The Ghost In The Machine

Q3 EDITION 2021

ADM

ADM Investor Services International Limited

EDITORS NOTE

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Pandemic, Risk, Supply Chain Disruption, China, Regenerative, Freight, Central Banks, Sugar, Wheat, Metals

Welcome to the September 2021 edition of the Ghost In The Machine, which as ever covers a wide range of topical issues, from 'regenerative agriculture' through dry freight shipping, grains and sugar supply and demand outlooks, central bank tapering, risk management trends to China's regulatory clampdown and property sector woes.

'Regenerative' is an 'en vogue' buzzword these days, particularly in respect of Agriculture, but all too often it is yet more 'greenwashing' – so what does it mean in real practical terms, where are the risks and opportunities?

Sugar markets have had a good year, so what are the prospects for the new season, in terms of supply in key producers Brazil and India, and how uncertain is the demand picture?

Expectations for the global Wheat harvest are being dialled back due to weather induced harvest delays, and what in quality terms looks to be a European poor crop, we take a look at how this is impacting Paris Milling Wheat futures.

The pandemic's supply chain disruptions have moved skyrocketing ocean dry freight container rates into the mainstream, above all in terms of inflation risks, so what have and will be the key drivers going forward. As much as VaR (value at risk) has long been at the centre of risk managers' assessments, it is anything but perfect, and many have started to look at incorporating EVT (Extreme Value Theory) to try and better anticipate so-called 'fat tail' risks.

As the Fed and other major central banks start to consider tapering QE measures, what impact will this have on equity markets. China's raft of regulatory interventions in so many sectors of its economy continue to send shockwaves through markets, foster doubts about its economic outlook, while its property sector woes are reviving concerns about the nebulous world of metals transit finance.

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THE GHOST IN THE MACHINE

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THE NEXT BIG RISK—AND OPPORTUNITY

"Regenerative" everything—agriculture, tourism, business, what have you—is all the rage right now, but very little of it is actually regenerative. In many circumstances, slapping the term "regenerative" onto something is quickly becoming the new greenwashing. But to allow that to happen is a huge risk not only to corporate reputations who have signed up to it and the eventual push back to global brands as consumers reject that regenerative greenwashing, but also to the planet itself. The concept of regeneration, but also how it specifically is applied to agriculture, is the single "new" solution to come around since the realisation that the climate crisis is real and quickly approaching and we can't risk letting it go to waste.

When it comes to regenerative agriculture, some of the world's biggest brands have jumped on the bandwagon and made significant commitments to integrate it into their supply chains. From Nestlé and Cargill to Unilever and Diageo, they all have different targets for different levels of sourcing from regenerative sources by as soon as 2025, though most are for 2030 and as far out as 2050 for 100% transition. To mobilise the volumes of regeneratively produced crops and meat required to hit these targets is going to require a global shift at farm level—and quickly.

> *"THE GOOD NEWS IS THAT THE CARBON EMISSIONS RELATED TO SCOPE 3, THE FOOD, FEED, FIBRE AND FUEL USED BY THESE COMPANIES, ARE IN SOME CASES AS MUCH AS 80% ASSOCIATED WITH AGRICULTURE AND AG-BASED PRODUCTS."*

> WHAT WE HAVE BEFORE US IS A UNIQUE OPPORTUNITY TO SHIFT THE GLOBAL AGRICULTURAL ECONOMY

The good news is that the carbon emissions related to Scope 3, the food, feed, fibre and fuel used by these companies, are in some cases as much as 80% associated with agriculture and ag-based products. So, making meaningful change at the scale required to achieve the targets set out will have a significant impact on GHG emissions, as well as water, pollution and also livelihoods for farmers, in the short- to medium-term.

That is, if what they're doing really is regenerative. All too often, it's not. Although some companies, Walmart is a recent example, have laid out very detailed programs and targets for the transition to regenerative agriculture, several of the other big names have included the word "regenerative" in their targets and roadmaps without really understanding what the term means, and that becomes a major risk as consumers and civil society expect these brands to actually do what they say they going to do. And if they don't, the backlash will be swift, severe and potentially detrimental to their bottom lines and to their shareholders.

SO, LET'S BACK UP FOR A MINUTE.

What does "regenerative" really mean? In the greater scheme of things, according to The Regenerative Design Framework, regenerative moves towards a living systems approach that works together with nature rather than trying to manipulate it where energy is created rather than consumed. Applying that to regenerative agriculture, there are five or six basic tenets—depending on who you talk to (which is part of the problem as it is still seen as a bit of a wishy-washy definition). Those tenets are:

- Minimising soil disturbance through low till or no till methods
- Maximising species diversity above and below the ground
- Keeping the soil covered year-round to enhance water retention and build microbiology
- Integration of livestock
- Significant reduction or elimination of chemical inputs

THERE IS MORE, THOUGH.

There is the alignment of agriculture with natural processes, such as water and energy cycles, crop rotation is a must to ensure disease and pest control by breaking up the building of vectors, and not to be forgotten is the livelihood of farmers where they are paid decent wages thanks to providing ecosystem services such as sequestering carbon and their products are paid what they're worth. How society has come to believe that fast fashion and $1,000 mobile phones are worth their wages but paying the real cost of food is not is beyond my comprehension.

Regenerative agriculture is where "carbon farming" comes into the picture and why organisations are so hot to get farmers certified as regenerative by monitoring their farming practices so the amount of carbon sequestered can be accounted for and monetised. Control Union has its Regenagri scheme that does that, Commonland is working on something similar, and Rabobank launched its Rabo Carbon Bank in 2020 to connect farmers to finance, using the carbon credits they generate to finance their transition to regenerative, supported by an army of agriculture extension agents. The Savory Institute, home to Holistic Management, has launched its Land to Market programme that goes further by connecting those regeneratively certified meats and fibres to brands who want to source those products.

Just as the Green Revolution of the 1970s changed agriculture forever by focusing on economy of scale that required chemical inputs and mechanisation to achieve the yields required to feed a growing planet, boosting agriculture related GHGs along with it, regenerative agriculture will help to reverse that damage. By realigning agriculture with natural processes to quickly and significantly reduce the GHG emissions associated with farming and livestock production it will simultaneously decarbonise supply chains and tackle the climate crisis head-on.

> *SOCIETY HAS COME TO BELIEVE THAT FAST FASHION AND $1,000 MOBILE PHONES ARE WORTH THEIR WAGES BUT PAYING THE REAL COST OF FOOD IS NOT IS BEYOND MY COMPREHENSION*

BUT WHAT IS THIS GOING TO MEAN IN PRACTICAL TERMS?

It's going to mean rethinking supply chains. It's going to mean cover crops with soy and corn production, taking dairy and beef cattle out of the barns and feed lots and back onto the land, in many cases integrated with those row crops, and a significant reduction in chemical inputs. Although those concepts may seem frightening to the companies that have been built by creating crop protection and animal nutrition, as R&D and innovation-focused businesses they can no doubt reorient themselves to provide products that will be useful in a regenerative rather than degenerative economy.

What we have before us is a unique opportunity to shift the global agricultural economy—and the rest of the economy and society along with it—to produce the food, fibre and fuel required for a growing population that works together with nature while providing livelihoods that are climate resilient, climate positive and provide quality of life to all. It may sound utopic but it's not. It's necessary to stem the flow of urbanisation and repopulate rural areas so that the regenerative revolution can take place while stopping climate change in its tracks. But for regenerative agriculture to be successful, the companies and brands that have committed to it must make good on those promises, or else they put not only their own reputations at risk but also risk the health of our planet and society as well.

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> "THE BIGGEST FACTOR IN SUGAR IS THAT IT HAS HARDLY RAINED ACROSS BRAZIL'S CS SINCE THIS TIME LAST YEAR. CHUCK IN A ONCE IN A GENERATION FROST AND ANALYSTS HAVE BEEN CUTTING ESTIMATES SINCE MARCH"

A SWEET FUTURE?

The beginning of October marks the start of a new global sugar season so it would seem timely to look back on a peculiar past season and, more importantly, polish the crystal ball for what might happen over the coming 6-9 months.

This time last year the world was in the tight grip of the pandemic with the growing realisation that it was going to be more deadly and last longer than most had predicted. It would be another couple of months before the vaccine breakthrough would be announced. Brazil was on course to produce more sugar than ever before and India was gearing up for another season of over 30 million tonne production. However, Thailand's production had collapsed and the EU was struggling with disease due to the banning of Neonicotinoid pesticides. Global consumption had taken a hit as the world remained locked down. Raw sugar prices had improved from the single digit lows of April but were still poor at just above 13 cents.

Fast forward 12 months and the world is slowly climbing out of the Covid hole battered and bruised but, generally, defiant. The biggest factor in sugar is that it has hardly rained across Brazil's CS since this time last year. Chuck in a once in a generation frost and analysts have been cutting estimates since March. The jury is still out on the final production but if the harvest tail is short then anything above 32 million tonnes will be a surprise. The drought and frost damage has been so severe that it could impact on the next cane harvest. However, traders would be wise to remember that cane is very robust and give it some decent rainfall it can recover. Therefore, much will depend on the weather across the CS over the next 6-7 months especially with chatter that a mild La Nina may develop over the coming months. This drop in Brazilian production has meant that the small surplus in global production over demand expected by analysts earlier this year for 2021/22 is now moved to a deficit – the size of which is still to be determined.

Elsewhere there appears to be no production issues of the same proportion as Brazil. India looks set to produce another +30 million tonnes of sugar some 5 million tonnes more than they need domestically. The government will be relieved that prices have improved enough for an export subsidy not to be needed. Thai production is bouncing back after two seasons of abysmal production due to drought. Currently, up to 100 million tonnes of cane may be produced after falling to 67 million tonnes in 2020/21. The EU has had several issues to deal with this season with early frosts across France and to a lesser extent, Germany killing newly emerged beet leaves adding to their pesticide issues. However, overall production is expected to increase from last season which was hit by dry weather.

On the other side of the equation things are very much more opaque. Physical demand has collapsed recently which has seen the spot month value in both raws and whites fall to a large discount to the rest of the board. Many argue that the underlying consumption is still there but end-users have dug into existing stocks at destination because freight rates have soared. Global demand has not increased significantly and it is mainly problems with congestion which some see easing before too long. Sugar, being a comparatively cheap bulk commodity, means a jump in freight costs impacts greatly on its delivered cost. The situation with white sugar has been exacerbated further with a lack of available containers. There has, undoubtably, been a drop in consumption due to global lockdowns, availability and the continuing underlying incentives to cut consumption on health grounds which has quietly continued during the pandemic. Nevertheless, it

"AT THE BEGINNING OF THE YEAR THERE HAD BEEN A LOT OF SOMEWHAT HYSTERICAL TALK OF COMMODITY SUPER CYCLES DEVELOPING"

is very difficult to quantify with most analysts believing global consumption levels are, possibly, a little higher than pre-pandemic at best. In time the buyers will have to turn to origin for supply. Whether freight rates will be lower remains to be seen but it could lead to physical tightness with the consequence of higher prices.

At the beginning of the year there had been a lot of somewhat hysterical talk of commodity super cycles developing. This chatter has become rather muted over the past few months as prices of virtually all commodities have fallen from their early year highs. Sugar prices remain at relatively high levels although, recently, the funds have started to cut their long-held longs which has pulled prices off their 4 ½ year highs reached in the middle of August. One of the consequences of the 20 cent plus levels reached was that Indian exporters took full advantage and sold raw sugar for 4th quarter this year into 1st quarter next year.

What are the prospects for the sugar market over the coming 6-9 months? The two biggest factors will be Brazilian sugar production and global demand each of which being mainly influenced by two factors impossible to predict – weather and the pandemic. Assuming rainfall across Brazil's CS is plentiful through to the beginning of April then production will probably improve back to around 35 million tonnes. If La Nina lingers then it could be another poor cane crop and production might not improve much. In the short-term India can plug some of the shortfall from Brazil as they have during the current season through existing stocks and surplus production next season. However, stocks will diminish and assuming ethanol production increases as predicted, then the huge surpluses of the past will be more unlikely and Indian production will become more balanced. Demand will, surely, pick up as destination stocks and freight rates drop. Actual global consumption should, ultimately, return to year-on-year growth. The upside is, obviously, always open to a weather shock but a rally above 22 cents would seem unlikely but, by no means, impossible in the short to medium term. The good news for producers is that the downside also looks limited to probably around 18 cents which would be just below Brazilian ethanol parity and above most of their production costs.

So, at the moment, the fundamental picture looks positive for sugar...but just a word of warning - the picture looked similar at the beginning of 2020.

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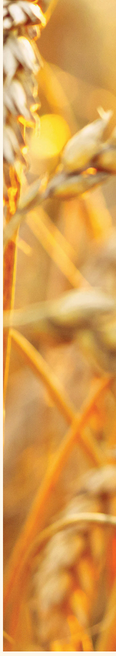


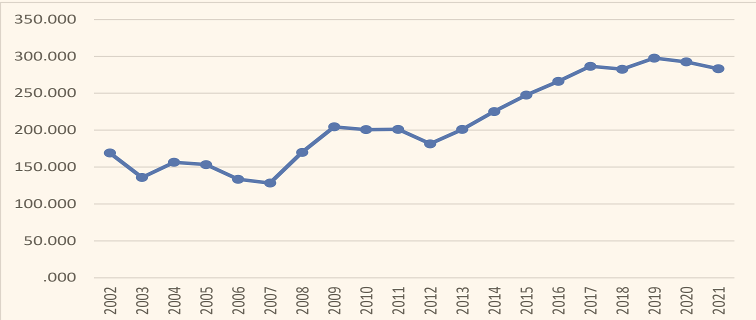
PARIS MILLING WHEAT, CAN THE SHORT DELIVER?

This year's global wheat harvest looked to be on track to produce 1.66% more wheat than the previous year, with the May21 USDA WASDE forecasting 2021/2022 wheat production to hit a record 788.98 million metric tonnes, with global consumption marginally lower than this at 788.68 were set to produce a very small surplus.

The situation has changed somewhat with the Sept21 WASDE now forecasting 2021/22 production at 780.28 mmt, with consumption forecast at 789.63 mmt we are set to produce a deficit. This leaves us with a forecasted carryout stock of 283.22 mmt, 3.8% smaller than expected in May (Chart 1).

Whilst a production deficit and smaller ending stocks are supportive to wheat prices, this alone does not explain the levels we are seeing, especially in that of the Euronext milling wheat contracts.

Chart 1: Global Wheat Ending Stocks



Source: USDA

Chart 2: Global Wheat Ending Stocks

Source: Thomson Reuters

If we consider the European Union in isolation, production has rebounded from a pretty dismal 2020/21, with the Sept21 USDA WASDE estimating a 2021/22 all wheat crop at 139 million metric tonnes (10.37% higher than 125.94 estimated in 2020/21). Based on these production volumes alone, we would expect the Euronext milling wheat contract to have come under pressure. The below Euronext milling wheat December seasonality chart, looking at the last 5 years, shows us that this isn't the case (Chart 2).

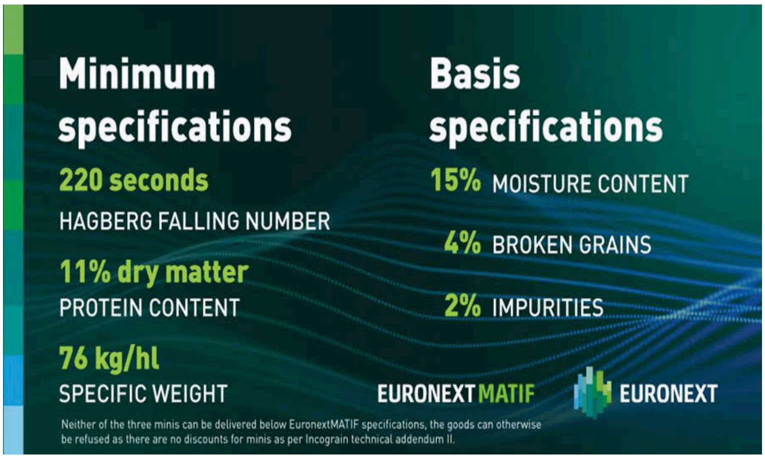
There are a number of factors driving price direction, including the drought in Canada, poor US spring wheat harvest results and smaller wheat yields in Russia. But the main factor driving Euronext milling wheat? Wheat quality, especially in France (the EU's biggest wheat growers and one of the world's biggest exporters of milling wheat).

The latest French harvest survey (FranceAgriMer), with 90% of the soft wheat samples targeted and some results outstanding from a rain delayed harvest in northern France, points to a pretty poor crop in terms of quality. Test weights are low, with only 32% hitting the 76 kg/hl level (last year 98% of the crop exceeded the 76 kg.

Whilst the quality issues were mostly apparent in France they were not confined to this region with low test weights also seen in Germany, Poland and Baltic countries. Strategie Grains recently revised down 2021/22 soft wheat production in the EU27 to 129.1 MMT and expect as much as 40% of the crop not to be suitable for milling (compared with 27% in 2020/21).

The Euronext milling wheat contract settles in physical delivery, with all of the delivery points located in France (Rouen, Dunkirk, La Pallice and Nantes-Montoir). That considered, the quality of the French crop is of particular importance. Contract specification in Chart 3.

Chart 3



Source: Euronext

Chart 4

Source: Thomson Reuters

The French harvest results have led to some countries like Algeria, Saudi Arabia and China easing import specifications. Some Chinese importers are reportedly now accepting down to 75 kg/hl, against 77 kg/hl initially. The Saudi Grains Organization (SAGO) have reduced their spec weight requirements to 76 kg/hl to reportedly help European offers. FranceAgriMer have also played down the importance of test weights and were implying this is more a cost factor for flour millers than it being detrimental to baking quality. Regardless, if participants are using the Euronext milling wheat contract to try and ensure they can get their hands of full milling spec wheat and there isn't this grade of wheat available and in the hands of the short, we could see some fireworks.

"THE FRENCH HARVEST RESULTS HAVE LED TO SOME COUNTRIES LIKE ALGERIA, SAUDI ARABIA AND CHINA EASING IMPORT SPECIFICATIONS"

Once the quality concerns became apparent we saw a remarkable jump, not only in price but also open interest. The Euronext milling wheat December 2021 open interest peaked at 338,744 lots, and the current contract high currently stands at 254.25 (highest price we have seen in almost 9 years). The below Euronext milling wheat seasonality chart, looking at the December open interest over the last 5 years, shows a fairly large increase in activity. (Chart 4).

In Strategie Grain's recent publication on the 16th of September, they anticipate there to be just under 80 mmt of milling wheat in the EU, this is compared with over 85 mmt in 2020 and despite of the sizeable increase in year on year overall production volumes.

The EU commission, as of the 14th September report, saw EU total wheat exports at just over 6 million tonnes, running 44% above last year. It is noted that over 50% of this has come out of the Balkans, of which large volumes went to feed wheat destinations. However, we are not long into the 2021/22 marketing year (1st July – 30th June) and demand is strong.

With a shortage of milling grade wheat in Europe (especially France) I will be keeping a close eye on the open interest as we start to approach expiry of this season's Euronext milling wheat contracts, with what looks like potential for a short squeeze.

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SOME THOUGHTS ON DRY BULK OCEANFREIGHT MARKETS IN 2021... AND BEYOND

Since the end of the first COVID-19 wave, oceanfreight – or at least the container segment of it – has been making headlines in the popular press. The Suez-canal blockade by the Ever Given and a US Anti-Trust Probe into price setting by container liners being the most catchy ones. Looking at the Baltic Freightos Container Freight Index (FBX) we indeed see that after years of sideways movement, container rates started picking up after the first COVID wave on the back of increased demand for "disposables" and other hygienic consumables that are mainly produced in the Far East.

Add to that COVID-induced capacity limitations on export and import terminals, empty containers in the USA/EU not finding repositioning cargo (and have to be shipped empty to Asia), modest fleet growth and liners not undercutting each other in deviation of past habits and we see an explosion of container freight rates which doesn't seem to have reached its peak yet. Industry sources predict that the capacity mismatch is likely to last through at least Q1 2022 (Chart 1).

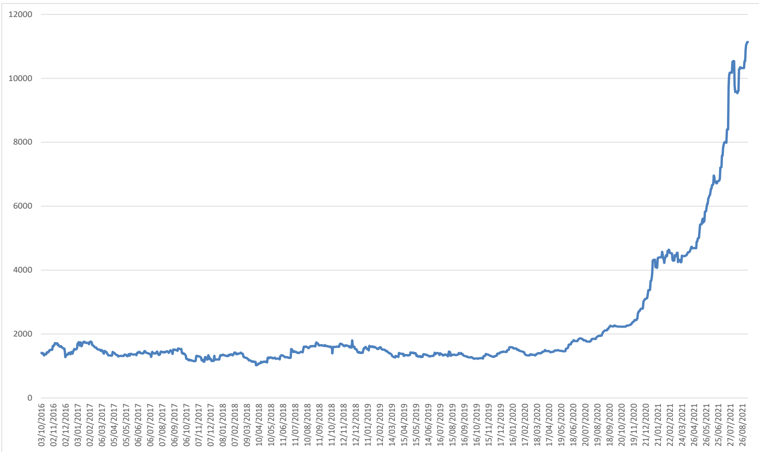
> *"INCREASED COMPETITION WITH TRADITIONAL HANDYSIZE CARGOES RESULTING IN A FURTHER PRICE DRIVE GIVEN THERE WAS – AND IS – VERY LITTLE GROWTH IN THE HANDYSIZE FLEET"*

Interestingly enough when we look at the smallest dry bulk vessel size for which we have a Baltic Exchange index (Handysize 7 TC, 38000 dwt), this index also seems to bottom around the same time as industrial production restarts. However in March 2021 when containers really started to jump, the H7TC does the same, as shippers that had been moving to containers over the past two decades all of a sudden reversed course and returned to dry bulk handysize parcels as this unexpectedly became the least pricey alternative. This increased competition with traditional handysize cargoes resulting in a further price drive given there was – and is – very little growth in the handysize fleet. At the same time larger handysize stems started to look at Supramax tonnage which by default lent support to that size class (Chart 2).

However, all dry bulk size (Capesize, Panamax, Supramax and Handysize) classes have after a rather disappointing Q1 achieved a stellar upwards rise. Investigating the main drivers behind this, main causes are without doubt the restart of heavy industry in Asia, Europe, South America and the USA with increased demand for iron ore, bauxite, coking and thermal coal helping on the demand side as did continued good Chinese demand for agricultural products although demand in absolute terms doesn't explain the magnitude of the rise. Just looking at the numbers, it becomes quickly apparent that the main cause for the upward momentum is located at the supply side. On the one hand we have an imbalance of trade which already existed in previous years but is steadily accelerating and makes that most dry bulk tonnage ends up in Asia without sufficient Asia-outbound dry bulk cargo to reposition making that tonnage has to be lured back to the Atlantic through a combination of higher freight rates as well as so-called ballast bonuses. On the other hand we have a very marked increase in congestion in both Chinese and Brazilian ports which binds tonnage and hence reduces available carrying capacity as well (Chart 3).

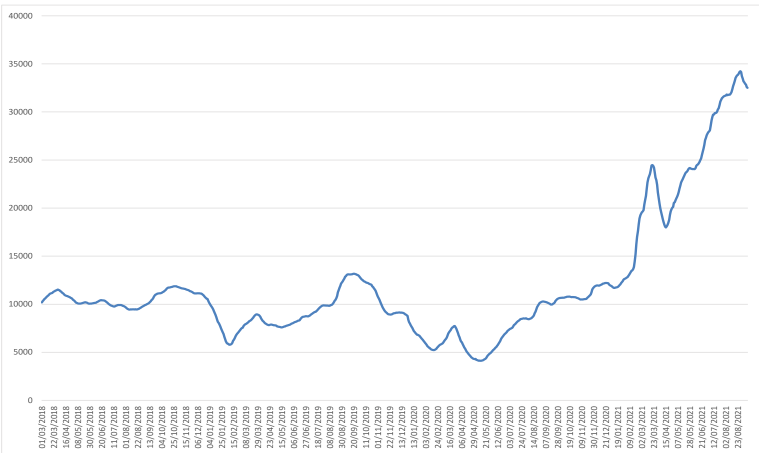
> "LARGER HANDYSIZE STEMS STARTED TO LOOK AT SUPRAMAX TONNAGE WHICH BY DEFAULT LENT SUPPORT TO THAT SIZE CLASS."

Chart 1: FBX (USD/40'FEU)



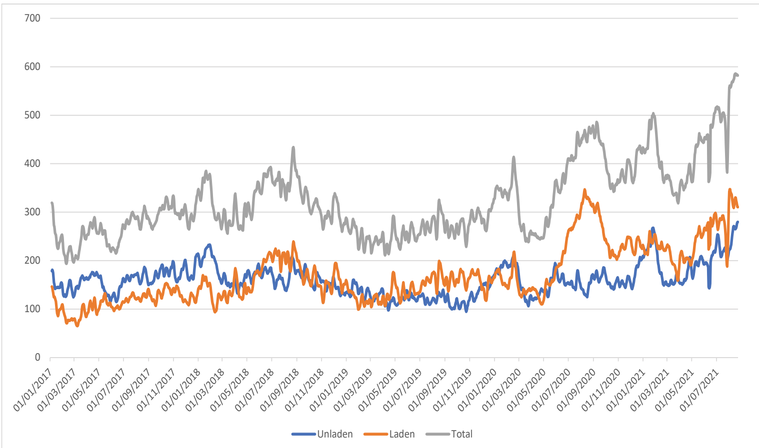
Source: Baltic Exchange Information Services Ltd

Chart 2: H7TC (USD/Day)



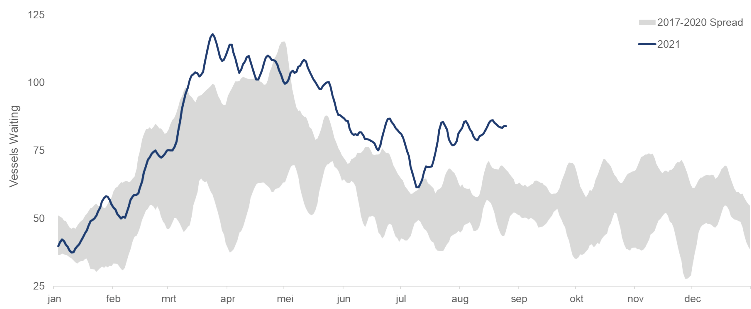
Source: Baltic Exchange Information Services Ltd

Chart 3: China Dry Bulk Port Congestion (vessels waiting)



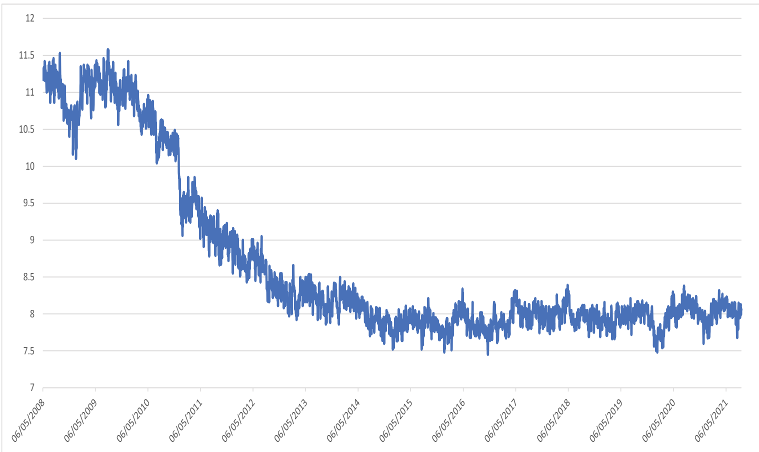
Source: Baltic Exchange Information Services Ltd

Chart 4: Brazil Dry Bulk Port Congestion



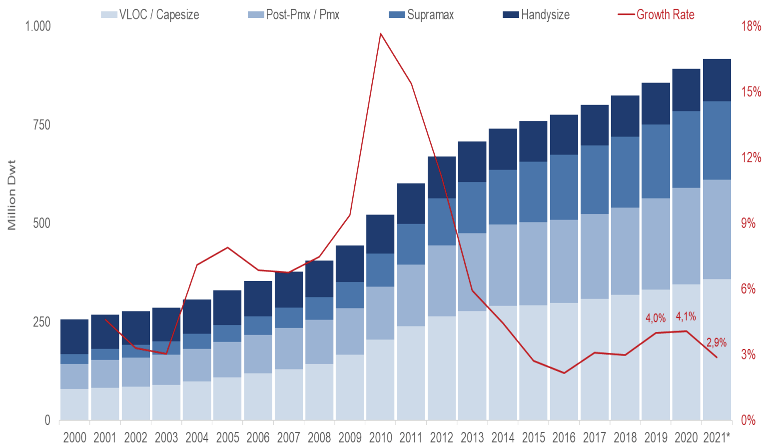
Source: Reuters EIKON, Howe Robinson Partners

Chart 5: Panamax Average Fleet Speed (in knots, incl anchored vessels)



Source: Bloomberg, Howe Robinson Partners

Chart 6: EXISTING DRY BULK FLEET



Source: IHS sea-web, Howe Robinson Research

A third factor that needs to be factored in is average sailing speed and while this has been going up for vessels actually moving, average speed across the entire fleet has in fact come off given the significant amount of tonnage tied up in congested ports (Chart 4/5).

So where does this leave us for the foreseeable future? Looking at the dry bulk fleet profile it becomes apparent that during the last few years fleet growth has slowed down considerably and even though freight rates are currently high and should induce new building, it might not happen in a meaningful enough way. Reasons are firstly that a lot of yard capacity has disappeared over the past few years and available capacity is likely to give preference to (relatively better paying) container tonnage. Secondly, with increasing pressure for the maritime industry to go green, the big question is which is going to be the maritime fuel of the future: methane, hydrogen, nuclear salt reactors, LNG, ... ? As long as there is legislative insecurity and these technologies are still extremely expensive most owners might not want to be first in making the (wrong) judgement call and hence hold back on making investment decisions (Chart 6).

On top of these pure economic drivers, we will also witness a reduction in capacity as a consequence of the new Energy Efficiency Design Index (EEXI) approved by the International Maritime Organisation in 2021 and which will come into effect in 2023. Although quite some ships will survive the initial introduction and get by with some affordable hard and software adjustments, it looks as if more and more vessels will no longer be able to comply over time as the EEXI tightens year by year and hence these may well disappear from the market. On top of IMO action decided upon, the probable inclusion of shipping in the European Union Emissions Trading System might further reduce available capacity in European waters as there will be owners that do not wish to be subject to a carbon trading obligation (or cannot open the required carbon accounts in EU National Carbon registers) and hence exclude EU waters in charter parties. Hence overall it appears that dry bulk shipping capacity might for the first time in decades stop growing. If this would become reality, even a modest 2-3% annual growth in seaborne trade would result in a fierce competition for carriage capacity and hence support dry bulk freight rates for the near future...

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STOCK INDEX FUTURES AND CENTRAL BANK TAPERING

Federal Reserve Chairman Jerome Powell at the August virtual Jackson Hole, Wyoming, Federal Reserve Symposium indicated the long awaited tapering of the Federal Reserve's monthly purchases of $120 billion of Treasury and mortgage-bond securities could take place later this year. Analysts interpreted Mr. Powell's comments to be a bit on the dovish side since Mr. Powell suggested policymakers will only gradually cut back on asset purchases, and that the Federal Reserve is still a long way from raising interest rates.

Chart 1: S&P 500 Futures - Weekly

Source: Chart from QST

Mr. Powell's dovish tone precipitated a move higher for stock index futures, especially in contrast to several Federal Reserve officials at the time who were voicing their preference for a near-term tapering rather than an end of the year tapering. Prior to the Jackson Hole Symposium there was a consensus view that a tapering could be announced sooner rather than later. The thought process is that anything that puts downward pressure on interest rates, as would be the case in the event of a later rather than sooner tapering, is considered to be bullish for stock index futures (Chart 1).

Stock index futures held up well despite several Federal Reserve officials recently saying they could begin reducing their monthly purchases of bonds by the end of this year if the economy performs as they anticipate. Philadelphia Federal Reserve Bank President Patrick Harker is the latest official to say he would support the start of tapering this year following Dallas Fed Bank President Robert Kaplan who reiterated his support for starting to taper the Fed's asset purchases in October as long as there are no fundamental changes to the outlook. There were similar comments from New York Fed Bank President John William when he said "it could be appropriate" to begin tapering before the end of the year.

Some analysts pushed back expectations for when the Federal Reserve will begin reducing bond purchases after a recent disappointing U.S. payrolls report, the sharp deterioration in consumer sentiment as tracked by the University of Michigan and the smaller than estimated increase in the U.S. consumer price index. Overall, in recent months stock Index futures have been only intermittingly and temporarily pressured by talk of tapering.

Stock index futures showed little reaction when the European Central Bank at its September 9th policy meeting left interest rates at record low levels but announced it would start conducting a moderately lower pace of asset purchases for the rest of the year. The central bank said the Pandemic Emergency Purchase Programme will be maintained at €1.85 trillion until at least the end of March 2022 but gave no signal of its next policy move, including how it might dismantle the Pandemic Emergency Purchase Programme.

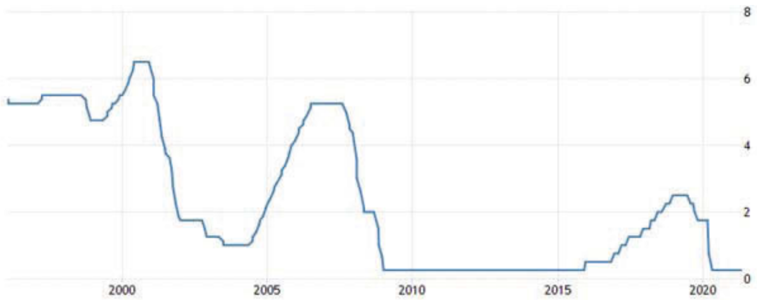
ECB President Christine Lagarde said the ECB's decision doesn't represent a move to phase out its bond purchases but simply is a realignment to the improved economic developments, and that the bank will remain committed to easy-money policies for years. Many traders saw this as a token step towards unwinding the emergency economic aid it put in place during the pandemic.

> *THERE IS STILL PLENTY OF ACCOMMODATION IN THE INTERNATIONAL BANKING SYSTEM, AS WELL, DESPITE SOME CENTRAL BANKS ACTUALLY ANNOUNCING A TAPERING SCHEDULE IN ADDITION TO TALK OF WITHDRAWING OTHER FORMS OF ACCOMMODATION.*

TOO MUCH ATTENTION FOCUSED ON TAPERING?

In my opinion there is currently too much attention given to when the Federal Reserve will taper its asset-purchase program. Whether there is an earlier than anticipated tapering or a delayed tapering, the fact remains that the fed funds rate is likely to remain at the historical low rate of zero to 25 basis points for quite a while.

Chart 2: U.S. Federal Funds Rate



Source: RateSource: Tradingeconomics.com, Federal Reserve

While I believe there will be a tapering at some point, most likely it will take place later rather than sooner and be a "dovish" taper with any reduction being small, especially now that economists have begun slashing U.S. third quarter gross domestic product estimates following mostly softer than expected economic data. Even when the Federal Reserve does taper its asset-purchase plan, my view remains that an earlier or later tapering would only represent a partial withdrawal of accommodation.

PLENTY OF PUNCH LEFT IN THE PUNCH BOWL

There is still plenty of accommodation in the international banking system, as well, despite some central banks actually announcing a tapering schedule in addition to talk of withdrawing other forms of accommodation. In spite of some central banks tilting toward a less accommodative policy, there is still plenty of stimulus remaining. Keep in mind that some countries in Europe and in Japan continue to have negative interest rates. Money tends to flow to where it is treated the best, and currently that asset-class is equities. A Federal Reserve tapering will not derail the bull market in stock index futures. The global reflation scenario will still largely be on track and will remain a major tailwind and ongoing dominant fundamental that supports futures in the long-term. Higher prices are likely for U.S. stock index futures.

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SUGAR IS SHINING IN A VOLATILE COMMODITY WORLD

In the past few months, we have seen a volatile Commodities Market, perhaps a bit more than usual.

We are having to deal with uncertainties on Agri yields, for the grain crops of USA, EU and CIS, due to uncertain rainfall patterns, to say the least. We have also seen an active Hurricane season in North America, higher freight rates and risk of demand disruptions as the virus is still going around, especially in the Far East.

The US Dollar is going sideways. Investors are watching the Fed and its forward policies which may have to deal with higher inflation and a very inflated balance sheet. Will the Dollar finally break the recent narrow range and rally?

Meanwhile, Stock Markets are doing okay with many investors not expecting any short-term disruption or change of policies, which could affect the market in the short-term.

ARE WE IN THE EYE OF A POTENTIAL ECONOMIC STORM?

Time will tell, but in the meantime we are seeing some "disinvestments" for some Agri Commodities, on the short term, with NETT LONGS being reduced, but mostly on Corn and the Soybean Complex.

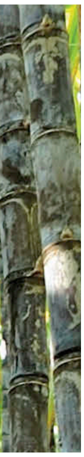
When it comes to Sugar nr 11 and Sugar nr 5 (Futures) there has been some reduction on NETT LONGS in the past 3 months but not much. Why?

The Brazilian Cane harvest in the Centre-South (CS) has been affected by a prolonged period of low rainfall as well as a couple of frosts in the past few months. Sugar Futures peaked at UScts/lb 20.90 (Oct 21 nr 11) by mid Aug but since then it has slowly retraced. As prices approached UScts/lb 19 and lower, physical off take improved and prices rebounded.

In the short-term, Sugar Futures don't have any significant volume of producer selling for the front months as most have done what they had to do sometime ago. Consumers on the other hand, have been raising their buying targets and providing a support to the market every so often.

Currently, without Investors (Funds, Specs, Index Funds) or Traders selling Sugar Futures, there is little pressure from Producers for 2021 until mid-2022 positions.

Current crop estimates expect Brazil CS to produce 31 to 33 mln m/t of sugar, down from 38,4 mln m/t. The lower Cane harvest and higher Gasoline prices (up 38% since Oct 2020), keep pushing Ethanol prices higher in the Brazilian Domestic market (up 52% since Oct 20), besides Sugar (up 62% YoY)! Hydrous Ethanol prices are trading at the equivalent of UScts/lb 18 cts and Anhydrous 20 cts basis 96 pol.



> *"COUNTRIES LIKE CENTRAL AMERICA, INDIA AND AUSTRALIA ARE EXPECTED TO PRODUCE SIMILAR CROPS. THE EU AND THAILAND ARE EXPECTED TO INCREASE, SO ON AVERAGE, THE GAINS OF OTHER NATIONS MAY OFFSET WHAT BRAZIL MAY NOT HAVE, BUT NOT EVERYTHING."*

SO, WHAT ARE THE SUGAR FUNDAMENTALS BEYOND BRAZIL?

At the present moment, many other producers are likely to have a decent crop, similar or higher than the previous one.

Countries like Central America, India and Australia are expected to produce similar crops. The EU and Thailand are expected to increase, so on average, the gains of other nations may offset what Brazil may not have, but not everything.

India is expected to produce 30,5/31 mln m/t vs. 30,6 mln m/t during last crop. The EU may surprise with 17,5 mln m/t up from 15,4 mln m/t and Australia similar to last year at 4,3 mln m/t.

The wild card is still Thailand. The last Cane harvest was 66,5 mln m/t and the coming crop is estimated as low as 85 mln and to as high as 100 mln m/t of Cane. The range would mean a Sugar production 1,9 mln to 3,5 mln m/t higher than the previous crop.

In terms of Sugar S&D, we are expecting a small deficit for April 21 / March 22. Our latest crop and consumption estimates point to a marginal deficit (103k m/t) with further risk of a greater deficit, depending on how "bad" the Brazil CS harvest may end up. There is a risk that Brazil may be worse and others not improve as much.

The previous year S&D was a marginal surplus of 1,5 mln m/t, so World Sugar stocks are not necessarily up and, in some countries, lower than others.

Given the weaker exports from Central America and Thailand, stocks are marginally up but due to stronger exports from India or lower production in the CIS and EU, their respective stocks are lower at very low levels.

We revised our sugar consumption for April/March 20/21 and found it to be 1,01% lower YoY, so despite the lockdowns and economic downturns, Consumption wasn't much affected. As we go into April/March 21/22 we see a pickup in consumption by 1%.

SO, HOW IS THE WORLD SUGAR TRADE?

It seems that 60,5 mln m/t moved from Exporting to Importing Nations in 2020 an increase of 8,2 mln m/t vs. 2019. We estimate 38,7 mln m/t of Raw Sugars and 21,8 mln m/t of Refined/White Sugars.

The first semester of 2021, which started stronger YoY, slowed down to a certain degree, but total volume may end up close to 27,6 mln m/t, similar to last year. We see a pickup in Raw Sugar exports to 18 mln m/t, up 747k m/t and a drop in Refined/White Sugar exports to 9,6 mln m/t or 1 mln m/t lower YoY.

Higher Futures and freight rates is causing importers, where possible, to slow down their imports, in hope of better prices later on. Thus far it hasn't been the case.

SO, WHAT ARE INVESTORS UP TO?

The latest CFTC report (as of the 7th of Sept 2021) showed the outflow of Investors picking up speed again. When we look at Agri Commodities, we see a nett long of 2,1 mln lots, down from 2,8 mln lots early in the year and at the lows for the year so far. Does it mean they don't like Agri Commodities as much as before?

Well, that is the case for some Commodities like Soybeans and Corn (down 359k lots) but for the Softs (Coffee, Cocoa and Sugar) they are only down 41k lots with Sugar down 27k lots at 414k lots NETT LONG or 21 mln m/t!!!

It's our view that unless "Investors" and Traders decide to sell Sugar, there is no pressure as Consumers are well priced and would prefer to keep selling, what hasn't been sold, on a scale up basis!

On the other hand, we notice that Consumers are dealing with their needs and getting on with their demand, perhaps not so enthusiastically but in the short term they don't seem to havemany options.

We estimate that Producers priced 22,2 mln m/t since Sept 20 at an estimated average of UScts/lb 16,31 while Consumers priced 24 mln m/t at an estimated average of UScts/lb 16,56, so similar. As we speak, Sugar nr 11 March 22 Futures is trading at 20 cts!! When we look 1 year ago, Producers had priced 43,4 mln and Consumers 22,7 mln m/t as of Sept 2020, about 4 cts lower.

So, if we can resume what is happening, Sugar Fundamentals imply an equilibrium in terms of supply and demand, with Producers well priced, willing to price scale up, Investors quite long and willing to hang on, so far! Consumers will have to deal with a much "drier" on offer market until Investors see greater crops and pressure or a turbulent macro environment.

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QINGDAO 2.0??

In a previous Ghost article, "Slow Boat to China" (Nov-Dec 2018), we discussed how a Chinese Government clampdown on lending to the rampant construction sector in 2010 encouraged some Chinese builders to explore alternative sources of funding, specifically metals transit finance.

Back then, unsecured domestic lending was perhaps 10% p.a., but some domestic Chinese banks were offering attractive rates of sub 4% when "secured" against imported metal shipments (typically copper), a US$ denominated asset.

The raw material departments of some construction companies would buy and cancel LME copper warrants, showing the warehouse receipts to the lending bank, and receive them back within a couple of weeks together with funds lent to a future date supposedly coinciding with the metals arrival / use in mainland China (warehouse receipts are created when LME metal warrants are picked up and cancelled, ahead of being shipping out).

Unscrupulous borrowers realised that they didn't need to hold the warehouse receipts for the term of the loan, given that banks were lending on sight of documents (including faxed/photocopied documents), so they could avoid the expensive LME cost of carry by re-warranting the metal to LME, and then repeat the process of picking up and cancelling different warrants to generate fresh warehouse receipts.

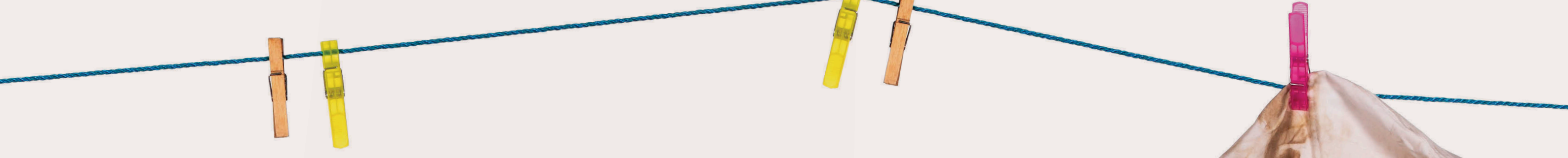
It's possible that some borrowers would send the same warehouse receipts to several banks at once, thereby multiplying the funding. The lack of a central registry of collateral made it impossible to know the extent of multiple pledging against total metal held, but estimates at the time varied from 10x, 20x or even 50x lending against metal held?

> *"MARKET CONTINUES TO SEE WARRANT TRADING ENQUIRIES FROM NON-PHYSICAL PLAYERS IN ASIA"*

Provided that the funds were re-paid on time, it seems the lenders did little checking against the collateral used as security, and it's possible that earlier loans were repaid out of funds received against new finance deals.

Warrant traders may have questioned why these customers were picking up and dropping back warrants in a pointless and costly merry go round, paying bid/offer spreads, financing, rent and re-warranting costs without actually shipping metal, even specifying metal at the back of a queue and a slow boat to China to extend the loan maturity.

The Chinese govt clamped down on copper warrant financing in mid-2013, but a similar pattern of cancellation / re-warranting quickly emerged in zinc, nickel and tin.



QINGDAO 1.0

The Qingdao scandal broke in mid-2014, when some aluminium supposedly held by Dezheng Resources in the port of Qingdao was found to be missing. The Chinese authorities immediately locked down Qingdao preventing legitimate metal owners from accessing their metal and independent assessment of the scale of the problem. The chairman of Dezheng Resources received a 23 year sentence after it emerged they had been multiple pledging and selling stock, with some estimates putting the loss at $3bn to banks and trading houses.

Qingdao spawned a number of lawsuits over metal collateral, memorably Mercuria vs Citigroup in London's High Court, and other lawsuits involving metals financing emerged some years later including Marex-Natexis-Access World, and Envy Global Trading in Singapore this year.

TRANSIT FINANCE STILL A RISK?

Given the relatively high costs to buy and ship metal, LME warehouses tend to be down the list for regular buyers of physical metal, with consumers preferring to source from merchants or producers.

Despite the higher costs of buying LME warrants, the market continues to see warrant trading enquiries from non-physical players in Asia, keen to pick up or dropping back LME deliverable metals, which suggests some regional banks are still offering preferential lending rates against warehouse receipts. Given the high round trip costs of rolling LME warrants, it's reasonable to suspect these costs are diluted by multiple pledging, with the associated risks to lenders.

It's not just Chinese banks which are exposed to risks when financing metals, with news reports that several western banks stopped commodity financing for a diverse steel group after it was alleged that liberties were taken with bills of loading and absent metal.

A central registry of collateral and regular auditing would have helped prevent multiple pledging and missing metal at Qingdao. In the aftermath, blockchain technology was suggested as a secure ledger for commodity financiers, although it's uncertain if or how effectively this has been applied in China.

> *"IT'S NOT IMPOSSIBLE THAT EVERGRANDE MAY HAVE SOME INVOLVEMENT IN METALS FINANCING?"*

DIRTY LAUNDRY

Western financial markets were rightly embarrassed by the financial crisis of 2007-08, brought on by a creative pursuit of returns after US rates were cut close to zero following the equity weakness in early 2001 and aftermath of 9/11.

Generous QE and zero rates were (are still) employed to keep the system afloat, and Government enquiries led to crackdowns on bank compensation and behaviour, with financial dirty laundry getting a public washing.

Side-stepping the west's financial issues, China's economy has continued to develop strongly, including bouncing back from the COVID pandemic that continues to challenge the global economy, while also attracting regular expressions of concern about China's shadow banking sector.

September's failure by Evergrande to meet interest and principal payments provides a significant test for authorities. China's second biggest property company has US$300bn debt at risk and off-balance sheet exposures including a domestic wealth management arm, triggering local protests and global concern at a time when China is also trying to address the wealth gap and excessive commodities speculation.

The Chinese government announced that Evergrande's interest and principal payments were on hold, suggesting some form of state bailout but, with their US$ debt trading mid 20s% and forecast sub 20%, international debt holders will suffer.

As a construction company, it's not impossible that Evergrande may have some involvement in metals financing? If so, there may be repercussions for the global metals market?

If safeguards surrounding collateralised lending have been introduced since Qingdao, this might allow a more orderly unwind of bank exposures. However, the ongoing appetite by financial players for LME warrants suggests risks remain.

When Qingdao broke in 2014, the Chinese locked it down rather than wash that laundry in public. It will be interesting to see how Evergrande's treatment differs in 2021?

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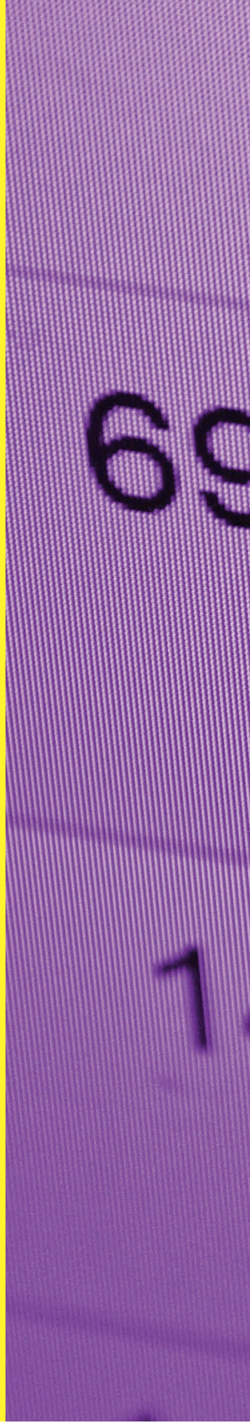


EVT – A QUICK (...AND POSSIBLY TIMELY) LOOK AT EXTREME VALUE THEORY...!

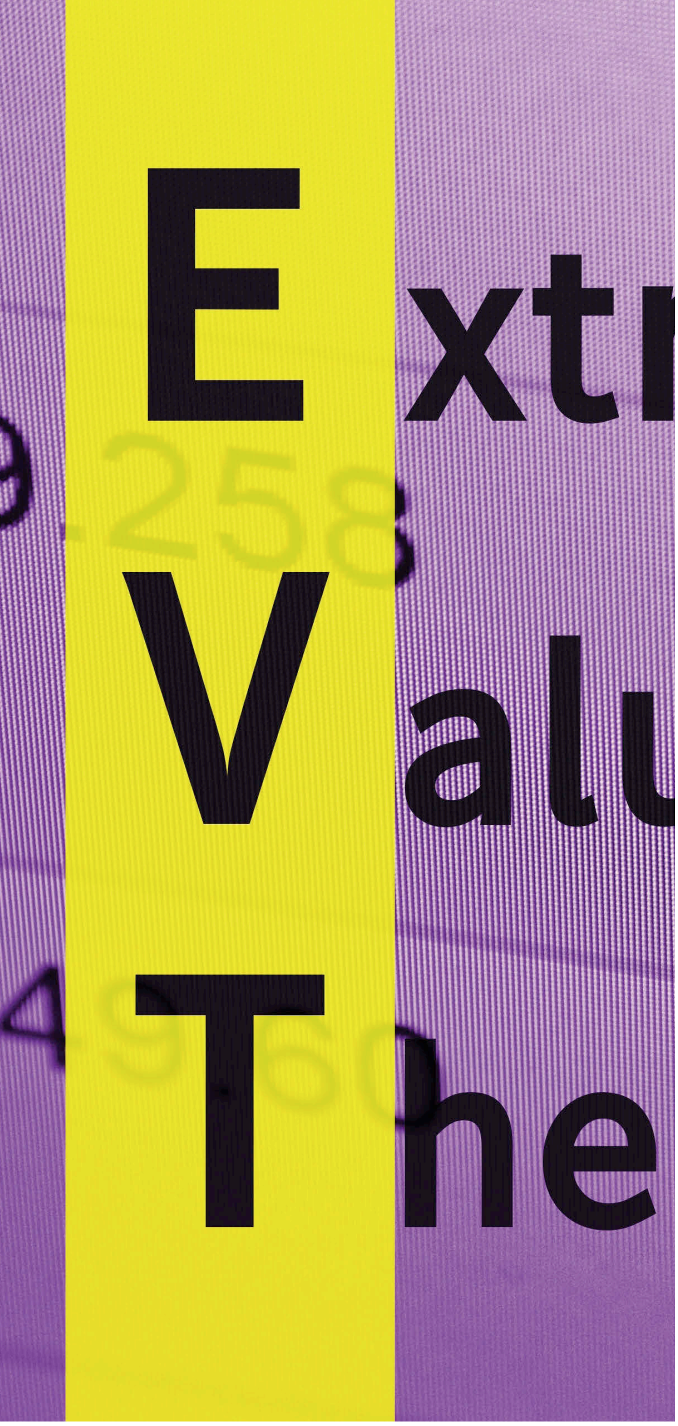
'...In Cauda Venenum...'

This story starts, as do many of my inspirations, with a seeming throwaway phrase by a fellow professional during a session I moderated at Commodity Trading Week back in June. It was Extreme Value Theory! Now, I am no statistician, my brief is Technical Analysis which whilst using some statistics, is more an art than a science. However, I wanted to know fmore, and the more I found out, the more I wanted to write something about it...and share it with you. So here goes...

As many of you might know, I have always seen issues with using Value at Risk (VaR) as the 'be all and end all' tool in Risk Management. The main reason is that it does not adequately take into account the jumps in illiquid exposure in forward days/months. I guess I was not the only one, as during the last few years, when attending the annual Commodity Trading Week, I noticed a lot of Risk Departments move away from VaR and towards various forms of stress testing on their positions. This was not the only criticism of VaR that I saw. Younes Besalah at the Bank of Canada wrote in his working paper 'Steps in Applying Extreme Value Theory to Finance: A Review' back as far as November 2000 that, '**The VaR approach has been the subject of several criticisms. The most significant is that the majority of the parametric methods use a normal distribution approximation. Using this approximation, the risk of the high quantiles is underestimated, especially for the fat-tailed series, which are common in financial data'. He continued with 'Investors and risk managers have become more concerned with events occurring under extreme market conditions...Extreme Value Theory (EVT) is a useful supplementary risk measure because it provides more appropriate distributions to fit extreme events. Unlike VaR methods, no assumptions are made about the nature of the original distribution of all the observations.**'. So...you may still use your favourite VaR tools, but it is very much worth your while, to include some EVT tools as well!

> *"EXTREME VALUE THEORY (EVT) IS A USEFUL SUPPLEMENTARY RISK MEASURE BECAUSE IT PROVIDES MORE APPROPRIATE DISTRIBUTIONS TO FIT EXTREME EVENTS"*

The next questions are...where does EVT come from and what does it mean? Well this venue is way too small to cover it all. However, from what I've been able to piece together, EVT was pioneered by



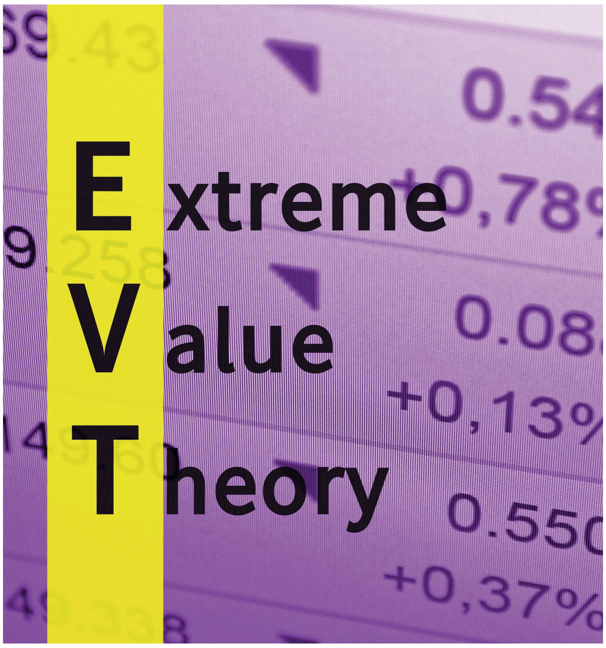
Leonard Tippet, an English statistician who worked for the British Cotton Industry Research Association. Whilst there, in the 1920's and 1930's, he clarified and worked on making cotton thread stronger, noting how a thread's strength was controlled by its weakest fibres. Further work with the noted statistician Sir Ronald Fisher Tippett, saw Tippett describing the distributions of extremes assuming independent variables. This was codified into a Theory in 1958 by the eminent German mathematician Emil Gumbel.

In more modern times, the book 'Extreme Value Theory: An introduction' by Lauren de Haan & Ana Ferreira is not just an introduction but also a focus on theoretical results and applications. This is where the phrase 'In Cauda Venenum' popped out as it is the first sentence of the book. In case you Google it, it IS NOT the 13th studio album by Swedish progressive metal band Opeth, but the Latin for '...Poison in the Tail...', aptly describing where the threat lies in assessing the markets using EVT as compared to VaR.

So...we know where it came from and have an idea of its meaning, though I would urge you to do more of your own independent study to learn further details. However, let's now look at how it can be used, assuming that you're not using it.

Well, in trying to study the data and impact of potential large market losses and the probability of their occurrence. Normal distribution, as laid out under VaR, does not happen. The issue is the fat-tail distribution in some extreme moves which affects all VaR assumptions. Now, EVT can be used to supplement VaR, not replace it, as VaR uses all the data for estimation...and most are central, falling short of the extremes because of scarcity. EVT allows techniques to concentrate on the behaviour of these extremes and the risks involved.

Yet with all this, EVT is seemingly still only a stepping stone, if a large one, towards further refinements or even jumps. One important issue, as outlined again by Younes Bensalah, was how '...**these results apply well to the univariate case, the multivariate one seems to define the limits of this theory**.'.



Thus, EVT can be seen as robust, using fewer strong assumptions, is justified by a body of mathematical theory and honestly reflects many of the uncertainties seen in rare events. It is also relatively quick and straightforward when applied to data compared to other methods. Yet it does not work well if you have limited datasets as it is dataset heavy. That is because it has been designed to deal with difficult questions, ones where information may be sparse...or non-existent!

I'll finish with the words of Professor Jonathan Tawn, Professor of Statistics at Lancaster University and a leading researcher in EVT. He said 'The key message is that EVT cannot do magic – but it can do a whole lot better than empirical curve-fitting and guesswork. My answer to the sceptics is that if people aren't given well-founded methods like EVT, they'll just use dubious ones instead.'.

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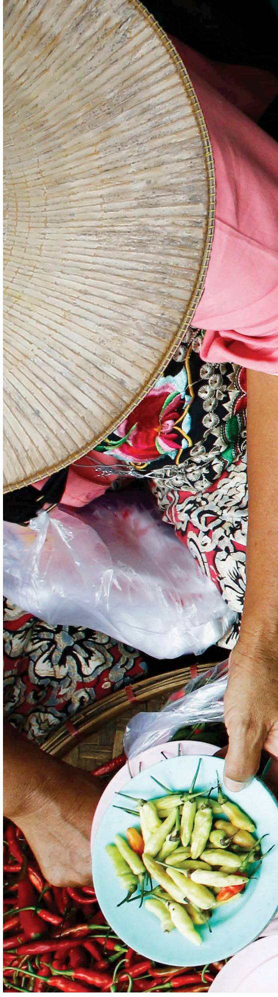

CHINA'S REGULATORY CLAMPDOWN: BANE OR BOON?

China's wave of regulatory interventions across a very wide range of sectors have become a major topic for discussion in financial markets, above all for equities and commodities.

It is all too easy to depict these often abrupt moves as authoritarian and anti-capitalist rollbacks, with strong echoes of the Maoist era, above all reasserting the authority of the CCP. But this is a very narrow ideologically driven perspective, which serves western political beliefs and stereotypes, while ignoring the antecedents. To be sure, the seemingly endless interventions are a seedbed for volatility in Chinese financial assets, and will continue to be a very prominent risk factor for investors, but should not per se be seen as a prompt to cut exposure to China.

In an era of protracted and intense 'financial repression', cutting exposure to an economy like China, in which many investors are underinvested, and which is and will continue to be a key engine of global growth, makes little sense, above all when generating positive inflation adjusted returns is so challenging. But as with the stereotypical political narrative, this is rather too much TINA ("there is no alternative") and FOMO ("fear of missing out") to this perspective, at least in terms of trying to comprehend what is happening and why.

As I have suggested in prior Ghost In The Machine articles on China (e.g. "Visions of China", "About that China 'devaluation' and 'debt crisis'" and "The Digital Currency Challenge Is Real"), there is a long history of Chinese authorities having to fire-fight excesses and imbalances in their economy, above all financial, which is hardly surprising given the explosive growth in its economy over the past four decades, and which its governance and regulatory structures have struggled to keep up with. In truth the developed world has done little better in evolving its regulatory structures to keep up with the technological revolution and digitalization of the global economy, and one can argue that there is an element of chutzpah about some of the criticisms levelled at China. After all the near monopolies that have been allowed to emerge such as Alibaba, Baidu or Tencent are really no different to Amazon, Facebook, Google or Microsoft, all of whom are as much subject to intense anti-trust scrutiny in the US and EU, as China's digital giants are by China's Communist Party.

To be sure, the crisis which has emerged around property giant China Evergrande has been brewing for more than a decade, and is above all a very familiar story about colossal leverage crashing on the rocks of liquidity issues, which then morph into solvency problems. It is equally a tale of the Chinese authorities' historic mobilization of the colossal pool of private savings into investment in property as a key road to prosperity, and the myriad of wealth management products (WMPs) often sold as insurance, which have attracted enormous inflows due to the promise of high yields and rates of return. It is too early to say how this will unfold in terms of consequences, but the antecedents of the Evergrande debacle are a very, if not the most, significant part of the regulatory intervention push.

> *"CONCERNS ABOUT CHINA'S OVER-RELIANCE ON DEBT TO POWER ITS GROWTH ARE ANYTHING BUT NEW"*

The facts are in many ways uncomplicated, and the similarities to the US 'housing bust' which in turn triggered the Global Financial Crisis are hard to ignore. Concerns about China's over-reliance on debt to power its growth are anything but new. But over the past five years China's overall debt to GDP ratio has grown by around 45%, and far more significantly much of that debt has gone into

the property sector, which in turn has accounted for around 25% of GDP. In prior episodes of such explosive growth in property sector related debt, it had nearly always been the case that local governments and regulators ended up intervening where the situation had gotten out of control, restructuring debt, and if necessary recapitalizing the entities. In turn this has encouraged lenders and investors to pile into lending ever greater sums of money to any entity (property mostly, but also other) that was in effect deemed to be 'too big to fail', in a classic race to the bottom, which erased any form of risk premia or credit differentiation, and by extension creating a great deal of moral hazard.

Mindful that the chronic over-reliance on debt (not just in the property sector) had become a serious threat to financial stability, and in many cases to fund projects that create little or no economic value, for example some 20-25% of properties in the most in demand cities are unoccupied, regulators moved to step up their hitherto, largely unfruitful efforts to curb debt growth. In the property and some other sectors this involved setting hard limits on cash to short-term debt, debt to asset and debt to equity ratios, which quickly choked off the ability to raise debt, in turning forcing liquidation of assets to pay down debt, and indeed suspension of some operations. The broader perspective is rather more important, namely that in clamping down on debt fuelled speculative activity, which produces little or no economic value, or what President Xi has called 'fictional growth', it is hoped that this will redirect money to consumption and business investment, or so-called 'high quality' growth. However, performing this sort of economic 'hand brake turn' firstly produces a great deal of uncertainty, which in turn creates seizures in the flow of credit via panic reactions among creditors, which can then spiral out of control due to contagion effects, above all financial distress in supply chains and indeed job losses. It also makes the process of balance sheet reconciliation and rebalancing even more challenging, often forcing the sort of rescue that the authorities want to avoid on moral hazard grounds, but then again allowing a Lehman moment would almost certainly be a great deal worse.

There is of course a much wider context for the array of regulatory interventions, which also needs to be considered, and it is dual aspect. China has ridden its luck on the back of the post-Cold War globalization and technology boom, but the row back against globalization was a train in motion long before the pandemic, which has only served to brutally expose some of the weaknesses inherent in 'just in time' production processes and globalized supply chains. However, if there is one lesson that should be learnt is that China is now fully integrated into the global economy, even if it is not politically. It is no more capable of decoupling itself from the world economy, than the rest of the world is capable of decoupling from China, let alone excluding it. Like so many powerful nations before it, it is learning that its efforts to secure its resource supply chains via its Belt and Road Initiative, and thereby to bind those economies to its own comes at a very high price, and in the longer term is often counterproductive.

Equally China's explosive growth over the past forty years has clearly taken hundreds of millions of its population out of poverty and created a great deal of wealth, but it now finds itself challenged on numerous fronts. To some extent, it is the victim of its own success, but like so many western countries, it has failed to adapt its economic models to its success, while paying lip service to confronting the increasingly destabilizing imbalances that have accumulated. As but one example, the environmental abuses and gross negligence that have been allowed to proliferate in its quest to achieve growth targets are now starting to prove costly as it is forced to rein in output, both due to pollution, and the deficiencies in its power supply infrastructure. In the case of the latter, it is clearly no worse than Western Europe, the US and Brazil, as has been so brutally exposed in recent months.

That said, in terms of adapting its regulatory models to deal with the excesses and the monopolies that have accumulated due to the rapid pace of digitalization of its and the global economy, it is in fact probably proving to be more proactive and indeed sensible. It is after all difficult to argue that placing restrictions on the amount of time that children spend gaming is malevolent. Nor are the moves to restrict and regulate education websites, which not only may not apply the highest standards in qualitative terms, but also effectively creates restricted access to learning, which in an economy with a rapidly ageing demographic and a shrinking workforce can only impair the economy's innovative potential.

In conclusion, it has to be added that while its regulatory methodology and implementation leaves a lot to be desired, viewing China's regulatory clampdown solely through the lens of political ideology is to say the least myopic, even if well-grounded criticism is always a necessity.

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At ADMISI, Eddie produces & publishes Eddie's Crayon's, a series of weekly, daily and special event Technical Analysis Reviews on FX, Stock Index Futures and Commodity Futures. He is a regular commentator on ADMISI's YouTube Channel plus others such as the Investing Channel and at online events such as Commodity Trading Week Online and Energy Trading Week Online. He has additionally spoken at many international conferences and seminars. Eddie is a Director of the Society of Technical Analysts, the oldest and largest Society promoting Technical Analysis, it's education and accreditation and a member of ACI-UK Financial markets Association.

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In an age of commentary overload, the Ghost In The Machine stands out for its no-nonsense clarity and thought-through forward thinking. There is a rare sense of reading tomorrow's news early and standing free, outside of the dubious wisdom of the crowd.

PREVIOUS EDITIONS

THE GHOST IN THE MACHINE

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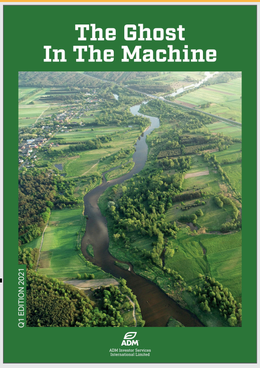

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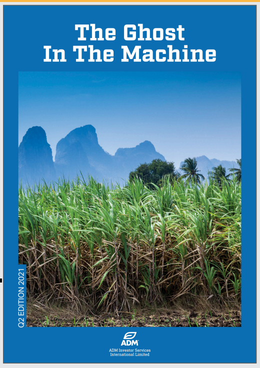

2020 | Q3 EDITION

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PRODUCTS AND SERVICES

COMMODITY MARKETS

As one of the world's leading food processers, we have a wealth of expertise in agricultural markets. This is supported by extremely experienced and professional teams in each of the main fields of the industry: energy, metals, grains, sugar, coffee and cocoa.

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With a traditional voice desk and state of the art technology driving ADMISI FX's online offering, you will have access to fast execution, low latency and deep liquidity in over 130 crosses. Whether you trade spot, forward, swaps or NDFs, ADMISI FX will have a solution for all your currency trading needs.

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Our highly experienced and professional team supports all aspects of clients' accounts from execution through to settlement. We value our clearing and settlement capabilities as a core competency for ADMISI.

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ADM Investor Services
International Limited

Q3 EDITION 2021

The Ghost In The Machine

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