barrels over the memorandum window alone were bridged with inventory rather than production, and bills like that come due in Q4. The bear case is just as convincing and has been more profitable to hold these past 6 months as some investors that got leveraged long near term oil exposure go battered. What changes my read is whether the Iran-Oman talks produce a mechanism, since a deal could take 10% off Brent in a session, whether Ceyhan runs at 750,000 or 220,000, and whether draws resume with the SPR where it is. I hope that despite all the uncertainty with these numbers and the entire situation at hand, this analysis proves to be informative.

OIL

A quick note regarding this extensive oil piece as the price of oil is grinding upwards slowly but surely again and is heading back to triple digits if this current trajectory holds (with products already being extraordinarily high, which also is not great). Most of it was written two weeks ago going into the last weekend of August, meaning that there won't be more Hormuz and general oil flow data about the past week due to the personal circumstances I have shared. Still though, I think that this will prove to be a very interesting analysis piece on said oil flows and that it will hopefully help paint a good picture on the global state of the oil market. I will start by noting however that the piece may end up being conservative, as some recent information from the US Energy Secretary points to 9Mbpd of oil leaving the Strait over the past week (8Mbpd of crude oil and 1Mbpd of refined products). If that is indeed the case, it is worth noting, but let's go over the numbers and see how it stacks up. On top of that, as I noted above, large parts of this analysis piece were prepared and written over the course of the end of August and as you can imagine, this is a pretty dynamic situation that can change day-by-day. If the 9Mbpd holds true, it would indicate a notable rising line.

Now, as for the analysis, I thought it'd be a nice change of pace from the piles of macro and uranium related research, especially given everything that is going on in the world right now. The published estimates for how much oil is clearing the Strait of Hormuz right now run from about 2.8 million barrels per day to 16 million, no I am not kidding. Same waterway and a range wide enough to build an entire oil thesis on in either direction and ride 5 supertankers through it at the same time. One camp has the strait functionally shut and the market sleepwalking toward a Q4 reckoning. The other has the barrels moving fine, the shadow fleet doing its job and anyone still short supply fighting the last war. Both camps have satellite imagery, both have spreadsheets and both are, in a narrow and irritating sense, correct in some way and I am here to make sense of it all for you guys. I have been collecting this data for weeks and the thing that kept nagging at me is that almost nobody in the argument is measuring the same thing (as per the 9Mbpd estimate above). Before anyone can tell you whether the market is 5 million barrels short or 8 million short, someone has to define what "through Hormuz" means. Once you do that, the numbers finally start making at least a bit of sense, but there is a metric load of data to go through. Crude loading inside the Persian Gulf at Basrah, Ras Tanura, Kharg or Mina al-Ahmadi and then passing the chokepoint on the way out is one number, the narrowest and the hardest to produce. Total liquids leaving the wider Gulf region by sea is a second and larger number, because it includes barrels loaded at Fujairah on the Gulf of Oman side and at Omani berths, neither of which touches the strait at all since the oil arrived overland by pipeline.

OIL

None of that goes anywhere near Iran, yet it gets described as "Hormuz flows" routinely by people who really should know better and then there is whatever a government official is quoting on television that day, which is a category of its own and I will come back to it. Total regional exports including routes that skip the Gulf entirely is a third and larger number again, folding in (from what I can tell) Saudi crude leaving Yanbu on the Red Sea, Iraqi crude arriving at Ceyhan on the Turkish Mediterranean coast, and Iraqi fuel oil that reached Syria on the back of a truck.

Sort the published estimates by which of those questions they are answering and the noise drops considerably, which is nice for a change because god knows there is a lot of noise on this subject. Correct me if I'm wrong here, but I think the entire public argument has been people shouting different answers to different questions and assuming the other side is lying, with Twitter/X being a prime example of that and being the cause of a fair few headaches over the past month. USN minus Oman minus Fujairah equals Strait of Hormuz. That equation comes from @TankerTrackers, who published it openly along with the reasoning behind it and I want to give them proper credit because they have been transparent about their arithmetic while most of the field waves their hands and gets into a shouting contest, so good on them. They count the daily average of what departs the US Navy blockade line in the Gulf of Oman, subtract what they know loaded out of Oman, subtract what loaded at Fujairah, and treat the remainder as traffic that must have come through the strait itself.

Their most recent published breakdown, at least at the time I am writing this bookwork, had 6.7 million barrels per day of crude outbound past the blockade line over the prior 7 full days, with Fujairah contributing 1.6 million and Oman contributing 0.925 million, leaving 4.175 million clearing Hormuz. A few days later they put the strait portion at around 4.2 million, and their most recent 7-day crude average came in at 3.8 million. Over the effective life of the memorandum with Iran, which they argue functioned for about 25 days rather than the nominal 60, they measured 9.8 million barrels per day.

They combine AIS with hundreds of daily satellite images and explicitly include visually identified tankers running dark, including vessels that reactivate their transponders days after departing the blockade line. Asked directly whether cargoes could be missed entirely, they said the chances of being missed by either AIS or imagery are low but never zero and that all they can do is their best, which I think is a fair answer.

OIL

Asked whether ship-to-ship transfers get double counted, they explained that the transfers happen in the Gulf of Oman west of the blockade line and that they count the receiving vessel on its way out. Asked about a tanker running dark for 2 weeks in both directions, the answer was that they cast a wide net. That is roughly the correct posture for anyone doing this work, at least in my opinion, since it produces a floor with a stated error direction rather than a point estimate dressed up as truth. I could have included a few more Q&A sessions, but that about covers the most important part of it. During the memorandum period the United States allowed about 74 million barrels of Iranian crude to leave the region, a figure of theirs I have not seen picked up anywhere else and one that does interesting things to the official cumulative totals I will get to shortly. A separate tracker publishing a daily transit table built from vessel counts and cargo sizes logged 703.9 million barrels of west-to-east liquids transits from the start of March through the third week of August. Across 174 days that works out to 4.04 million barrels per day. The most recent full week in that same table came in at 19.6 million barrels, or 2.8 million per day, with 1 day recording zero.

2 independent methods, 1 leaning heavily on imagery and 1 on vessel-by-vessel transit logging, landing at roughly 4 million barrels per day for the strait itself. That convergence did more to move my own estimate than anything a bank or all the mixed messaging from the various governments involved published. The 2.8 million figure for the middle of the month is lower than the late-month TankerTrackers number, which is what you would expect from a bad week for transits combined with a method that cannot see what it cannot see. Of 695 total outbound liquids transits since the start of March, 185 involved Iran-linked vessels, or 27% by count (if I got any of these data points wrong, let me know, I am writing this during one of those late night grinds). Iranian crude exports are supposedly at zero under the blockade, so the reasonable reading is that a large share of non-Iranian Gulf crude is now moving on shadow-fleet tonnage. The grey fleet has become the delivery mechanism for everybody's barrels, Iranian or otherwise. Compliant majors are largely locked out of a waterway that sanctioned tankers cross regularly, a strange inversion with consequences for freight rates that again, I will pick up later. So why does the official number look so different? CENTCOM published a graphic claiming 750 million barrels of US military-supported oil exports since Operation Project Freedom began in early May, set against zero barrels of Iranian exports. Run the arithmetic. The operation had been going 116 days at that point, and 750 million divided by 116 is 6.47 million barrels per day. Meaningful, sure, but the same military told a US news outlet about a week earlier that it had helped move more than 660 million barrels since early May.

OIL

That implies roughly 90 million barrels in 8 days, or something north of 11 million per day, in a week when every commercial tracker on the planet that I could find was reporting between 3 and 8 million. Earlier statements implied around 500 million barrels at the end of July, which gives about 7.6 million per day for the 3 weeks that followed. As you can imagine, the run rates implied by successive official statements are not consistent with each other, let alone with the imagery. Then there is the 16 million barrel night, which sounds like it comes straight from an Arabian oil story. 3 US officials briefed a reporter that roughly 40 tankers transited the southern Omani channel in a single night carrying about 16 million barrels out. Commercial vessel-tracking data for that night showed zero confirmed west-to-east crossings. Iranian officials, of all people, publicly disputed the figure and said they had permitted 3 Iraqi tankers and blocked everything else. That is pretty telling if you ask me.

TankerTrackers, coming to the rescue once again, offered the most plausible reconciliation, which is that officials may be describing barrels per convoy movement rather than per day, and that flotilla convoys move a limited number of tankers at a time because air cover is finite. Their line was that officials like to pick cherries when it suits them (color me surprised) and that it is the daily averages over a longer duration that count, with a laden egress one night followed by a ballast ingress the next. Generate one good evening and you have a headline. The Energy Secretary has separately claimed a 9 million barrel per day 7-day average and, at one point, that flows had returned above pre-war levels, on the basis that the government holds hard data where the trackers only have estimates. In the same week one data provider counted 84 total vessel transits and another counted 6 commodity vessels on a single day. Got to be honest here, I have no way to audit classified overhead collection and I am not going to pretend otherwise as I wouldn't really be doing anyone a favor. What I can say is that the public arithmetic does not close and when the arithmetic does not close I default to the people who publish their method and my own research as well.

Goldman Sachs put total Persian Gulf exports of crude and products at 15 to 16 million barrels per day, framed as about two-thirds of a pre-conflict baseline of 22 to 24 million and well above the March trough of 5 to 6 million. They also said Hormuz transits specifically are likely close to the 8 to 10 million range US officials have been citing and they credited the recovery to a rise in dark crossings by specialized shippers and to ship-to-ship transfers, adding that higher dark flows could moderate the upside to crude prices even if the disruption runs long.

OIL

Coming down to 15 to 16 million is total regional exports of crude and products from the whole Gulf area and the 22 to 24 million pre-conflict comparison is a regional number too. The strait itself carried about 20 to 21 million barrels per day of total petroleum liquids in the years before the war on US government figures, of which crude and condensate was roughly 15 million. Kpler has used 15 million as its 2025 Hormuz baseline, which fits the crude-and-condensate reading rather than total liquids. So Goldman is answering the third question, TankerTrackers is answering the first and second, and the daily transit table is answering the first with a transponder-and-imagery floor. These were never the same number folks, can you imagine how much time it took to reconcile this all?

Which side of that gap should you believe? Rather than pick one, I tried to drag myself together with coffee and hope to build the regional crude balance from individual producers using the most recent published figure I could find for each. Saudi Arabia's combined Persian Gulf and Red Sea crude exports averaged about 3.23 million barrels per day across the first 23 days of the month, on track for the lowest monthly level since the war began and under the previous low of 3.65 million in May. Iraq put its exports across all routes at about 2 million per day through the first half of the month, roughly 26 million barrels in total, which its oil ministry described as the best daily rate since the crisis started. Fujairah contributes roughly 1.6 million on the TankerTrackers count. Kuwait and Qatar, which exported a combined 2 million before the war, are back to about 70% of that on trader estimates, so call it 1.4 million. Omani berths add another 0.925 million. Iran contributes nothing at all, at least according to this data.

That stacks to roughly 9.2 million barrels per day of crude leaving the region by every route combined. Cross-check it from the other direction, because why not. Take the 6.7 million past the blockade line, add Saudi Red Sea loadings out of Yanbu, add Ceyhan, and you land at something like 9.5 million. 2 builds, same neighborhood, not going to get much closer than this for me. Getting from 9.2 to 15 or 16 requires 5.5 to 6.5 million barrels per day of products, NGLs and LPG stacked on top. Before the war, products and NGLs through the strait ran roughly 5 to 6 million per day, so on paper it is possible. The trouble is that Middle East export refineries have largely not restarted. Global refinery throughput in July was 80.9 million barrels per day, nearly 5 million below the prior year, with the IEA specifically flagging continued Middle East product export disruption as a driver. Asking the region's product exports to run at full pre-war rates while its refineries are down is not something I can make work.

OIL

Oh and if you are wondering about oil and gas infrastructure damage, I already wrote an extensive piece on that a few months ago, so please go through that to get a better idea of where we are at and I may be looking to update that piece over the coming month. Moving on though to my own read, and I hold it loosely I will admit, is that total regional liquids exports are running somewhere around 11 to 13 million barrels per day rather than 15 to 16, with crude physically through the strait at 4 to 6 million and the upper end of that reflecting dark tonnage nobody has full visibility on and I do mean nobody, I tried to look. If that is right, the deficit against pre-war is closer to 7 or 8 million barrels per day than to the 5 or 6 the more relaxed desks are carrying.

Goldman built its 15 to 16 million estimate on an explicit under-measurement analysis using 2 methods and preliminary flow prints from every commercial provider do carry a real upward revision bias as confirmations land over the following fortnight or so. One tracker documented a case where 2 very large crude carriers that had exited 5 days earlier reappeared on AIS near Sri Lanka, revising a 7-day average up by more than a million barrels in a single stroke, and expects another million or so of dark transits off Sri Lanka and in the Malacca Strait to be added to the current week eventually. If that pattern is systematic rather than occasional, my bottom-up build is too low and the market is right to be calm, at least for now. From what I can tell the truth is somewhere in the overlap.

Saudi Arabia's East-West pipeline with a nameplate of 5 million barrels per day across 2 lines raised to a claimed 7 million. It reached that 7 million figure in March, the first time in the pipeline's history it has been asked to perform its emergency function at full scale, after surging to about 4.4 million by the middle of that month. Roughly 1.9 million of the throughput feeds west-coast refineries rather than export loadings. Yanbu's loading terminals are estimated to handle something like 3 to 4 million barrels per day under wartime conditions, with more than 30 tankers queuing at peak and waiting about 5 days to load. Yanbu exports averaged around 4.1 million per day in June against roughly 973,000 in the same period a year earlier, and 92% of Saudi seaborne crude left through that single Red Sea terminal complex that month if I got my data right.

OIL

Concentrating your entire export system in one port looks like competence right up until somebody points a missile at it and forced you to go around, but surely that wouldn't happen right? Houthi threats against Saudi-linked shipping have since pushed volumes partly back toward the Gulf, Ras Tanura took its first tankers since early March around the end of June, and combined Saudi exports across both coasts have fallen to that 3.23 million figure. Riyadh can bypass one chokepoint. Bypassing Hormuz and Bab al-Mandab simultaneously is a different problem and nobody built infrastructure for it sadly. SUMED, which moves Red Sea crude overland to the Mediterranean and skips Bab al-Mandab entirely, has run at about 1.9 million barrels per day recently and is close to its operational limit. Not much headroom left there either folks. The Abu Dhabi Crude Oil Pipeline runs about 400 kilometers from Habshan to Fujairah on the Gulf of Oman, outside the strait completely, with a nameplate of 1.5 million barrels per day and a reported operating ceiling nearer 1.8. It has run at high utilization since the war started and Fujairah loadings are around 1.6 million per day, which is precisely why UAE exports held up while Iraqi, Kuwaiti and Qatari volumes went to zero in the early months. A parallel West-East line targeting a doubling of bypass capacity to above 3 million is reportedly around half complete with an early-2027 target, though the more sober assessment puts it at mid-2027 because Fujairah port itself needs expanding first. Geography is a hell of an asset and Abu Dhabi is the only Gulf producer that has it.

Iraq produced around 4 million barrels per day before the war and exported roughly 3.6 million, about 3.4 million of it through Basrah, which makes it the country this conflict has hurt most and the one with the fewest options. Seaborne exports collapsed by more than 97% in May to around 96,000 barrels per day. Production fell to about 1.9 million in June against roughly 4.2 million pre-war as reservoirs filled up and fields were shut in. The recovery has been real and partial, with all-route exports back to about 2 million per day. The Kirkuk-Ceyhan pipeline has 1.6 million barrels per day of nameplate capacity and has been carrying a fraction of it, running around 220,000 through the early part of the year. Baghdad approved plans to more than triple that to 770,000 and a new one-year agreement with Ankara signed at the start of the month guarantees a minimum transport rate of 750,000 barrels per day. A guaranteed minimum transport rate in a commercial agreement is a contractual commitment and nothing more in my opinion. Iraqi state marketing put July Ceyhan volumes at about 7 million barrels for the month, which is roughly 226,000 per day, and whether the line is physically running at 750,000 at present is something I could not verify from any source, my apologies.

OIL

Iraq has been trucking crude and fuel oil overland into Syria since the spring under an arrangement with SOMO that includes a separate fuel oil component, with reports of 500 to 700 tanker trucks crossing daily by early summer and the head of the Syrian state oil company putting it at around 1,000 trucks per day by June. The Syrian side quoted about 220 barrels per truck, which gives roughly 220,000 barrels per day. Bloomberg's reporting on the same corridor used about 20 tons, or 135 barrels, per truck on a 4 to 6 day drive to ports in Syria and Jordan, which gives about 135,000. Those 2 figures differ by a factor of nearly 2, so a cross-check does help. Syria exported 720,000 tons of fuel oil in June, becoming the Middle East's largest shipper of the product with 28% of volumes, and traders estimated trucked flows exceeded 600,000 tons of fuel oil the following month. Converting roughly 600,000 tons gives something on the order of 125,000 to 130,000 barrels per day, which lands much closer to the lower estimate.

My working number for the trucked route is 130,000 to 200,000 barrels per day, weighted toward the bottom of that and predominantly fuel oil rather than crude. For scale, about 300,000 barrels can be loaded onto a single shuttle vessel that then transfers to a larger tanker holding around 700,000, so one medium ship movement replaces roughly 2,000 truck crossings. No wonder we use ships... An Iraqi government advisor floated (pardon the pun) the idea that a fleet of 20,000 tanker trucks could move 3 million barrels per day, which is arithmetically true and also operationally absurd. The trucks are a rounding error against a 20 million barrel per day chokepoint and all that jazz.

Baghdad is planning a Basrah to Haditha line at around 2.5 million barrels per day feeding Baniyas, Ceyhan and Aqaba and reviving the long-idled Kirkuk-Baniyas route. Iraq has announced versions of these projects before and not built them. On a 3 to 5 year horizon they would redraw the geopolitics of the whole region, but on a 2026 horizon they change frankly nothing. Alternative routes had increased to 7.2 million barrels per day from less than 4 million before the war on the IEA's early-spring assessment, against strait loadings of around 3.8 million at the time and more than 20 million in February. Call it 3 to 3.5 million barrels per day of real incremental relief against a hole of roughly 13 million. The bypass network exists, it was built for exactly this and it covers about a quarter of the problem, which is better than nothing.

OIL

Iranian crude loadings collapsed from 893,000 barrels per day in July to 156,000 through the middle of August, and CENTCOM has reported zero Iranian exports since the blockade was reimposed. Independent maritime intelligence corroborates it, noting that 16 very large crude carriers holding roughly 32 million barrels of Iranian crude reached the Malacca Strait after departing the Gulf of Oman between the middle of July and the start of August, with none departing since. TankerTrackers, asked directly what share of current flows is Iranian, answered with one word and that word was, you guessed it, zero.

Iran was around 10% of the region's non-LPG and non-LNG liquids exports before the war, and that share is simply gone from the market if those numbers are to be believed, accounting for roughly a third of the total deficit by one practitioner estimate I saw. Whatever you think about the politics, shutting the strait has cost Iran its own export revenue completely while its neighbors clawed back to somewhere between 50% and 75% of normal depending on what numbers you use. The strategic asset has been spent, and spending it has accelerated a bypass build-out that will permanently reduce its value. That is the sort of outcome that looks like a win for about 6 weeks.

But what about the stuff that relatively fewer people are arguing over? LNG exports through the strait are down roughly 95% year over year on UN trade analysis, with Qatari exports specifically down about 96% and just 18 cargoes shipped over a reporting period against 509 in the same period a year earlier, at an estimated cost of around \$24 billion in lost gas revenue. QatarEnergy declared force majeure in early March and has now extended cargo cancellations to Pakistani buyers into October, with Bangladeshi supply extended beyond September.

A gas consultancy tracking this closely found roughly 2.1 million tons of liquefaction capacity online at Ras Laffan with around 10 ballast carriers anchored nearby holding more than 1 million tons of loading capacity, which makes the bottleneck transit rather than production. Stacked on top of that is physical damage, with drone attacks on Ras Laffan and Mesaieed reportedly removing close to 17% of Qatar's export capability and specialized LNG equipment does not get replaced in a quarter, as I extensively covered in my Gulf O&G infrastructure damage report. Multi-year repair timelines are the working assumption and QatarEnergy has been notifying buyers of allocations broadly around 50% of annual contracted quantities, against a full-year export forecast of roughly half pre-conflict capacity.

OIL

Qatar had roughly 20% of global LNG trade before this. At the risk of stating the obvious here, there is no pipeline bypass for LNG, no Yanbu equivalent, no Fujairah equivalent, no truck workaround. Gas either goes out through the strait on a purpose-built carrier or it does not go out properly at all. European benchmarks jumped 35% in a single day early in the crisis and UK gas hit levels not seen in a year and the more recent reporting has LNG-linked prices back at their highest since early 2023 even while oil flows improve. That divergence between an oil market which has partially healed and a gas market which structurally cannot is the most underappreciated feature of this whole episode and as a European it is a painful show to watch as the renewable energy virtue signaling continues on our continent.

So how has the world been running 7 or 8 million barrels per day short with Brent at \$90 rather than \$150 or \$200 or whatever triple digit number the bulls want to hang on it? Well, 2 things have filled the gap and both of them are finite. Global observed stocks were 8.2 billion barrels in January, the highest since early 2021, which was a lucky starting point nobody planned. IEA member countries then agreed an unprecedented 400 million barrel coordinated emergency release. Stock draws averaged 3.8 million barrels per day across the first months of the conflict, split roughly 2.4 million crude and 1.4 million products. OECD government inventories fell 163 million barrels to their lowest level since December 1990. The US Strategic Petroleum Reserve went from about 415 million barrels in late February to 289.7 million in the most recent weekly print, after a 172 million barrel authorized release, and that is the lowest reading since November 1982. Yeah you read that right, 1982.

The SPR was on its way up in 1982, still being filled for the first time, so the comparison understates how far this has gone. The current level represents about 40% of authorized capacity and it is the post-fill low, full stop. Whatever cushion absorbed the first 6 months of this is largely spent and no, Venezuelan crude is not going to help refill it anytime soon, though US commercial crude has confused the picture with a couple of surprising weekly builds, including the largest since early 2023. Global oil demand is now forecast to contract by 420,000 barrels per day year over year to 104 million, which is 1.3 million below the pre-war forecast, with second-quarter demand alone down 2.45 million year over year. Petrochemicals and aviation took the worst of it as you can imagine and Japan and Korea each lost around 290,000 barrels per day of demand in April as import-dependent naphtha crackers cut runs.

OIL

One bank has Chinese crude import requirements running up to 1 million barrels per day below prior expectations, with Chinese gasoline demand destruction around 180,000 barrels per day of which they expect 70% never to return. One well-connected practitioner put China's total purchase shortfall at 3 to 4 million barrels per day below pre-war, which if accurate would close most of the supply gap on its own, though I could not corroborate a number that large anywhere in the published agency data and would treat it as an upper bound and not some gospel that shuts down any oil bull case and frankly I wouldn't do that for a lot of these numbers as things are vague and uncertain all across this sector and that is putting it mildly. So the balance is being held together by drained reserves and permanently destroyed demand. Neither of those is a bullish resolution. Both are the market borrowing from the future to keep the present looking calm.

Crude physically clearing the Strait of Hormuz is running around 4 to 6 million barrels per day, total crude out of the region by every exit is around 9 to 10 million, and total liquids including products, NGLs and pipeline routes is around 11 to 13 million. That last figure is below Goldman's 15 to 16 and above what the pure transponder counts imply. Against a pre-war regional baseline of 22 to 24 million, the export shortfall is roughly 9 to 12 million barrels per day, partially offset on the balance side by demand that has been torn down.

The shadow logistics chain got built and that is what has pushed every estimate upward over the past 2 months, but that is not the strait reopening in the tradition sense. Everybody is now running the ADNOC playbook, with spot tenders, crude shuttled into Fujairah for offshore ship-to-ship transfers, receiving vessels departing past the blockade line, transponders off in one direction and back on somewhere near Sri Lanka. Both SOMO and Aramco are running the same routine and Chinese buyers have been taking sizable clips of Basrah and Arab crude via tender, loading outside the strait. Freight on the benchmark Middle East to China route has been ripping, which reflects real tanker demand created by a physically longer and more complicated supply chain rather than barrels being parked in floating storage. That extra tonne-mile cost is being absorbed by the system and showing up in freight rather than in the flat price, at least for now.

OIL

OECD government stocks at 1990 lows, the SPR at post-fill lows, the coordinated release largely spent, and a shortfall against normal Hormuz flows over the memorandum window alone of roughly 550 million barrels of crude that was bridged with inventory rather than production. Bills like that come due in Q4 when the buffers thin. Add a gas market with no bypass, Qatari trains needing years of repair and a northern hemisphere winter arriving that better not be a harsh one or we are all screwed here, all into a structurally short LNG market, and you have the bull case,.

Demand destruction has been larger than modeled and a good chunk of it is sticky. China has absorbed a big share of the shortfall by simply, well, not buying. The dark fleet is bigger and better organized than anyone can measure, which means every preliminary print understates the true flow and the revisions all run one way. Bypass infrastructure gets meaningfully better through 2027, even if that is still a year out, and the market has consistently overestimated the physical shortfall at every stage of this conflict, which is why every rally above \$110 has been sold. That is the bear case and it's just as convincing when you look at it, because on the evidence of the last 6 months it has been the more profitable one to hold.

Where I come out is that the physical situation is worse than the price implies I would say and the buffers that made that gap tolerable are close to exhausted, so the asymmetry from here favors upside surprises over downside ones, but this is a market where the flow data itself is contested, where the government publishing the most bullish transit numbers has an obvious interest in lower prices and where a single corridor agreement between Tehran and Muscat could take 10% off Brent in a session. So what would change my mind? Whether the Iran-Oman corridor talks turn into an actual mechanism, for a start. Iran's military claimed a revenue-sharing agreement on the strait's waters and revenues, while the 2 foreign ministries only described an interim framework and made no mention of fees. Oman has told the maritime regulator it opposes transit fees outright. Washington opposes any Iranian-controlled charging regime and has reportedly told mediators it will not revive the June memorandum. Tehran has also tied reopening to the Lebanon and Gaza conflicts and to lifting the naval blockade first. Plenty of ways for that to fail and one way for it to succeed spectacularly.

OIL

Then we got a few more questions to answer before we can even get close to a conclusion of this messy story. Whether Qatari LNG restarts, and at what allocation, is the second. Every extension of force majeure is another month of gas-market tightening that the oil price tells you nothing about. Whether Ceyhan flows at 750,000 barrels per day or stays near 220,000 is the third, a half-million barrel per day swing entirely outside Iranian reach. Whether Yanbu can hold above 3 million barrels per day with Houthi threats against Saudi-linked shipping is the fourth. The Petroline is fine, for now luckily, but the berths and the Red Sea are the open question and whether the Q4 inventory bill arrives on schedule is the last. Onshore stocks have been drawing for months while oil on water has swung around, US commercial crude has posted those surprising builds, and the signal is mixed right now. If draws resume at anything like the earlier pace with the SPR where it is, the market will find out quickly how much of the current calm was borrowed as that cushion is looking a lot thinner now, like a partially deflated bouncy castle that is still standing, but looking a lot less safe than before.

Before we conclude this, I will note a bit of uncertainty on that Kirkuk-Ceyhan pipeline, since 750,000 is a contractual minimum and the most recent observed monthly figure implies about 226,000. The split between crude and refined products in the TankerTrackers blockade-line figure is another uncertain figure, since their published numbers are described as crude and I do not have a reliable products series to set alongside them, though one independent tracker separately noted around 400,000 barrels of product on a given day. Actual Yanbu crude export loadings for the most recent weeks are also uncertain (do you see the same pattern here that I do? Things are uncertain and data is hard to come by, but man I tried), and the 3.23 million figure for total Saudi exports comes from a market commentary account citing tracking data rather than from a tracking firm directly, so treat it as indicative. The 3 to 4 million barrel per day estimate for China's reduced purchases is another number that is resting on a single well-informed practitioner with nothing in the published data to support a number that size. Oh and the per-truck loading on the Syria route is the final one, which is why my range for that corridor is as wide as it is. I also have no way to audit the US government's transit figures, which remain the largest single source of disagreement in this entire dataset. I have laid out why their published arithmetic does not reconcile with itself. That is not the same as proving them wrong though, as I am just trying to square everything by putting a million different data points together. That about covers everything and I hope it proves to be informative.

PRECIOUS METALS

While gold and silver are starting their sideways consolidation around the \$4400 and mid \$60's mark respectively (which would be a great place for both to be at for some more time as we build a base before the next move, given what these prices do for the margins of many producers), this week I want to run you all through a different tailwind for gold that I have discussed before, but is worth bringing up again now as it provides some good context as to what could be a right tail event for the metal going forward. That is beyond central bank buying and it coming back into the fold as the world's neutral reserve asset of choice of course. The US government holds 261,498,926 fine troy ounces of gold, roughly 8,133 metric tons and carries every single one of those ounces of it on the books at a mere \$42.2222. I tried calling them to offer a premium at a nice round \$50 to buy it, but they didn't pick up the phone sadly. Why is it so low? Congress fixed that number back in 1973, when the Bretton Woods corpse was still twitching, and nobody has touched it since. Total book value comes to about \$11 billion. At a market price near \$4,500 the same metal marks at about \$1.18 trillion, with a big old T. Treasury has issued gold certificates to the Federal Reserve against that stock and the Fed carries them as an asset at the statutory price. Raise the statutory price toward market, Treasury issues certificates for the difference, the Fed credits the Treasury General Account with the gain and Washington ends up with more than \$1.1 trillion of spendable cash without selling an ounce or auctioning a single bond.

Luke Gromen, who I greatly respect for his takes on gold, rightfully noted that every \$1,000 on the gold price adds roughly \$260 billion of that capacity. Every \$4,000 adds about \$1 trillion. Gold has put on better than 10% in the past month on what the sell side has settled on calling the debasement trade (which it is of course) and each dollar of that move widens the fiscal opening available to a Treasury Secretary who has spent the summer trying to talk the long end down. Correct me if I'm wrong here, but that is a policy incentive pointing in precisely one direction and that is higher gold prices.

So what does Treasury do with \$1.1 trillion it never had to borrow? Officials suggested recently that the department could tap the General Account, currently near \$950 billion, to fund the expanded buyback program. Buybacks of off-the-run long paper were doubled from \$2 billion to at least \$4 billion per operation after the 30-year touched 5.33%, a 19-year high. Dealers had assumed bill issuance would pay for it. The TGA is a checking account though and something has to refill it. New issuance does the job and defeats the purpose. Revaluation does the job and does not, guess which one they may prefer?

PRECIOUS METALS

Go back a few decades to another inflationary environment and a rising gold price was Volcker's enemy because it read as the thermometer on dollar confidence and a central banker fighting 13% inflation cannot have the market pricing his currency's downfall in public. That logic may have held while gold was an embarrassment on the sovereign balance sheet, but it stops holding the moment gold becomes collateral behind \$1 trillion of fiscal headroom. The way I see it, a Treasury funding buybacks out of revaluation gains wants the gold price higher and wants it higher before pulling the trigger rather than after. You think this is a wild idea that doesn't have any precedent? Think again, because Roosevelt ran this trade in 1934, marking gold from \$20.67 to \$35 and booking a \$2.8 billion paper profit, \$2 billion of which capitalized the Exchange Stabilization Fund. If action needs to be taken to ensure fiscal stability, they will take said action and that will be very bullish for gold.

The \$42.2222 figure is set by statute and the orthodox reading is that Congress has to move it first. A minority argument says 31 USC 5117 (hope I got that one right) already lets Treasury issue additional certificates against the same gold without touching the statutory price and there is a House bill floating around that names gold certificate revaluation as a funding source for a Bitcoin reserve, of all things. If I recall correctly Bessent said flatly sometime last year that Treasury was not revaluing the gold, sure, but he has also said he intends to monetize the asset side of the balance sheet and he has since spent television airtime reminding viewers that America's stockpile carries a market value above \$1 trillion. From what I can tell those two positions do not coexist indefinitely folks.

Revaluation recognizes a market price on metal the government already owns, so no new wealth appears and \$1.1 trillion covers under 3% of \$40 trillion in debt. It funds without issuing and cash spent out of the TGA arrives in the banking system as reserves. Base money expands, but the already ridiculously high debt stock does not and the bond market gets to decide whether that reads as cash management or monetization with better manners, but it will take note, you can be sure of that. Call it a gimmick if you like, or whatever else you want to name it, but a government that needs a higher gold price to generate fiscal room is still a completely different actor from one that treats gold as evidence of its own failure and central banks buying close to 1,000 metric tons a year have been front-running gold's return as the world's neutral reserve asset for a while now and that is not stopping. If anything, it is gather momentum. If Washington marks its own gold to market, it will be a massive catalyst heard, and also felt, around the world.

COPPER

While we have seen the price of copper grind up and up and up for months now, copper has failed at roughly \$6.70 three separate times since the spring and has spent 4 months grinding inside a \$6.20 to \$6.70 band, with every low higher than the one before it. Roughly \$4.50 a year ago, then \$4.85, then \$5.35 in the spring flush, then \$6.15 midsummer. That is what accumulation looks like when the physical market is arguing with the macro and winning on points as we just see higher prices upon higher prices.

The US imported 225,094 metric tons of refined copper and alloy in July, the largest month in records going back to 1990 and up 78% sequentially, with roughly 46% out of Chile and close to a quarter from the DRC. Comex stocks have built for 53 straight sessions to a record 693,630 tons, and the full American hoard including private storage is probably north of 1 million tons. All of it because Washington still has not ruled on whether refined cathode gets tariffed, having blown past its own deadline months ago. An entire hemisphere of metal relocated on a maybe.

Codelco's own output fell 11% to 564,000 tons in the first half on El Teniente restrictions, softer Chuquicamata volumes and weaker Ministro Hales grades, and guidance of 1.33 to 1.36 million tons is now described as difficult to achieve, which in state-miner language means gone. Pre-tax profit still rose more than 4x to \$1.97 billion on a realized 653 cents against cash costs of 232 cents. Global mine output fell 1.1% in the first half, the majors covering 66% of world supply were down 3.5%, and Chile printed its weakest second quarter in at least 19 years. Add the sulfuric acid squeeze on South American leach operations, a DRC concentrate ban in its third month, Gresik offline and treatment charges at or below zero.

So why has \$6.70 held? Speculative net length on Comex ran near 912,000 tons against roughly 675,000 tons of registered stock, which is a lot of paper chasing a finite pile, and a firmer dollar was enough to shake some of it loose. Chinese rod plants below 60% utilization say high prices are rationing demand at the margin, and that is real. Meaningful, sure, but 12 months at prices well above incentive levels produced less copper, not more. Ceilings tested three times in 4 months rarely survive the fourth if the overall macro environment is also positive enough to keep the rally going of course.

CODEx URANIUM

Cameco, NYSE: CCJ

There was no news to report on

Denison Mines, NYSE: DNN - Cost basis: \$0.35 - Percentage allocated: 80%

There was no news to report on

Energy Fuels, NYSE: UUUU - Cost basis: \$1.47 - Percentage allocated: 90%

Energy Fuels closed the Australian Strategic Materials acquisition late last month, roughly \$299 million in stock, after 98% of ASM holders voted it through and the Federal Court signed off. ASM has been delisted from the ASX, and Energy Fuels picked up its own ASX listing under EF2 along the way, which is also great for your man Goat. So what came through the door? I have covered this extensively before at the time the deal was announced, but for the people in the back, we got the Korean Metals Plant at Ochang, running 1,300 tonnes per year of neodymium-iron-boron alloy capacity today, with an expansion underway to lift that to 3,600 tonnes and commissioning targeted as early as the end of this year. Energy Fuels frames the expanded number as enough alloy for more than 1 million EVs annually, which is a capacity framing rather than a demand forecast, and I would treat it that way. The plant also brings commercial metallization for NdPr and developing capability for dysprosium and terbium. Dubbo comes along in the package as well, though nobody is buying this stock for Dubbo.

White Mesa of course produces oxides. A magnet needs oxide converted to metal, metal converted to alloy, then alloy formed into the magnet. Energy Fuels had been building out the oxide end for years and had precisely nothing downstream of it, which meant every tonne of separated NdPr had to find a buyer who owned the next step, and most of those buyers are in China. Ochang closes that gap in one move, and pairs with the pending VAC acquisition, which supplies the magnet itself. Ross Bhappu called it a major milestone toward a fully integrated Western mine-to-magnet chain and for once the corporate language is roughly accurate. Meaningful, sure, but the plant is in South Korea. Energy Fuels has said it intends to build an American Metals Plant using the Ochang technology, subject to market conditions, which is the phrasing companies use when they mean "if someone else pays for it." From what I can tell, that American facility is an aspiration with no capital attached, and anyone modeling domestic mine-to-magnet on U.S. soil should hold that assumption loosely for now, even if I do believe more government support is on the way.

CODEx URANIUM

Energy Fuels, NYSE: UUUU - Cost basis: \$1.47 - Percentage allocated: 90%

Now to Donald, where Astron has secured Commonwealth approval to export rare earth element concentrate from the project to the United States. Energy Fuels holds the right to purchase 100% of Donald's concentrate output, which then goes to White Mesa for separation into oxides. Astron flags the heavy content as the selling point, 0.4% terbium oxide and 2.7% dysprosium oxide as a share of total rare earth oxides.

Those percentages may look small until you run them against what the deposit actually delivers. Phase 1 is designed for roughly 7,000 to 8,000 tonnes of concentrate per year, containing around 4,700 tonnes of total rare earth oxides, of which approximately 1,000 tonnes is NdPr oxide, 92 tonnes dysprosium oxide and 16 tonnes terbium oxide. Energy Fuels has said the Phase 1 heavies alone would cover something like a third of U.S. dysprosium demand and a quarter of terbium demand. Phase 2 roughly doubles the concentrate volume to 13,000 to 14,000 tonnes. Energy Fuels can invest AUS\$183 million plus \$17.5 million in shares to earn up to 49% of the joint venture, and the arrangement gives it decades of feedstock without owning a mine outright, which I like.

Total project funding sits somewhere near AUS\$520 million against a targeted 50/50 debt-to-equity split, and the only committed piece so far is a conditional, non-binding letter of support from Export Finance Australia for up to AUS\$80 million. That was almost a year ago. Final investment decision has been guided to the third quarter of this year, which, allow me to elaborate, ends in a few weeks, so I am watching this closely. The bear case on Energy Fuels has always been that it collects assets faster than it converts them into cash flow. Fair enough in some sense, but I would refer you to my interview with Curtis that I uploaded last month, which tackled exactly this concern. Having said all that, the White Mesa expansion adding 20 tonnes of terbium oxide and 120 tonnes of dysprosium oxide capacity by end-2027 now has an approved export pathway feeding it and an owned alloy plant behind it, and that is three links of a four-link chain assembled while the rest of the West is still writing white papers about doing it. If they can make it all the way to the finish line, a western based mine-to-magnet company is worth a lot in this current world with geopolitical uncertainty and fragile supply chains, especially around REEs and related product.

CODEx URANIUM

Bannerman Energy, ASX: BMN - Cost basis: AUD\$0.79 - Percentage allocated: 100%

There was no news to report on.

Global Atomic, TSE: GLO - Cost basis: C\$1.86 - Allocated: 100%

There was arguably some news to report on regarding the political uncertainty in Niger, but there is no clear information available to make for a good discussion, so let's see what the coming weeks bring in terms of updates on that front.

Cosa Resources, TSX: COSA - Cost basis: C\$0.31 - Percentage allocated: 80%

There was no news to report on.

enCore Energy - NYSE: EU - Cost basis: C\$2.81 - Percentage allocated: 100%

There was no news to report on

CODEx URANIUM

Devex Resources - ASX: DEV - Cost basis: \$0.159 - Percentage allocated: 65%

DevEx dropped an exploration update on Nabarlek recently, roughly a month into the dry-season campaign with three priority targets drilled, applications lodged to bring another five to drill-ready status, and five more prospects advanced through mapping and surface geochemistry. No assays yet though, which are of course the proverbial 'needle movers' if they are good.

The result that caught my eye came from the KP Prospect, where drilling hit strongly altered basement and a chlorite-hematite fault breccia. Bear with me, because I am not a seasoned geologist, but I did pick up some knowledge along the way. In unconformity-related systems like Nabarlek, uranium travels in oxidized basinal brines as uranyl complexes and drops out of solution when it meets something reducing, typically graphitic basement or ferrous iron along a reactivated structure. Hematite tells you oxidized fluid moved through. Chlorite tells you that fluid chewed on the basement rock and altered it hydrothermally. Brecciation tells you the structure stayed open long enough to keep channeling that fluid rather than sealing shut after one pulse. Get all three in the same hole and you have confirmed the geology plumbing worked. That is the precondition for a deposit at Nabarlek and it is the thing an explorer cannot manufacture with a good geologist and a nice map. I know, lots of geologist talk from an amateur geologist, but in plain English it is pretty promising even if it isn't clear mineralization yet.

The honest caveat is that alteration halos are typically an order of magnitude larger than the orebodies inside them, sometimes far more. Plenty of holes across the Alligator Rivers province have hit beautiful chlorite-hematite breccia and precisely zero uranium from what I have been able to find. Alteration lets you vector, but it does not pay dividends. Nabarlek itself produced roughly 24 million pounds at grades that made it one of the highest-grade mines ever operated, and DevEx now holds the largest contiguous land position in the province after absorbing Alligator Energy's tenure. From what I can tell, the geological case is sound and the ground is right, but the prize is a hole with grade in it. Everything before that is an explorer telling you the odds have improved, which they have, from very long to slightly less long.

CODEX OIL AND GAS

Valaris - NYSE: VAL - Cost basis: \$36.34 - Percentage allocated: 75%

There was no news to report on

Petrotal Corp - TSE: TAL - Cost basis: C\$0.52- Percentage allocated: 100%

There was no news to report on

CODEX PRECIOUS METALS

AbraSilver - CVE: ABRA - Cost basis: C\$0.33 - Percentage allocated: 50%

All things considered, Abra has held in there remarkably well for months now. As for recent news, the company issued a Limited Notice to Proceed to Worley late last week, starting the bridging engineering phase at Diablillos. Worley teams across Argentina, Canada and Colombia will handle engineering design, technical studies, procurement, cost estimating, scheduling, permitting support and camp planning, working under the COO and the recently appointed Project Director. Worley wrote the Definitive Feasibility Study, so this is continuity rather than a fresh learning curve, which at 4,000 meters in remote Salta counts for something. Part of the scope covers planning a site camp for both construction and operations, plus evaluating modular construction options, because hauling stick-built infrastructure up to that altitude is exactly as expensive as it sounds.

Small release, no numbers attached, everything stable. The way I see it, though, this is the step that converts a permitted, DFS-complete project into a costed execution plan, and the company is pointing at a final investment decision around the middle of next year with first production targeted for 2029. RIGI approval, provincial environmental sign-off and a DFS are already banked, and bridging engineering is what a company does when it intends to build, or at least get the project so far along that a major will come in. Both are viable and both are valuable with this project.

And the company also keeps getting more valuable with each set of passing drill results. The company put out first assays from Cerro Viejo late last week, 5 holes into a target 4 km north of Oculito. DDH 26-047 returned 32.0 meters of 0.29 g/t gold starting at 9 meters downhole, then 14.0 meters of 1.50 g/t gold from 54 meters, both in oxide. DDH 26-037 gave 27.0 meters of 0.58 g/t gold from 23 meters. Shallow, oxidized, and mineralized essentially from surface. DDH 26-043 hit 7.0 meters of 0.53% copper in sulphides below the oxide zone, and DDH 26-048 picked up similar style copper roughly 500 meters northeast, which suggests the porphyry interpreted to underlie the district is developed across a decent area rather than one hole's worth of luck. Phase VI now stands at roughly 12,000 meters across 54 holes since the start of the year, of which only about 1,000 meters have gone into Cerro Viejo. A third rig mobilizes later this month, Condoryacu follow-up starts shortly off a new drone magnetic survey, and a CSAMT survey is running across the Oculito and JAC trend. Grades here are nowhere near Oculito and no metallurgy exists yet, sure, but a company holding 366 Moz AgEq in reserves does not need Cerro Viejo to work, which is precisely why it is interesting.

CODEx PRECIOUS METALS

Rio2 - CVE: RIO - Cost basis: C\$0.55- Percentage allocated: 50%

Rio2 received regulatory approval for the Modified Environmental Impact Study at Condestable a couple of weeks back, closing out a 14-month process with Peruvian regulators, local communities and other stakeholders. Andrew called it a significant regulatory milestone, and for once that sort of phrasing undersells rather than oversells what came through I believe. Permitted throughput goes to 10,000 tonnes per day from the current 8,400, roughly a 19% lift. Tailings Storage Facility #6 is approved as a dry-stack facility with initial capacity around 43 million tonnes and design headroom for staged expansion to 170 million tonnes. And the environmentally approved mine life extends by a further decade, which is massive because permitted mine life is what a lender discounts when sizing a facility against an underground copper operation in Peru.

The dry-stack piece deserves a moment. Peru has spent the last 15 years watching wet tailings storage become the single largest permitting and social-license obstacle in Latin American mining, and filtered dry-stack is the modern answer to it. Rio2 is already commissioning the tailings filtration plant on site, so the permit and the equipment are arriving together rather than the usual sequence where one waits 18 months on the other. Next steps are engineering studies on both the plant and the mine, currently running with third-party consultants, ahead of a final investment decision targeted for the second half of this year. Rio2 acquired Condestable at the end of January. Taking an asset from acquisition to expansion FID inside 12 months would be quick work by any standard, at least in my opinion. Some context for how much Rio2 needs this. Condestable delivered 9.3 million pounds of copper in Q2 plus byproduct gold and silver, and it has been carrying the company while Fenix Gold works through a difficult ramp-up. Extreme weather in the Atacama deferred roughly 5,000 ounces of Fenix production late in the quarter and management pulled full-year gold guidance rather than defend a number they could not control. Consolidated Q2 came in at 13,539 ounces of gold, 75,437 ounces of silver and 9.3 million pounds of copper, with \$105.3 million of revenue and \$46.8 million of net income, so the copper mine is doing the heavy lifting. The bear case writes itself as well of course as Fenix guidance is suspended, further commercial production is still ahead of them in Q4, and a permit to expand is not the same as capital to expand. Fine, sure, but a company whose gold ramp is wobbling just a bit, just got permission to grow its cash-generating asset by 19% and extend its life by 10 years, and it did so ahead of schedule, showing how strong this management team is.

CODEX PRECIOUS METALS

Outcrop Silver - CVE: OCG - Cost basis: C\$0.17 - Percentage allocated: 75%

Outcrop reported new assays from Santa Ana and Las Maras a few days back and I would personally argue that the interesting hole is one they drilled at a spot with nothing visible on surface. Santa Ana behaves as a shear zone with pinch-and-swell geometry, meaning the structure fattens and thins along strike, and the swells consistently carry the better grades and widths. Outcrop had already mapped shoots spaced roughly 300 to 400 meters apart along that structure. So they picked a swell about that distance from the San Juan shoot, drilled it blind, and DH648 came back with 9.16 meters grading 127 g/t silver and 0.70 g/t gold, 188 g/t AgEq, at 5.28 meters estimated true width, including 0.40 meters of 1,930 g/t silver and 8.65 g/t gold. That is Shoot 7, the fourth identified along the Santa Ana structure, and it has no surface expression whatsoever.

Predicting a blind orebody off a spacing model and then hitting it is a different class of result than extending a known vein, at least in my opinion. It converts geometry into a targeting tool across the remaining strike. The rest of the release backs it up. DH652 returned 0.30 meters of 5,196 g/t silver and 8.51 g/t gold, 5,947 g/t AgEq, inside a hanging-wall splay that was not in the geological model at all. DH650 gave 6.76 meters at 186 g/t AgEq. At Las Maras, DH637 delivered 2.86 meters of 1,760 g/t silver and 5.14 g/t gold, 2,214 g/t AgEq, with two internal intervals above 5,000 g/t AgEq, the widest high-grade interval reported at that target so far. DH624 added 0.30 meters of 4,355 g/t AgEq in another splay.

Carlos Torres flagged a pretty important part of this whole story as well. Drilling has traced Santa Ana over 1.7 kilometers of strike but only 350 meters down dip, and whether the same 300 to 400 meter periodicity repeats vertically has never been tested. If it does, the model applies in two dimensions instead of one. Honest about the misses, too. DH640, the deepest hole at Las Maras, came back narrower with lower silver, and DH653 was weakly mineralized. Management is folding that into the interpretation rather than burying it, which counts for something in a sector that usually reports the good half. All of this feeds the Santa Ana resource update guided to be here very soon, against a maiden estimate of 24.2 Moz AgEq indicated and 13.5 Moz inferred.

CODEX PRECIOUS METALS

Integra Resources - NYSE: ITRG - Cost basis: \$0.79 - Percentage allocated: 75%

There was no news to report on

Andean PM - CVE: APM - Cost basis: C\$0.64 - Percentage allocated: 90%

There was no news to report on

Mining Americas - CVE: MAI - Cost basis: C\$3.50- Percentage allocated: 100%

Talk about great news for one of our largest holdings, let alone gold holdings.

SEMARNAT approved the change of land use permit and the environmental impact assessment at Cerro de Oro, and those two are massive. So, are we ready to go? Well, Mining Americas (still need to get used to calling it that instead of just Minera) still owes the ratification payments, still needs ancillary approvals covering explosives, water and municipal licenses, and still has to finish detailed engineering. Surface rights with the Melchor Ocampo municipality and the San Pedro de Ocampo ejido were locked up 4 years ago, so that landmine is already defused. Management guides to a construction decision as early as next year, and allowing 12 months to build a 20,000 ton per day open pit and heap leach, first gold arrives in 2029 on my numbers.

Anyone modeling 2028 is being generous, although I would love to be proven wrong. The old study ran 59 million tonnes at 0.37 g/t through the pads at 68% recovery, 477,000 ounces over 8.2 years, averaging 58,400 a year with 65,000 in the first 4. Strip ratio of 0.3 to 1, which for an open pit is close to free. Pre-production capital of \$28 million, sustaining of \$14.7 million, AISC of \$873 an ounce, NPV5% of \$150 million and a 111% IRR at \$1,600 gold. Every cost input there rests on a 2022 basis and none survive contact with current prices. The peso was modeled at 20 to the dollar and trades near 17, pushing peso-denominated lines up roughly 18% in dollar terms, because of course it does.

Mexico lifted the special mining duty from 7.5% to 8.5% and doubled the extraordinary precious metals duty to 1% of gross revenue. Copperstone went from a \$36 million capital estimate at PEA level to \$58 million at pre-feasibility, and applying that rebasing here turns \$28 million into \$50 to \$60 million. Still cheap for what you get, but not as cheap as it was before. Rebuilding the cost side, I get AISC around \$1,200 to \$1,300 an ounce once you inflate the operating base, add the higher duty and credit back the 0.75% royalty repurchased from Auramet for \$4.5 million in shares.

CODEX PRECIOUS METALS

Mining Americas - CVE: MAI - Cost basis: C\$3.50- Percentage allocated: 100%

Call it \$1,250 for consistency sake. No, it's not great to see all these costs go up, but that's the name of the game and I am not here to go all wild gold bull on the company and just bump up the numbers of the old study based on new gold prices. Still though, things look very good, cost increase or no cost increase. At \$4,500 gold that is a \$3,250 margin across 477,000 ounces, or \$1.55 billion of life-of-mine cash flow before tax and before the build. Corporate tax at 30%, the 8.5% duty and profit sharing take you near 40% all in, leaving roughly \$875 million after capital. Free cash flow of \$115 million a year, closer to \$127 million in the first 4, and payback in about 5 months of production. Discounted at 5% (I know, maybe a bit aggressive for a Mexico based mine, but I think they get this over the line) I land near \$650 million, at \$5,500 roughly \$850 million and \$148 million a year, at \$3,500 around \$450 million and \$80 million a year. Those are my numbers, not the company's, I want to make that clear. A project clearing a 111% IRR at \$1,600 gold does not turn marginal at \$3,500 like some others (looking at you, Florida Canyon). It just turns slightly less absurd.

So what does \$4,500 gold buy you on a deposit this thin? 0.37 g/t at 68% recovery leaves 0.25 grams recovered per tonne, about \$36 of revenue against roughly \$10 of cost. The same rock generated \$13 at \$1,600 gold, where the whole thing lived or died on whether the column tests held. Miss recovery by 7 points now and you surrender 10% of revenue on a 72% margin, which you absorb without blinking. With all 790,000 ounces still classified inferred, you want as much of that room as you can get, but I have heard from some mining folks I respect that there is a lot of potential upside with this asset in terms of resource upgrades, so that would be a nice surprise if that is indeed the case.

The resource shell was drawn at \$1,700 gold on \$8.80 per tonne of cost and 70% recovery, which implies a cut-off near 0.23 g/t. Rebase that cost and run it at \$4,500 and the cut-off drops an incredible amount near 0.12 g/t, so the pit widens even before anyone drills a hole. As I noted above, there is real upside to the existing mine plan and it doesn't just come in the form of a different cut-off grade. Mineralization is open below roughly 130 meters and the deeper sulfides were never counted. Drilling and more metallurgy are planned, and a resource update, an upgrade into indicated and a pre-feasibility with real reserves all have to land before a board that now borrows from Scotiabank and National Bank signs off. That does not just happen tomorrow, but with such a good asset, it also won't take 3 years.

CODEX PRECIOUS METALS

Mining Americas - CVE: MAI - Cost basis: C\$3.50- Percentage allocated: 100%

Against a CAD\$720 and change million market cap, as I am writing this, on 110 million shares, roughly \$509 million, it's a pretty massive development. Copperstone alone carries a \$537 million NPV at \$4,500 gold, is under construction, and targets 46,000 ounces a year at \$1,314 AISC from mid-2027. Stack Gold Rock and Cerro de Oro on top and the parts run past 3 times the whole. Group output could climb from roughly 35,000 ounces at Pan this year toward 195,000 with all 4 running, though Pan depletes along the way, so treat that as a ceiling unless we see Pan pull off some incredible resource upgrade. So why is nobody paying up? Some doubt in the management team, a wall of warrants in the C\$7 area (that will likely provide a good source of funding for the capex requirements of the project pipeline, but will still prove to be something we need to chew through regardless) and general execution risk. I am planning to release a new model based on this news for the company soon, so stay tuned for that.

The stock added nearly CAD\$100 million on the announcement, on a day gold rallied 2% anyway, so against an unrisken \$650 million the market has paid for maybe 10% of it. Meaningful, sure, but that is the market saying it will believe Cerro de Oro when the pads are lined and after Santana I cannot fault anyone for being a bit skeptical at this point. What changed is the shape of the thing though as Mining Americas now owns 3 permitted, low-capital projects it can build one after another out of Pan and Copperstone cash flow without printing a share and the last in the queue throws off \$115 million a year at spot. Very different animal from the company that spent 5 years trying to make a single Sonoran heap leach work and there is a lot of potential upside here in my view.

CODEx 'OTHER'

Westwater Resources - NYSE: WWR - Cost basis: \$0.69 - Percentage allocated: 70%

There was in fact a lot of news to report on following the EXIM \$25 million loan approval and I believe that this was sufficiently major news that it warrants its own analysis piece on the valuation and future of the company. I have been gathering the needed information and data on Westwater and I am planning to upload the analysis report over the coming few weeks. My apologies for the delay on this front.

Aldebaran Resources - CVE: ALDE - Cost basis: C\$0.79 - Percentage allocated 80%

Aldebaran completed the Centauri Minerals spin-out, which is something that you all may have noticed in your portfolios. Every Aldebaran share was exchanged for one new Aldebaran share plus shares in Centauri and the new Aldebaran paper trades under the same symbols with a fresh CUSIP and ISIN. If you held ALDE, you now hold two things, but what did Centauri take with it? A portfolio of roughly 43,000 hectares across Salta, Catamarca and Jujuy, with the Rio Grande gold-copper project in Salta as the most advanced piece. Rio Grande carries an NI 43-101 resource that was updated and refiled earlier this year, showing a meaningful increase over the prior estimate. Sam Leung runs it, and from what I can tell most of the things that Aldebaran owned that was not Altar is now over there.

The logic from Aldebaran's side is sound I think. Altar is a 22 billion pound copper resource with a PEA outlining a 48-year mine life and a \$2 billion after-tax NPV8, and a project of that scale does not need a portfolio of early-stage ground cluttering the story when management is trying to move it through a pre-feasibility study and fending off the sort of interest that prompts a board to adopt a rights plan against creeping takeovers. Rio Grande has a defined, independently estimated resource rather than a soil anomaly and a dream, Argentina's RIGI regime has made large capital projects there financeable in a way they were not five years ago, and the team originating this came out of the same house that built Altar from an option agreement into one of the largest undeveloped copper deposits in junior hands. That is a better starting position than most newly listed explorers get. My own read is that Centauri is a hold for anyone with patience and a small position size and a sell for anyone who came to Aldebaran purely for copper scale. Argentina exploration is a decade-long game with dilution built in. The reason to own Aldebaran is still Altar, and the updated resource incorporating over 40,000 meters of new drilling should land sometime over the coming weeks.

CODEx 'OTHER'

Comstock - NYSE: LODE - Cost basis: \$2.36 - Percentage allocated: 100%

Over the past few months, Comstock may have been the company that I have spent the most time on and that is in part because it is a significantly overweight position, but also in part because it is such an incredibly interesting story with some huge potential. No I am not here to once again bore you all with solar panel recycling economics and free-cashflow multiple spreadsheet, but I did want to spend some time on their land package which, in my opinion at least, is becoming ever more valuable right now as the company gets it ready for a potential sale over the coming ~6+ months.

For the people in the back, Comstock now owns 47.63% of Sierra Springs Opportunity Fund and has signaled it wants to push that to a little over 50% I believe, which would hand it outright control of the vehicle, even though they have already stated that everyone involved is highly supportive of the future plans for SSOF. Sierra Springs recently closed on over 150 parcels representing more than 2,000 acres and nearly 2,000 acre-feet of water rights, bringing total holdings to over 2,200 acres of developable land, excluding the 258 adjoining acres Comstock owns outright. Those 258 break down as 98 industrial and 160 commercial, both centrally located just south of the Silver Springs Regional Airport and they carry their own senior water rights. Consolidating the position cost roughly \$20 million across two quarters, which for a company carrying a market cap near \$270 million is a serious allocation of scarce cash, but also incredibly value accretive if they get a sale over the line.

Comstock also guaranteed a surety arrangement with Great Basin Gas Transmission starting at \$22 million and stepping up to \$54 million by the end of 2027 (but hopefully a sale will have been conducted by then, if not that potentially turns into a bear case that I am not going to sweep under the carpet here, as it is something I am potentially worried about), securing power equivalent to 250 to 300 megawatts. The underlying agreement covers 50,000 dekatherms per day and Corrado has indicated a follow-on opportunity could bring the total to at least 1.2 gigawatts, though that one has not come to formal bid and again I hope they don't get greedy with that as no sale would mean they are on the hook for large payments for that power, but that is not my base case scenario as of right now, just something to watch out for. So why does firm gas reprice the dirt instead of simply improving it? Land that has not been through power infrastructure studies has been trading around \$2,500 to \$10,000 an acre, while power-ready sites in Texas have gone for roughly \$800,000 an acre.

CODEx 'OTHER'

Comstock - NYSE: LODE - Cost basis: \$2.36 - Percentage allocated: 100%

In markets with committed utility load the median reaches \$2.8 million an acre in Northern Virginia, against roughly \$28,000 an acre for assemblages exceeding 1,000 acres without it. A 100x spread on physically similar ground and no, that is not a typo, that is simply a sign of the times and a pretty incredible one at that. The variable is deliverable megawatts (and water and support of course, but more on that later) on a timeline a buyer can underwrite, if you will.

Corrado has put comparable transactions for the powered land thesis in the \$400 million to \$600 million range, which could prove to be conservative, but let's run with that for now and hope to be positive surprised in the future. Take the midpoint, apply the 47.63%, and roughly \$240 million is attributable to Comstock against a market cap near \$250 million at the time I am writing this. From what I can tell, that leaves the first industry-scale solar panel recycling facility now online, the \$45 million mining asset sale to Mackay with \$20 million of cash arriving near term, and whatever Bioleum eventually becomes, all in for about \$10 million. Meaningful and pretty ridiculous if you think about it, sure, but that only computes if you assume the land transaction never happens. Local opposition blocked or delayed at least 75 data center projects in the US in Q1, representing approximately \$130 billion, roughly matching the entire prior year in three months, while active opposition groups more than doubled from 396 to 833 across 49 states. Wild if you ask me, but it may work in our favor when it comes to this holding.

More than 300 data-center-related bills were introduced in statehouses in the first 6 weeks and Maine's legislature passed a moratorium on facilities drawing 20 megawatts or more before the governor vetoed it. Site selection has become a political exercise, and scarcity is migrating toward the jurisdictions willing to say yes, we do want those datacenters in our backyard. Lyon County has been accommodating and the county manager has publicly described working hard to create a business-friendly environment. Commissioners are nonetheless drafting a data center ordinance after residents raised water and pollution concerns, with Corrado himself speaking at that workshop in favor of standards-based rules and flexibility on water where a facility uses little to none. Frictionless is overstating it of course, but measured against Maryland, Ohio, Texas and a bunch of others, though, this is about as supportive a jurisdiction as exists right now, and nearly 2,000 acre-feet of water rights in a state where water is the first question at every hearing is an asset in its own right.

CODEx 'OTHER'

Comstock - NYSE: LODE - Cost basis: \$2.36 - Percentage allocated: 100%

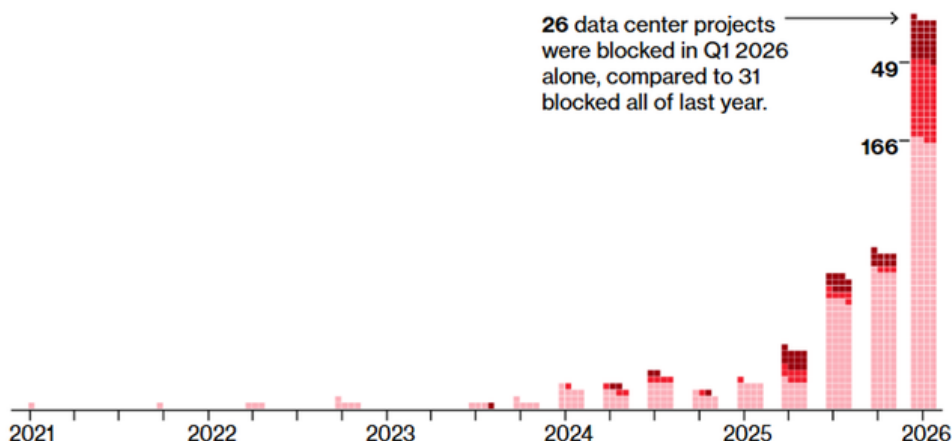
Tract closed on roughly 1,060 acres beside Silver Springs following a rezoning and development agreement with Lyon County, a site they say supports up to 1.6 gigawatts with an initial 700 megawatts under utility study and their stated reasoning was adjacency to a planned transmission line, long-haul fiber routes, a major gas transmission line and existing wet utility infrastructure. Every one of those attributes describes the Sierra Springs package too, which is flat, contiguous and immediately proximate to Highway 50, State Route 439, the airport and the Tahoe Reno Industrial Center where Tesla, Switch, Google, Microsoft and over a hundred others already operate. One data center land analyst I heard about recently ranked this corridor a top 3 location in the entire country, which sounded aggressive, but also very probable given all the things we just discussed.

Several people whose judgment I trust have walked this ground in person and came back more constructive than when they arrived. A couple of stringent analysts even own the stock purely for the real estate and ascribe zero interest to the recycling business, which is a striking stance on a company whose entire public identity is solar panel recycling. When the people who have physically stood on an asset are the most bullish on it, that tends to carry weight with me. Fair note though, nothing is signed, the buyer pool at the top end is small and counterparties may require 90 to 150 days of due diligence, so definitive news probably slips and I don't see a sale being lateralized before year-end, but we may see a preliminary framework for a sale in 2027. Fine, as long as they are not on the hook for massive power payments. The common objection is that the land is just a story, but when it could match or vastly exceed the value of the current market cap, we have to take note.

Local Opposition Ramps Up Efforts to Block New Data Centers

Number of US data center projects facing new opposition, by quarter

■ Blocked ■ Delayed ■ Facing some opposition



Note: Data available through Q1 2026
Source: Data Center Watch (10a Labs)

CODEX 'OTHER'

LibertyStream - CVE: LIB - Cost basis: \$0.45 - Percentage allocated: 100%

LibertyStream reported 3 months of consistent battery-grade lithium carbonate production at Freedom Launchpad late last month, which is great to hear just as the share price is showing signs of life once again. Every full certificate of analysis since the refining system was reconfigured for battery grade in the spring has come back at or above 99.7% Li_2CO_3 , against the 99.5% minimum buyers specify, 9 consecutive certificates assayed by NSL, alongside multiple completed 24-hour campaigns.

Cumulative output stands at roughly 3 tonnes across battery-grade, technical-grade and customer-specific material, including 1 tonne shipped under the initial industrial trial order. Samples have gone to 4 customer organizations for evaluation since early summer, and material has been produced to specifications supplied by 3 more. So the chemistry holds and the automation holds, if you will. Where does that leave them? Freedom Launchpad serves as a demonstration and training platform. Freedom 1 carries the commercial case, the first 1,000 tonne-per-annum installation under the Select Water Solutions agreement at that same Howard County site, targeted for commissioning by year end. The area has been cleared and leveled, concrete work is being prepped, and commercial-scale equipment is expected across late Q3 and early Q4. Which is like... right now.

Going from 3 tonnes produced in campaigns to 1,000 tonnes a year of continuous output is a step change of roughly 300 times and direct lithium extraction/production has a long graveyard of companies that made/produced lovely samples and never made tonnes, but from what I can tell, LibertyStream's answer is that the process architecture does not change for scale-up, with larger carousels holding additional extraction modules on the same Gen 6 template that already runs a 20-minute cycle against the 60 minutes Gen 5 needed, built on 21 months of field operations and over 400,000 barrels of processed brine. Plausible engineering, at least in my opinion, though unproven at throughput. The coming months bring equipment delivery, mechanical completion, commissioning, the public S-1 filing, a listing (that could be combined with a raise), and possibly further offtake out of that sample pipeline, which management sizes above 10,000 tonnes per annum of anticipated American demand through 2029. Plenty to trip over. At somewhere near \$120 million of market value on the last figure I saw, the market is paying for a demonstration plant and a promise that part of that first plant delivers and not much more than that.

CODEx 'OTHER'

LibertyStream - CVE: LIB - Cost basis: \$0.45 - Percentage allocated: 100%

Now, with that all being well underway, time to discuss the securing of financing and on that front we got some very positive news last week. The company signed a non-binding (that part is doing a lot of heavy lifting in not just this sentence, but also in the reasoning as to why we have not seen price target upgrades from analysts nor what should have probably been a ~50% up day for the stock upon the announcement, but I digress) term sheet for a financing framework of up to \$95 million, anchored by an initial \$45 million delayed-draw senior secured construction facility covering Freedom 1 and Freedom 2. Interest runs at 12.25%, maturity is 5 years from execution of definitive agreements, and draws are tied to independently certified construction milestones. The balance of the framework covers future sites, each evaluated and approved individually. Layered on top are fees, minimum-return protections, and common share purchase warrants equal to up to 10% in respect of the initial \$45 million, exercisable for 7 years. Is 12.25% expensive? Depends what you hold it against. SOFR is around 3.66% and US prime is 6.75%, so we are talking roughly SOFR plus what? 860 basis points? Which is rich against mainstream private credit for a borrower with cash flow. LibertyStream issued 12% secured senior promissory notes about a year ago, so measured against its own borrowing history they have swapped short paper for a 5-year milestone-drawn facility at essentially the same coupon. From what I can tell, that is a decent outcome for a pre-revenue company building a first-of-a-kind plant. No matter how enthusiastic we as investors are, it can't be denied that it's still a new-ish tech that is not without risks.

Fees are undisclosed. Minimum-return protections are undisclosed and that phrasing usually points to a floor on the lender's return, which would make early repayment expensive. The warrants carry no fixed number, no disclosed strike and a 7-year term against the 24-month warrants attached to the summer placement. Longer duration means considerably more option value handed across, whatever the eventual count turns out to be. My working assumption until the definitive documents arrive is an all-in cost in the mid-to-high teens. Defensible for the risk, the way I see it, and nowhere near the 12.25% headline. Now, who is on the other side of this? Endurance Finance Partners is the rebranded Firsttime Credit, the credit arm of an Israeli venture platform, relaunched under the new name a couple of months before this term sheet. The business launched on a model of not raising capital upfront, leading transactions alongside banks, institutional investors and private backers while acting as the technology and credit evaluator. I know how this all sounds, so I went and did a bit of digging.

CODEx 'OTHER'

LibertyStream - CVE: LIB - Cost basis: \$0.45 - Percentage allocated: 100%

LibertyStream's release calls Endurance the arranger, which fits that description neatly. The public track record runs to a single transaction, a \$60 million facility to a maritime emissions company, co-provided with Deutsche Bank Private Credit & Infrastructure. Whether Endurance now has committed capital sitting behind it I cannot verify and that gap decides how much a signed term sheet is telling you here. The diligence that closes this deal may well belong to whoever ends up holding the paper. It seems legit, which is good, but still. Funding also depends on the company "completing an investment commitment in such amount as may be agreed." My read is that LibertyStream has to put money in alongside the debt, unquantified, arriving in the same window as a confidentially submitted S-1 and a Nasdaq listing targeted for later this year. The non-dilutive framing does not survive contact with the document sadly and I expect further dilution before the year is over to get all the goals over the line, but what I will add is that there are likely a lot of catalysts arriving over the coming months that could materially push up the share price and cushion the blow of any dilution we may see.

Does the money work? Freedom 1 and Freedom 2 are 2,000 tonnes per annum combined and one could argue this could even cover part of Freedom 3. Battery-grade lithium carbonate has been running near \$20,000 per tonne and management guides all-in operating costs of roughly \$6,200 per tonne at commercial scale, royalties to Select included. Call it \$13,800 of margin, or \$27.6 million at nameplate against \$5.5 million of annual interest on the initial facility, which covers itself several times over and all that jazz.

Only 600 tonnes are contracted though, delivered quarterly starting next year. That produces \$8.3 million of margin against \$5.5 million of interest, before roughly \$15 million of corporate overhead. Meaningful, sure, but thin enough that a ramp delay and a lithium drawdown arriving together would sting a fair bit in those early days of just having one facility running. Push lithium to \$12,000 and contracted volume alone stops covering the interest bill, but that is a pretty big bear case from where we are now to be fair. Every tonne above 600 is uncontracted for now, and this framework only scales if those tonnes find homes of course, but I am hearing there is plenty of interest and I hope they can lock in sales at elevated lithium prices to really get that healthy margin on the books. Definitive agreements are targeted inside 45 days, with an explicit clause letting the parties move that date.

CODEx 'OTHER'

LibertyStream - CVE: LIB - Cost basis: \$0.45 - Percentage allocated: 100%

Whether the security is ring-fenced to the projects or an all-assets pledge that swallows other parts, what the warrant count settles at and whether prepayment terms permit a cheaper refinancing after an uplisting are all unresolved for now and remember, it's non-binding for now. All in all though, still positive to see them get some options over the line and I am eagerly awaiting to see it hopefully close so we can move on to the next catalyst.

ASP Isotopes - Nasdaq: ASPI - Cost basis: \$3.84 - Percentage allocated: 100%

ASP Isotopes began commissioning the liquid helium plant at Virginia Gas a couple of weeks back, with first commercial shipments guided before this month is out. Let's hope they actually make that deadline for a change, but I am not holding my breath. Phase 1 nameplate is somewhere between 58 and 70 mcf per day of liquid helium depending on which release you read, alongside roughly 2,500 gigajoules per day of LNG. The single priced offtake is a 5-year take-or-pay with an unnamed Asian industrial gases group at a fixed price above \$600 per mcf, covering about 15% of Phase 1 helium volume. Around 75% of Phase 1 LNG is contracted.

70 mcf per day at \$600 works out to roughly \$15 million of annual helium revenue at full nameplate, and management guides combined Phase 1 helium and LNG to approximately \$27 million annualized. Set that against \$333 million of cash at the end of last year and a stated EBITDA target above \$300 million for 2031, and Phase 1 is a rounding error for now. Phase 2 carries the real economics at roughly 900 mcf per day and over \$360 million of annual revenue at nameplate, on a 44-month build that has not started yet.

Still though, the macro could hardly be more supportive. ASPI reckons roughly 50% of global helium supply is offline, Qatar alone accounts for more than 25% of liquid helium output and Ras Laffan has taken drone and missile damage. Virginia Gas holds some of the richest helium concentrations ever measured, Phase 1 drilling finished 4 months early and flow rates came in up to 16 times earlier wells.

CODEx 'OTHER'

ASP Isotopes - Nasdaq: ASPI - Cost basis: \$3.84 - Percentage allocated: 100%

So why am I not doing cartwheels? Because the enrichment business, which is the reason this company exists in the portfolio in the first place, keeps missing its own dates. Silicon-28 was guided to first commercial shipment in Q2, then pushed to Q3, after 9 months of engineering modifications to valves and compressors. Only the first 18 stages have run at target enrichment, for a bit over 3 weeks, and those same fixes still have to be rolled through the remaining stages while 3 signed U.S. supply contracts wait. Ytterbium-176 shipped a first sample over a year ago, then a Pretoria power surge destroyed one of 3 lasers and halted production for months. The plant now enriches in 3-hour campaigns roughly every 2 days pending delivery of a continuous processing vessel that would allow about 3 months of uninterrupted running. At a targeted \$20,000 per gram, that vessel separates samples from revenue. Carbon-14 was guided to mid-year and has slipped to 2H alongside everything else.

Management attributes the delays to equipment from former OEM suppliers rather than the ASP technology itself. Possibly true. The calendar does not care whose compressors failed, because it failed and together with it failed yet another management promise. \$27 million of helium and LNG revenue is a consolation prize, and a company valued on 2031 enrichment economics does not get to substitute one for the other. If Silicon-28 and Ytterbium-176 are not shipping commercially before the year closes, ASPI is in trouble, helium or no helium.

Merlin Labs - NASDAQ: MRLN - Cost basis \$6.05 - Percentage allocated: 100%

As my friend Uzo rightfully noted, this is a physical AI pure play and calling it the Waymo of the skies, which I found to be a funny reference and honestly a pretty good one as well. Right with him as he noted that this has 50-100x potential upside, but also 100% downside if it doesn't work over the coming 3-5 years and as Sam in the Discord community chat stated, this should be sized in a way that if it ends up being a 0, that it shouldn't materially affect your life, but if it's a 50-100x you can buy yourself a nice car. It remains a volatile pre-revenue post-SPAC AI play that has a lot of risks attached to it, but if they do deliver the proverbial goods over the coming years, we are talking about a potential giant in the making here.

CODEx 'OTHER'

Merlin Labs - NASDAQ: MRLN - Cost basis \$6.05 - Percentage allocated: 100%

Now for some news and I know, given the share price performance, there is plenty of frustration and I completely get that, but still there was some good news for the company even if said price action didn't show it yet. The Civil Aviation Authority of New Zealand handed the company a Part 146 Aircraft Design Organization certificate a few days ago. Merlin engineers holding delegation authority can now approve certain aircraft design changes internally, within a scope CAANZ agrees project by project, rather than routing each one through an outside design organization. If you ask me, that is pretty significant.

Now for something else, which was less about news flow and more about experience, Shawarma Capital shared some incredible insights on the company recently, so credit where it belongs. The certificate does not attach to an aircraft or a program. It attaches to the organization. CAANZ examined how Merlin qualifies its engineers, how its design control system works, how it manages safety, how it keeps records and then accepted a formal exposition governing how design work gets done at all. Whatever gets certified next in that jurisdiction starts from a shorter runway than the last one did. Matt George put it as "Owning the capability to deliver design approval is how that curve bends," the curve being the cost of airframe number two against airframe number one. CTO Tim Burns made the more useful point, that no regulator delegates design authority to an organization it has not first taken apart and inspected. Shawarma Capital's line is that you can copy code but you cannot copy delegated design authority and the headstart Merlin has on the regulatory pathway and they compare it to a security clearance, where the paperwork is the product and a good moat can make or break a company.

Now count what the company holds in the country. A Part 135 air operator certificate from a couple of years back. A Part 145 maintenance certificate the year after. Part 146 design authority as of last week. Operate, maintain, approve, that is the complete set of organizational permissions you need to fly your own certified aircraft on revenue routes in New Zealand, assembled over roughly 4 years, one audit at a time. That is some solid process that should be paid attention to while everyone was, somewhat rightfully of course, staring at the C-130J. The stated target is commercial autonomous service in 2027 out of the Kerikeri test facility and from what I can tell this is the permission set that target was always going to require.

CODEx 'OTHER'

Merlin Labs - NASDAQ: MRLN - Cost basis \$6.05 - Percentage allocated: 100%

Shawarma Capital states the caveats themselves, so again credit where credit is due. A certificate is a capability and revenue is a different animal that has not arrived, but will if they deliver the goods. The scope covers certain design changes agreed per project, not blanket authority to sign whatever crosses the desk. Commercial operations are ahead of this company rather than behind it and the \$105 million IDIQ ceiling with SOCOM is a ceiling, not a booking, a distinction more people writing about this name should probably internalize and something that I explicitly noted in the analysis piece on the company as well. Which brings up the more valuable piece of work Shawarma published, because they went and flew the thing. Yes, you read that right.

Shawarma Capital took an invitation to Merlin's flight test operation at Quonset Point in Rhode Island, where the company relocated from Mojave in late 2024 to be closer to its Boston headquarters. Everything in this paragraph is from their write-up, so read it as theirs, but I just thought it was such an interesting piece that I wanted to add it to this week's company analysis. The demo pilot is a former military C-130 pilot, the same airframe at the center of the SOCOM program. Mission planning runs off a tablet, waypoints placed in 3 dimensions with altitude included, editable in flight, with the aircraft taking up a new route the moment it is authorized. Restricted airspace renders as a hard boundary the system will not enter and the servos and actuators themselves carry bounded authority, so everything the autonomy wants to do gets checked against deterministic constraints before it becomes motion. The clever part goes inside a cage the regulator can inspect and the cage is as much the product as the cleverness is as per Shawarma.

The detail carrying the most weight, at least in my opinion, is that the two components they watched work in the cabin are the same two that cleared SOI 3 earlier in the month. The Flight Control Computer and the Automated Communication System. The certification paperwork and the hardware describe the same machine, which is the check you fly to Rhode Island to run. They also report hearing Merlin Pilot work its own ATC frequency in a synthetic voice, with the controller on the other end treating it as any other airplane and a takeoff-to-touchdown flight with no manual pilot input at any point. Read that against the Oshkosh landing from about 6 weeks ago, hands off onto Runway 27 in front of the largest aviation crowd on the planet and the demo starts looking real good, all while the share price is treated like the company has nothing more than some fancy aviation data.

CODEx 'OTHER'

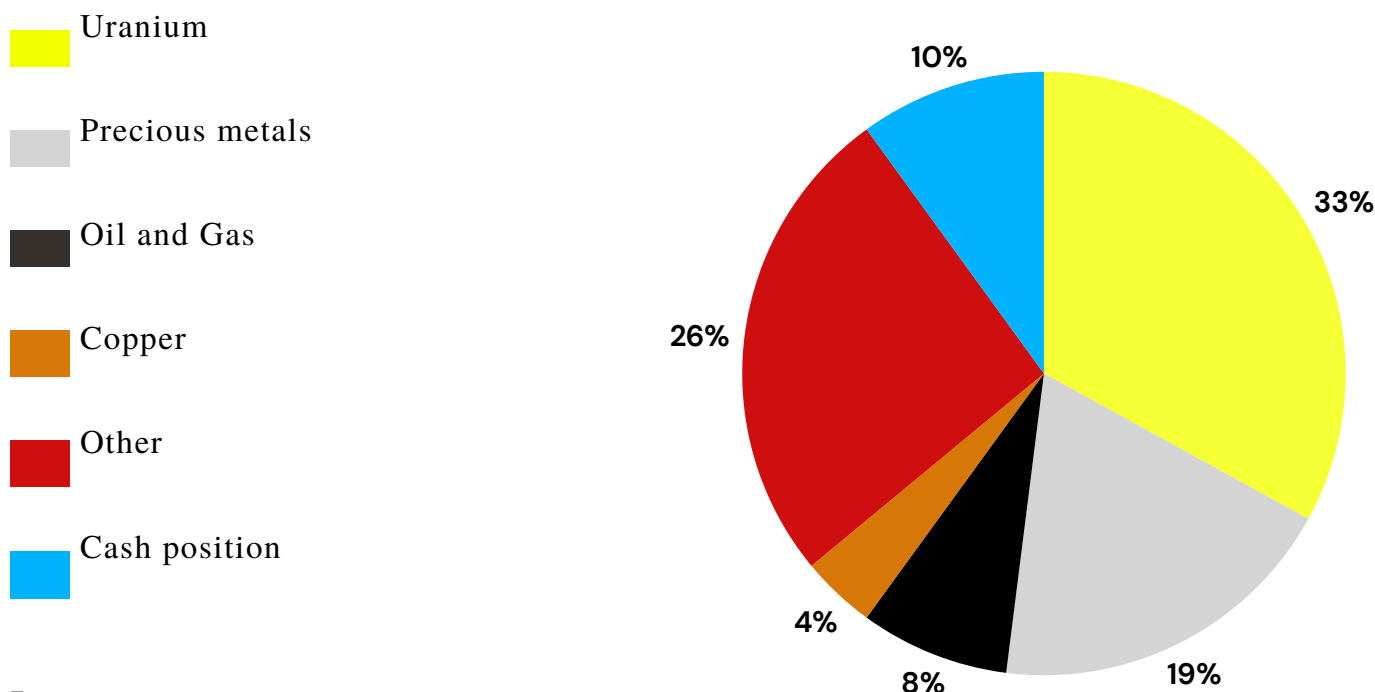
Merlin Labs - NASDAQ: MRLN - Cost basis \$6.05 - Percentage allocated: 100%

One structural observation from their piece is that none of Merlin's aircraft are fly-by-wire. A Caravan, a King Air, a C-130J are all cable-and-hydraulics machines designed decades before anyone imagined software in the loop, so integration means retrofitting servos and actuators, characterizing how that specific airframe behaves, then expanding the envelope. The world's cargo and military fleets are not fly-by-wire either. A company that can only automate new airplanes has a market measured in future deliveries, while a company that can retrofit the existing fleet has the thousands of airframes already flying, which is like the whole Condor thesis. Merlin points at roughly 2,400 global civil cargo aircraft excluding China and Russia per Airbus's cargo forecast, inside a commercial fleet north of 22,000 per IATA, with a non-binding MOU with IAI and a relationship with World Star Aviation as the current entry points. On the defense side the same logic runs through the GE Aerospace teaming from last autumn, aimed first at the KC-135 Center Console Refresh, where GE's flight management system footprint already covers more than 14,000 aircraft globally.

So what else has come across the wire? The Q2 print I walked you through last report, so I will only pull the forward-looking bits back out. Management guided the second half to \$4 million to \$6 million if the planned milestones land, declined to guide 2027 at all, and said the meaningful C-130J money arrives next year with the integration phase. They also flagged additional aircraft platforms to be announced in the near term. On the burn, the second half should come in flat to slightly better than the first on an adjusted EBITDA basis as one-time merger costs roll off and hiring growth slows, against \$183.9 million of cash and short-term investments and no debt. The C-130J has been post-CDR since early June, moving into integration and then ground testing and George was candid that the first integration takes substantial work and substantial capital before the lessons carry across to other large multi-engine turbine aircraft. As for the lockup, the mid-September unlock and the preferred's conversion-date reset fall on the same day, with roughly 44 million insider and PIPE-anchor shares coming free while the reset prices off a 20-trading-day VWAP with a \$5.00 floor. The preferred carries a 12% payment-in-kind dividend compounding semi-annually. Their float work is the other half of it, since the de-SPAC redeemed out something like 90% of the trust. Two overhangs, one date, roughly 3 weeks out, so let's see how it affects price action going forward. For now though, while it has been a very frustrating hold, that sentence I started with still holds true, as this is a pure example of either a complete zero or a massive winner.

CODEX PORTFOLIO ALLOCATION

Total portfolio allocation per sector



Important notes:

- 'Percentage allocated' points to how much room I am leaving to add to any particular position. This could be either due to the position already being de-risked, waiting on specific catalysts to materialize, not having gotten another buy opportunity yet etc
- Just because a position is still underweight or not fully positioned, does not mean I don't have conviction in the company, as per the point above. Please keep in mind that the allocations include more than just the portfolio holdings themselves, which can shift depending on buying and sales and I try to reflect my personal portfolio as well. It's not a perfect calculation, rather just an overview to reflect the allocation generally.

Priority for the coming months:

- I have noted this in the previous report as well, but with sentiment getting bad for commodity/material related equities, now is a good time to start putting some cash to use if you have a sizeable position. I have already put a third of said cash position to work in order to bolster several positions as per the associated update. More to follow.
- The PHYS reserves will be kept in place as I remain very bullish on gold.

That's a wrap for this week's newsletter. There is a lot of content on the way as I noted on the first page, with plenty of interviews, updates and company analysis pieces, so stay tuned for that, but for now I hope that you have a good and healthy rest of your day and weekend and also thanks again for the massive amount of support, cheers! ~Mart

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