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Outlook

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OUTLOOK TO OUR READERS

London, 8th January 2021

Welcome to the second Annual Commodities Outlook from the desks of the analysts in the London team. We formed the team in 2019 to complement the work of the existing analysts in the organisation, who are largely but not exclusively in the Americas. The London team focuses to a degree on the EMEA and Asia regions, but of course we have a global reach and are always available to talk to any client, prospect or colleague who has questions that are particularly relevant to our respective areas of expertise. As well as analysis that is distributed through Newsletters and which is posted on the Market Intelligence portal (daily commentaries, Thought Leadership, analysis of particularly interesting sets of circumstances, Black Swans and so forth—of which there were obviously plenty in 2020), we also have a programme of regular webinars on topics of interest.

This document includes contributions from Kevin Solomon on the economic outlook and the oil market; from William Rutherford-Roberts on wheat, oilseeds and coffee, Natalie Scott-Gray on the base metals suite plus cross commodity analysis, while my area of speciality is the precious metals. For your interest I have included the table below; clearly wheat was impervious to the impact of the virus, certainly in terms of short-term price action, and Will also discusses the relative activity between Arabica and Robusta in the Coffee chapter. Oil has obviously taken the biggest hit, while gold did what it does best, which was to act as an effective risk hedge. Read on for more details...

Asset	Size of March fall (%)	To a low of how long previously?	How long to regain the February levels
Wheat	10.1%	six months	two weeks
Gold	12.4%	four months	five weeks
Arabica	14.9%	six days	six days
Aluminium	20.5%	4 years 2 months	20.2 weeks
Lead	20.8%	4 years 2 months	23.2 weeks
Nickel	24.2%	1 year 2 months	19.8 weeks
Tin	25.8%	4 years 2 months	13.0 weeks
Zinc	26.0%	3 years 10 months	19.8 weeks
Copper	26.5%	3 years five months	15.4 weeks
S&P 500	33.9%	1 year 2 months	25.2 weeks
Silver	35.7%	10 years 11 months	19.5 weeks
Platinum	42.2%	17 years, 5 months	41 weeks
STOXX 600	42.6%	6 years five months	85% - 46 weeks
Palladium	44.1%	6.5 months	74% - 46 weeks
Brent	67.0%	18 years, three months	88% - 46 weeks

Source: Bloomberg, StoneX

I would like to express our thanks to Vitor Andrioli, who is the Markets Intelligence Co-Ordinator, based in Brazil, and who as always has been a tremendous help designing the templates for this and the other Market Intelligence publications.

Very best wishes for a safe and peaceful 2021.

Enjoy your read!

Best regards,

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ECONOMIC OUTLOOK

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Bullish factors

- ▲ Mass vaccinations / herd immunity will enable all sectors to participate in the recovery.
- ▲ Early business cycle growth dynamics is expected in H2 2021; synchronous global economic growth is expected.
- ▲ End of earlier uncertainty in U.S. policies reflecting fears of a divided Congress.
- ▲ Historically easy financial conditions should benefit economic activity.

Bearish factors

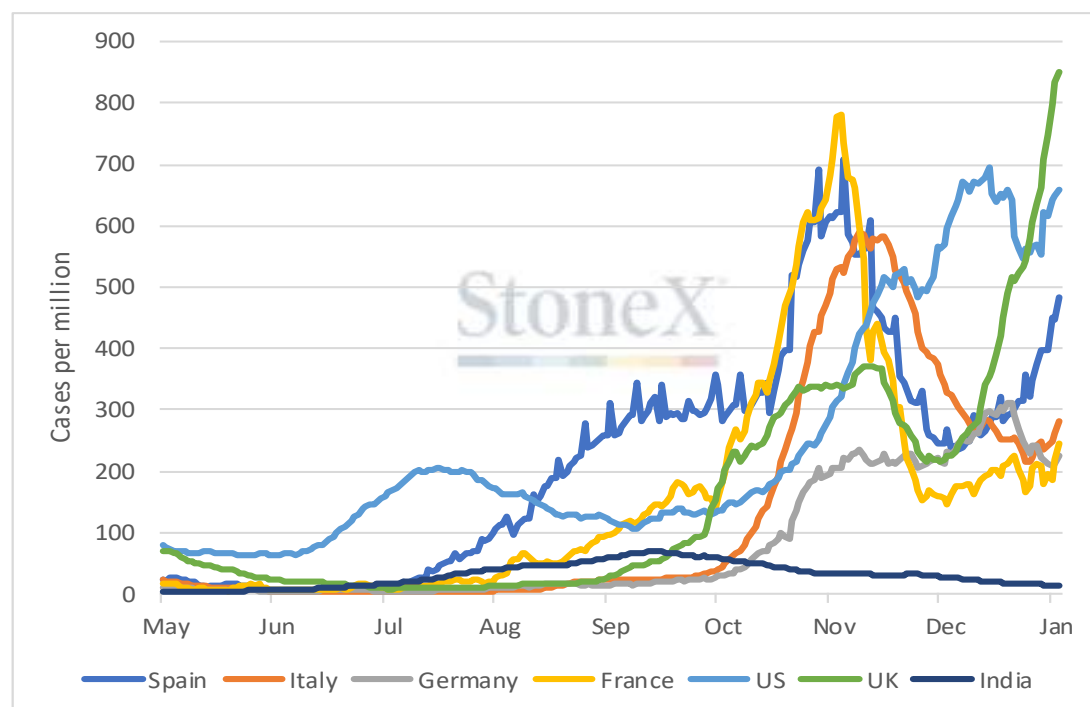
- ▲ Lacklustre pace of the vaccine rollout, owing to logistical issues, may peg back economic growth prospects in 2021. Further mutations of the virus that may prove somewhat resistant to vaccines.
- ▲ The emergence of protectionist trade policies and increased mistrust between China, U.S and Europe, risking the unsettling of the global economic recovery.
- ▲ A politically divided United States could derail sentiment.

The global economy collapsed into a state of paralysis in the spring of 2020 and at the height of global lockdowns, had over half of the world's population (4Bn people) experience some sort of restriction to their mobility. The global pandemic forced changes upon the normal functioning of economies around the world, with sweeping stay-at-home orders and social distancing measures distorting business operations around the world, particularly businesses that exist in the recreational sectors. Governments and central banks have desperately intervened to provide economic assistance to their COVID-impaired economies on a scale that has never been seen before. The U.S. Federal Reserve balance sheet expansion was 76% in 2020, from \$4.2Tn to \$7.2Tn, while the European Central Bank's expanded by 64% from \$5.2Tn to \$8.6Tn. In order to comprehend the scale of economic support, we compared with the monetary and fiscal intervention that we saw during the 2008 crisis, with the pandemic. The combined fiscal and monetary response in May saw Germany direct roughly 33% (and counting) of its GDP toward stimulus in 2020, compared to a modest 3.5% of GDP during the Global Financial Crisis (GFC) in 2008. In the United States, the combined fiscal and monetary response last year represented 12.1% of GDP (and counting), relative to 4.9% of GDP during the GFC. Of note, this analysis was from McKinsey was conducted in May 2020, and current stimulus to GDP ratios are likely to exceed the numbers stated above once we assess the full COVID-19 crisis retrospectively, but it provides a baseline to understand the scale of the economic turmoil that the pandemic has created. Global output will contract in 2020, but China will be the only country to register annual growth, with the world's second largest economy the notable outlier in muting the spread of the virus within its borders.

COVID –19 remains the primary risk in 2021

Fast-forward to Q4 2020, and we have finally been presented with multiple vaccines to prevent the spread of COVID-19, which should now facilitate the process of a robust recovery to the global economy in H2 2021. The market is filled with unbridled optimism and somewhat prematurely priced in the return to normality during Q4-2020, but COVID-19 risks are in abundance in H1 2021, especially in the first quarter as the virus is expected to peak in the winter months in the Northern Hemisphere, which will keep many of the advanced economies locked down and will continue to inhibit activity to substantially below their output gaps. In addition, the new variant of COVID-19 is deemed to be 54% more transmissible than the initial strain, which is another accompanying headwind that the world has to contend with.

COVID-19 cases in the major economies (per million cases)



Source: WHO. Design: StoneX

Commodities Outlook | 2021

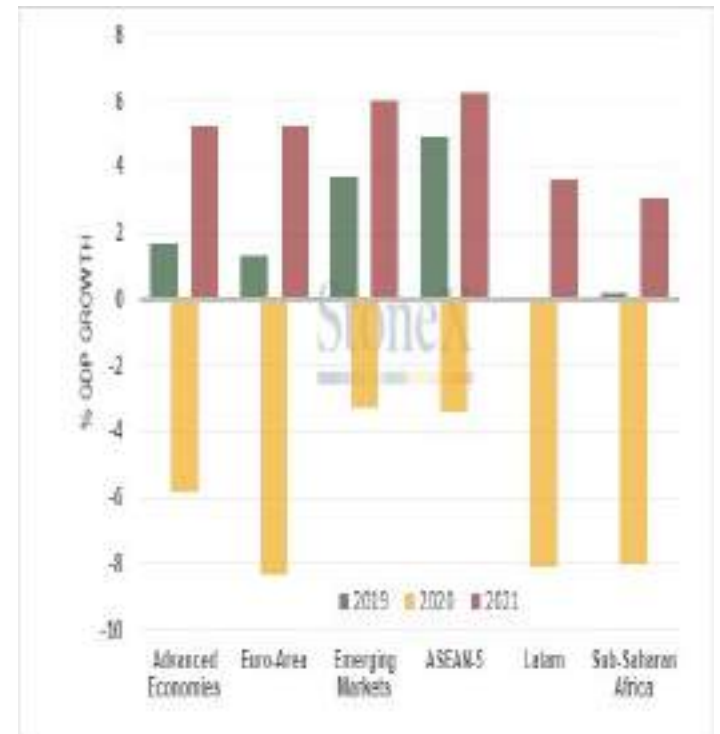
Nonetheless, the economic prospects for 2021 are inextricably linked to the speed at which vaccinations are distributed and utilised, rather than the amount of fiscal and monetary support that is unleashed by governments and monetary authorities. Despite the anticipation of a synchronous global economic rebound in 2021, albeit from low levels of activity, global GDP will remain a distance away from pre-crisis output levels, especially in the advanced economies. Meanwhile emerging market economies are expected to return to pre-pandemic output in 2021.

The long-lasting impact from the pandemic will reside predominantly in the global jobs market, with permanent closures of businesses and structural changes to some sectors. The data indicate that the unemployment rate amongst the OECD member states peaked in 2020 at 8.5%, surpassing the unemployment rate that was observed in the aftermath of the Global Financial Crisis. However, in the quarters after the pandemic hit, the unemployment rate recovered to 7% towards the end of 2020 due to widespread government job retention schemes. But, as the some of the global job retention programmes expire, we may observe spikes in the unemployment rate during 2021 that will interrupt the gradual downward trend in the joblessness rate.

The economic scarring from the pandemic does not just stop at employment, but it has also infiltrated global investment. UNCTAD indicates that global investment collapsed by 40% in 2020 on an annual basis, but global foreign direct investment inflows are expected to fall a further 5% to 10% in 2021, and are projected to bounce back with fervour by just under 20% in 2022. The sluggishness in global investment is driven by corporations deciding to err on the side of caution as their profit margins have largely been squeezed by the pandemic. Prudence is expected to continue for the rest of 2021 once the public health risk has been largely eliminated before corporations begin undertaking large scale investment projects.

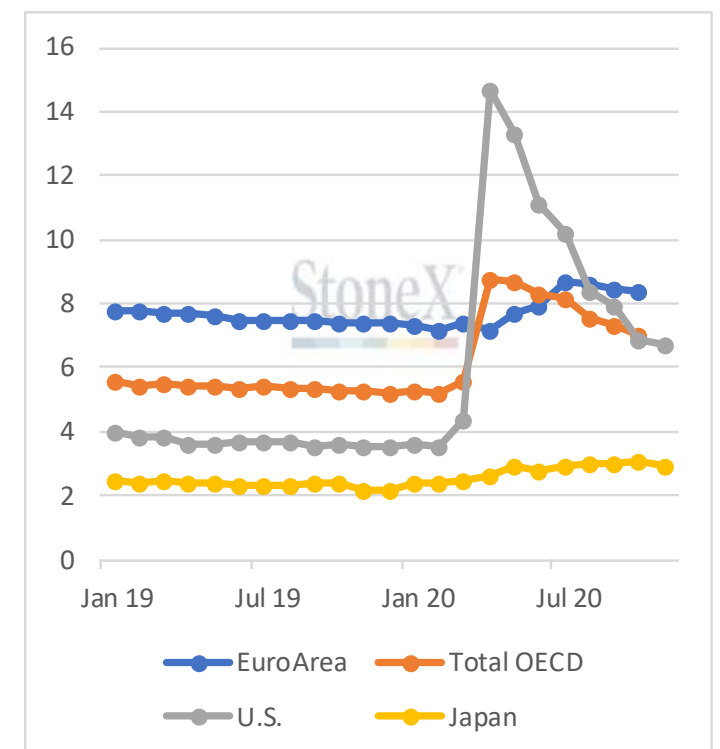
The deluge of fiscal and monetary support on a global level has investors preparing for inflation to return with some lustre in the second half of 2021, and this could be a serious reality. As herd immunity via the way of the rapid deployment of vaccinations provides confidence within the market, there could be a surge in pent up demand towards sectors that have been unloved by the pandemic, particularly services. The Federal Reserve, Bank of England and the European Central Bank are all prepared to see inflation overshoot their target of 2% in order to get their respective economies on a stable footing; should inflation arrive in 2021 H2, it is expected to be temporary because of the long-lasting distortions in the global economy, particularly in employment which will cap wage growth.

WEO Global Economies Outlook is expected to rebound



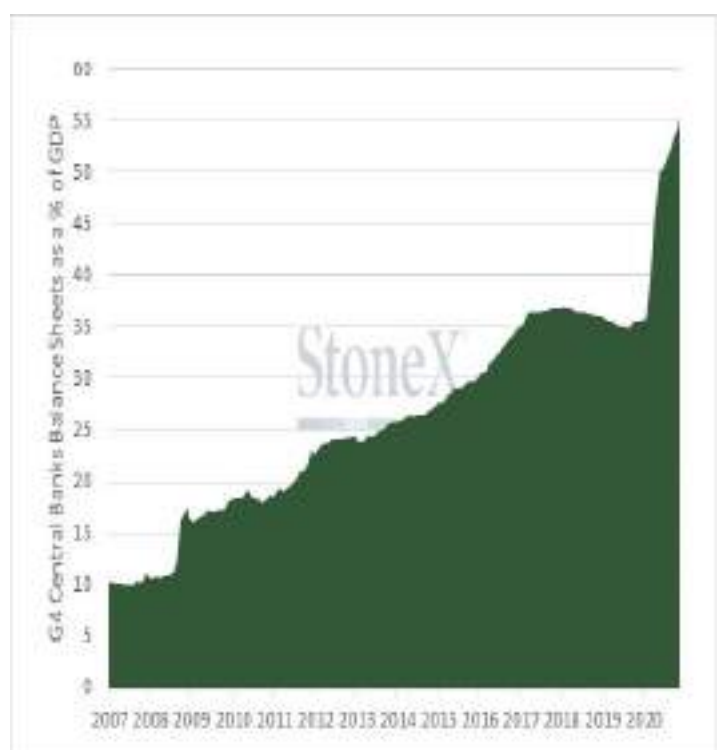
Source: IMF. Design: StoneX.

The OECD Unemployment Rate is showing signs of a gradual recovery



Source: OECD. Design: StoneX.

The G4 Central Banks Balance Sheets as a % of GDP. (BoJ, BoE, ECB, Fed)



Sources: Bloomberg. Design: StoneX.

The case for inflation is predicated on increased saving rates of households in the past year, which could be the fuel to the inflationary surprise. In addition, the rising prices of key commodities that influence global supply chains is a core leading indicator of inflation. Copper and oil, which are both seen as thermometers of the global economy, are expected to benefit of improving global trade, a substantially weaker U.S. dollar that could all contribute to influencing the upside to inflation.

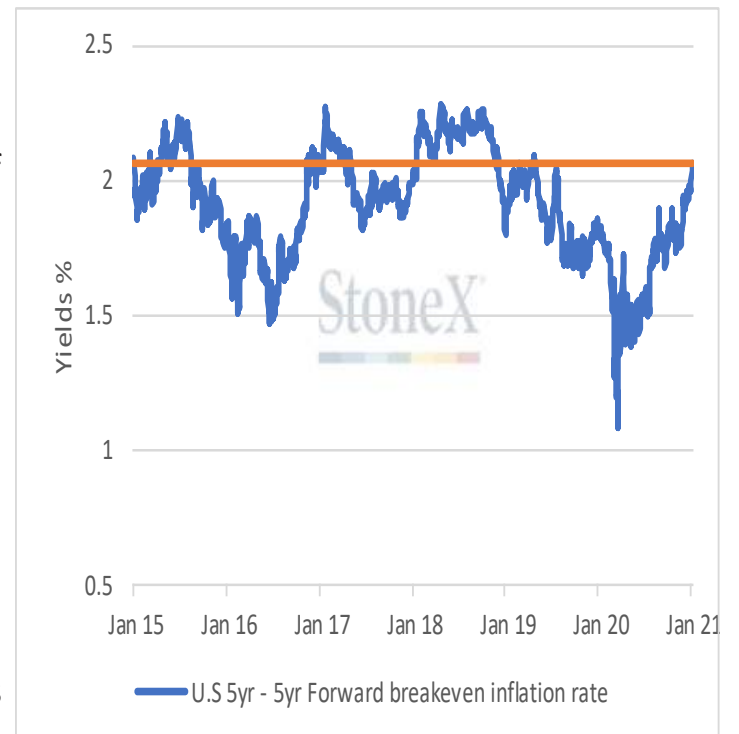
2021 is viewed as a rebound year, but there are risks ahead

Geopolitical risks will be centre stage in 2020, with primary focus on the trade tensions between China and the United States. Once President-Elect Joe Biden officially takes his position at the White House, there will be pressure from both sides of the aisle in Congress to apply pressure on China over the nation’s business practices. There are expectations that Joe Biden’s approach will be much more systematic, predictable and perhaps less inflammatory than outgoing President Donald Trump, and in this case, could alleviate the downside risks to the market. However, it remains to be seen whether China would change its own strategy over the negotiations. Another risk originating from trade tensions with China is the possible uncoupling of supply chains and it could be a significant negative distortion to the market given China’s dominance. The view of de-globalisation appears on the rise from a worldwide perspective, and that even includes spats between the European Union and the United States. Global companies are flirting with the idea of diversifying their risks away from China and reorienting towards other emerging Asian economies, such as Vietnam. Rising labour costs in China are also a key driver for multinational companies to look elsewhere. This upcoming year could be key in seeing how drastic the upheaval is, if it even occurs at all, but this will all be linked with how relations are managed between the West and China. Upheaval of supply chains could create a sharp appreciation in the cost of goods manufactured in China, but it looks as if companies will favour building increased resilience within their supply chain networks. But as previously mentioned, relations between the E.U. and the United States may be tested, particularly after the E.U signed an investment deal with China.

Polarisation within the United States

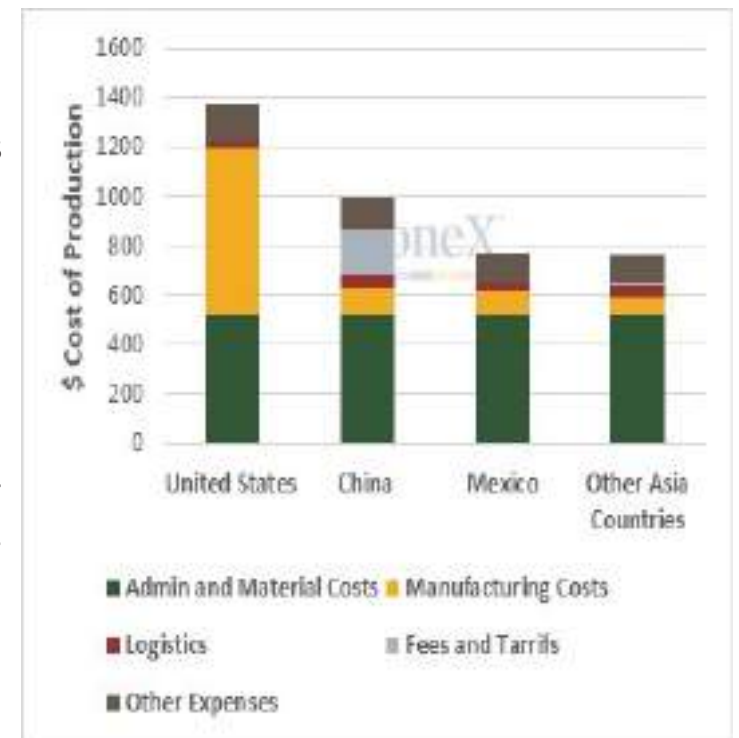
The largest risk to derail the economic recovery remains linked to politics, and the bifurcation within the United States became increasingly clear in the latter part of 2020 and especially in the first week of 2021. Should these pressures continue to propagate, with the United States divided (according to a YouGov poll only 62% of voters believe that Joe Biden is the legitimate President), which could undermine the Biden presidency throughout his term. If domestic conflicts gain momentum, investor caution will certainly take hold and perhaps detract from United States’ foreign policy initiatives this year.

U.S. Breakeven inflation rate



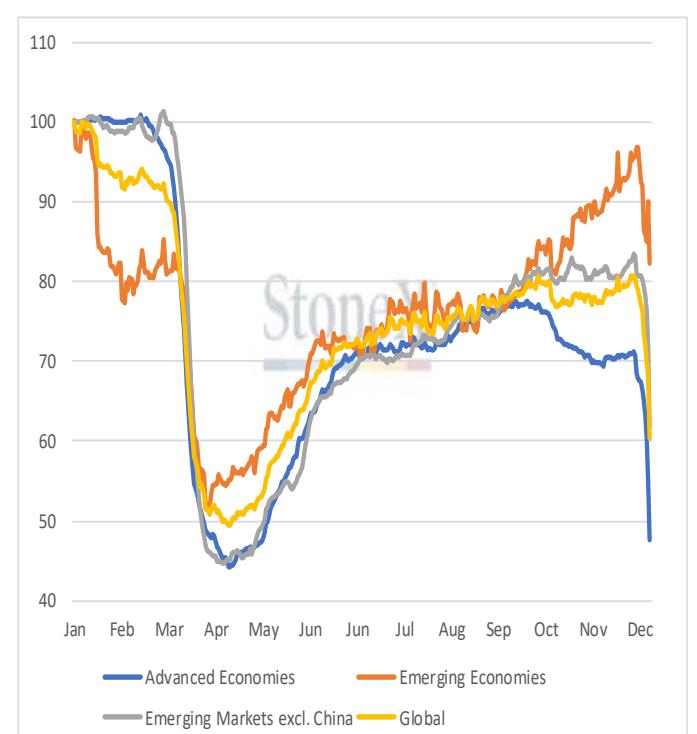
Source: Bloomberg. Design: StoneX.

Could we see an upheaval of some supply chains from China?



Source: PWC. Design: StoneX.

2020—high frequency economic activity in advanced and emerging economies



Sources: Bloomberg, StoneX.

2021

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Bullish factors

- ▲ Gold is likely to find support from potential geopolitical and economic tailwinds in 2021, while industrial metals are forecast to rise on global manufacturing recovery, supported by both central bank and government policy stimulus.
- ▲ Oil consumption is likely to jump on a resurgence in individuals' confidence towards transport, particularly air travel.
- ▲ A hopeful recovery in demand for H2 2021 (on global immunisations), on the back of forecast tighter supply, should support coffee prices.

Bearish factors

- ▼ A longer than anticipated roll out of various vaccines, leading to global herd immunity being delayed, would negatively impact all industrial metals and the energy complex.
- ▼ The realisation that certain industries such as transportation (including automotive and aerospace) are unlikely to regain 2019 levels for years to come.
- ▼ The potential for escalating geopolitical tensions between the United States and China, China and Australia or indeed in the Middle East could delay global recovery and impact worldwide trade.

The **precious** metals sector was the best performing commodity group in 2020, rising on average by 27% Y/Y, led by silver, which in turn mirrored gold's movements as the latter benefited significantly from its characteristics as a hedge against multiple forms of risk. This year, with both geopolitical and economical certainty skewed to the downside, we expect that gold will maintain high prices, especially given negative real interest rates and excess liquidity seeking a home, while silver should benefit from the double-whammy of a strong gold price and improving industrial activity. Indeed, if we turn solely to **industrial** metals, which were the second-best performing commodity group in 2020 (rising by 16% Y/Y for base metals alone), copper led the pack, influencing the rest of the LME suite from mid-March annual lows, with prices bouncing back on China's robust V-shape economic recovery, supply concerns, a weak U.S. dollar and improving outlook for manufacturing globally given central bank and government stimulus policy. We forecast a bullish outlook for the metals this year as demand outside China recovers on global immunisation prospects, while China enacts its 14th Five Year Plan and a global shift to green policy supports investment into 'green' metals. Turning to **agriculture**, the sector also recorded a positive price performance in 2020, rising by 16% Y/Y, with this year's forecast of tighter balances of wheat, corn and soybeans in major global exporting nations likely to be further price supportive. In the case of coffee, slightly lower supplies are expected to be offset by stunted global consumption growth. Meanwhile, the **energy** complex was a sore point this year, posting an annual decline of 15% Y/Y, with end-use demand cut off due to the spread of the virus, stifling most modes of transport and economic activity. This year, on the back of vaccine distribution, confidence in individuals' mobility should rise (particularly in air travel) from H2 2021, providing a real impact to oil consumption; however, we do expect recovery to be long and slow with global oil consumption remaining below 2019 levels for at least the next two years.



Source: Bloomberg. Design: StoneX.

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OUTLOOK

PRECIOUS METALS; GOLD & SILVER

Gold and Silver

Silver wears the laurels as the outperformer among the major base and precious metals over 2020, with a gain over the year of 48%. As shown in the table in the introduction, silver's fall during the February/March COVID-induced meltdown was 37%, down to near-eleven-year lows, while gold shed "only" 12% to just four-month lows. This reflects the two key elements in silver's fundamentals: - the first is its dual personality, with 60% of demand coming from the industrial sector, plus its historical affiliation with gold; and the second is its innate volatility. With the markets recoiling, silver suffered both as an industrial metal and on the expectation that reduced spending would hit its decorative/jewellery side. When gold started to recover, silver eventually followed and then built up tremendous momentum, rallying from an intraday low of \$11.64 to a high in early August of \$29.86, a gain of 186% as investors and speculators used its higher volatility as a way to achieve gearing to gold's bull run.

Gold, meanwhile, came down with the rest of the financial sector in the Q1 falls; this is a normal pattern although it often raises eyebrows on the basis that if gold is an insurance against risk, why does it come off? The answer is that the depth and liquidity in the gold market (daily volumes, after stripping out estimates for futures and ETPs, are roughly 50% those of the S&P500—if the other elements are included then gold volumes are, at ~\$145Bn per day, ~95% of S&P volumes) mean that it is frequently sold in order to raise cash against margin calls. Once the crisis has passed, positions are usually re-established. The fact that gold unwound its losses after just five weeks while it took the S&P 25 weeks, is self-evident.

Gold's intra-year performance was less effervescent than silver, but nonetheless very respectable with a net gain over the year of 25%, ranking it fourth behind silver at 48%, and palladium and copper at 26%.

Bullish factors

- ▲ **Gold:** widespread financial stimulus with liquidity looking for a home
- ▲ Many nominal and even more real interest rates are negative and likely to dip further
- ▲ Lingering geopolitical risk, further yuan:\$ appreciation
- ▲ **Silver:** predicated on gold's fortunes; potential uplift from improving industrial fundamentals—eventually.

Bearish factors

- ▼ Widespread and effective uptake of vaccine bringing fresh confidence
- ▼ Reduced monetary easing in China
- ▼ Silver would be pulled down by a retracement in gold but signs of a sustained industrial recovery would cushion the blow to a small degree.

Gold and silver—January to December 2020



Source: Bloomberg. Design: StoneX.

So the question arises; will gold and silver sustain similar gains in 2021? To address this we look first at gold and then consider silver.

There is no doubt that there are still a number of tailwinds behind gold as we go into 2021; the question is whether they are all already priced in. In principle one could argue that anything that is already known about should by definition be priced into the market. This sounds attractive, but doesn't necessarily work. An especial case in point is the massive global financial stimulus. The United States the European Central Bank and the Bank of Japan have all been active with a combined asset growth of over \$7Tn last year. With Congress' approval of a \$900Bn virus relief package in the United States (tied to the \$1.3Tn government funding programme) there is more liquidity coming; Europe may follow suit, while Japan is looking to extend support for the corporate sector. China has been accommodative, but policy is pointing to a less accommodative stance next year following the recovery in the economy.

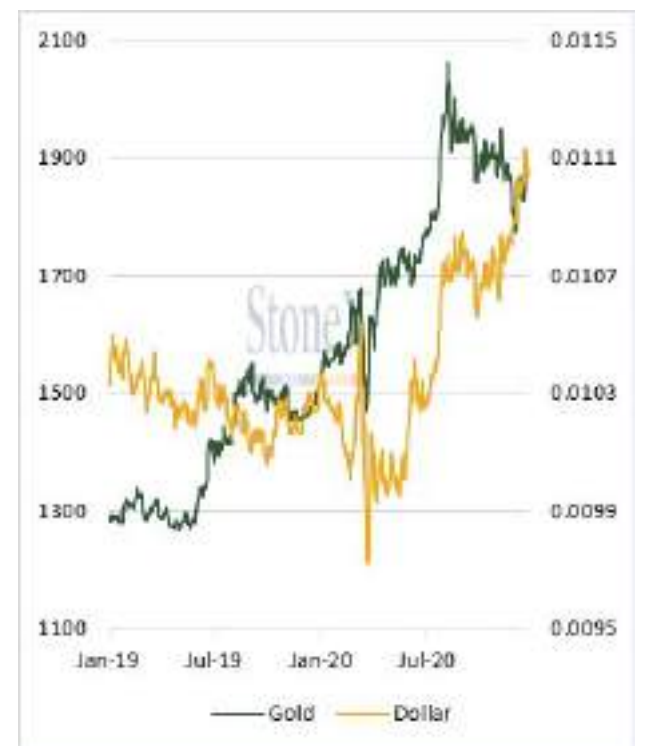
In this respect, therefore, gold is caught between headwinds and tailwinds. Increased spending power in the United States and a nudge upwards in domestic inflation would push real rates further into negative territory, which is supportive; conversely, a return in confidence that would drive domestic spending would also suggest professional funds moving further into value stocks rather than risk-off assets. We saw this in microcosm when the first tangible vaccine announcement was made in November (although under the law of diminishing returns, subsequent announcements have had increasingly modest effects on gold, on the whole).

It is hard to quantify how much spending power will be unleashed if as and when the virus is controlled and confidence returns. There is, however, a likelihood of consumer-led inflationary forces. Given inflation's low rates around the world, it is not inflation per se that would have a tangible impact on gold; it is the effect of rising inflation on real interest rates. Further, with the markets awash with liquidity, and no guarantee that there will not be a third wave of virus, plus with no opportunity cost associated with holding gold, we believe that on balance, professional funds will continue to favour gold investment as a risk-hedge, especially as equities remain over-valued and vulnerable to a correction—particularly if corporate tax rates are raised.

We must remember that a vaccine is not a cure and that we have to work through a substantial lead time during which economic activity will remain under pressure, with associated strains in the financial system. The chart to the right shows that while VIX has come right down from its Q1 spike, it remains high in recent historical terms; some of this relates to the change of Administration in the United States and uncertainty over how the new policies will play out domestically and internationally.

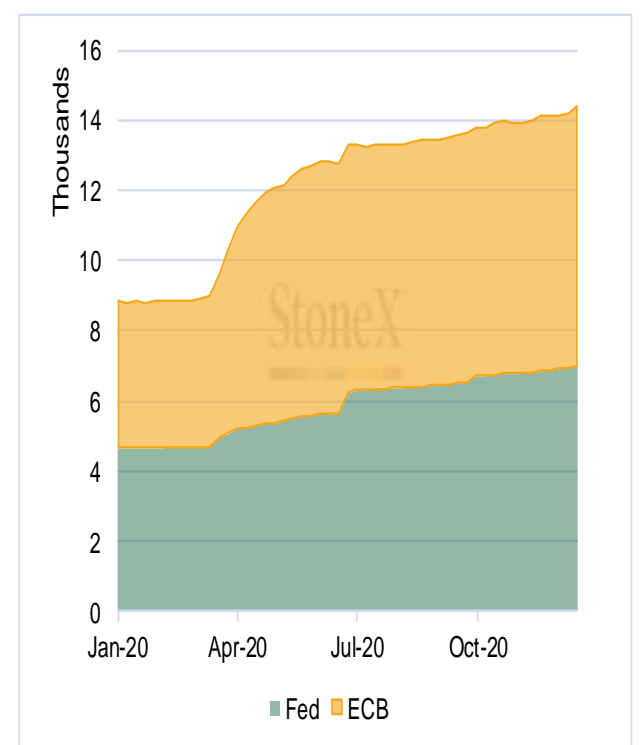
While Mr. Biden is widely seen as a more inclusive character than his predecessor, the tensions within the United States will be difficult to smooth over, but with a *de facto* Democrat control of

Gold and the inverse of the dollar



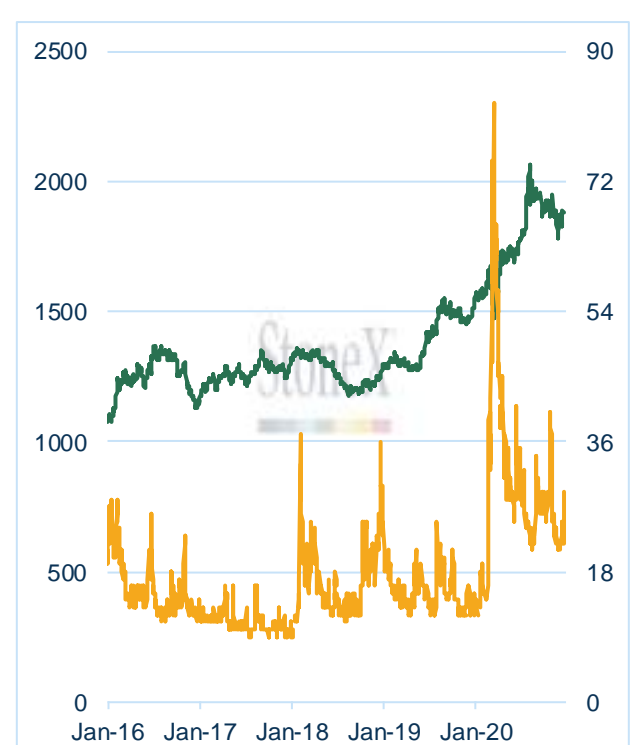
Source: Bloomberg. Design: StoneX.

The Fed and ECB Balance sheets, 2020



Source: Bloomberg. Design: StoneX.

Gold and the VIX index



Source: Bloomberg. Design: StoneX.

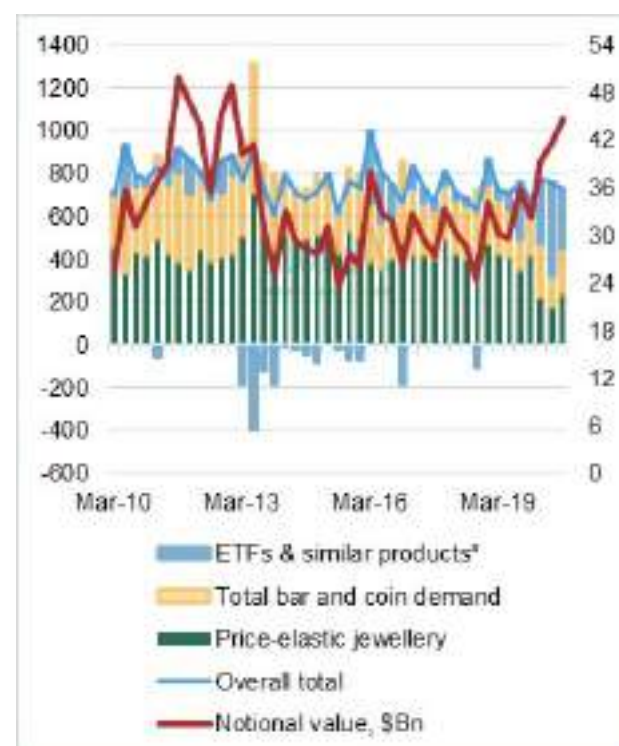
Congress we can expect more aggressive fiscal stimulus this year. Internationally, it is likely that Mr. Biden will aim to maintain a tough stance with China, although the diplomatic rhetoric may well be toned down. As one of President Biden’s top targets is to discuss trade tariffs, we may see some clarity on this area sooner rather than later. Meanwhile the EU trade deal with China, agreed in principle on 31st December 2019, has raised tensions between Europe and the United States. The continued economic risks in the EU, exacerbated by the protracted negotiations over Brexit, are putting sustained pressure on the euro, while the dollar charted an independently bearish course over much of 2020. The additional stimulus package may well renew downward pressure on the dollar, and it is arguable, therefore, that the currency most likely to benefit from these forces is the renminbi as China is thought likely to ease away (gradually) from its recent accommodative stance.

On balance, with the outlook for the first half-year uncertain at best, we expect gold to rise, if only gradually, in the first months of 2021. Once there is tangible evidence that the virus is being brought under control, and confidence in an economic recovery gains traction, then gold would be likely to ease.

From a fundamental standpoint, grass roots gold demand was hit hard in 2020, although solid buying activity from the ETPs in the first ten months or so was easily enough to offset the reduction elsewhere. Looking forward it is not difficult to paint an eventual picture similar to that of 2013; when risk appetite was picking up, professional investors bailed out of ETFs and all that metal went into China. This time would be slightly different in that we are already starting to see an improvement in demand in India and some parts of east Asia, as well as China, so any such sales could well be absorbed on a more widely-spread basis this time. One of the other reasons why Chinese demand from the international market was so sluggish in 2020 is that too much metal went into China in 2013 (including among the banks, keen to capture the price premium) and it took a long time to work off.

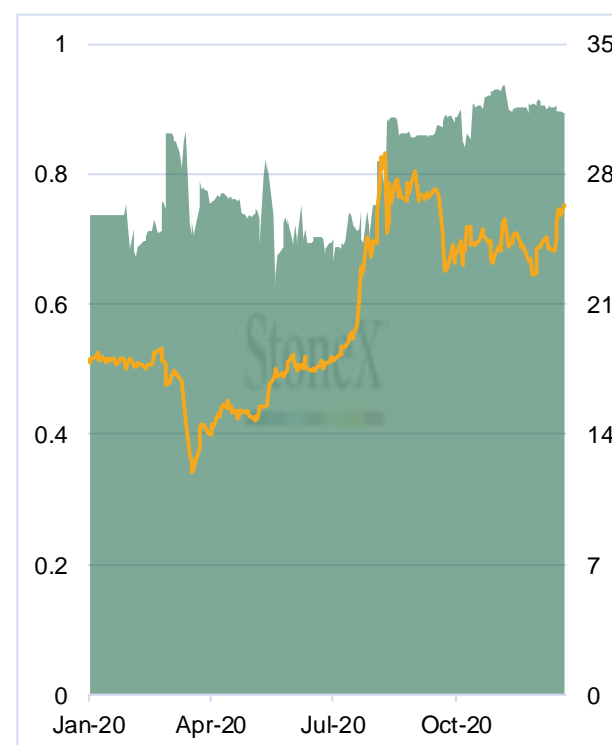
If we see gold prices continue to rise through a good part of 2021 and then ease, silver should follow a similar though more exaggerated path. The gold:silver ratio should contract during the bull phase and then widen again as prices come off. Under this scenario, we would expect to see physical gold investment in the Middle East and Asia hold up better than silver offtake. In India, which is the world’s largest consumer of silver jewellery and silverware plus bar & coin, the silver market is static, while gold is already moving and prices much above \$30 are likely to work against silver while discretionary spending is still cautious. Later in the year silver industrial demand should make gains, notably in electronics and solar uses and we expect the market to be in a surplus of roughly six weeks’ industrial demand. It is likely that western ETF investment would mop this up, and with supply price-inelastic (only 25% of silver supply is from primary silver mines) the price action will, for the most part, remain closely allied to that of gold.

Gold retail investment demand and the ETPs



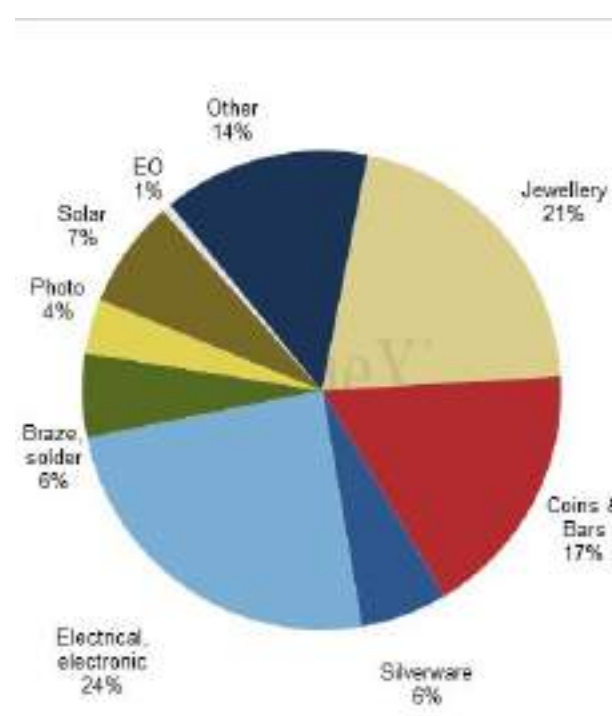
Source: Bloomberg. Design: StoneX.

Silver; Gold-silver correlation



Source: Bloomberg. Design: StoneX.

Silver demand patterns, 2020e



Source: GFMS, Refinitiv. Design: StoneX.

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OUTLOOK

PRECIOUS METALS; PGM

Platinum and Palladium

Platinum and palladium both saw hefty swings in their supply and demand profiles in 2020, with the virus having a severe effect on mine production, notably from the deep underground mines in South Africa, while the importance of the automotive sector to the demand profiles meant that both markets contracted on both sides of the balance.

We estimate that platinum mine production contracted by some 1.4M ounces or 13% in 2020. Virus-related production losses were exacerbated by outages at Amplats' processing units, with the Anglo Converter Plant (ACP) Phase A suffering an explosion in the first quarter, which resulted in the declaration of force majeure to concentrate suppliers; the Phase B Plant then suffered one or two issues and has been closed for a full re-vamp over the course of 2021. Amplats understandably reduced its guidance numbers for 2020, but the repair of phase A was completed much more rapidly than initially expected and guidance was raised. Amplats is the world's largest platinum producer; corporate production guidance at time of writing was between 2.6M and 2.7M ounces of PGM; quarterly reports suggest a drop of ~1.2M ounces of platinum, or 18% of global refined output (including scrap), and a slightly larger reduction in palladium output, which latter looks like being of the order of 0.9M ounces, 10% of global total (this difference in share reflects the very high level of palladium scrap supply globally).

Part of the resurgence in platinum's price as of November was due to the fact that Amplats essentially ceased sales and was expected not to resume until 2021. The company has said that the release of work-in-progress inventory built up during 2020 will be spread over 24 months and we have factored this into our forecasts. The other driving forces included the fact that apart from oil, platinum was, until the end of October, one of the weakest hard assets in the suite, with year-to-date losses of 13%; the next weakest, among the major metals at least, was lead, with a 6% decline.

Bullish factors

- ▲ **Platinum:** Growth prospects for heavy duty vehicles;
- ▲ Fuel cell-powered vehicles finally appear to be making headway;
- ▲ Return of capital investment in chemical and glass industries;
- ▲ **Palladium** to return to market deficit next year;
- ▲ Improvement in the light vehicle sector.

Bearish factors

- ▲ Continuation of second virus wave, further knock-on impact;
- ▲ **Platinum:** return of South African mine production; market back in surplus;
- ▲ **Platinum:** dim outlook for the EU auto sector;
- ▲ **Palladium:** pre-stocking of palladium (and rhodium) for autocatalysts in China over 2018-2020

Platinum and palladium, January—December 2020



Source: Bloomberg. Design: StoneX.

We estimate that platinum posted a deficit in 2020 (prior to any ETP activity), the first one since 2015, as supply took a bigger hit than demand. The outlook for next year suggests a reversion to a surplus, of roughly four weeks' demand as mine supply works its way back to more normal levels, while demand, although improving, will not regain 2019 levels. In fact we do not expect to see 2019 demand levels achieved until 2023 at least.

Meanwhile palladium looks to have been in deficit again (as it has been since 2011), although somewhat smaller than of late, at approximately five weeks' global demand. Palladium scrap is a very important part of the supply side and while mine supply contracted, the overall drop in output in 2020 is estimated at 14% compared with 19% for platinum.

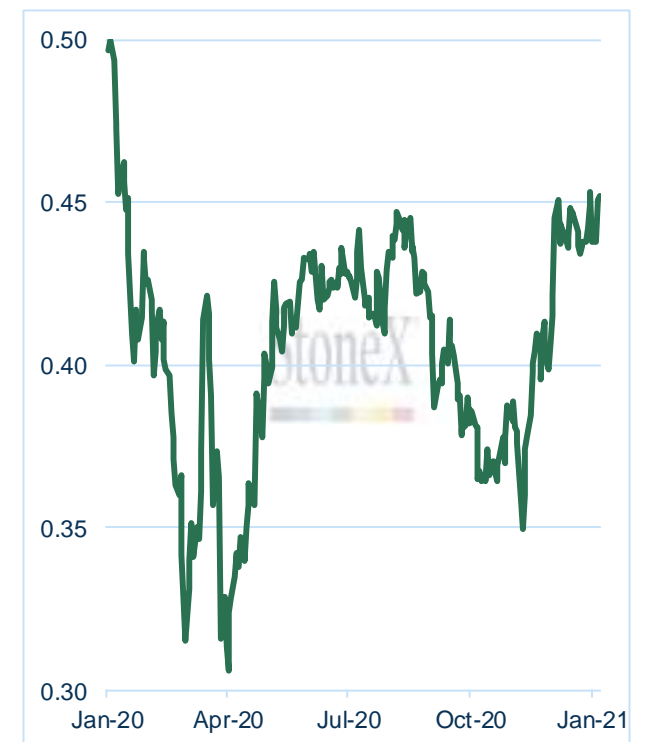
The key demand element is the automotive sector, although platinum is only half as reliant on autos as palladium, at 39-40% of global demand, against 79-80% for palladium.

The impact of the virus on the automotive industry has been substantial, not just in volume terms. While that has been tangible, the enforced retrenchment of the industry and the associated need for very careful investment planning on the back of much thinned balance sheets has highlighted the electrification of the vehicle fleet and the competition with the Internal Combustion Engine (ICE). This favours platinum in its own right, as fuel cells for vehicles, which have platinum electrodes and which have been under investigation for at least three decades, are finally coming into the picture. In the vanguard comes Hyundai, which announced in October that it expects to need 70,000 ounces of platinum annually by 2030 for its fuel cell stacks (the company plans to produce 700,000 fuel cell units by that year) and in October 2020 it delivered the world's first mass-produced fuel cell trucks, to customers in Switzerland. While 70,000 ounces is only roughly 1% of current-day demand levels, this is just one company and others can be expected to follow suit.

On the other side of the coin is the impact on palladium of vehicle fleet electrification. While platinum benefits, palladium is not involved in fuel cell technology nor in battery-powered vehicles, and in addition research has been underway in parts of the industry to re-substitute platinum, in part at least, for palladium in emission control catalysts. This was originally price-driven when platinum was down to just 40% of the palladium price, but was also stimulated by potential shortfalls in palladium supply.

Fleet electrification changes all this. Not only does platinum take pole position over palladium with fuel cell technology, but the change in powertrains means that there will be no long-term shortfall in palladium supply. Far from it. In 2020 autocatalyst scrap return amounted to an estimated 2.2M ounces, or 25% of total supplies. Behind Russian mine output, it is also the second largest component of palladium supply. We believe that even without disruption to mine supply last year palladium would have been

The platinum/palladium ratio



Source: Bloomberg. Design: StoneX.

Platinum market balance (000 ounces)



Sources: GFMS, Refinitiv. Design: StoneX.

Palladium market balance (000 ounces)



Sources: GFMS, Refinitiv. Design: StoneX.

ying with or slightly ahead of South Africa in the race for second place.

Taking this one step further involves netting off scrap supply from both sides of the equation. This puts net palladium demand in autos in 2020 of 5.4M ounces, still at 79% of the total. Fast forward to 2030, however and the picture changes.

Overlaying analysis onto the long-term auto sales forecasts from Bloomberg Intelligence suggests that, while at present the auto sector may be 79% of palladium demand, then 2030 is the year in which scrap return from the auto sector *exceeds demand* from the same sector. While 2030 may seem a long way away, it is only nine years hence—and mining companies tend to look for a ten-year time horizon when planning their strategy.

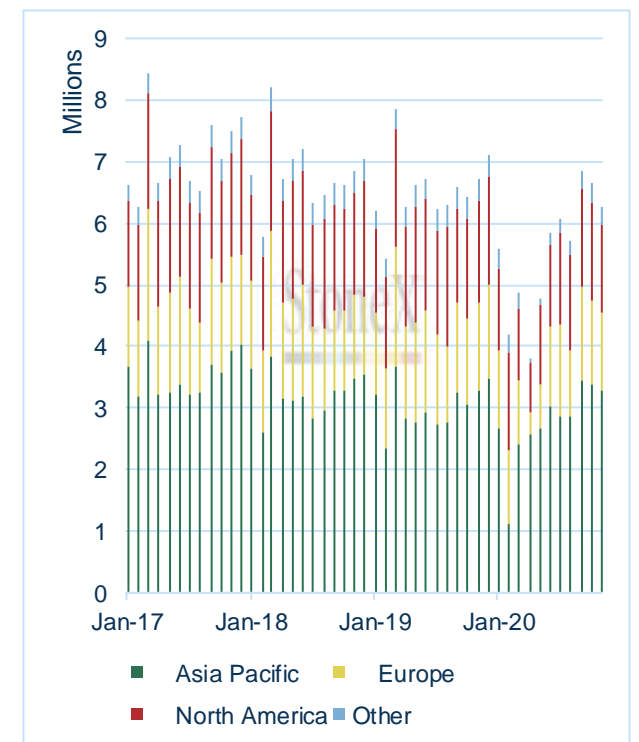
The shorter term shows that platinum’s fall in February / March to near 17-1/2 year lows saw the managed money positions on NYMEX crash from a net long of 2.2M ounces in mid-February to just 0.3M ounces. The rally at end-year saw fresh longs almost matched by short covering. Entering 2021, therefore, platinum is not under much of a speculative overhang. At the start of the year platinum is trading close to \$1,100, suggesting that the imbalances of the first quarter of 2020 have been fully unwound. To that end, platinum prices may struggle to hold on to \$1,000 in the first part of 2021 in the face of continued uncertainty and likely reduced corporate investment. The changing nature of the road transport industry, (and the upside that should come from improvements in long-haul trucking, which will use diesel or, in the case of some Swiss trucks, fuel cells), suggest that by year end platinum prices will be higher than they were at the start of the year.

Palladium, meanwhile, will remain in deficit beyond 2021, even though global demand is unlikely to reach 2019 levels until 2023 at least; we believe a number of auto companies will have inventory to run off and there is some reluctance to enter into long-term contracts this year.

In late December Norilsk’s Global Palladium Fund issued its first metal tokens to its customers. This is an innovation, using digital transactions on an electronic “tokenisation” platform, allowing customers to price physical metal for future delivery. The tokens are backed by Norilsk’s metals and transactions can be settled physically or financially. The company does not intend to sell more than 20% of its metal via this system, and will be able to buy back tokens if a customer’s requirements change. This could well be the start of a key fundamental change in commodities trading.

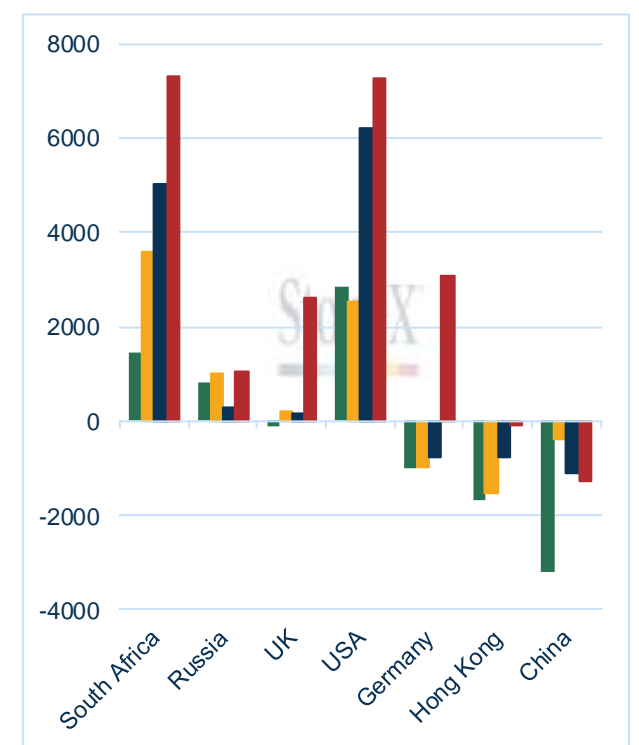
Meanwhile as we enter 2021, palladium shorts on NYMEX had contracted sharply from a nine-month high, supporting the rally towards \$2,400. Palladium liquidity can be thin and forwards can be volatile; palladium could be in for a bumpy ride, at least in the first half of the year, especially as we believe that Chinese users had stockpiled in 2018 to early 2020, ahead of emission limits tightening, but the overall outlook is moderately positive.

Vehicle sales by region



Source: Bloomberg. Design: StoneX.

Swiss platinum trade, key partners



Sources: Swiss Federal Customs Administration; StoneX.

Swiss platinum trade; Hong Kong and China



Sources: GFMS, Refinitiv. Design: StoneX.

2021

OUTLOOK BASE METALS

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Bullish factors

- ▲ A swift global distribution of multiple COVID-19 vaccines would alleviate global economic uncertainty; while forecast continued fiscal and central bank policy stimulus will still be required in H1, lending support to demand, particularly in the west.
- ▲ The rise and implementation of green policy will benefit 'green metal' demand.
- ▲ 2021 marks the first year of China's 14th Five Year Plan, with a focus on new infrastructure, electrification and recycling.

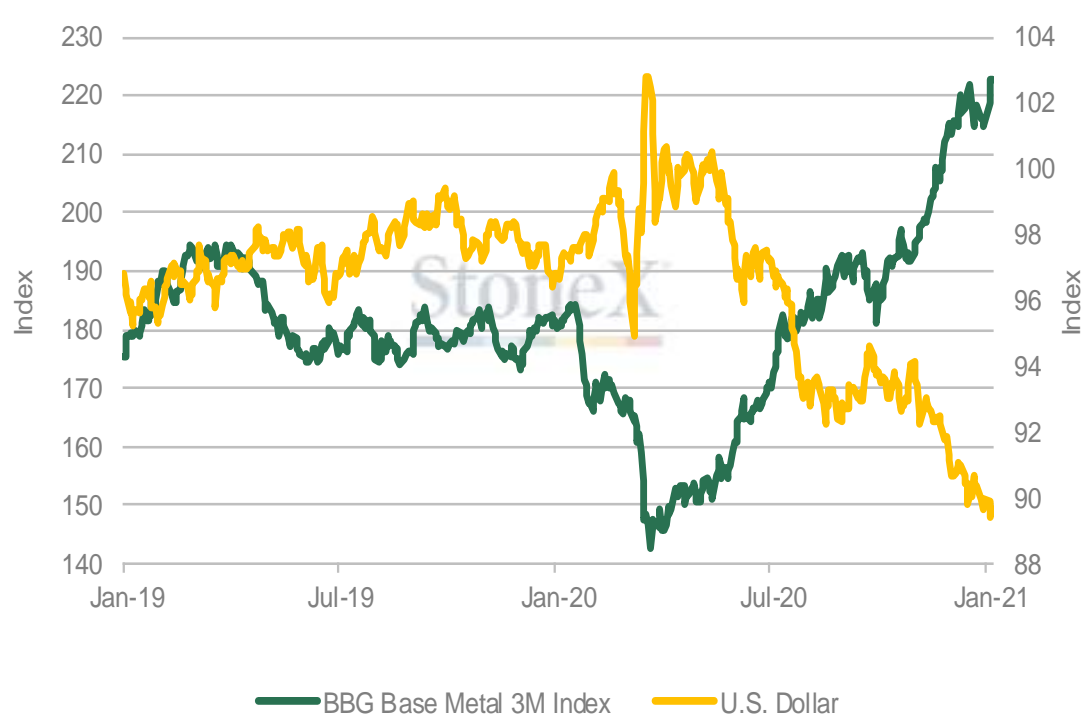
Bearish factors

- ▼ Continued threat of virus spreads for (at least) the next six months, resulting in rolling lockdowns and social distancing measures keeping consumer confidence at low levels.
- ▼ The threat of heightened geopolitical tensions, not only between the United States and China, with President-Elect Biden having announced the intention to work with "allies" during his term; but also with ongoing trade disputes between China and Australia and the potential uplift in tensions between the US and EU over developments on the Comprehensive Agreement on Investment between the EU and China.
- ▼ Despite a deal on free trade being agreed by year-end 2020 between the UK and the EU, uncertainty remains over how new rules will impact businesses and sectors such as the highly integrated automotive industry.

Despite risks being skewed to the downside this year, with no certainty over the timeline for multiple COVID-19 vaccine approvals, distribution or indeed the point at which individual countries or global 'herd immunity' can be reached, in our base case scenario we are forecasting that a virus vaccine will be widely available by H2 2021. Having said this however, the road to recovery (particularly in the west) will be long and slow, and we expect it will take years for the distortion between China and the rest of the world to balance out, negatively impacting the demand side of the equation for the base metals. Yet, we do remain bullish for the suite this year for several key reasons. Firstly, if we focus on the economic environment outside China, at least one vaccine is expected to be widely available this year, both fiscal and central bank policy are likely to remain supportive in H1 2021, aiding the recovery in demand for the base metals which last year fell to multi-year and even record lows for the modern era. Furthermore on this point, while monetary policy remains accommodative it is highly unlikely that interest rates will be raised.

Turning to China, although there are concerns that the V-shape recovery we recorded last year will slow down, particularly as the PBoC has alluded to the fact that easing and then exiting monetary policy is a question of when rather than if, not only will a recovery in demand outside China boost export growth (one of China's key driving forces behind its rebound), but this year marks the first year of the country's 14th Five Year Plan. Looking more closely at the consequences of this, we expect increased investment in mining assets around the world (as the country strives towards higher self-sufficiency), while an increase in demand for 'green' metals will occur on the back of not only investment in new infrastructure (such as 5G networks, EV chargers and new railway and metro lines), but from the move to green and sustainable development. This will largely focus on electrification and recycling (although please note, higher recycling of certain base metals such as lead and zinc could dampen demand for primary metal in the

Bloomberg base metal 3M index versus the U.S. dollar

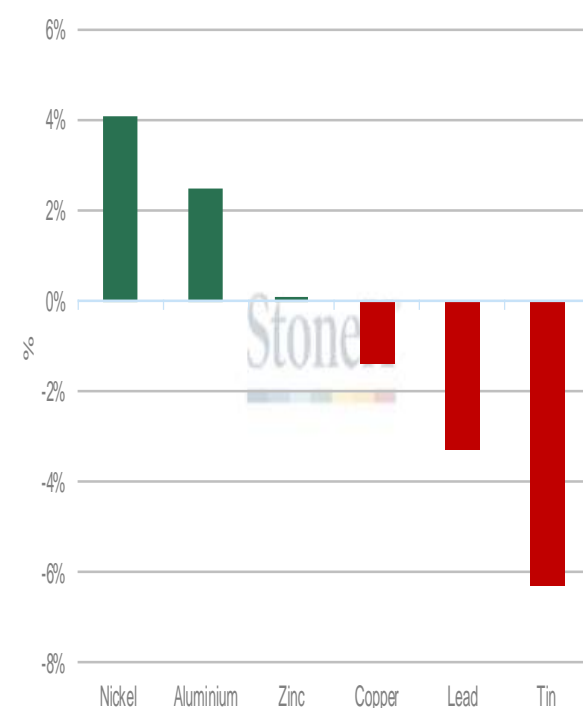


Source: Bloomberg. Design: StoneX.

longer-term). On a global scale, a further supportive factor comes from the unprecedented move towards green policy as a result of COVID-19, which currently stands at \$805Bn worth of approved national and subnational stimulus (including the \$644Bn EU Package), which will dramatically increase demand for battery metals (cobalt, lithium and nickel), in addition to copper and aluminum in the move towards electrification and light-weighting of vehicles.

Last year saw COVID-19 related disruption limit the availability of normal mining operations. The knock-on impact towards a tight concentrate market in China for certain metals (such as copper and zinc), was exacerbated recently by the lack of available cargo ships to transport raw materials, sending up premiums. Our outlook for **supply** this year is rosier, and we forecast that refined supply for each base metal will record growth. Indeed, if we turn to the health of the mining industry, high refined metal prices amid historically low oil costs and indeed weak currencies in producing nations have improved margins in the sector. Having said this, however, risks will remain not only in the form of necessary maintenance (as miners attempted to recover to annual guidance levels towards the end of last year), but delays to projects, or even lost CAPEX, could impact the longer-term trajectory for metal production, not to mention the increased requirement for companies to adhere to ESG pressures. If we look more closely at each metal, starting with copper, we forecast that the 1.4% decline recorded in 2020 (largely as a result of halted and restricted operations in South America, in addition to limited cargo availability), will rebound this year, jumping up by around 3.4%, although with Chile and Peru (which account for ~40% of global production) holding presidential and general elections this year, political tensions could act as a negative headwind. Meanwhile, the threat of further strike action in the country (because of soaring copper prices), could also result in operational delays. Nickel is set to hold the most robust outlook for production next year, based on capacity expansions in Indonesia, with supply expected to jump by 5.6% to a new record level, although China will continue to suffer under the nickel ore export ban from the country. Following suit, lead is set to see supply lift by a robust 5.0%, in part supported by the easing of scrap flows. Aluminum production is set to rise by 4.1%, although an industry move towards a lower carbon footprint, with aluminum produced via scrap requiring 95% less energy than virgin metal, could see stricter controls implemented, particularly in China as part of its latest five year plan. Turning to zinc, output is forecast to rebound strongly, rising by 3.7% this year, although concerns remain in the longer-term over new mine production replacing exhausted resources. In addition, something that is important to point out here is that while global supply of these metals is on track to rise Y/Y, regional supply tightness will also play a part, particularly in China in which metals such as zinc and copper have seen smelting costs dive to multi-year lows. Indeed, Chinese copper smelters have agreed to set the annual

2020E refined production—Y/Y change



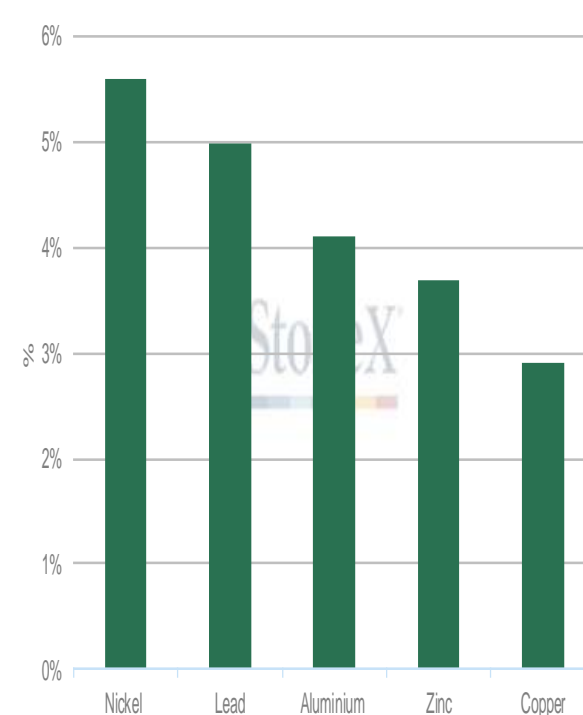
Source: CRU International. Design: StoneX.

Chinese zinc TC/RC



Source: Bloomberg. Design: StoneX.

2021F refined production—Y/Y change



Source: CRU International. Design: StoneX.

benchmark treatment/recycling cost price at \$59.50 per tonne of ore and 5.95 c/lb of refined metal for 2021, posting its lowest level in a decade.

Unsurprisingly, this year **demand** is set to increase across the base metal suite, with demand outside China picking up from (in some cases) record low levels, with the pace of growth in H2 2021 expected to outshine that in H1 2021 on the back of immunisation expectations. Consumption in China is set to hold firm with forecast GDP growth forecast at 8% (up from ~2% growth in 2020). Indeed, goals set for the country’s 14th Five Year Plan and indeed Vision 2035, will help to underpin strategic stock building of certain ‘green metals’ such as nickel, cobalt and lithium, in addition to copper and aluminum (although current high prices of some of these metals could limit this action). Vision 2035 includes targets to raise NEV market share of 5% in 2019 to 20% by 2025 and 50% by 2035. Within this, 95% of sales by this time will be made up of full-EV, and the rest from hybrids. However, while global manufacturing has recorded a robust rebound in 2020, unlike in previous downturns when the ratio between GDP and industrial production has been 2:1, in this pandemic-led downturn, the ratio has moved closer to 1:1 (because lockdowns have hurt the service sector more severely than manufacturing). Manufacturing globally is forecast to expand from current levels and this should further act as a support for export strength in China. In addition, something that must not be overlooked is that while demand is set to increase for each metal next year, with copper, nickel, lead, zinc and aluminum consumption to expand by 4.6%, 10.0%, 5.4%, 5.3% and 7.6% respectively, demand outside China is unlikely to regain 2019 levels (which were already low due to the impact of trade tariffs between China and the United States), until 2022/2023.

Turning to specific metal demand, copper is among one of the most favourable metals in the suite in terms of consumption growth this year, with its universal application in electrification boosted by the global move towards green policy, with prices (aside from key macro drivers mentioned above), set to benefit from low global inventory levels that push the market into a deficit. Nickel consumption will also be a beneficiary of the shift to ‘green’ via its use in lithium-ion batteries, but it is important to remember that ~65% of nickel’s end use still comes from its use in stainless steel production, which on a global level it will take years to recover to 2019 levels. Focusing on zinc, which alongside tin was one of the only base metals to record a consumption drop in China last year, demand recovery will be closely linked to the health and rebound of the steel and construction industry, while both lead and aluminum will largely take their cues from the recovery in the automotive and wider transportation industries.

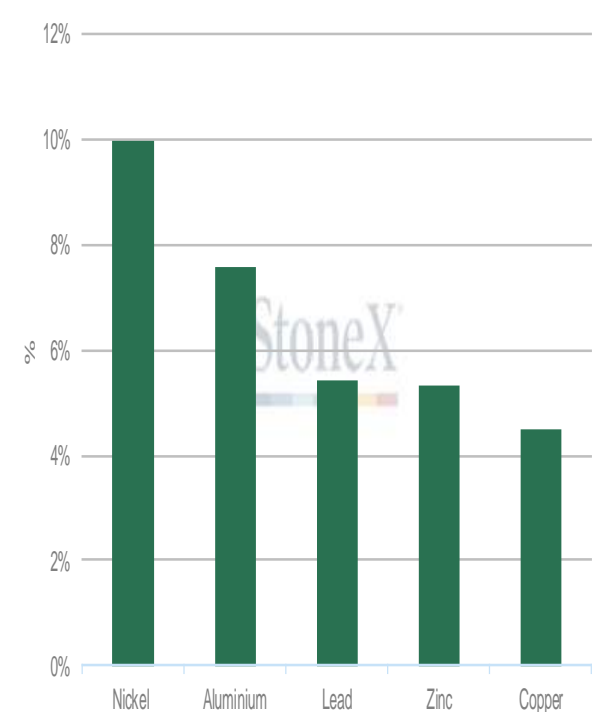
2020E refined consumption;

China versus ROW

	Change (%) Y/Y		Lowest Level Since
	China	ROW	ROW
Copper	2.0%	-9.0%	On Record
Nickel	3.3%	-8.8%	2017
Lead	0.0%	-7.4%	2015
Zinc	-1.5%	-8.0%	2007
Tin	-0.4%	-9.8%	On Record
Aluminium	2.7%	-13.1%	2010

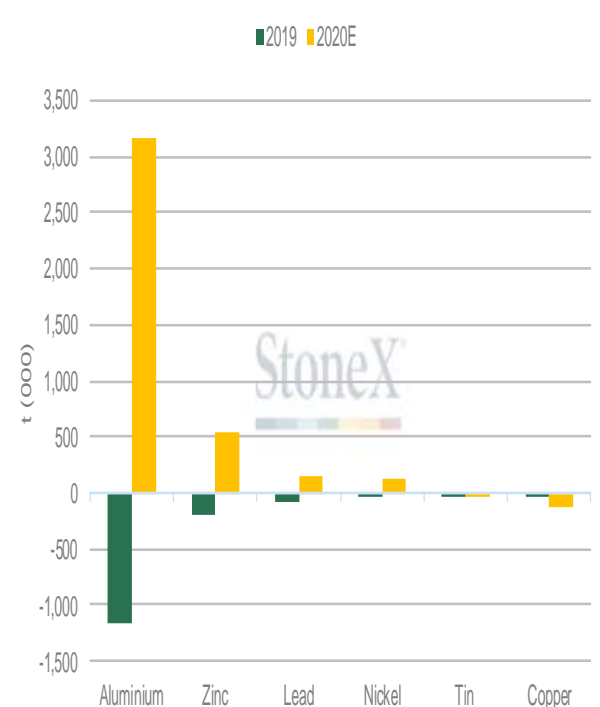
Source: CRU International. Design: StoneX.

2021F refined consumption—Y/Y change



Source: CRU International. Design: StoneX.

Market balance (surplus/deficit) 2020E versus 2019



Source: CRU International. Design: StoneX.

2021

OUTLOOK CRUDE OIL

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Bullish factors

- ▲ Continued supply intervention from OPEC+.
- ▲ Drawdowns of global oil inventories throughout 2021, both on-land and floating.
- ▲ Wide-scale deployment of COVID-19 vaccines.
- ▲ Dearth of global investment in oil and gas infrastructure.
- ▲ Synchronous global economic growth.
- ▲ Expectations of a further softening of the U.S. dollar.

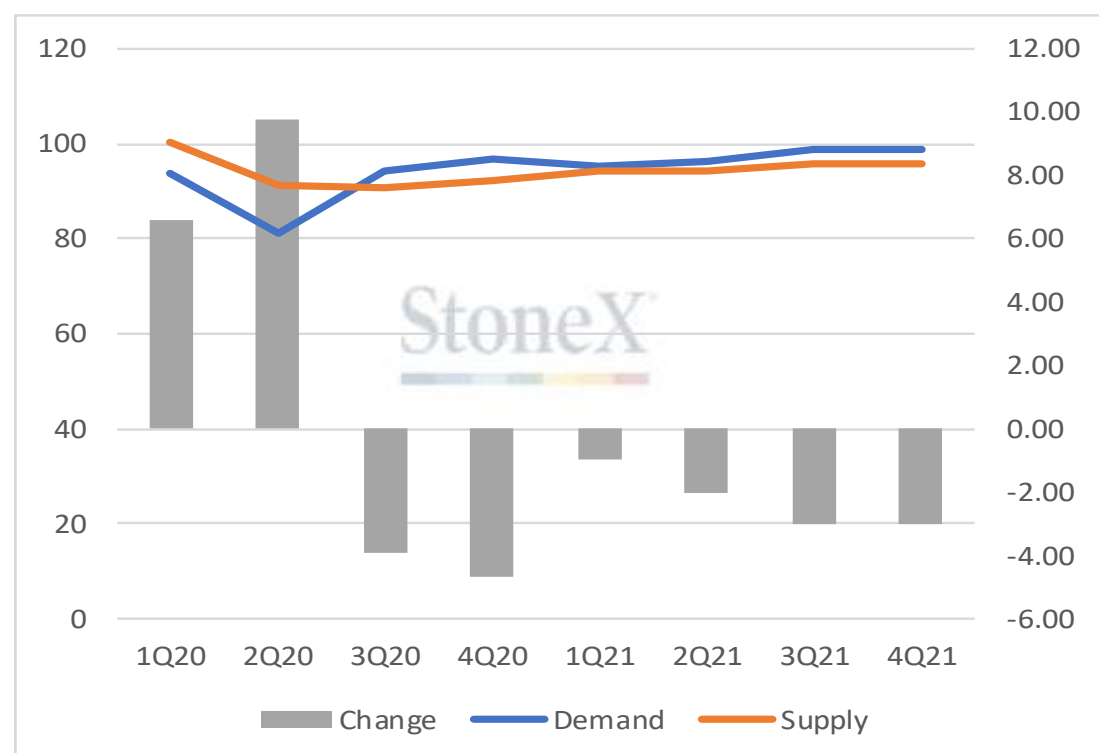
Bearish factors

- ▲ A return to the 2015 Nuclear Deal could unleash more Iranian barrels onto the market.
- ▲ Lacklustre pace of the vaccine rollout and failure to control outbreaks may peg back oil demand prospects in 2021. Further mutations of the virus that may prove somewhat resistant to vaccines is also a risk.
- ▲ A revival of trade war tensions between China and the U.S.
- ▲ Schisms widening within OPEC+
- ▲ Public remaining sceptical over international travel; aviation fuel must be the driver of oil demand recovery.

Last year was unprecedented to say the least, with COVID-19 prompting a drastic restructure of the global economy, particularly the oil market. In order to contain the spread of the virus, governments were forced to intervene by restricting the movement of people, on which a large portion of oil consumption is predicated. In March, OPEC+'s *de facto* leaders Saudi Arabia and Russia had diverging views over whether to withhold supply when the pandemic first hit because of uncertainty over the duration of the virus. The varying viewpoints resulted in OPEC+ barrels flooding the market at such an inopportune time, when demand was almost non-existent globally, which consequently sent prices to the floor and left the market to deal with a colossal glut of oil that will take at least a year from now to completely clear. However, oil has effectively risen from the ashes in 2020, with assistance from OPEC+, after the organisation agreed the largest oil production cut in history, to the tune of 9.7M bbl/d in April, to restore balance to the market. Since then, continued OPEC+ intervention in combination with the gradual recovery to demand and now, with multiple vaccines at our disposal, has contributed to oil prices reaching nine-month highs in the latter stages of 2020.

The expectation around the market is that the mass deployment of the vaccine will provide the global economy with a stable foundation to launch a robust rebound in economic growth. The reflation trade is truly underway, and this has benefited the cyclical assets, particularly the beleaguered oil complex in Q4 2020. In our view, we expect oil prices to continue their move higher in 2021 largely due to the vaccine, but with the caveat that the actual gains in oil demand from vaccines is expected in H2 2021, when those most at risk in the developed economies would be vaccinated, although herd immunity is not likely to be achieved until the end of 2021, according to the World Health Organisation. COVAX, the 190-country international initiative, will ensure that countries have equal access to Coronavirus vaccinations and has announced it has already secured 2Bn doses, and by the end of 2021, 20% of all participating countries' populations should have received doses of Coronavirus vaccinations.

2021 Global Supply and Demand Forecast



Source and Design: StoneX.

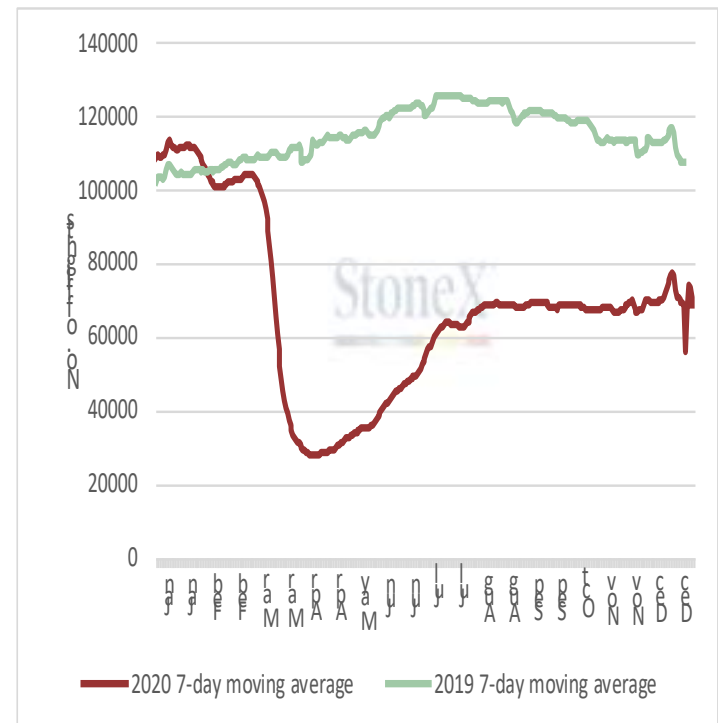
A jet-fuel sized hole in global oil demand

Throughout 2020, we observed an asymmetric recovery in the oil product slate, with gasoline demand recovering the quickest and is expected to oscillate around 2019 levels this year, while aviation fuel is considered to be the laggard with demand remaining tepid in 2021, despite the availability of vaccines. The International Energy Agency sees weak jet fuel demand contributing as much as 80% of the 3.1M drop between its 2021 global consumption projection and the 2019 baseline.

The dearth of CAPEX investment in global oil infrastructure in 2020 will cap future global supply, more notably in the United States than any other country. Oil companies that operate in the United States have to contend with higher CAPEX costs due to the expensive unconventional methods of extracting oil from shale compared to the OPEC+ members who employ cheaper conventional forms of extraction. According to Duff and Phelps, oil and gas companies domiciled in North America slashed their 2020 CAPEX plans by 49%, relative to global national oil companies, who conducted more moderate cuts of 24%. U.S. shale operators also have to consider rapid base decline rates, which is rapid decline in the output from an existing well, resulting in oil companies having to drill more wells in order to maintain output. The U.S. Energy Information Administration predicts that in 2021, U.S. oil production will stabilise at 11M bbl/d, a distant memory from the 13M bbl/d seen in 2019. Ultimately, global energy companies have reduced their capital investments in oil infrastructure, which could lead to tighter supply in the future and as a consequence, a cycle of higher prices. Commodities generally experience cyclical boom and bust periods and the negative supply and demand shock of 2020 could be the prelude to the boom in crude prices.

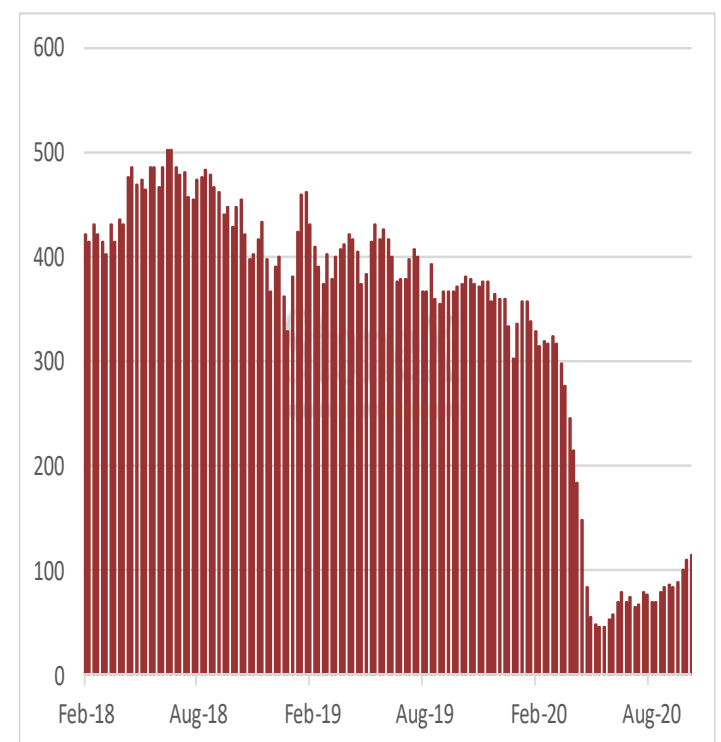
OPEC+ will continue its market intervention into 2021. At the group's December meeting, it was decided that from January, supply will increase by 0.5M bbl/d, and thereafter, there will be monthly meetings to decide whether OPEC+ should incrementally increase supply by 0.5M bbl/d each month through to the end of March. However, the first meeting of 2021 started off with fireworks after Saudi Arabia voluntarily reduced its crude output by 1M bbl/d through February and March, while Russia and Kazakhstan will incrementally increase output by a combined 0.075M bbl/d in February, and then again in March. The latest schism was evident at the most recent meeting with Russia and Kazakhstan pushing for an increase to production in February over fears of ceding long-term market share, while the vast majority of OPEC+ members voted to postpone any increases to output for another month as the public health crisis intensifies in Europe and the United States. The Kingdom of Saudi Arabia may have been OPEC+'s knight in shining armour this time around, but this only papers over the cracks in the organisation and internal pressures will only grow.

No. Of Commerical flights in 2020 vs. 2019



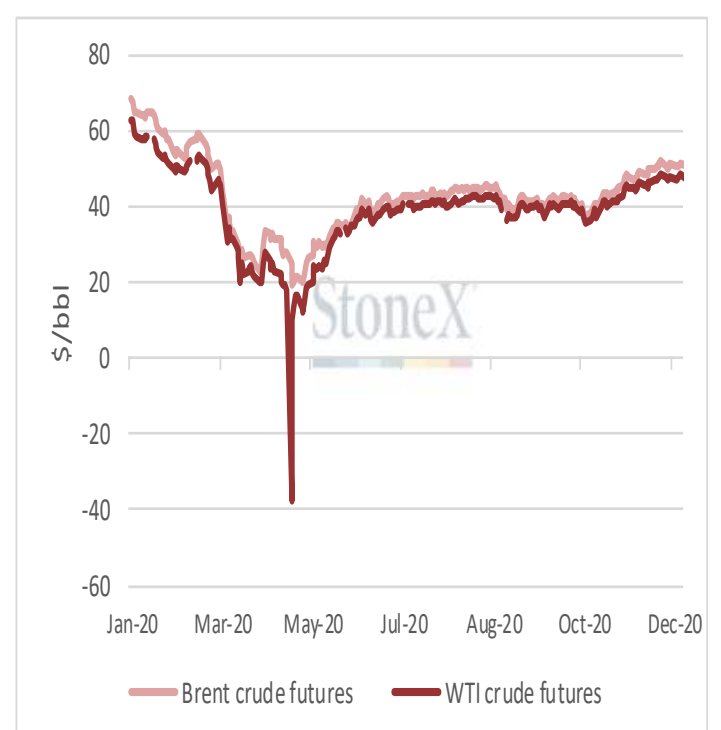
Source: FlightRadar24. Design: StoneX.

U.S. Frac-Spread Count (Drilling activity monitor)



Source: PVMI;. Design: StoneX

WTI and Brent crude futures price through 2020



Sources: IEA, StoneX (projections). *Includes natural gas condensate. Design: StoneX

Let's assess the pressure points within OPEC+ that may torment the group this year. Firstly, the divergent strategies of Russia and Saudi Arabia. Russia has the United States oil industry in its crosshairs and wants to ensure that OPEC+ does not encourage a recovery of the U.S. industry in the long-term. The U.S. benchmark straddles the \$50/bbl, a sustained break above that price level is expected to foster U.S. supply. In addition, Russia does not want to be punished for its competitive advantage of low cost production and an oil fiscal breakeven point of \$42/bbl. Meanwhile, Saudi Arabia's oil fiscal breakeven point for 2021 was \$76/bbl. Secondly, the UAE also signalled that its goals may not align with *de facto* leader Saudi Arabia in the December meeting, as the nation plans to monetise as much of its hydrocarbon resources as possible before the transition from fossil fuels starts to chip away at the world's appetite for oil. The UAE plans to expand output capacity by 1M bbl/d to 5M bbl/d by 2030, according to ADNOC's investment strategy. Thirdly, the fragile finances of some of the OPEC+ contingent is another pain. Iran, Nigeria and Iraq among others have been under considerable financial stress, compounded by the impact of the Coronavirus, due to their heavy reliance on oil revenues. For instance, oil revenues represent 90% of Iraq's government budget. These countries among others are desperate for increased revenues from oil sales and will be looking to put as many barrels onto the market to help bolster their economies, which may come in the form of compliance issues. Nonetheless, we do not expect the OPEC+ contingent to continue marching to the same beat in 2021.

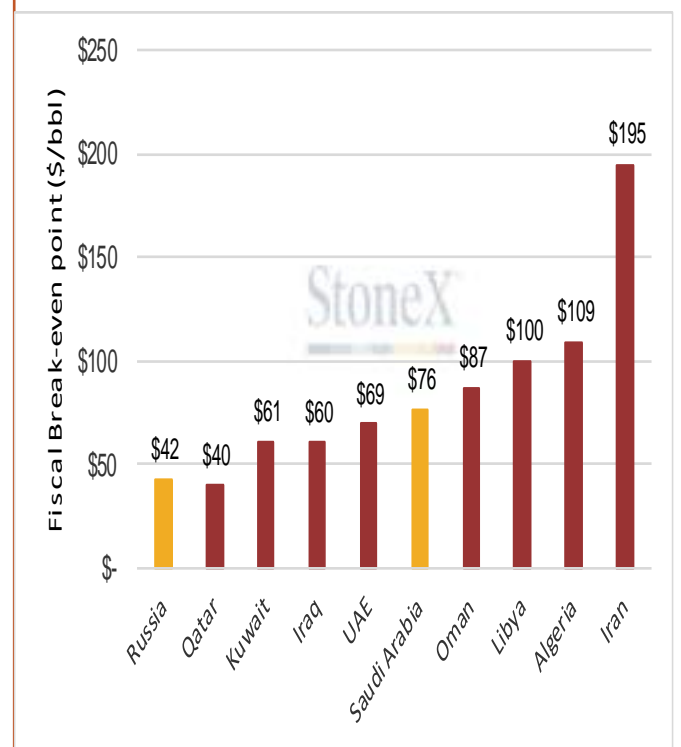
Possibility of Iran's return to the market?

A key downside risk in 2021 comes in the form of the increased probability that Iranian barrels could return to the oil market. U.S. President-Elect Joe Biden has suggested that he envisages a return to the 2015 Nuclear Deal as a solution to stability in the Middle East. This could add 1.5M — 2M bbl/d of oil to the market if sanctions are partially lifted. Given the complexity of the discussions, we expect negotiations to take some time, perhaps in the second half of the year. Additionally, increasing barrels from Iran in H2 2021 would make it easier for the market to digest, but if an agreement is struck beforehand between Iran and the United States and other signatories, while oil consumption remains anaemic, this could derail the recovery and possibly force further intervention from OPEC+.

Inventories

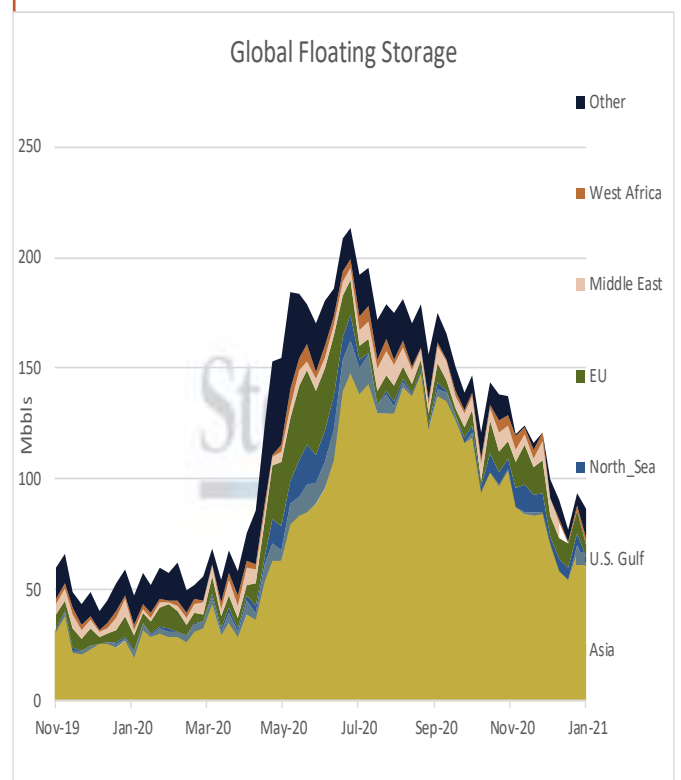
Global inventories on land and sea should continue to reach pre-virus levels by the end of 2021. The combination of OPEC+'s market balancing strategies and the improvements to global demand will provide oil prices with some impetus. As a show of the progress that was made in 2020 with the rebalancing of inventories, global floating storage is already within touching distance of pre-COVID-19 levels.

Oil Fiscal Breakeven Point 2020



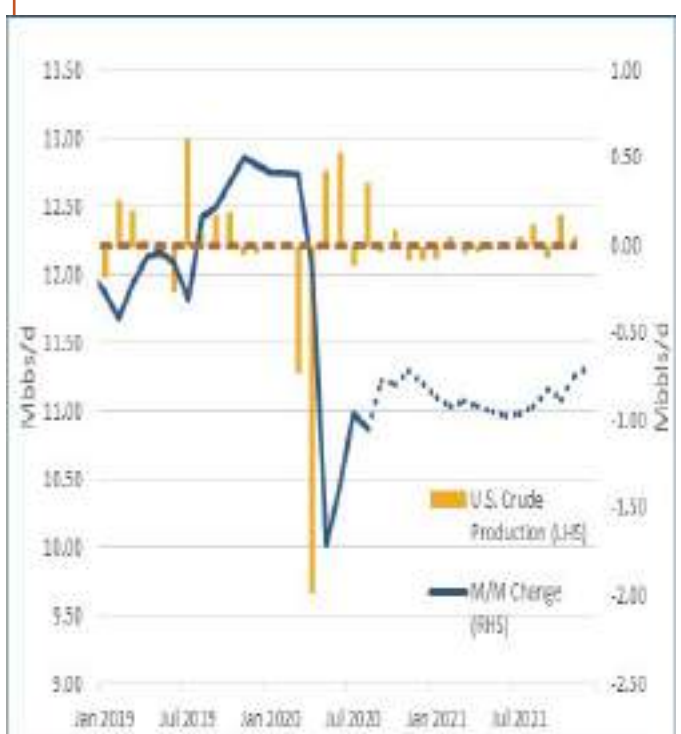
Source: IMF; Reuters. Design: StoneX

Global Floating Storage



Source: Vortexa. Design: StoneX

U.S. Production 2021 Forecast from the EIA



Source: EIA. Design: StoneX.

2021

OUTLOOK COFFEE

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Bullish factors

- ▲ Continued dryness in Brazil and potential supply tightness from Vietnam
- ▲ Recovery of the Brazilian Real and the Colombian Peso;
- ▲ Arrival of a vaccine for Covid-19;
- ▲ Tighter availability of high quality washed arabica's available for exchange delivery;
- ▲ Recovery of the coffee demand, mainly out of home consumption.

Bearish factors

- ▼ Extended effects of the Covid-19 pandemic on demand;
- ▼ Continued strengthening of the US dollar;
- ▼ Favourable weather conditions in Brazil and Vietnam;
- ▼ New crop availability from Colombia, Central America, and Vietnam.

The final quarter of 2020 brought with it a great deal of volatility within both the Arabica and Robusta complexes. Arabica prices moved between a high of 128.9 and a low of 104.9 c/lb (1st continuation) while the Robusta equivalent traded between a low of \$1,250 and a high of \$1,426/t. The fourth quarter was highlighted by some very difficult weather conditions across major growing coffee regions of the world, including dryness in the Brazilian coffee belt, two major hurricanes in Central America and multiple tropical typhoons in Vietnam, bringing accompanying price volatility that has capped off a very interesting year in the coffee market.

The coronavirus pandemic resulted in widespread social restrictions around the world, which is widely expected to have resulted in a Y/Y decline in global coffee consumption in 2020. The CoffeeNetwork 2020/21 Forecast Report, published in December, shows consumption of coffee in the two largest consuming regions, i.e the United States and the European Union, fell in 2020 due to the impact of COVID-19. While social restrictions were in force across much of Europe in Q4 of 2020, takeaway options and other methods are expected to mitigate the detrimental impact to consumption over the Northern Hemisphere winter. The news of the arrival of multiple vaccines in late 2020 brings with it expectations of a hopeful return of some form of normality this year, which should result in at least a partial recovery for out-of-home consumption methods in 2020/21. Debate over whether there will be a full return to pre-COVID economic activity raises questions over whether there will be a full recovery for out-of-home consumption. Increased reliance on at-home consumption methods in 2020 is expected to continue to support demand for Robusta. Despite this, global economic activity is not expected to make a full resurgence in 2021 which should place a ceiling on global coffee consumption in 2020/21. Coffee Network forecasts a global surplus of between 11.63-13.62M bags in 2020/21 with production pegged between 173-174M bags and demand at 160.4-161.4M bags.

Coffee prices (Arabica - NY and Robusta - London)



Source: ICE/NY & ICE/London. Design: StoneX.

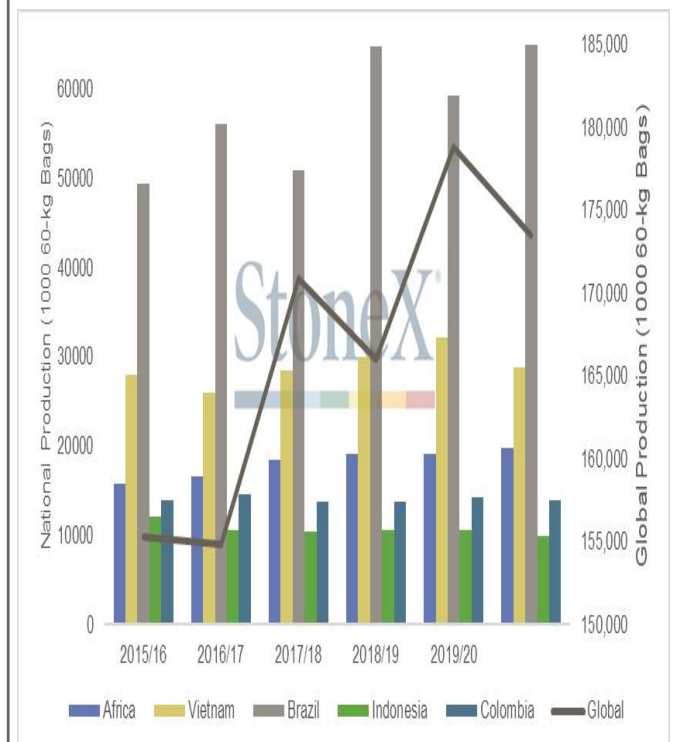
Brazil: Brazilian production is widely expected to take a significant hit in 2021. Following the near record bumper crop of 2020/21, which StoneX forecasts totalled 65.1M bags, the 2021/22 crop is moving into the “off-year” of the biennial cycle. Furthermore, the crop experienced significant dryness across major coffee producing regions of Brazil, especially Minas Gerais, the largest coffee producing municipality in Brazil, accounting for nearly 50% of Brazilian coffee production according to the USDA. On average, rainfall across the municipality of Minas Gerais (as well as other major producing municipalities in south east Brazil) has been below average for a large proportion of 2020. The La Niña phenomenon has contributed to the lower than normal rainfall and excessive heat in key flowering periods in early October. This dry weather is feared to have done irreversible damage to the crop with early estimates indicating that the Arabica crop could fall from 47-50M bags in 2020/21 to as low as 33-34M bags in 2021/22. Cross compared with USDA data, this would be Brazil’s smallest Arabica crop in a decade. A significant reduction in Brazil’s Arabica output due to the negative biennial year and the detrimental effects of drought threaten to place a great deal of strain on global Arabica supplies in 2021/22. Robusta production is expected to increase in 2021/22, possibly past 20M bags.

Vietnam: Vietnamese production took a hit in the 2020/21 harvest following the prolonged dry season in early 2020, followed by torrential and persistent rains due to La Niña during the harvesting months that delayed the pace of harvest and negatively impacted quality. We forecast production at 28.8M bags based on the detrimental weather impacts the crop experienced. Tighter availability of Robusta from Vietnam is expected to reduce its competitiveness into 2021, although Vietnam will retain the top spot of number one Robusta exporter. In reflection of the smaller harvest Y/Y, FOB prices for Vietnamese Robusta averaged a premium of \$282/t against the London 1st continuation in November 2020, compared to a discount of \$28/t in 2019. The higher price of Vietnamese Robusta is expected to aid the competitiveness of Brazilian origin in 2021.

The wet weather in Q4, while detrimental to the pace of harvest in 2020 will be beneficial ahead of the delayed (due to La Niña) dry season which typically begins in November and ends in May/April. Farmers are unlikely to suffer from the issues of last year of drained reservoirs which inhibited their ability to irrigate as much as usual in. Ample water reserves will mean sufficient irrigation on soils which are already holding above average levels of moisture. This bodes well for a recovery in Vietnamese production in 2021/22.

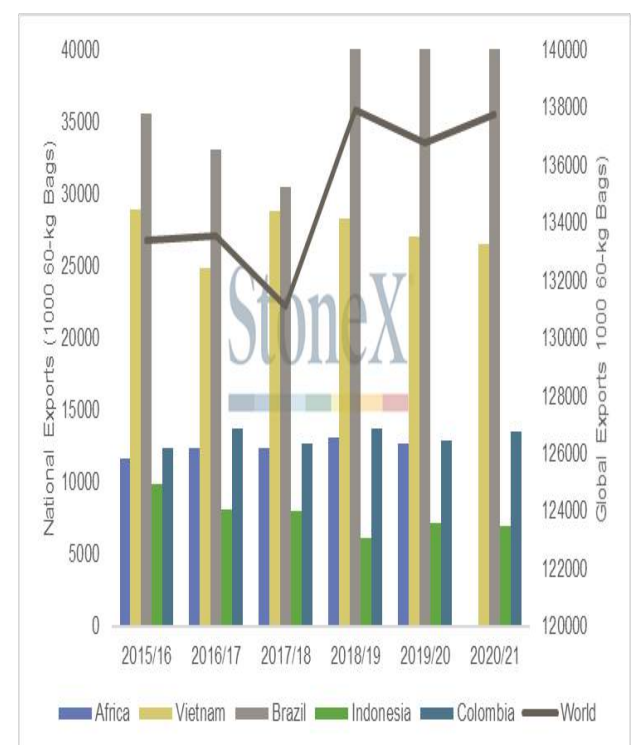
Indonesia: Production in Indonesia is forecast to decline in 2020/21. Delays to the wet season into the harvesting months and the prolonged dryness are expected to negatively impact output, while abundant rains moving into the rainy season stand to benefit the next crop, ensuring suitable soil moisture levels for development of

Global Production vs Major Global Producing Countries



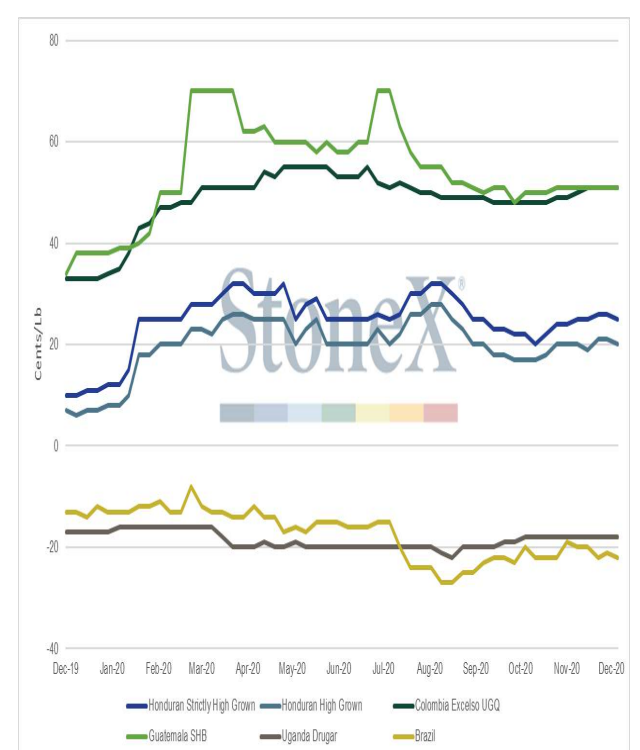
Source: ICE. Design: StoneX.

Global Exports vs Major Global Producing Countries



Source: General Dpt of Customs for Vietnam, Cecafe & USDA. Design: StoneX.

Arabica Differentials



Source: Thomson Reuters Design: StoneX

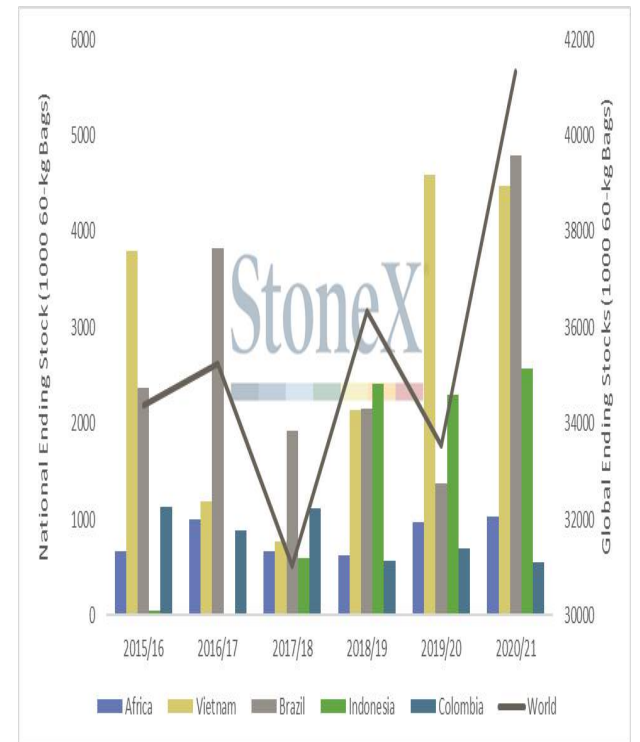
the 2021/22 crop. Excessive rains do risk impacting the quality of beans, potentially reducing export volumes in 21/22.

Africa: Total production for 2020/21 is forecast to climb marginally to 19.9M bags. The 15-Year Coffee Roadmap programme in Uganda, which aims to increase farm efficiency and introduce new varieties, should continue to improve Ugandan production in 2020/21 with the Ugandan Coffee Farmers Alliance forecasting production close to 7M bags, while exports are expected to continue to grow at a strong pace. Uganda is expected to be Africa’s largest exporting nation in 2020/21 following a record volume shipped of 5.4M bags, according to the Ugandan Coffee Development Authority. Ethiopia, Africa’s largest coffee producer, is expected to maintain production at 7.4M bags.

Central America: Following the huge amount of destruction that was caused by Hurricanes Eta and Iota to nations such as Honduras, Nicaragua and Guatemala, exports are likely to take a hit in 2020/21. Logistical damage from the storms is expected to make it harder to move workers to farms and get coffee off the farms as well as damage to crops from the storms. A lower volume of high quality Arabicas from Central America would support price differentials for varieties such as Honduran high and strictly high grows. Indeed, following a lower level of production in 2019/20, premiums for these varieties climbed to multi year highs in 2020, with a resulting drawdown in Arabica certified stocks due to the relative discount against the New York complex.

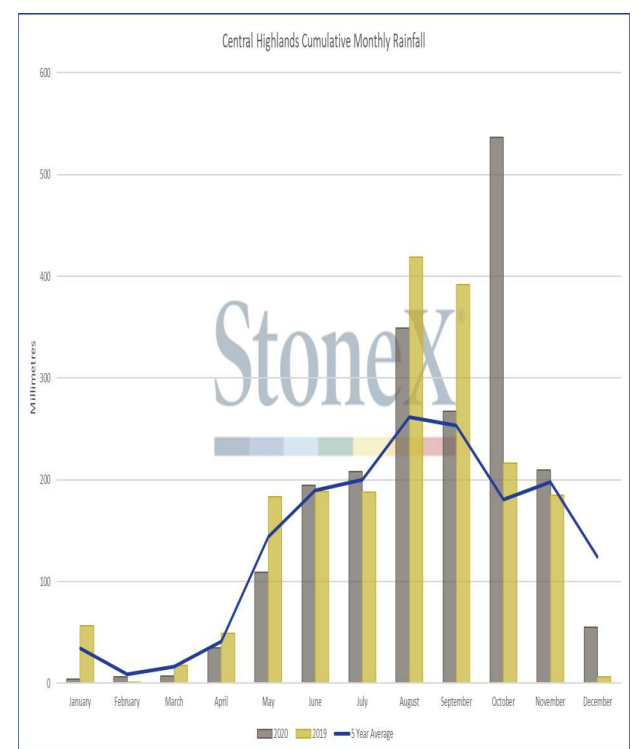
Colombian coffee production is expected to range between 13.5 and 14.0M bags in 2020/21. The nation has experienced heavier than normal rains since the beginning of Q4 2020, which has been attributed to La Niña, delaying early flowerings.

Global Ending Stocks vs Major Global Producing Countries



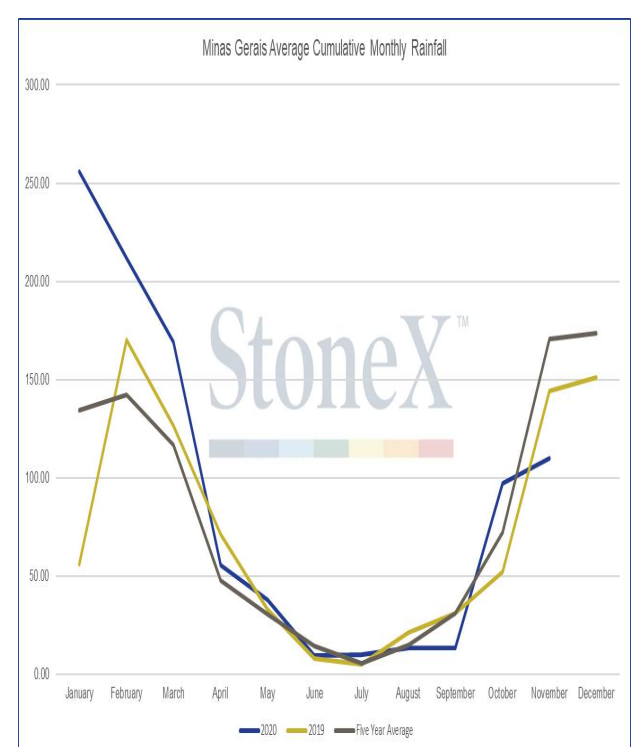
Source: USDA Design: StoneX.

Central Highlands Soil Moisture Levels



Source: Thomson Reuters Design: StoneX.

Minas Gerais Cumulative Rainfall



Source: Thomson Reuters Design: StoneX.

2021

OUTLOOK WHEAT

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Bullish Factors

- ▲ Adverse weather conditions in spring 2021 hampering European production and causing further difficulties for the Black Sea;
- ▲ Maintained demand from China and continued dryness in South America;
- ▲ Maintained demand in second half of 2020/21 from major importers due to COVID-19;
- ▲ Implementation of the Russian export tax in second half of 2020/21

Bearish Factors

- ▼ Recovery of European production in 2021/22 and bumper crop from Australia offsetting reduced supplies in Northern Hemisphere;
- ▼ Major global importer demand satisfied by H1 purchases of wheat resulting in lower exports in H2;
- ▼ Stable Global Production in 2021/22;
- ▼ Easing of Chinese demand following rapid pace of imports in H1 2020/21

Global ending stocks are expected to increase year-on-year at the end of 2020/21, on record high global production and reduced export potential from Russia. Heightened demand in H1, however, which could potentially carry over to H2 of 2020/21, depending on the situation with respect to COVID -19, could provide downside to carryover stocks. Increased demand is expected to result in tighter ending stocks in the major exporting nations. Higher requirements from major global importers in the first half of the marketing season as well as the emergence of unusual participants such as China and Pakistan are expected to have an increased impact on supply availability in the second half of 2020/21. An expected resurgence in production from Australia in 2020/21 is forecast to help ease supply pressures on Northern Hemisphere nations in the second half of the 2020/21 season, although reduced exportable surplus from Argentina due to severe drought conditions during the development of the crop is expected to limit the origin's competitiveness in the second half of 2020/21. Despite the issues in Argentina, current USDA estimates indicate that between Australia and Argentina, the exportable surplus is expected to climb by 9.0Mt to 32.0Mt in 2020/21. Lower production in the United States is expected for 2021/22 based on the poor condition of the winter crop going into the winter months. The implementation of a wheat export tax by the Russian Government in mid-December 2020 is expected to provide tailwinds in the second half of the 2020/21 season, with heightened demand for more competitive origins during the quota's implementation expected to tighten the supply-demand balance as well as an expected reduction in the Russian exportable surplus due to a pick up in export pace ahead of the quota coming into force on 15th February. A resurgence in European production and reduced Black Sea production is forecast for 2021/22. We will be concentrating on the outlook for Europe and the Black Sea in this report.

Chicago and Paris Wheat 1st Continuation



Source: CME & Euronext. Design: StoneX.

European wheat growers were glad to not see a repeat of the sowing conditions of 2019, with a good combination of dry weather and rainfall providing much better conditions for plantings this year. Much of the significant gains that pertained in the global wheat markets in the last quarter of 2020 were attributed to the difficulties presented to Black Sea growers in the Autumn and winter months. Very dry weather made plantings of winter wheat very challenging, with concerns over a large drop in production for Russia and Ukraine in 2021/22 and the Russian export tax prompting a significant pick up in export pace in the last quarter of 2020. Based off early reports on the Black Sea and Europe, Black Sea production is expected to decline in 2021/22, while EU production is forecast to recover towards the five year average. Multi year high prices in the last quarter of 2020 that have carried over into 2021 are expected to result in increased plantings of spring wheat in Europe and Russia for 2021/22. While spring weather is a key determining factor for the final condition and yield of the crop, the conditions that Black Sea with which farmers were presented, particularly in major producing regions such as southern Russia, is very concerning with crops going into dormancy in the worst condition since 2013 despite record winter crop plantings. This is expected to result in a higher proportion of winterkill and lower yields. While spring conditions could help to replenish the crop, there is an increased risk of crop failure and reduced yields, with spring crops not yielding as well as winter.

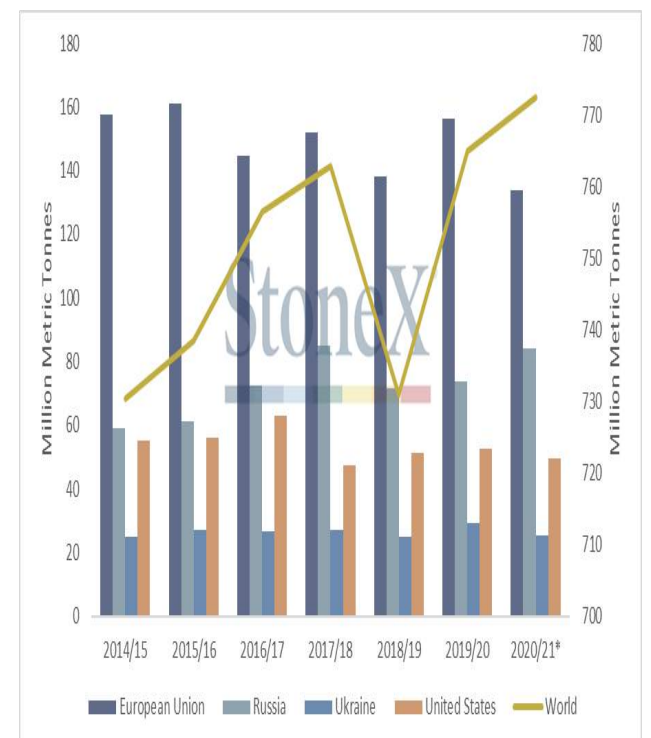
Both Chicago and Paris climbed to multi year highs in Q4 2020 with the Chicago 1st continuation gaining 10.8% Q/Q while the Paris equivalent gained 7.8%, driven by heightened demand from major global importers, rising domestic prices in Russia, and reluctant farmer selling, in turn supporting FOB prices for Russian and Ukrainian wheat. Key benchmark prices such as the 12.5% protein specification in Novorossiysk climbed to a six-year high in Q4 as concerns increased over the availability of Russian wheat in H2 of 2020/21 and a smaller Russian crop in 2021/22, in turn supporting global prices. The upward revisions to production estimates for Australia and Canada, with eased concerns over the pace of exports in Russia in H1 2021, caused prices in Chicago and Paris to decline in early December. Spring weather will be a key determining factor in both price direction and volatility in the remaining half of 2020/21. Good levels of rainfall in the spring will improve prospects for Black Sea crops and improve the condition of European crops that were already in good condition going into dormancy. This would weigh on prices in expectation of larger supplies as we move into 2021/22 as well as easing risks of maintained domestic stockpiling in the second half of 2020/21. Reduced exports from Russia, however and tighter availability in Ukraine and the EU are expected to remain supportive for global wheat prices. Poor spring weather would aggravate already dry soils in the Black Sea placing even greater strain on wheat crops that are already struggling, potentially risking severe

Production – World



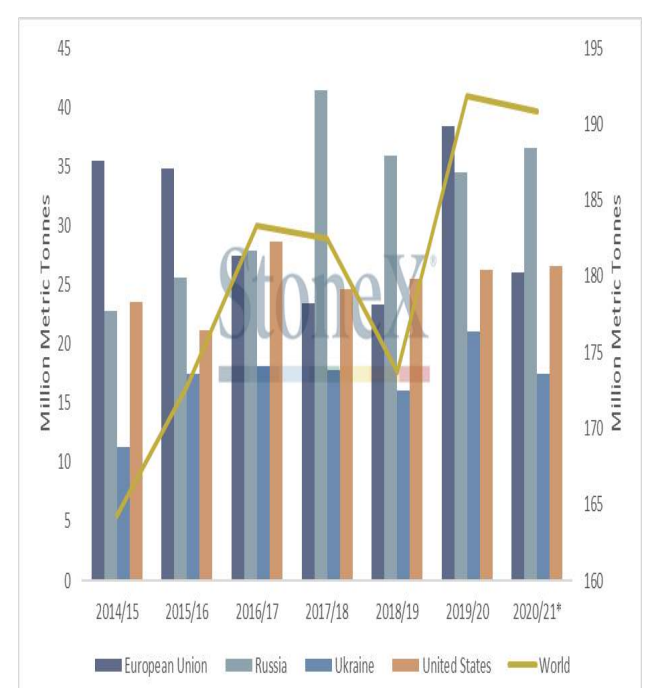
Source: USDA & IGC. Design: StoneX.

Production Europe, Black Sea & U.S.



Source: USDA. Design: StoneX. * Estimated

Exports Europe, Black Sea & U.S.



Source: Design: StoneX. *Estimated.

year-on-year cuts to production, in turn reducing the volume of exportable surplus which would be supportive for global prices.

Increased demand for European wheat, as well as barley from China, has supported EU exports so far in 2020/21 but despite this, EU exports are expected to decline compared to the previous season due to reduced supplies and increased domestic demand. A notably smaller corn crop from Ukraine and a reduced pace of imports from the EU place greater pressure on internal supplies to meet consumption demands, especially for feed. Reduced availability of corn for feed would place higher reliance on wheat for feed. EU imports are running ahead of last year, with Ukraine supplying a large proportion of that wheat. Higher reliance on imports and domestic supplies are likely to place greater strain on EU wheat supplies with heightened demand for EU origin due to the parity in FOB prices in mid-December against Russian origin. Offers for Russian wheat in mid-December showed traders accounting for the implementation of the export tax (€25/t or approximately \$30/t) by raising offers in Egyptian tenders over \$10 above the most competitive quotes, essentially pricing Russian wheat out of the market. Negative differentials on EU and Ukrainian origin are likely to increase demand for wheat where supplies are already limited.

Lower levels of production from the Black Sea and an expected resurgence in European production should benefit the competitiveness of European origin in 2021/22. The export pace for the EU stands at 12.8Mt as we write, down 14.9% year-on-year, with Algeria and China the leading purchasers. Easing domestic stockpiling through the summer due to a hopeful retreat of COVID-19 and steady carryover stocks present downside for wheat demand at the start of the 2021/22 season, with below average production in Russia and the United States providing upside support.

Ending Stocks – World



Source: USDA & IGC. Design: StoneX. *Estimated

FOB price (USD/t)



Source: Agricensus. Design: StoneX. *Estimated.

2021

OUTLOOK OILSEEDS

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Bullish factors

- ▲ Poor weather in South America due to La Niña cutting soybean production;
- ▲ Lower availability of rapeseed oil and sunflower oil from the Black Sea and Europe;
- ▲ Record high demand for soybean and soybean products from China.

Bearish factors

- ▼ Ample rainfall in South America due to a less severe La Niña event;
- ▼ Favourable weather conditions in Europe and the Black Sea supportive for rapeseed production;
- ▼ Increased plantings in the United States and South America for 2021/22.

Globally, the outlook for oilseeds in 2021 is for increased plantings in the United States following very strong demand for the beans from China in 2020 and rising soybean prices in the last quarter of 2020, as well as the expected tightest volume of carryover stocks in seven years. Forecasts for global soybean ending stocks (less China) are set to fall to a seven year low and high demand from China is expected to be supportive to soybean prices in 2021, while concerns over dry conditions in South America due to La Niña, which were supportive to prices in Q4 2020, are expected to remain positive as La Niña conditions persist through to the end of Q1 2021. Brazilian soybean production is forecast to reach a record in 2020/21, with StoneX estimating the crop at 132.6Mt despite the dry weather, on record plantings, while Argentinian production is forecast at 48.0Mt.

European rapeseed production is forecast to make a marginal recovery year-on-year in 2021/22, although difficult sowing conditions across the continent are expected to limit the scope of the recovery. MARS reported in Q4 2020 that sown area is expected to be smaller than last year and below the five year average. The beginning of the planting campaign was highlighted by notably dry weather followed by substantial rainfall in the first half of October, which prevented sowings due to excessive soil moisture, with plantings in France and the UK expected to decline Y/Y. Increased costs of development and greater difficulty with pests such as Cabbage Stem Flea Beetle are expected to result in reduced plantings for 2021/22 as farmers move away from the crop. Favourable spring conditions could help to improve yields and promote a recovery in 2021/22, however. Canola production in Canada is expected to fall to the lowest in five years in 2020/21 to 18.7Mt according to Statistics Canada, but a resurgence in Australian production to 3.7Mt is expected to offset reduced supplies from Canada. Following on from a poor crop in 2020/21 on difficult development conditions and severe dryness in both the autumn and spring, the Ukrainian rapeseed crop is forecast to post further declines in 2021/22. Much like the United Kingdom and

Chicago Soybean & Euronext Rapeseed 1st Continuation



Source: Euronext, Chicago Mercantile Exchange Design: StoneX

France, severe crop losses in previous seasons and higher expense in maintaining the crop are forecast to be drivers behind reduced winter rapeseed plantings. As with 2019, the winter sowing season in Ukraine has been highlighted by reports of dry weather causing difficulty in getting crops in the ground, which will incline farmers to turn to more profitable crops.

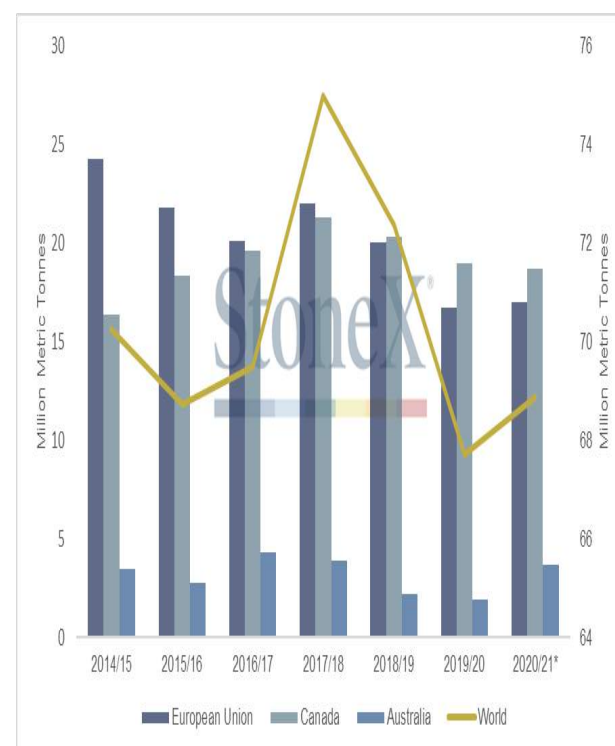
Total use of rapeseed is forecast to decline in the European Union in 2020/21, with the EU Commission forecasting a 1.9Mt reduction in total usage which is expected to be mostly offset by a 1.6Mt reduction in total supply. Imports are expected to be lower for 2020/21 on reduced usage due to the coronavirus pandemic. Reduced energy demand is in turn expected to constrain demand for rapeseed in biofuels, while social restrictions throughout 2020 and potentially through H1 2021 will hamper demand for cooking oils on reduced restaurant visits, in turn reducing crush usage and resulting in higher ending stocks coming into 2021/22.

Smaller crops in Ukraine and a consistent to slightly larger crop in 2021/22 in the European Union hopefully are likely to be coupled with higher demand, as energy demand recovers and economic activity makes a return to normality on conditional subjugation of the coronavirus pandemic, which would be supportive for rapeseed prices in H2 2021.

Soybeans: The end of 2020 was highlighted by concern over the condition of the South American soybean crop with the USDA posting two consecutive downward estimates for soybean production in Argentina between November and December, along with downward revisions to exports, while U.S. carryover stocks are forecast to fall to the lowest in seven years. Soybean imports from China are forecast to reach a record in 2020/21 of 100.0Mt according to the USDA, on the resurgence of its hog herd and increased demand for soybean oil as hog producers displace high priced corn with wheat and barley. Soybean oil is being added to increase energy within the feed ration to offset the loss of corn. Global ending stocks are forecast to decline to a five year low on record high domestic consumption, driven by the record demand from China.

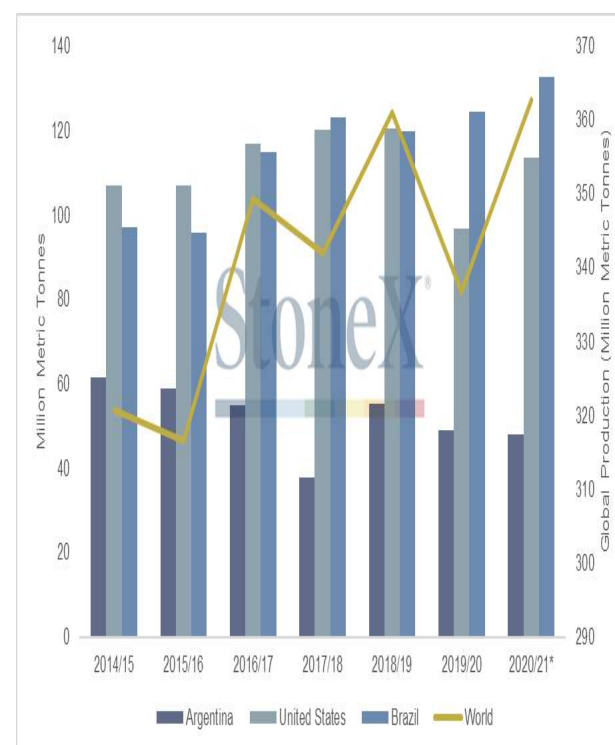
Palm Oil: Palm oil prices finished 2020 on a strong bullish run, with palm oil futures climbing to an eight year high in mid-December. Soybean oil prices gained significant ground throughout the fourth quarter of 2020 with the 1st continuation soybean oil contract gaining 29.9% Q/Q. Concerns over soybean production in South America, due to the impact of La Niña as well as heightened demand for soybeans from China have driven supply concerns coming into 2021. The most recent WASDE report showed an expected decline in U.S. ending stocks to the lowest in seven years for 2021, while Argentinian production and subsequently, exports, were also lowered due to the impacts of La Niña. Furthermore,

Major Global Rapeseed/Canola Producers



Source: USDA, Statistics Canada & ABARES. Design: StoneX

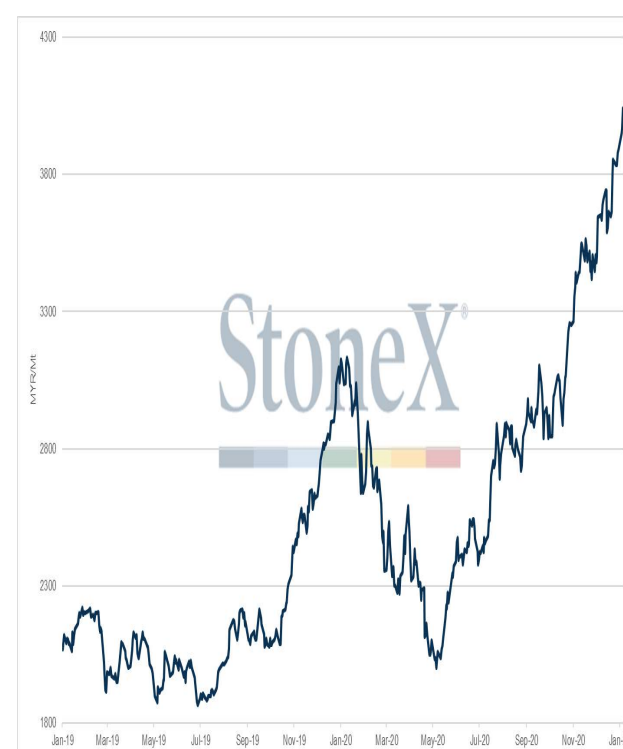
Global Soybean Production



Source: StoneX, USDA, Conab. Design: StoneX

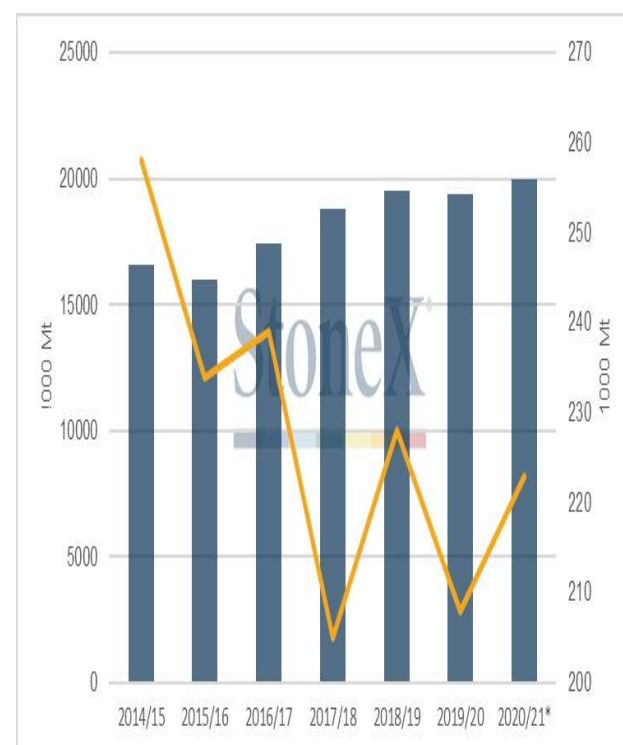
smaller sunflower and rapeseed crops in the EU and Black Sea are expected to place greater strain on global vegetable oil supply in 2020/21. The Indonesian Government’s decision to maintain the B30 mandate throughout the COVID-19 pandemic helped maintain demand for biodiesels there over 2020, while the Government’s decision to implement a progressive export levy in December should remain supportive for prices through at least the first half of 2021 while helping replenish the depleted fund used to sustain the B30 programme. The USDA forecasts a moderate climb in palm oil production for the world’s two largest producers in 2020/21; Malaysia and Indonesia. Production is expected to increase to 19.9Mt and 43.5Mt respectively. The impacts of the La Niña weather phenomenon are expected to be supportive to both palm oil production and prices in 2020/21, with higher than average rainfall supportive for yields, although if heavy enough to cause substantial flooding, heavy rains could be harmful to yields. The expected detrimental impact of dry weather in South America on Argentinian and Brazilian soybean production could place greater strain on the vegetable oils complex as a whole in 2021. With the hopeful resurgence of economic activity in 2021, consumption of vegetable oils as a whole is expected to increase in 2021 on increased demand for biofuels and cooking oils. The USDA currently forecasts global consumption for palm oil will increase to 75.5Mt in 2020/21, an increase of 4.4% Y/Y with imports in India and China expected to increase by 13.6% and 2.6% respectively Y/Y, helping to drive demand growth in 2021.

Palm Oil Price



Source: Bloomberg. Design: StoneX.

Global Palm Oil Production & Ending Stocks



Source: USDA. Design: StoneX.



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