Rory Johnston: All Things Oil

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Erik: Joining me now is Rory Johnston, founder and CEO of Commodity Context. Rory, it's great to have you back on the show. Our listeners frequently request your return on Twitter to discuss the Strategic Petroleum Reserve, which we'll delve into in today's interview. However, I'd like to begin by addressing the question of supply balance. Essentially, many industry experts, including Goldman Sachs and JP Morgan, anticipated a significant oil supply deficit in Q3 and Q4, possibly around 2 to 3 million barrels per day. This would have been a major development. Yet, it seems that this deficit did not materialize or started to do so in Q3 but has now faded. We're not observing substantial reductions in EIA inventory. What could explain this discrepancy, and why did experts expect a 3 million barrel per day imbalance? Is such an imbalance real? And if so, why isn't it reflected in the data?

Rory: Well, so this is the strange thing happening right now. So I run my own global oil demand and supply balances as well, just to kind of give myself a sanity check on these estimates put out by the big outlets, and my data is also showing very considerable deficits, at least since May and June and continuing right through to August and September, where the last data that I have is kind of tabulated for. So the balances, like the deficits, are there in the data. But I think it's pretty reasonable to say that no one looks at the market right now and says it's a market that looks like it's 3 million barrels a day in deficit. So I think there are probably a couple of places where you begin to see leakage away from that, call it paper deficit, to a real tangible deficit in the market. I'm sure we'll talk more about Iran later. But I think, you know, looking at a couple of easy examples, understated Iran production levels, I think are one area where you could probably get 200-300,000 barrels a day of extra balance on the supply side. I think China is a massive question right now, I think Chinese demand looks exceptionally strong, which definitely seems to be holding up the entire demand side of the world at the moment.

But on the other side, it does definitely seem to be running kind of orthogonal to the broader macroeconomic data and narrative we're seeing coming out of China, you know, vis-a-vis the economic slowdown, the issues in real estate, and kind of the traditional heavy industry sector. So I think all of that, all I'm trying to say here is that the supply-demand balances that we all love so much, as you're saying, are useful tools. But I think when you see realized outcomes in the market differ considerably from what you'd expect in the balances, you can get to look and say, okay, something's wrong. And you'll begin to start, you know, questioning and kind of troubleshooting essentially, like, what's wrong with the model? And I think, you have to kind of look through all those things.

And the questions around, you know, where are the biggest question marks? Well, you have things like that China demand and Iranian supply. You also have stuff around things like, for instance, that EIA data, which is a kind of a constant kind of talking point in the market, this is crude oil supply adjustment, which was very, very large, and particularly in the weekly data that one follows so closely. But what do I think the first thing that's important to note is that a positive, you know, crude oil supply adjustment in and of itself, people always talk about it as this bullish factor, but it is definitively a bearish factor. It means that the data you're seeing, the data we include in our models, is either understating supply or overstating demand. And I think most likely, and what the EIA is on investigation to found is a little bit of both. When they looked into this, the two major factors they identified as driving this crude oil supply adjustment higher were one, basically an understanding of blending demand or barrels of natural gas liquids, they were effectively being counted as crude, either in exports or in input into refineries. And the other thing is essentially an understatement.

So basically, you're overstating demand because this blending demand wasn't really demand, it was just kind of coming back into the supply side. So what they did was create these transfers to crude oil supply column in their balances. And this has reduced demand, in particular, by about six or 700,000 barrels a day, which I think is, again, these big chunks, notably go towards closing that balance and making this data make more sense, especially since these adjustments exploded more recently, so they're going to have a larger impact on more recent data. The other thing that we still know is that, that was only part of it and they've begun adjusting that in the monthly data, and they will begin trickling through to the weekly data in December. But then there's also this question of this understated production, they probably have kind of maybe 300,000 barrels a day more there, where that will begin to be upgraded and go forward as they're planning in March, I believe. So those are a couple of things that you start to whittle away at that balance, but I think the bizarre thing is that even all that together, it still looks like a reasonably tight market on paper. And it looks like a reasonably tight market, if you're looking at things like calendar spreads, not quite as tight as we were at the kind of peak of prices at the end of September, but still, you know, very backwardated. You know, Brent today is trading at like a buck and a quarter a barrel versus prompt versus the second month. WTI is a little bit weaker, but still in that kind of clearly backward area. And I think, inventories, like you were saying, total petroleum inventories aren't as hot as you would have expected. But crude inventories continue to decline or at least range trade sideways, when they should be building at this time of year in the US data. So it looks like the crude oil is tight, looks like the diesel market is reasonably tight, but you then have these like pockets of very weak conditions in natural gas liquids, in gasoline, etc. So it's a very, very messy market. But I think it's, you know, looking at everything, it still looks like crude is at least reasonably tight, even if it's not, 3 million barrels a day tight.

Erik: It seems to me that if your independent analysis checks with what Goldman and JP Morgan and everybody else said about there being a big supply deficit based on all the data that were available to you, then somebody must be monkeying with the data that's being fed to you and into Goldman. And I think, well, Iran is the obvious target. But there's no way that Iran, you know, is grey market selling an extra 3 million barrels that we don't know about because they don't produce that much. So the next target that I mean, I don't understand what the motive could be. But it seems like China clearly has a massive SPR. If they have, as Dr. Anas Alhajji, he predicted on the show just a few weeks ago, he thought as prices started to get up that China would start drawing down its SPR. If they've been drawing down their SPR but not telling the world that's what they're doing, that might explain it. But what would their motive be for doing that?

Rory: I think China is the natural place to look, and specifically, like you're saying in China, looking at strategic rather than commercial stocks, the commercial stocks we do have access to in China look pretty normal, very similar to what you see in the US and European data. But, you know, the fundamental challenge that everyone needs to understand with Chinese particularly demand data is it doesn't actually report monthly demand data like all the rest of the world does; it reports production, and then you have implied trade data. So you can kind of create these implied or apparent Chinese demand numbers, and those really, really rocketed. And again, you're looking at huge, like 2 million barrels a day year to date, demand growth implied in China, which is a staggering amount, that is more than the entire, you know, that's about two thirds of global demand growth this year. That's a huge number, putting China in over 17 million barrels of demand a day for the first time in its history for like three, four or five, six months running now. So I wrote a while back, I think this is the clearest most likely culprit for some weirdness that we're seeing in the data, just because it's, it's such a big piece of the puzzle. It's like a fifth, almost a fifth of the global market. And it's notoriously opaque with what it presents. I wrote a little while back on Commodity Context, a post called "Chinese Demand Doubts." And in that, I posited essentially, a theory that, early in the COVID crisis, you saw China take advantage of very, very low global prices and began, you know, and this is what China does a lot with commodities, when prices are low, it stockpiles, it loves to build these strategic stocks. I used to cover metals a lot more than I do now. And they did this all the time with base metals, copper, etc. So they always have these state reserves of all these commodities. But you saw it in crude oil during COVID. What I'm seeing coming is being implied as strategic building on the refined product side.

So either you are seeing kind of record demand in China across a whole bunch of areas, or you're seeing that that difference, that surplus, the actual need going into strategic stocks, and we're talking like big implied flows. If that's true, like 500,000 or even a million barrels a day on some of those highest months. And the rationale for that, you know, this is where we get into speculative territory. It seems unlikely that they're building that much refined product, and particularly diesel inventories when diesel prices are so high, it just seems way too high to be pure, normal economic stock building. The other argument or answer would be that it's a pure national security, strategic like very, very old-school, war & peace strategic stock building. In which case, there is an argument that we had seen over the past year increasing signs of hostility between Beijing and Taiwan. If you were to see China begin to prepare for an increase or an escalation in hostilities that could disrupt flows of commodities into China, this is kind of what you'd expect to see. They've already filled their crude reserves up, now they're going to start building some products as well. And the economist had a really interesting piece looking at other commodities, like the agricultural commodities and other things that they were building at the same time, just seemingly bizarrely strong stock building demand, given the price and kind of overall market structure at the time. So I think, well, it still seems like a very low probability that this is, I mean, I naturally am suspicious when you come to planning for war. But I, you know, the data is such that I can't completely rule it out. The alternative is that China is indeed consuming just a gobsmacking volume of petroleum products right now, and entirely separate from its overall macro story, which seems equally interesting and bizarre to me if that's the case.

Erik: Returning to the EIA data, you already mentioned the adjustment, which I found absolutely fascinating. You know, if you take a freshman accounting class, and your trial balance doesn't work, and you just add something at the end that just, you know, fudges it and changes it to what you want it to be, you don't pass the freshman accounting class. But EIA seems to be exempt from that; they just don't change the numbers after the fact and say, "trust us." I want to talk, though, about Cushing, Oklahoma, specifically, because back in the day, we used to think Cushing was absolutely critical because that's where the WTI futures contract is settled. If there's not enough oil in Cushing, people could put a squeeze on that; you could get into a physical delivery situation that could really disrupt the market. These days, with exchange for physical rules in the futures market, they don't really have to settle the actual physical oil at the location of Cushing, Oklahoma anymore. So how important is it? You know, we're basically at what some people have described as virtual tank bottoms, 20 million barrels of oil in storage in Cushing. A lot of people say that's the bare minimum that the place can operate on. How critical is that to the market? And what are the things that go wrong? Is it blending operations? I mean, if you have less than this, let's suppose we got down to 10 million, what would break? Is it that you can't do blending at that point, or what breaks?

Rory: Well, I think you're definitely right. I think the number one most important thing, I think one of the things that's fascinating with the history of Cushing and why the US WTI, kind of the main crude hub is in Oklahoma, rather than I think most people would expect it today to be like on the Gulf coast of Texas. Why is it Oklahoma and I think the bizarre thing is that, you know, the history of the United States as a major crude oil importer, and particularly up into areas like the Midwest is that, you'd import the crude into the Gulf Coast and pad three, then you ship it north. So what you've seen since then, is between the continued growing of the Canadian oil sands, I'm Canadian, up in Toronto. And then in addition, you also had, obviously, the shale revolution, you had this massive move of oil both in, you know, the mid continent, as well as obviously, in Texas, and began to shift the entire flow of everything. And now you even have Canadian barrels being exported at the US Gulf Coast, whereas historically, they would all be kind of trapped and captive in the pad to Midwest market. So that's entirely shifted. And now the main locus is shifting from Cushing, towards and even from the Cushing primary WTI contract to much more this kind of, you know, Houston WTI, or Midland delivered to Houston ports, or kind of broader Gulf Coast ports. And now, this is because WTI Midland has been included in the Brent blend the first non-North Sea crew to be included. So you're shifting the entire balance of interest and function in the market, away from Cushing and down towards the Gulf Coast.

I'm not an expert on the kind of this specific concerns around blending in Cushing. But I do know that the reason you have large stocks of inventories in a major hub like that is that it's even you know, there's the very, very bare kind of maintenance requirement. But the majority of it's there that if you even have a minor disruption, you have a cushion there so that you can maintain normal operations. So as an example, last, last year, we saw a kind of a multi week outage on the Keystone pipeline, that would have a much larger impact on the market. If you went into that situation with already very, very low Cushing stocks, because you just have that much less time to kind of, you know, float to in your own kind of buffer there. And I think generally, what you've seen overall is that, these tighter stocks, and again, they're tighter in Cushing, they're tighter in the Gulf Coast, tighter kind of everywhere across the United States. And that is making the overall system theoretically, at least more sensitive to moves in supply and demand. Although, as we've seen in the market, crude is trading back down to trading off of its highs now. So again, the market should be tighter than it is and I am all acknowledged here that I am reasonably bullish at these prices, just given all of the risks on the horizon. But obviously the market is relatively sanguine, despite those risks at this point.

Erik: Let's move on to geopolitical risks. I seem to be the odd man out here. I think there's a very high risk, upside risk in the price of the oil market, because I think it's likely that we're going to see an escalation to some kind of kinetic conflict with Iran. A lot of people who are more knowledgeable than I am disagree with me on that. What's your view on that and how do you see the geopolitics in general playing out as it affects the oil market?

Rory: Let's just narrow the conversation very specifically to what's going on in the Middle East right now, because I think there's, you know, over the past year, geopolitics has generally met Russia, that file has kind of quieted down or, you know, we could even talk about China and Taiwan a couple of months ago. And that's less of a concern today than it was a couple of months ago. And now the main focus is war in the Middle East and further escalation. Obviously on October 7, when the Israel/Hamas war began with Hamas's heinous assaults against Israeli citizens, this was the kind of environment that theoretically, there's no more classic risk premium that we discuss in markets than political or security instability in the Middle East. And with a direct feed through to crude oil prices, that's like the textbook definition of risk premium in the market. And I think that, what you're seeing today is that, obviously, Israel and the Palestinian territories do not have a substantial impact on the market themselves. The two ways that this could and theoretically would impact the market is through proxy relationships, and broader geopolitics and the region specifically, as they apply to Iran, most notably, and then Saudi Arabia, I think it's important to kind of break those out separately.

In the case of Iran, I think this is what most people think about when they think about the kind of primary risk of escalation with the ultimate example of, you know, a blockade or a mining of the Strait of Hormuz by Tehran, which would have obviously a huge impact on the market, and is one of the ultimate tail risks in every scenario planning exercise I've ever been aware of in the oil market. But I think that it is reasonably unlikely. I think that at this stage, they would be dramatically shooting themselves in the foot. And you're kind of primary, and I'm speaking from the perspective of Iran here, you'd be shooting yourself in the foot and removing your primary lifeline in this market, which is China. And I think it seems unlikely to me that Tehran would cut the million and a half plus barrels a day shipping to China, out of its kind of relationship. I don't think China would like that, particularly what we're talking about earlier, but a clear kind of stock building and security bias in Beijing. At the same time, it obviously wouldn't help the case of Iran, and it would obviously spark a massive, immediate retaliation from the United States directly in the area. I think that seems…well not impossible, by any means. Anything that happened the oil market forever and always.

It’s certainly a tail risk. I don't think it's anywhere near a base case for me. But I think that where you will likely see some erosion of Iranian supply to the market is like one of the major things we've been following this year is surging Iranian exports, despite the fact there has been no official change in U.S. and White House sanctions policy towards Iran. So what's been going on and the major discussion point in the phrase that people are using is, this idea of like looser sanctions enforcement, despite there being no letter of the law change. Now, if you saw an explicit and some people, I think I've been mistaken in saying that there's been like an actual easing of sanctions. If that was the case, you would see a lot of Iran old customers, countries like India coming back into the market in size. And that just hasn't been the case. What you've seen is the buyers of sanctioned Iranian crude have just been buying more of it. And by buyers of Iranian crude, I mostly mean China. So what's been going on? I think that the main discussion here is that the White House in the administration has very clearly been trying to get a run back to the negotiating table and back to discussion and back in some kind of deal. Like the JCPOA or the Iran deal that was scuttled by the Trump administration. That's kind of a clear point that Biden administration has been in favor of for a very long time. And earlier this year, there was a notable chilling or kind of, or I should say, warming of rhetoric around a Iran. And I think what this did was it signaled to Chinese or potential Chinese buyers, that if you know, there's always some risk of buying running crude, but that risk shifts with how the US has kind of signaling its intention to enforce those sanctions on the books. So I think what we saw was that they're kind of saying like, this is not the moment in these negotiations that we're going to, make a very hope high profile, you know, sanctions busting endeavor. That manifested as 500k to 700,000 barrels more Iranian crude in the market right now than there was a year ago. It was one of the largest sources of global supply growth of the past year. And I think that was a very notable change in the market.

Because there was no official change in US sanctions policy towards Iran. It's really hard to say like, okay since the Israel-Hamas war started and there's a clear question, a clear dotted line between Tehran and Hamas, and particularly between Tehran and Hezbollah in southern Lebanon, this is the question of like, what would they do? Would they directly say, we're ramping up sanctions? Well no, because then they'll have to acknowledge that they have loosened sanctions enforcement in the first place. And the official line is that they haven't done that. So what I think is one of the things that you're only going to be able to see as the data progresses, and what I would expect to see is despite no change in sanctions, I would expect to see less Iranian exports into the market, just because the potential buyers are that much more concerned that you're going to have kind of US and US sanctions enforcement coming on the back of this, you know, hotter tone with Tehran. So I think that's the big question. I think a total shuttering of the Strait of Hormuz is still very tail risk, I think a 500,000 barrel and a plus loss of

Iranian exports is very within the realm of ,if not base case, high probability kind of hawkish case.

Erik: Now I have to confess, I am in the base case camp in terms of something very significant happening in Iran. So I'd like to just ask you a little more about this because I'm clearly the odd man out, and most people agree with you. So most experts agree with you. But I guess what I'm missing is it seems to me the logic that I'm hearing from everybody goes kind of like this: look, the US, for the sake of deterrence, just moved two aircraft carrier battle groups, and a whole bunch of guided missile destroyers and cruisers into the region to create this massive deterrent, that Iran would be absolutely crazy to, you know, try and attack Israel now. Because what they would be bringing down upon themselves would be just so incredible that nobody's that stupid. And I think wait a minute, how did we get into this in the first place? Hamas did something which clearly was certain to bring this incredible wrath down upon them. The intel that the US government is telling us that it believes is that Iran was at least partially behind that Hamas attack. So it seems to me that this decision of, do we want to go and do something to push our geopolitical cause that might bear extraordinary, you know, existential risk to our very existence. They've already answered that question in the affirmative, at least in my perception. Why in the world would you not think that they're going to do more extreme things?

Rory: Well, I think there's no doubt that Tehran is a broad backer of Hamas. I think there is still legitimate difference of opinion as the degree of culpability with this attack in particular. And I think that is the important kind of range of uncertainty that the policymakers are dealing with right now. And I think, even despite the hot rhetoric on all sides right now, I think it's been notable that at least the official statements from the White House, and from the Israeli government, and Tehran itself, have all seemed to put distance between Iran and the Hamas attacks, rather than tying them close together. And I think if we saw an eagerness on any side to escalate this, you would have seen that earlier. Now, I think that you are gradually seeing its conditions escalate. Regardless, I think that, once you remove, let's say, you remove the direct culpability, I think that we're still in a kind of very, flammable situation, and things are only getting worse, and things are only getting hotter. You're seeing various Iranian-backed proxy groups across the Middle East attacking Israel or US forces with a whole variety of missiles and drones and everything else. Obviously, you have seen that the United States, I want to say it was for, this past week, conducted airstrikes on two very clearly, Iranian Revolutionary Guard camps and ammunition bays in Syria that were being used to supply some of these broader attacks. But I think, again, I think you just haven't seen a willingness on any part to kind of directly tie Iran to the attacks, even if I think a lot of people suspect it. But I think even the reporting on this has been very mixed. You've seen or you saw earlier reports saying that, going as far as to say that Tehran actually greenlit the attacks a couple of days prior to the fact that, they were very surprised about the attacks, or at least the extent of the attacks. I think, what seems to be, and I think this is, you know, very fog of war, no one knows right now. For me, my suspicion is that there was an idea that they were broadly supporting Hamas, that something was going to happen, but I think that the extent of the attack surprised Iran and that's just based off of the kind of very scattershot reporting that we're seeing so far. And I think if you wanted to escalate something more, I think you need something much more concrete than we have thus far. And I think for that reason, I think it's the same thing of ,if Iran is going to escalate the crisis further, it's not going to be with direct Iranian forces. It's at least first going to be with its very, very voluminous and multifaceted Iranian-backed proxy groups all throughout the region. That's been a core tenant of Iranian foreign policy in the region for decades now, is to not directly engage itself but always have this like dotted line plausible deniability. I think it's going to be far more difficult to do something like mine the Strait of Hormuz with proxy forces, I think that's where you get the direct Iranian Navy involved. And then, you know, all the dotted line is out the door. And I think that's a direct confrontation. I think at this stage, it seems unlikely that anyone's going to take that move. But I don't disagree that the situation we were in certainly increases the likelihood that happens. I think it’s still just a tail risk, though.

Erik: Rory, let's move on to Venezuela, a country that you've been writing quite a bit about in a Commodity Context lately, also an excellent source of the blend stock that we need the heavy blendstock that's needed in order for US refineries to be able to produce finished products from the crude oil that we produce in the United States. What's the story on Venezuela? How does that fit into this whole picture?

Rory: Yeah, I think it's a really nice hand off here from discussing Iran, because I think the two countries in the world right now that are mostly, where supply is most directly constrained by some of the most severe US dollar secondary sanctions we've ever seen in the market are on both Iran and Venezuela. And what we saw, I think two weeks ago now, is the Biden administration announced that it was removing or lifting primary oil sanctions on Venezuela's oil industry on interactions and commercial interactions with database that Venezuela's national oil company for six months. And in exchange for this, the Maduro government has at least extensively agreed to a bunch of these, lack of what they call, this electoral roadmap. And the main goal here is, as stated by the administration or by the State Department, is that they want to use the removal of the sanctions as a way of enticing and getting Maduro to agree to freer and fairer elections. The 2018 elections were generally considered to be, or I should say, a widely considered to be corrupt and illegitimate. It had the lowest voter turnout in Venezuela's modern democratic history. And the hope is that the 2024, in early 2024, the Venezuelan presidential election will be less corrupt, and more legitimate. So what you had seen was that the Maduro government and the unified opposition party group agreed to a couple of things. And one important one was the inclusion of international independent observers in the election, which is a very common electoral transparency stipulation. And the other thing importantly, was allowing all candidates that want to run for office to be allowed to run for office. And that's been a major thing that the Maduro government has done is essentially invalidate people's candidacy.

What you saw shortly after that was the opposition held a primary vote to figure out who was going to be this candidate to run against Maduro. And the overwhelming, I think the last time I saw it was 93% of the vote in the primary was achieved by a woman named Machado. And she is a longtime government opponent, and importantly, was previously invalidated from running for office in Venezuela by the Maduro government. And now the Maduro government has actually called that primary election to be a fraud and a sham, and are basically the Supreme Electoral authorities trying to invalidate it. So I think what we're seeing out the gate barrel, like not even a month into this, not even a couple weeks into this, and you're already seeing the Maduro government kind of blow his nose toward this deal. Technically, the Maduro government has until the end of November, to present the Biden administration with a concrete plan of action for doing two things; one, allowing all these candidates to run, including, I think, most importantly, Machado, and second, beginning to release US and Venezuelan political prisoners. I can see that second one happening faster. I think there's a real concern and I think real legitimate question of why would Maduro agree to something? Why would have Maduro agree to electoral stipulation at the gate where he is almost surely to lose in a much more public and transparent manner and if anything undermine his authority within the country? Well, I am initially optimistic and kind of commend the idea of, because again, sanctions for sanctions sake, I don't think are that useful and are just punitive. I think the goal here is in the lifting of the sanctions in Venezuela. You create the carrot, which is your sanctions are lifted, and you create the stick at the same time, which is, we can immediately snap these back anytime we want, should you run afoul of our agreement, which again, looks like the gate Maduro is going to do. So I think that's a good policy use of these sanctions in an attempt to try and kind of leverage some concessions from the Maduro government, so that you can begin to have some opposition gain traction there. But I think if you do see Maduro continue to oppose and prevent Machado from being on that ballot, the administration doesn't reimpose those sanctions. I think it proves, in my humble opinion, that this is nothing more than attempt to get more oil on the market.

And I think, obviously, we didn't even talk about it yet, but I think that the potential upside for Venezuelan production from these sanctions easing is quite limited. I think we're probably talking somewhere in the ballpark of 200,000 to 300,000 barrels a day over the next kind of, call it six months. Which is, if we kind of relate this back to Iran, about half or less than half the potential downside to Iranian production, from a tighter sanctions enforcement after the onset of the Israel-Hamas war. So I think it seems like a very little amount of crude, for opening up your flank to I think, very legitimate political attacks around kind of selling out in order just to get more crude in the market. I think that would be a shame for everyone. At most at this stage, it seems the easing that this license that they've been granted, is only six months. So at worst, right now, it's going to be six months, and then you know, the Biden administration is going to end up with egg on its face. At best, you do see, some actual movement, and while I supremely doubt an outright kind of like, very natural and civil election and movement to an opposition candidate from Maduro, I think the hope is that they can at least make some electoral inroads. But to your point about the US feedstock, I think while the 200,000 to 300,000 barrels a day is likely to, you know, it's not a huge amount in the context of an overall liquids balance, like we were talking to in the beginning, you're going to see any larger volume than that shift into US port. So this is, again, heavier crude, very similar in quality, it's called Mary, is the primary blend that Venezuela exports, very similar to heavy sour western Canadian select, which has generally been in reasonably low supply. Most notably, because Saudi Arabia, in its unilateral cuts, has been withholding 2 million barrels a day from the market. And a lot of that has been medium to heavy, sour crude. So you have seen tightness there. And I think that has also gone as we'll talk about a little bit later, I think about this, you know, one of the things that we're seeing right now in the relatively lower diesel yields, and global refineries while we still have plenty of gasoline, and that's because those heavier sour barrels typically yield more diesel in the way that our refineries are configured.

Erik: We'll come back to gas and diesel cracks in just a minute. But first, I want to move on to OPEC+ because I'm going to admit, I can't decide what would happen. Let's suppose that some version of my scenario happens, that there is a significant military, you know, Lindsey Graham gets his wish. And there is a US attack on oil-producing resources in Iran. On one hand, it seems to me, at least as I'm reading the tea leaves here, I don't think that the other oil-producing nations are in any hurry to ally themselves with Iran. I don't think they want to join this fight. I think they would like this fight to go away. But at the same time, if you were to have a lot of civilian casualties in Iran, and it was perceived as Israel was at war with the entire Muslim world, it would be very politically difficult for those OPEC+ countries to support the United States but, and effectively and indirectly support Israel by being accommodating with respect to, you know, OPEC, increasing production to keep prices from getting out of control and so forth. How do you read that? What do you think OPEC would do in that scenario? And feel free to comment otherwise on OPEC.

Rory: So the one thing, and just kind of tying directly into this, and the one thing I had neglected and forgot to mention. I had mentioned earlier with the Israel-Hamas war, there were two main supply risks, and the one was Iran, and we discussed that at length. The other is Saudi Arabia, and I think that's comes into this discussion very clearly. Because, OPEC+ right now on paper, is withholding 4 million barrels a day or more of supply to the market in terms of realized actual barrels being withheld, not just under production and kind of chronic issues, probably closer to kind of three, let's say. That's a lot of oil being withheld from the market, particularly when crude is kind of trending up around that $90/barrel Brent threshold, that's, you know, normally you would not have the Saudis alone withholding 2 million barrels a day in that scenario, it just seems like a lot of supply support for that kind of tight market. One of the discussions and then one of the major factors to watch and one of the hardest things to forecast, quite frankly, is when Saudi Arabia decides to add more oil to the market. I would say it seems, at this point, they don't seem like they're in a huge hurry. They seem to be pretty happy with the backwardation market. They seem to be happy with the price levels, even as they kind of are under pressure here. But obviously that even supports those cuts even more but the one area that has been discussed as a reason for Saudi Arabia to lift or begin easing its cuts or lifting its production, as part of a US brokered deal between Saudi Arabia and Israel to recognize, you know, for the Saudis to officially recognize Israel, the Saudis would get a US defense pact renewed. And the Saudis have been discussing that if the market conditions allow it, etc., they would begin lifting production in the first quarter of 2024, which, you know, does seem to dovetail pretty nicely with what I consider to be Mohammed Bin Salman's far more kind of calculated, and very self interested politics of oil. And I think for him, it would be seen as a general win if you could kind of ease political conditions in the region and get a defense pact and kind of also get to increase production out of it as well. I think it's a very direct, kind of lever and kind of holding in character there.

But one of the early theories as to the attacks from Hamas generally, and this would more directly implicate Iran, is that one of the countries with the most to lose of such a deal would be Iran, because Iran and Saudi Arabia, obviously, historic adversaries in the region, obviously, Iran and Israel, not great friends. So if Saudi Arabia and Israel got closer, that would be bad for Tehran. Obviously, if Saudi Arabia got a US defense pact, that'd be worse for Iran and if Saudi Arabia increased production, that would be worse for Iran. So all of this is worse for Iran. So one of the things that was early discussed, and I think it seems like it might be a stretch now, but I think it makes sense structurally is, this idea that by attacking when they did on the eve of some of these negotiations, you essentially pressure and push the Saudis into at least delaying these negotiations, which is exactly what we've seen, that the official negotiations are now on pause. But, I think one of the things that you could see here is, if the Saudis say: look, if you tighten sanctions against Iran, then maybe we'll go back to the table with this supply offset, because maybe we want to produce more, but we want Iran to produce less. So I think this dovetails into your scenario of a more direct assault against Iran. So the first thing is, I think you get the direct loss of Iranian barrels, I think the question is, would the Iranian Navy attempt to completely militarize the Gulf, which I think generally have a much larger barrel impact. But I think in your scenario, is a little bit more contained. But it's just the question of like, what does OPEC do? I think at this stage, OPEC is pretty clearly under the control of Saudi Arabia. And I think Saudi at this stage seems, would seem pretty game, I think, to at least support the market so that Iran got hurt more and you know, all else equal. So I think that's how I would think OPEC would deal with this, because I think at this stage, OPEC to me seems mostly like an appendage of Saudi Arabia broadly, because of all the oil withheld from the market right now. Actually, a very small of it is officially withheld through OPEC, is withheld by this voluntary cuts that Saudi Arabia organized and then a million barrels a day of it, or a third of it in total, is Saudi Arabia just itself, voluntary and unilateral. So I think that is something that Saudi wants to control this market, and they're very capable of controlling this market at this stage. And I think they will be very game to kind of put the pressure on Iran and be opportunistic in that way.

Erik: You mentioned a number of different countries and how many barrels they were each withholding. In terms of global spare capacity, what's your best guess? What's the total global spare capacity defined not as stated numbers, but what you think the real number is if everybody tried to produce as much as they possibly could after a couple of months to ramp up. How much would that be more than we have today?

Rory: I'd say probably ballpark, call it three, maybe three and a half on the upside with the vast majority of that existing in Saudi Arabia and the United Arab Emirates. I think a lot of the rest of OPEC+, the paper cuts they have on the table right now are mostly from just a general inability to produce that anyway. So it's mostly erasing these underperformance numbers than they are actually removing barrels in the market, all else equal, but I would say, let's say three, three and a half. And I also think that's actually one of the reasons that even if markets are as tight as we were discussing at the beginning, I think a notable difference between the market we're in right now and the market we were in, let's say, last spring of 2022 was, in 2022, the narrative was that OPEC was running out of spare capacity, shale was slowing down, you know, we're going to lose a huge amount of Russian supply. And it felt like, it's like where could you possibly get more supply at a moment's notice? And the answer was essentially like nowhere really. Now I think if you did see a spike, let's say to $110 a barrel Brent or 120, I think in that scenario, you would absolutely see the Saudis come back in with more supply, to kind of satiate that tightness in the market. I don't think that the Saudis are anywhere near as dovish, as they have been historically and pre-MBS, but I think that in the scheme of things, they still wouldn't like to see a complete kind of explosion of the crude price and damaging of economic outcomes right now, just given the general precarity of the of the broader macro setting.

Erik: I definitely agree that Saudi Arabia does not want to break the global market. But when you say 3.5, and I agree that sounds like about the right number to me. If that's total spare capacity everywhere, then wait a minute, and I do agree that this is an outlier, even my base case is not this bad. But suppose that warmongering chief Lindsey Graham has his way and the US actually goes and tries to, in Senator Graham's words, knock around out of the oil business by destroying all of their oil producing assets. Doesn't that take at least 3 million barrels offline and doesn't that mean that all of the spare capacity is used up?

Rory: Effectively, yes. I think exports are slightly lower than that. But in a total supply basis, absolutely. And presumably, in that scenario, you have a slightly lower impact because in a scenario where you destroy the entire Iranian industry, I assume that Iranian demand itself would also be slightly lower. But I do think net-net, I think ballpark, that's right. Which is why I think generally, any outcome that involves the zeroing out of a major oil producer is going to be blazingly bullish. And I think that is something that just can't be avoided in any situation because the oil market, almost always, in normal situations, kind of trends around perfect balance, at least on a moving average, multi-year basis. The hope is that, you know, you have stock builds here and there, but we're always pretty tight. So if you lose a huge chunk of supply, or in the COVID case, a huge chunk of demand, the market really breaks really quickly. And I think in a situation where you had, you know, if Lindsey Graham got his way and you removed Iran from the oil business, yeah, that's going to, you know, there's a huge hole, and no one could fill that very quickly.

Erik: Well, thank you for entertaining my admitted preoccupation with some of these. Everybody else calls them tail risks, I don't see them really as all that tail myself. Let's come back to something a little more mundane, which is, actually it's not mundane, it's just not end of the world stuff, which is gas and diesel crack spreads. Normally, the system's pretty well balanced. We know how much gas and diesel we need, the gas and diesel crack spreads run peripherally proportionate to one another. But lately, they're way out of whack. Why would they be so far out of whack?

Rory: Yeah, and so just for the very, very brief context there, before COVID, call it normal times, the crack spread for diesel and gasoline typically ranged between 10 and 20 bucks a barrel, depending on the season, depending on whatever's going on in the market, but reasonably tight, reasonably similar. Earlier this year, both diesel and gasoline crack spreads were over $40 or $50 a barrel, way, way, way kind of tighter than normal. And last year, we saw historic blowouts in both of those. I think at its peak, depending on the contract, you could use

$70, $80 barrel crack spreads for certain diesel contracts. So very, very broken market coming out of COVID.

Now, I think some of those refining capacity constraints are beginning to ease off a little bit as you see some of this new planned refining capacity come online that was delayed by COVID. But now we're seeing this other really interesting impact. And I think it's manifesting in large part from those OPEC+, and particularly Saudi cuts, and to understand why, if you look at Saudi Arabia as, let's just be super simple and say it is a 10 million barrel a day producer, ballpark, it produces a huge variety of blends of crude, it's not all one kind of monolithic grade, that's one of the things that makes Saudi Arabia so important in the oil industry as it produces a very wide array of crude for different uses, and different kinds of feedstocks in different geographic regions that prefer it. So, it's very well diversified on that. But when it cuts production, it typically is going to cut the least valuable barrels first. And those barrels typically tilt towards medium and heavier sour grades of crude because those are typically more expensive to refine. But what you've seen over that period is the differentials for other grades of heavy crude have really, really narrowed. You have seen some of that ease off recently, but WCS is an example, the Western Canadian Select crude, which is the grade we typically have the most visibility on, that grade at the US Gulf Coast went from, near $20 a barrel differentials after the US Gulf Coast earlier this year to nearly par this summer, and is back down to the $8 a barrel differential. Now, that's still reasonably tight for WCS. So I think it does show that the broader, heavy sour crude market remains tight. And the reason this is important specifically for this refining conversation is that those heavier barrels, it's much easier to crack apart hydrocarbons, and it is to fuse them together. So lighter crudes have a higher yield of lighter products like gasoline. That's why they're historically much more valuable.

Heavier crudes, you have to refine more with a bunch of more sophisticated and expensive refining infrastructure, things like these cokers that break up this heavy residual fuel oil into things like feedstock for diesel. And I think what you see here is, is if your overall crude slate becomes lighter, your diesel yield, all else equal, suffers. So what we're seeing right now, really interestingly this is a great example, over the past couple of months, let's say, over the preceding 18 months before that, you had both diesel and gasoline inventories tracing the very, very bottom of their normal seasonal ranges and supporting these really, really, really rich crack spreads. But then very suddenly, gasoline inventories shot higher from the bottom of the range, well past the average, and it's kind of come back down around those averages, whereas diesel is still at the bottom. So what's happening, I think what you've seen is that, while gasoline demand probably did weaken a little bit, and that's I think seasonally normal, the thing that's weird is that you had refining output kind of remain loftier than normal, and those refiners are chasing those still very lofty diesel spreads. And those diesel spreads now are at about, let's call it $40 a barrel, while gasoline is at about $5 right now on my screen. So huge collapse from gasoline went from $40 down to $5. And that's a screen crack spread. So the actual margin, accounting for other costs, likely means the gasoline margins are actually negative, that gasoline is effectively a cost byproduct now, whereas diesel is holding up the entire structure of global refining margins. So because those refiners kept producing in order to, and kept running crude in order to satisfy that diesel demand, it ended up oversupplying the gasoline market at the same time because the critical important thing to understand about global refining, is that you can't just produce one product, you have to process the barrel and all of its constituent products, which allows some of these blowouts and kind of dislocations in the market to become really extreme because you can have products that normally yield a bunch of money like gasoline become effectively worthless, if not actually negative-valued byproducts.

Erik: Seems to me like that's a really good topic to drill further into. We don't really have time in this interview, but maybe even in some of your future writing. It seems to me for energy transition, one of the things I expect to have happen is diesel demand stays around for a long time because it takes much longer to replace the heavy equipment that burns diesel. But gasoline demand is likely to come down substantially as electric vehicles become more popular. As you said, you cannot just turn a valve and say we are going to take this crude and produce all diesel with it, it doesn't work that way. So, what is going to happen in this energy transition to all the gasoline?

Rory: Yeah I think a huge topic that's been dreadfully misunderstood and under-covered. Now, I think one of the important things to note is that, historically, we actually have already had periods where gasoline was a worthless byproduct. At the beginning of the oil industry back when J.D. Rockefeller ruled the market, you had these, and this is before the onset of the automobile age. Initially, oil was produced for kerosene for lamps to displace whale oil. And gasoline, which was way too volatile and explosive for use in these types of uses, was essentially they used to, I've seen photos of it, they used to pour it on to lakes, and set it on fire.

Erik: Flaring it off, just like we flare off Natural Gas that we don't know what to do with it...

Rory: Exactly, 100%. So I think, you know, that's an extreme case obviously, and doesn't seem particularly ESG these days. But I think more likely, what you'd see is that as gasoline became under more and more pressure, I think we'd find other uses for it. And I think gasoline is a light hydrocarbon, I think we'd figure out ways to put it into petrochemical feedstock. But I do think that it is an area for a lot more research. And I'll be writing a lot more about refining over the next couple months.

Erik: Well Rory, I can't thank you enough for a terrific interview. But I want to stick on that subject of what you're writing in the next couple of months. Tell us more about Commodity Context. This is a really cool website that most people have never heard of. How did it come about? What's there, what services do you offer, and how can people follow your work?

Rory: Yeah, so you can look at commoditycontext.com where all my research is hosted. It's a substack platform. I write twice a week right now, typically, alternating between a weekly note that I publish every Friday at 4PM Eastern. I alternate between thematic research, so my research in Venezuela work and these data decks, which is these broader balance estimates and stuff as well. And the one thing I will finally say, because I know that Erik, you will not forgive me if I do not mention it before we go is obviously a lot of the work I've done on here over the past little while is around the SPR.

Erik: Oh, I forgot to ask you! We ran out of time. You know, we got to let you just do a real analysis of the SPR. Ok shoot us!

Rory: Exactly. So I think what we've seen recently and the most notable recent move is at the White House, and the department energy has actually changed the way they're soliciting for refills on the SPR now and they're actually doing the rolling periods so each month they're looking at purchasing like 3 million barrels, if the price of WTI is below a $79 a barrel, which at the time they announced it was over $90. So I think, it got a lot of side eye at the time, but I think it is at least a better version than the single one-off pilot that they're attempting, and I think it shows they're gradually starting to figure out how to do this. But I think what we've seen so far is that they still have not managed to really pull it off. And I think that it is also surely part of this announcement, the way it was announced, following the onset of the Israel-Hamas war, and the sheer barrage of very negative media that the White House has received, particularly in the context of the 50th anniversary of the Yom Kippur War and the Arab oil embargo in ‘73. I think all that together really pushed them to kind of reprioritize and recenter the refill on their agenda, and they're going to get a little further. But the other final important thing I'll mention here is that at most, they can only probably purchase something in the order of 50 million barrels, because they only have something around $4 billion left, ballpark, in the actual SPR or the crude oil account. All the rest of that money has been remitted back to Congress. And if Congress is going to want, and particularly as the politics of this get hotter, if Congress is going to want the White House to refill more SPR, they're going to need to allocate more funds. I think they should do that ahead of time, so that we're not bickering over the price and getting the money in line. If let's say we actually do have, let's say some kind of economic crisis, not outside the realm of possibility right now, and crude oil prices do fall, I think, obviously, it'd be a great opportunity to buy when prices are lower.

Erik: Listeners once again, the website is commoditycontext.com. Rory didn't mention it but his Twitter handle which I follow very closely is @Rory_Johnston. Patrick Ceresna, Nick Galarnyk, and I will be back as MacroVoices continues right here at macrovoices.com.