

Oceania Milk Market Outlook

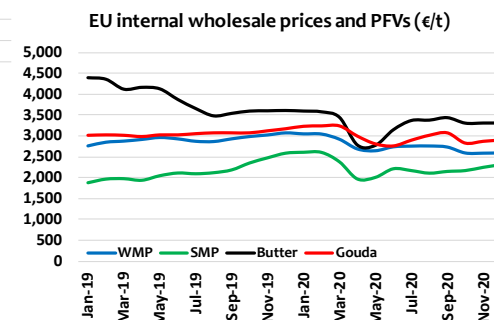
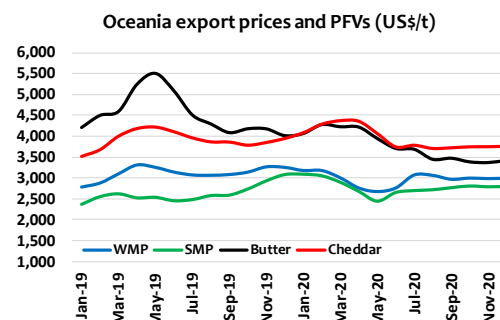
September 2020

1.1 Summary

Dairy markets weathering the COVID storm

- Global dairy markets remained relatively stable through the September quarter – with the obvious exception of cheese prices in the US. Sustained retail sales, refilling foodservice channels, the cushion of government aid and slow milk supply growth have combined to keep prices steady and firming in many cases. This has been aided by strong trade volumes as buyers took advantage of the savage dip in prices in Q2-2020.
- While it feels like there is denial in dairy markets about the seriousness of the economic impact of COVID, experience to date shows the resilience of demand for dairy products. This will be tested in coming months with large 2nd wave infections reprising movement restrictions in many major economies.
- While milk supplies will continue growing in H2-2020 – albeit slower than in the first half – our analysis of projected fundamentals suggests that values will remain relatively stable, with exceptions. The US cheddar market will weaken as block cheese supply improves with rising milk supply and additional capacity. Butterfat markets are exposed in all regions to weaker food service demand, which in the US and EU will force higher cream volumes into the butter churn.
- The changes in mobility and shopping habits will continue to alter the composition of demand for dairy products and ingredients. A deep recession was unfolding as the effects of early stimulus measures wear off and governments brace for the impact of employment losses and business closures on household spending.
- While developing world markets tend to respond to product prices rather than GDP changes, the uncertainty ahead will keep buyers cautious, and any outlook must consider risks of slower demand, as described herein.
- While experience suggests a recession might help everyday cheese demand in the US, the outlook will see consumers trade down to cheaper grocery lines, reduce spending on high-value speciality cheeses, snacks and entertainment lines, and (where it is possible) avoid dining out.
- Dairy farmers have been somewhat sheltered from the worst effects of the market gyrations and milk supply-side response to lower milk prices as projected will be lagged and heavily dependent on weather and feed costs.

| Topics | Key contents | Pages |
|--------------------------------------|---|-------|
| 1. Summary outlook | • Summary, trending indicators, hot items and watch points affecting the outlook | 1-5 |
| 2. Global outlook | • The commodity overview • Projected fundamental values • Global trade trends | 6-16 |
| 3. Hot items | • COVID-19 • Sensitivity to risk factors • EU • US • China • SE Asia • MENA | 17-27 |
| 4. The impact on Oceania milk prices | • Australia • New Zealand | 28-31 |



See page 15 for the table of projected values[#] for these regions.

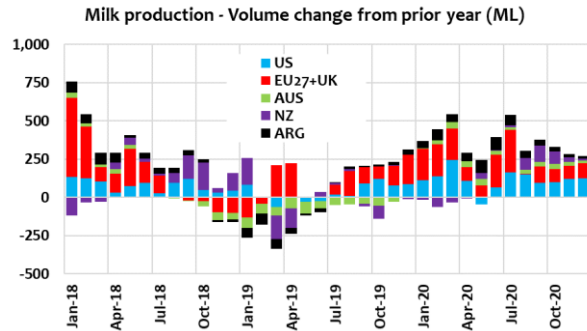
[#]These have been developed using relationships we derived from modelled correlations between material supply variables and spot prices over recent years, using econometric analysis. In each of these cases, the correlations were close to 90% over that period.

1.2 Projected milk values

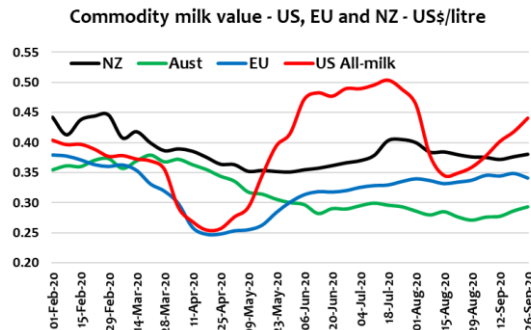
| Country | Key considerations | Milk production | Milk prices | | | | | | | | | | | | | | | | | | | | |
|-----------|--|--|-------------|------------|-------|------|-------|-------|-------|-------|-------|------|---|------|------------------|-------|------|-------|------|-------|------|-------|------|
| NZ | <ul style="list-style-type: none">We assume milk output will be 1.8% higher in 2020/21.Margins for producers will tighten significantly as milk prices are likely to be \$1/kgms lower than 2019/20 and costs continue to rise.We estimate Fonterra’s 2020/21 milk price (based on the reference formula) will be in the range NZ\$6.40 to \$6.70/kgMS. | <p>NZ milk growth</p> <table><tr><th>Year</th><th>Growth (%)</th></tr><tr><td>17/18</td><td>0.1%</td></tr><tr><td>18/19</td><td>2.2%</td></tr><tr><td>19/20</td><td>-0.5%</td></tr><tr><td>20/21</td><td>2.0%</td></tr></table> | Year | Growth (%) | 17/18 | 0.1% | 18/19 | 2.2% | 19/20 | -0.5% | 20/21 | 2.0% | <p>NZ milk prices (N\$/kgMS)</p> <table><tr><th>Year</th><th>Price (N\$/kgMS)</th></tr><tr><td>17/18</td><td>6.70</td></tr><tr><td>18/19</td><td>6.40</td></tr><tr><td>19/20</td><td>7.10</td></tr><tr><td>20/21</td><td>6.60</td></tr></table> | Year | Price (N\$/kgMS) | 17/18 | 6.70 | 18/19 | 6.40 | 19/20 | 7.10 | 20/21 | 6.60 |
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| EU | <ul style="list-style-type: none">The gradual rise in commodity prices has lifted our calculated EU Commodity Milk Value. The outlook suggests projected milk prices will remain steady over coming months.Individual country milk price averages will vary depending on product mix.Milk prices remain well below prior year levels in most countries which will help slow growth in milk output.In our base scenario, the projected CMV remains around 30c (euros) in the period through to June 2021 based on our outlook.This will be sensitive to commodity prices and some regions far more vulnerable to SMP and butter prices. | <p>EU-27 milk growth</p> <table><tr><th>Year</th><th>Growth (%)</th></tr><tr><td>2017</td><td>1.6%</td></tr><tr><td>2018</td><td>0.9%</td></tr><tr><td>2019</td><td>0.5%</td></tr><tr><td>2020</td><td>1.5%</td></tr></table> | Year | Growth (%) | 2017 | 1.6% | 2018 | 0.9% | 2019 | 0.5% | 2020 | 1.5% | <p>EU-27 milk prices (€/100kg)</p> <table><tr><th>Year</th><th>Price (€/100kg)</th></tr><tr><td>2017</td><td>34.8</td></tr><tr><td>2018</td><td>34.2</td></tr><tr><td>2019</td><td>34.5</td></tr><tr><td>2020</td><td>32.8</td></tr></table> | Year | Price (€/100kg) | 2017 | 34.8 | 2018 | 34.2 | 2019 | 34.5 | 2020 | 32.8 |
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| 2020 | 32.8 | | | | | | | | | | | | | | | | | | | | | | |
| US | <ul style="list-style-type: none">Milk margins will improve greatly in the coming months, including the effect of additional CFAP payments, although directed mostly at smaller producers.Milk producers won’t see the full benefit of high product prices. The spike in Class III milk prices with the CME cheese prices will again result in some heavy discounts to milk prices in monthly payoutsProjected all-milk prices are expected to average US\$18.10/cwt in Q4-2020 and slip to US\$17.45/cwt in Q1-2021. | <p>US milk growth</p> <table><tr><th>Year</th><th>Growth (%)</th></tr><tr><td>2017</td><td>1.4%</td></tr><tr><td>2018</td><td>0.9%</td></tr><tr><td>2019</td><td>0.4%</td></tr><tr><td>2020</td><td>1.8%</td></tr></table> | Year | Growth (%) | 2017 | 1.4% | 2018 | 0.9% | 2019 | 0.4% | 2020 | 1.8% | <p>US milk prices (US\$/cwt)</p> <table><tr><th>Year</th><th>Price (US\$/cwt)</th></tr><tr><td>2017</td><td>17.8</td></tr><tr><td>2018</td><td>16.5</td></tr><tr><td>2019</td><td>18.5</td></tr><tr><td>2020</td><td>17.5</td></tr></table> | Year | Price (US\$/cwt) | 2017 | 17.8 | 2018 | 16.5 | 2019 | 18.5 | 2020 | 17.5 |
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| 2019 | 18.5 | | | | | | | | | | | | | | | | | | | | | | |
| 2020 | 17.5 | | | | | | | | | | | | | | | | | | | | | | |
| Australia | <ul style="list-style-type: none">Our mid-range estimate for the commodity milk value in 2020/21 has fallen to near A\$5.30/kgms using the base scenario in this outlook, sensitive to cheese and fat prices and the value of the A\$.This has fallen from A\$5.90 in June at the time milk prices were set in the industry. | <p>AUS milk growth</p> <table><tr><th>Year</th><th>Growth (%)</th></tr><tr><td>17/18</td><td>3.5%</td></tr><tr><td>18/19</td><td>-5.5%</td></tr><tr><td>19/20</td><td>-0.5%</td></tr><tr><td>20/21</td><td>2.0%</td></tr></table> | Year | Growth (%) | 17/18 | 3.5% | 18/19 | -5.5% | 19/20 | -0.5% | 20/21 | 2.0% | <p>AUS milk prices (A\$/kgMS)</p> <table><tr><th>Year</th><th>Price (A\$/kgMS)</th></tr><tr><td>17/18</td><td>5.90</td></tr><tr><td>18/19</td><td>6.40</td></tr><tr><td>19/20</td><td>7.20</td></tr><tr><td>20/21</td><td>6.50</td></tr></table> | Year | Price (A\$/kgMS) | 17/18 | 5.90 | 18/19 | 6.40 | 19/20 | 7.20 | 20/21 | 6.50 |
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| 20/21 | 6.50 | | | | | | | | | | | | | | | | | | | | | | |

1.3 Trending indicators

Production

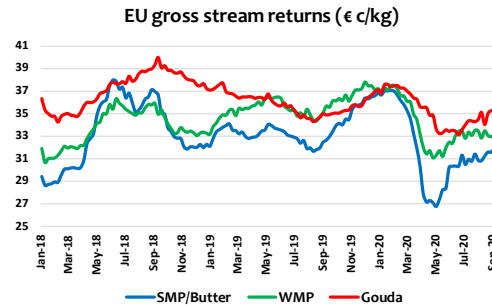


US milk producers are getting a strong signal to lift milk production

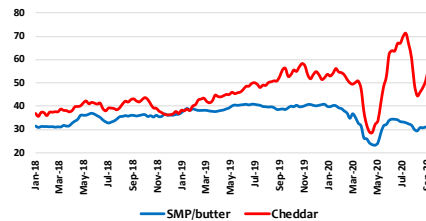


Product mix

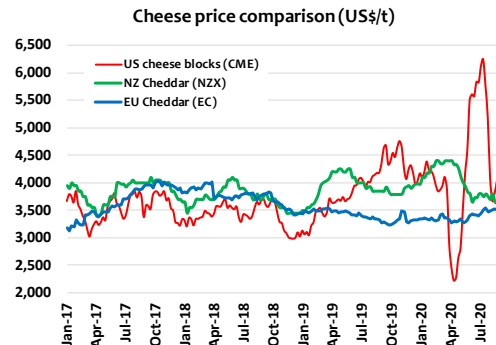
Recent prices support a lift in cheese output, but demand may be fragile



US gross stream returns (US\$/kg)

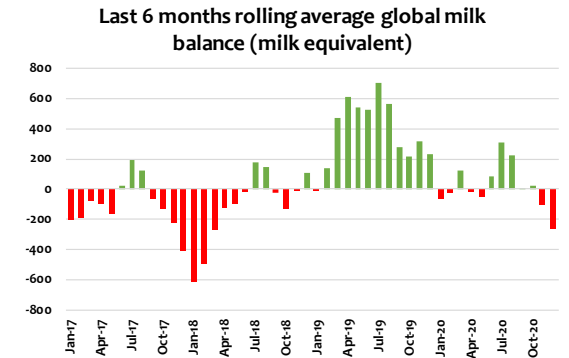


Volatile cheese prices in the US will make competition in key markets interesting in coming months

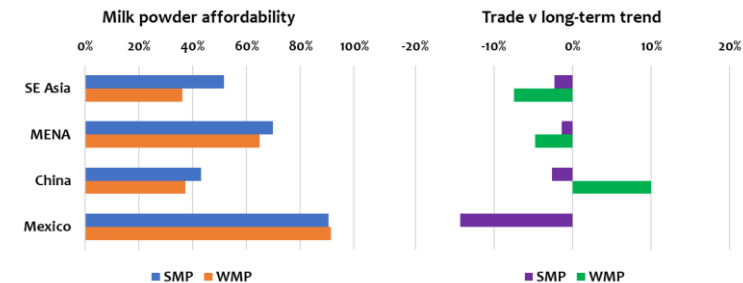


Balance sheets

Recent global trade has helped tighten the milk balance but that will weaken in coming months



Recent prices falls and currency changes have altered the affordability of commodities in key market regions



1.4 Hot items affecting the outlook

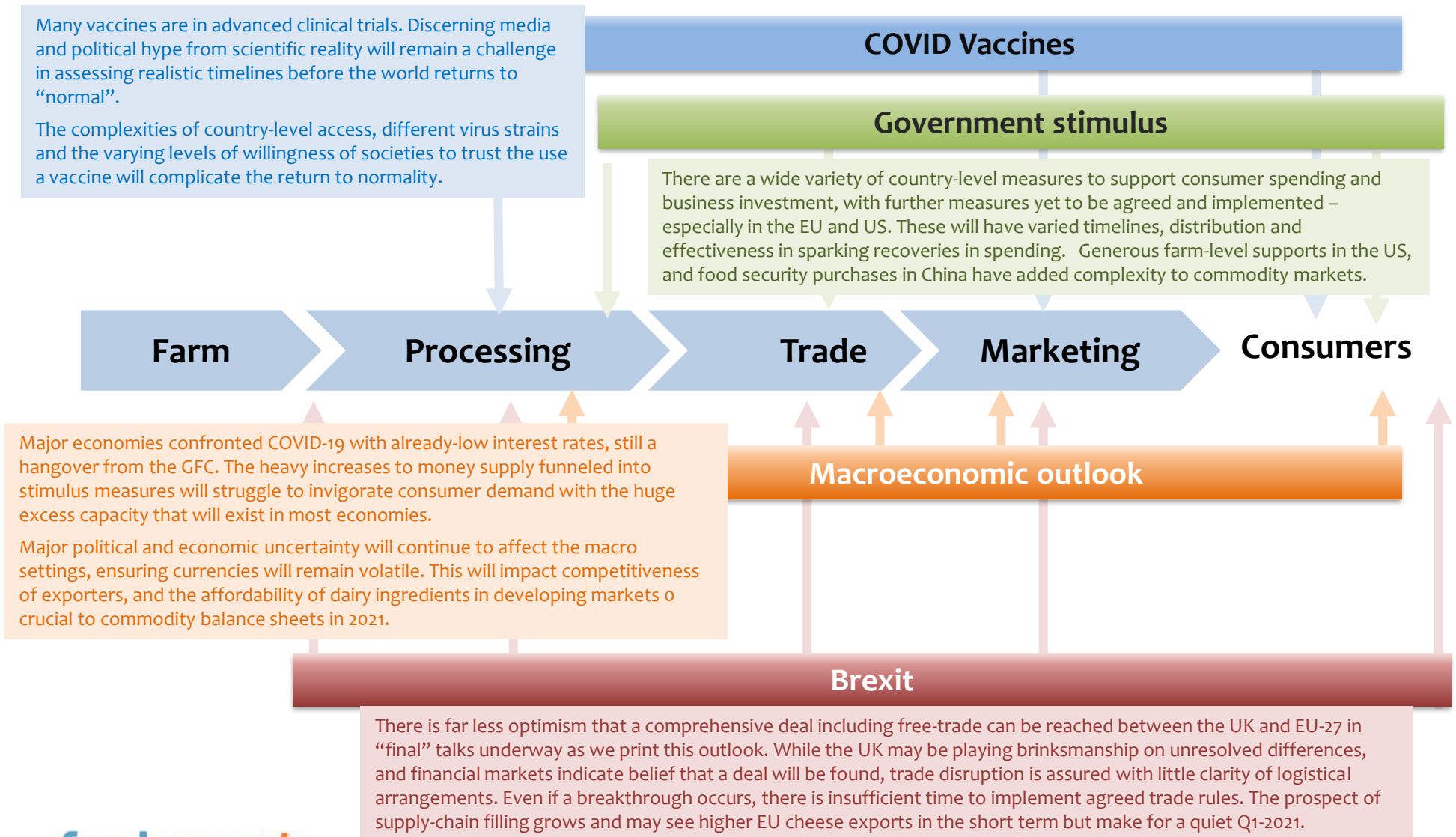
The significant items affecting commodity market fundamentals in the outlook:

| | Hot items..... | ...affecting dairy markets* | ... with likely timing. | | | | | Pages |
|---|--|--|-------------------------|-----------|--------|--------|---------|-------|
| | | | now | 6-12 mths | 18mths | 24mths | ongoing | |
| 1 | The ongoing impact of COVID-19 2 nd wave infections and a long wait for a vaccine | Dairy demand recovered after the first wave and is likely to suffer similar impacts | | | | | | 18-19 |
| 2 | The impact of recession on demand Massive income losses will impact consumption | Weaker consumer spending in US and EU is rippling to other developing regions | | | | | | 21-24 |
| 3 | Milk growth (& product mix) in EU & US Growing milk supplies will pressure fat markets | There are likely to be mixed impacts of weaker milk prices, feed costs and weather. | | | | | | 21-24 |
| 4 | The strong start to NZ's season Another good start but will it last | A normal spring has developed and will boost supplies through Q4-2020 | | | | | | 31 |
| 5 | Uncertain oil markets Can producers hold their nerve to limit supply | Weaker revenues will nonetheless further harm MENA and other oil dependent economies | | | | | | 27 |
| 6 | China's new equilibrium Demand is recovering but milk use changing | Demand is returning to normal but changes in milk use will alter the role of imports | | | | | | 25 |
| 7 | Sth East Asia's appetite in recession Affordability may be challenges in some markets | Lower prices have stimulated trade, but uncertainty will sustain caution | | | | | | 26 |
| 8 | A new version of "normal"? What will dairy consumption look like when things settle? | Changing consumer behaviour will change dairy markets | | | | | | 19 |

*The relative size of these bars is based on the size of potential **total milk effect** and **impact on projected fundamental values** of variations in assumptions.

1.5 Watch points

There are several policy and other wildcards that may significantly impact trade in the short to medium term.



2. Global outlook



Features in this section

The outlook for fundamentals [7](#)

Commodity overview [8](#)

The global outlook for commodities [9-14](#)

The base scenario – PFVs [15](#)

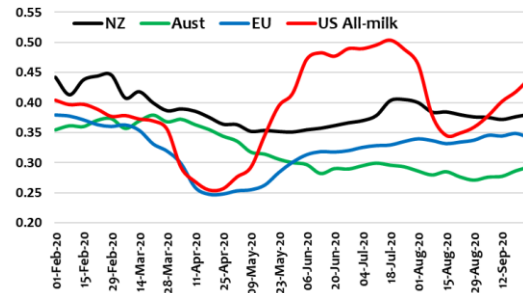
Global trade trends [16](#)

2.1 The outlook for fundamentals

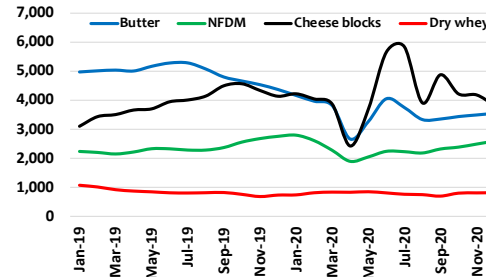
Overview

- The outlook across commodities in major exporters is mixed, with diverse influences. This complexity will ensure the US market remains volatile but this will likely ease as milk supplies build.
- In other markets – cheese and butterfat in the EU - an uneasy holding pattern has been found – the ability for retail markets to offset food service losses in demand has helped markets stabilise, while the fundamentals of milk proteins (SMP) are favorable with tighter stocks than we've seen in five years.
- Milk supplies are building with good margins in the EU and US and favourable seasonal conditions in the southern hemisphere – for now. This additional supply will weaken fundamentals in Q1-2021.
- There has been minimal **milk supply response – other than direct measures in the US** – as milk producers have been cushioned with the quick rebound in wholesale prices in Q2-2020.
- Our projected fundamental values are summarised in the charts on the right and in the table on **page 15**. The impact on milk returns from the major commodities is shown on the right.
- The factors affecting the outlook for major commodities are summarised on the following pages.

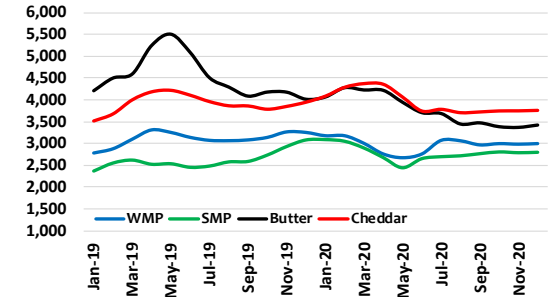
Commodity milk value - US, EU and NZ - US\$/litre



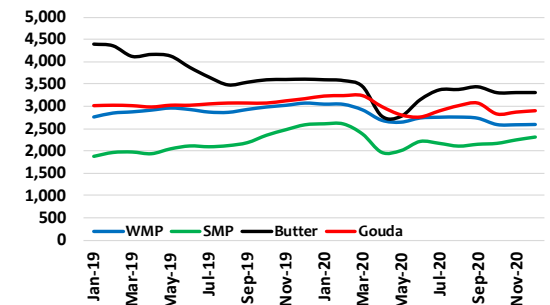
US internal prices and PFVs (US\$/t)



Oceania export prices and PFVs (US\$/t)
















EU internal wholesale prices and PFVs (€/t)



2.2 Commodity overview

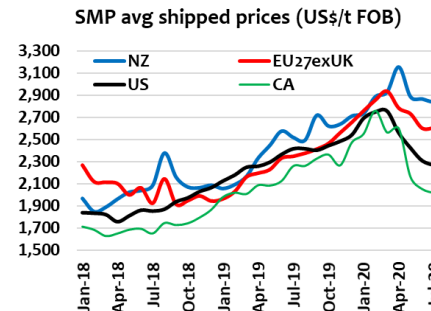
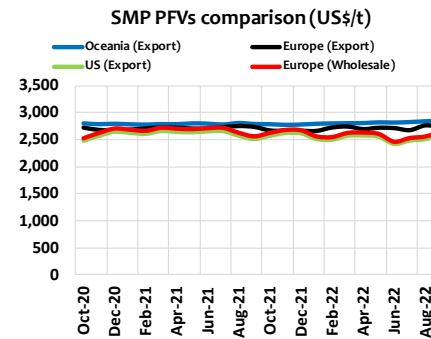
Opportunities and risks affecting the outlook

| | Current factors | Outlook considerations & watch points | Fundamental value direction |
|--------|--|--|--|
| SMP | <ul style="list-style-type: none"> Prices steadily improving with tightening global supplies. US NFDM prices recovering with improved demand, overcoming weaker domestic use. A sustained NZ-origin premium Overall export demand improving in Q3-2020, boosted as buyers took advantage of low prices | <ul style="list-style-type: none"> Improved late summer pasture/crop conditions in the EU Product mix is highly dependent on milk flows and sustained cheese demand Rising US milk supplies Stronger € weakens EU share of trade Headroom for more SE Asian imports Weaker Mexican demand with poor economic outlook Weak whey protein prices affecting competitiveness | <p>EU: slightly firmer on lower risk of large product mix shift. </p> <p>Oceania will follow EU at a small premium </p> <p>US will track EU trends, but sensitive to Mexican demand </p> |
| Butter | <ul style="list-style-type: none"> EU markets stable with good retail demand Rising US stocks with surplus cream Oceania prices weaker with lower export demand Improved MENA demand at lower prices, subdued Asian demand with COVID impacts | <ul style="list-style-type: none"> EU stocks may build with cream surpluses European prices sensitive to strength of retail demand Weak developing market demand with poor food service sales Weakening cream demand in the US with faltering food service openings and increasing milk supplies | <p>EU: weaker with higher stocks, subject to availability </p> <p>Oceania: steady but vulnerable to EU competition </p> <p>US: weaker, vulnerable to excess cream as milk output grows </p> |
| Cheese | <ul style="list-style-type: none"> Steady EU prices as retail demand offsets foodservice weaknesses Volatile US block cheddar market Government purchases adding to pressure in Q3 Oceania market weaker with poor foodservice demand | <ul style="list-style-type: none"> Improving milk supply in US cheese states Added US cheddar capacity online in Q4-2020 US consumers trading down likely to increase cheese use Stuttering recovery for foodservice in 2nd waves Likely intense competition in key Asian markets | <p>EU: steady, vulnerable to domestic demand later in 2020 </p> <p>Oceania: driven by pricing of EU and US competition </p> <p>US: weakening as supply recovers </p> |
| WMP | <ul style="list-style-type: none"> GDT and futures prices steady in recent events, supported by persistent Chinese involvement Fragile demand from other regions Improving Latam availability Boost in trade at lower prices to Africa and Middle East | <ul style="list-style-type: none"> Likely growth in NZ milk across peak months Still ample affordability for SE Asia and China Rising Chinese milk prices sustain WMP import advantage Increased uncertainty may limit demand from MENA | <p>NZ: finely balanced ahead of peak shipping period </p> <p>EU: will weaken with cheaper competitors and weaker returns </p> |
| Whey | <ul style="list-style-type: none"> Heavy supplies with weak WPC markets Declining IMF trade into China with stronger local brands Improving whey powder trade into China and SE Asia WPC demand remains weak | <ul style="list-style-type: none"> Rising SMP prices will support whey protein usage Pig herd growth in Asia lifting whey and lactose demand Improving US cheese output increasing supply | <p>EU/Oceania: improving with better demand </p> <p>US: improving with better domestic demand & trade </p> |

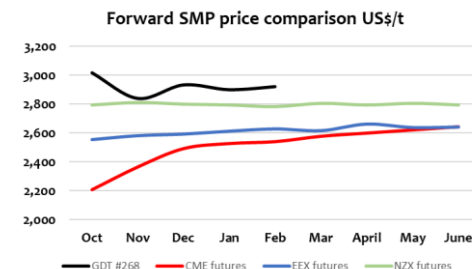
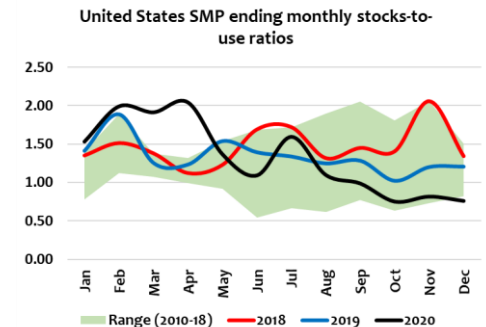
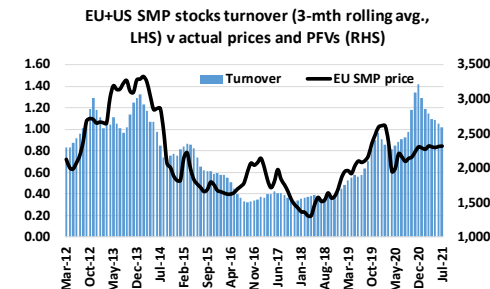
2.3 The outlook for commodities

SMP

- SMP and NFDM prices have continued to steadily build. The earlier fears of stock build did not eventuate – milk supply slowed and cheese demand has been resilient with the swing to retail sales.
- Market fundamentals are supportive with stocks in the EU-27 and US tightening due to relatively small YOY increases in production – other than the leap in EU-27 output in July. Exports have surged as buyers cleared significant volumes at the attractive lock-down induced Q2 prices.
- Milk supplies will grow at faster in the 2nd half of 2020 but our base scenario shows that aggregate SMP production will not significantly add to inventories. The global stock-turn of SMP combining EU+NZ+US will improve, supporting a continued steady build in PFVs.
- Nonetheless the US balance sheet and export prices are having a much stronger influence on global dynamics, and will keep EU prices in check. Exports have been critical to the US balance sheet – the growth in exports has almost offset the large decline in domestic use.
- We have tuned up our assumptions as to product mix in H2-2020 and 2021 that respond to changes in milk supply and cheese processing **based on a reconciliation of mass balanced milk** in EU, NZ and US which applies a consistent use of available fat and protein across all major product groups.
- Our projected PFVs are shown on the right** and in the table on **page 15**. These are sensitive to many variables as shown in scenarios described on **page 20**.
- While the outlook is cautious, the PFVs are sensitive to demand from key developing world markets – chiefly SE Asian countries and China. Our analysis shows that trade remains below trend in SE Asia, but forward prices are testing affordability levels. Mexico will be crucial to US PFVs, as prices in the weaker local currency remain high.
- There is a pending update on EU stocks to be published by the EU Commission/EDA shortly which will confirm stocks and domestic “disappearance” through July 2020 improving the accuracy of the projected balance sheet.



Direction of fundamental values



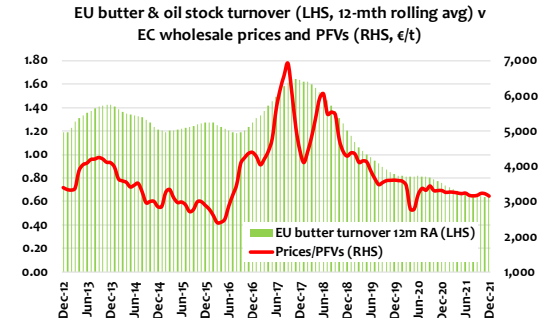
2.3 The outlook for commodities

Butter and AMF

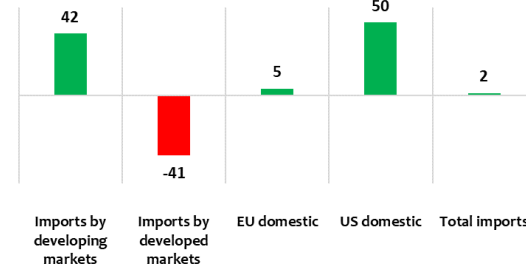
- Global butterfat prices have diverged in recent months as different influences impact the fundamentals in each of the major producers.
- EU markets remain steady, supported by strong retail sales that offset the losses in foodservice channels. Summer cream demand was sufficient to avoid a major butter stock build in the EU – as already seen in the US - due to its more larger exposure to non-retail sales.
- Oceania markets have been weakened by the decline in butter use in food service channels of major developing markets.
- While grocery and other food retail demand remains buoyant, there is less prospect that this can make up for the loss of butterfat use in food service outlets. Risks lie ahead in autumn and winter months and it is likely butter prices will come under pressure. In the EU cream surpluses will more likely develop with sluggish food service usage as stricter COVID restrictions are re-invoked or people simply avoid eating out.
- The stock build in the US is likely to worsen, although strong retail demand (aided by retailer promotions) may alleviate the pressure on wholesale prices.
- Export demand from developing markets may improve at low prices as mobility improves but will remain price-sensitive with the damage to the food service trade while travel and tourism remain seriously impaired.
- Our PFVs are shown on the right. **We have modelled projected butterfat availability** taking account of these various assumptions for milk production, overall EU product mix and all uses including butter and AMF.
- There is a pending update on EU stocks to be published by the EU Commission/EDA shortly which will confirm stocks and domestic “disappearance” through **July 2020** allowing improved accuracy of the projected balance sheet.

Direction of fundamental values

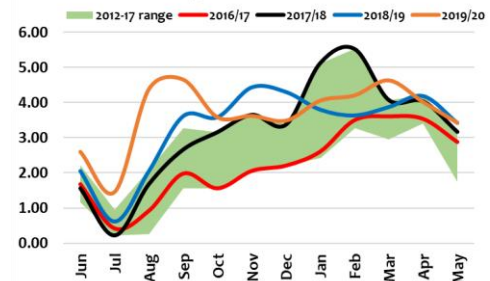
| EU | US | NZ |
|----|----|----|
| ➡ | ➡ | ↔ |



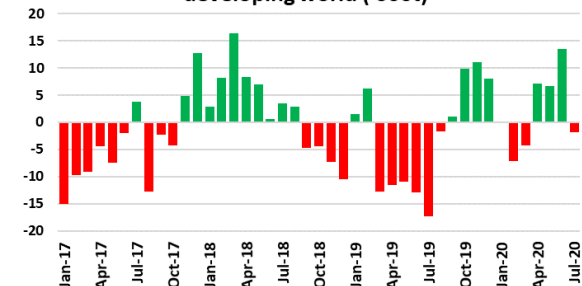
Change in butterfat demand - 12 months to July 2020 ('000t)



New Zealand Butter & AMF (CBE) ending monthly stocks-to-use ratios



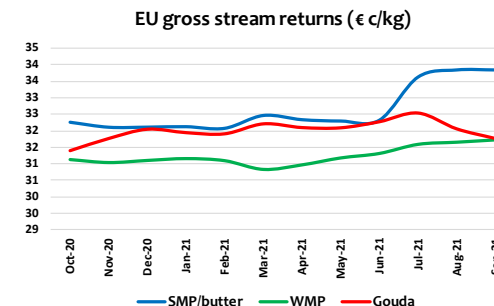
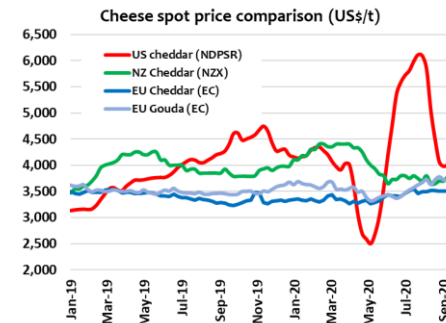
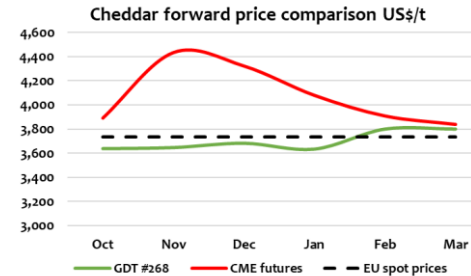
Year-on-year changes in butterfat trade with developing world ('000t)



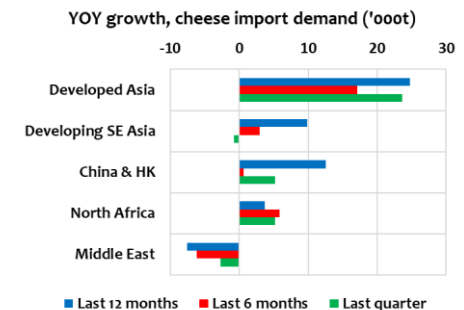
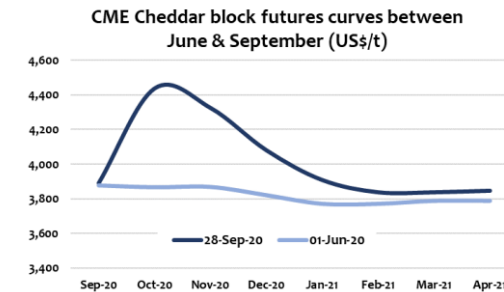
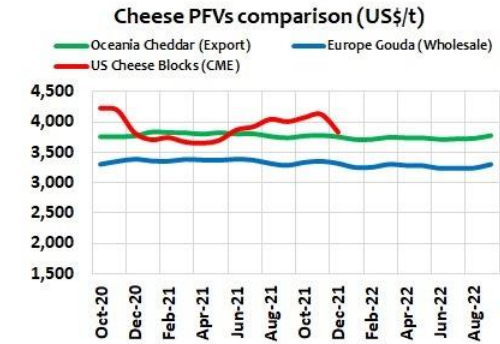
2.3 The outlook for commodities

Cheese

- Cheese markets have – similar to butter – shown divergent trends.
- EU markets have been remarkably stable after Q2-2020 price shocks and continued to slowly firm through Q3-2020 as retail demand offset foodservice losses. Processors have carefully managed supplies to match slightly weaker demand.
- Oceania markets softened to meet competing EU prices and stabilised in Q3-2020 in line with competitors. NZ product has had weaker export demand, losing meaningful market share to EU and US competitors.
- The US market continued to experience unprecedented volatility with the layered effects of lurches in milk supply, strong retail demand, refilling of foodservice supply lines and government food aid purchases. The US recession appears to be benefitting cheese consumption with more meals at home, and consumers trading down to cheaper fast food or takeaway meals.
- Limited short-term availability of stock to respond to sudden changes in demand has kept prices volatile on the CME. This will alleviate with stronger growth in milk supplies and new capacity coming on-line in Q4-2020. Futures prices in late Q4 and Q1-2021 have hardly budged during this time, as shown.
- **Our projected PFVs** are shown on the right and on **page 15**.
- The fundamentals suggest a finely balanced market in the coming months with sustained retail demand, helped by weak growth in milk supply in the EU. US block cheddar prices will soften through Q4-2020 with increased availability.
- Export market stability and recovery will be critical. The developments in negotiations to achieve Brexit will be critical, although increased risk of a disruptive no-deal outcome may again see a surge in shipments to the UK prior to years-end to avoid customs delays and high inbound tariffs.



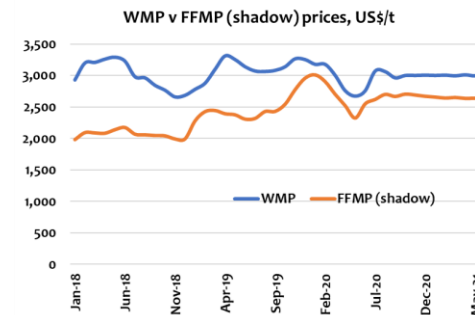
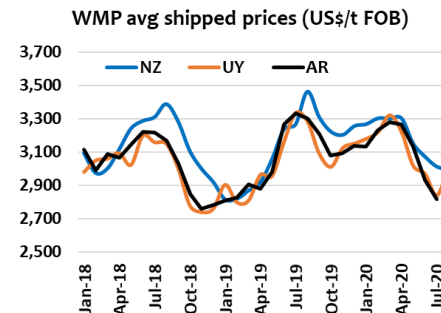
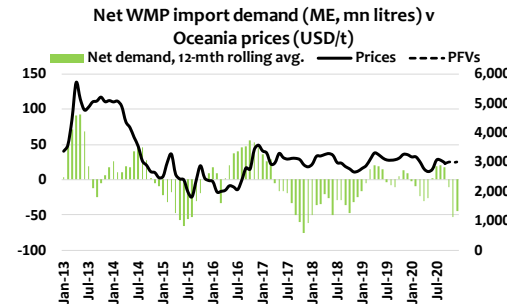
Direction of fundamental values



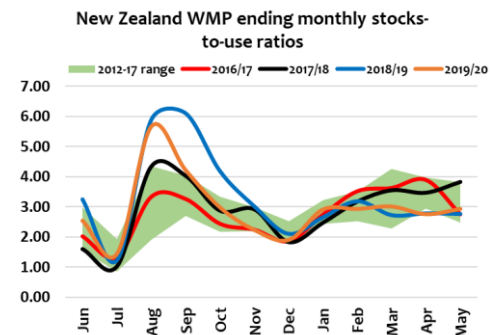
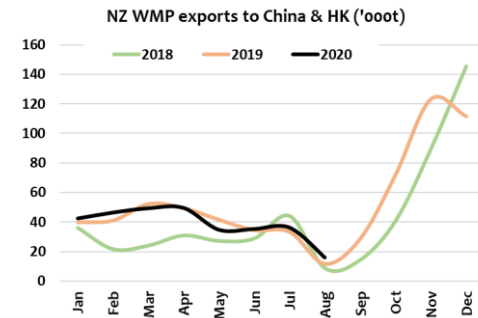
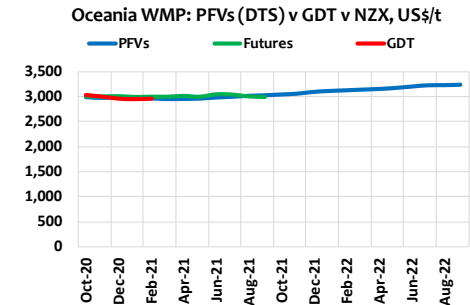
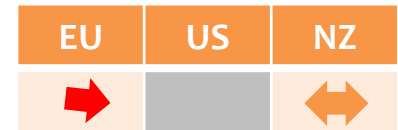
2.3 The outlook for commodities

WMP

- The WMP market has stabilised despite increased output from the EU and South America and the prospect of stronger peak milk production in New Zealand. Persistent demand from China (despite heavy internal stocks) and MENA have kept the market balanced.
- Export demand responded strongly to weaker Q2-2020 prices with improved competitiveness against fat-filled milk powder, driving stronger demand in the Middle East and Sub-Saharan Africa.
- Overall WMP availability in H2-2020 will lift more than 2%, reflecting higher NZ milk output and increased production in Latam as milk supply recovers.
- The outlook for WMP remains finely balanced, but we expect prices to drift weaker through peak NZ production and Chinese buying season. The blending of lower-priced imports will likely remain attractive as internal stocks are depleted through Q1-2021.
- Buyers in other regions are being challenged by affordability pressures at forward prices and will continue to be cautious given the extent of economic uncertainty, and the likelihood of higher output through the NZ peak production season.
- We assume NZ milk growth will be 1.8% for the 2020/21 NZ season, dependent on the effects of climate patterns on summer conditions. NZ producers are expected to shift their mix to WMP to avoid excess butterfat production.
- The **projected PFVs for Oceania WMP** are shown on the right and in the table on **page 15**.
- We test the sensitivity of this outlook, varying overall demand in coming months. A scenario is shown on **page 20** with a variation in the H2-2020 demand. This is plausible given Chinese WMP stocks likely to be carried into 2021.



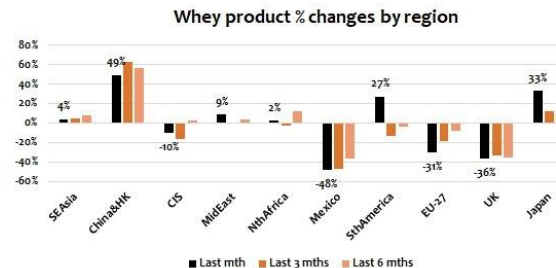
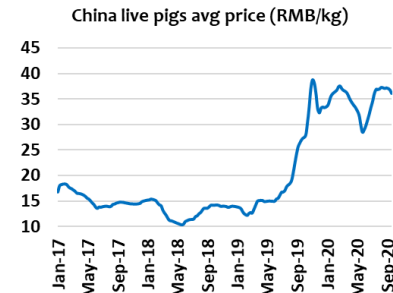
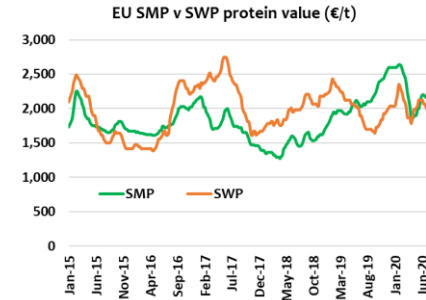
Direction of fundamental values



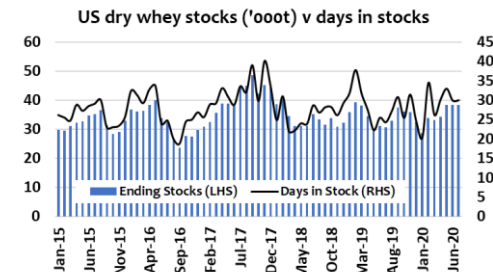
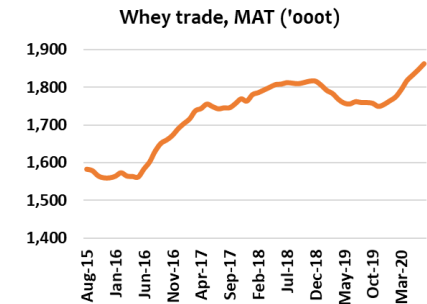
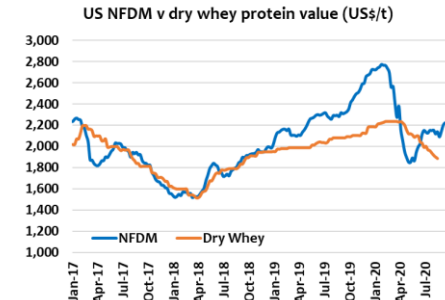
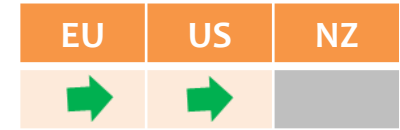
2.3 The outlook for commodities

Whey products

- Whey product prices remain under the complex influences of COVID-19 on milk supplies, cheese output, relative SMP prices and weak demand for high-concentrate products.
- Whey powder prices have been kept in check as stocks in the US remain adequate. Despite the slow growth in cheese output in the US, reduced WPC production kept dry whey output growing at better than 4% in the three months to July.
- A surge in export demand for dry whey has helped both EU and US producers – especially with the recovery of pig numbers in China and SE Asia. Much of this growth has been won by EU exporters.
- However the drag on the US market has also come from poor US domestic usage which has been in freefall – dropping 25% in the 4 months to July. Relative protein values favour whey which will help with domestic usage.
- The likely increase in US cheese output in response to highly favourable stream returns and added capacity will further add to whey supplies, and producers will continue to avoid making high WPC products as markets for sports nutrition and infant formula remain weak.
- The outlook for the commodity whey market in China remains positive with the ongoing rebuilding of their pig herd numbers.
- Whey PFVs are shown in the table on **page 15**.
- Poor production and trade data (differentiating dry whey from WPC concentrations) prevents meaningful development of global balance sheets, market fundamentals and trading trends for the various protein concentrations.



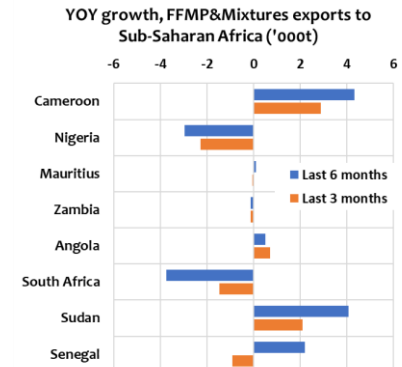
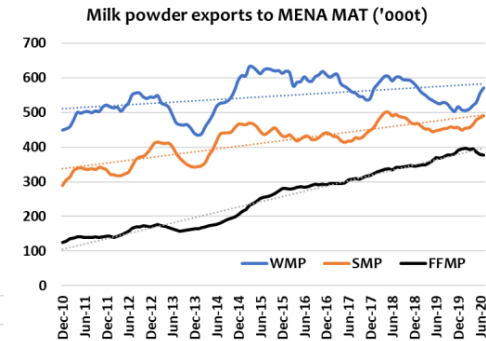
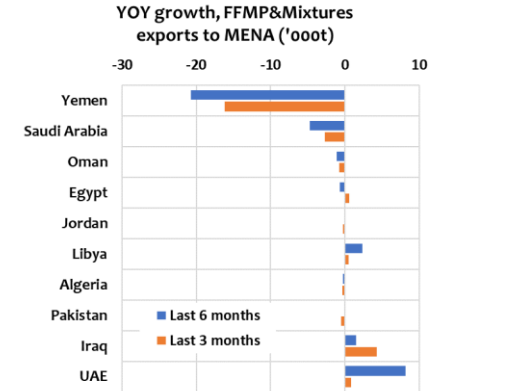
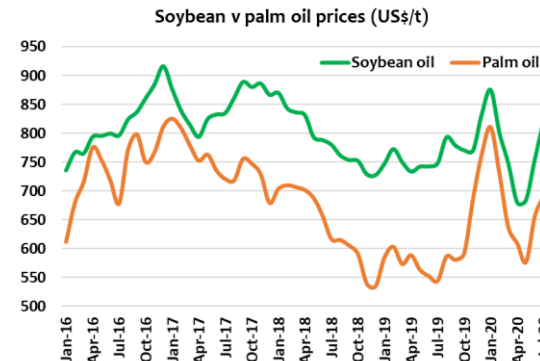
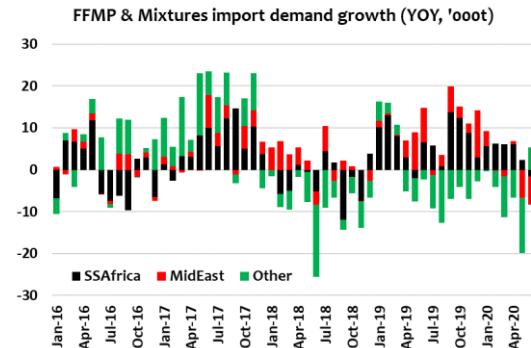
Direction of fundamental values



2.3 The outlook for commodities

Fat-filled milk powders

- Fat filled milk powders (FFMP) fall within a wider category (HS 190190) which makes it difficult to be precise regarding trade, while there is no production data for major producers.
- The new trade data reporting by the EU in the past few months has helped this situation, but to date the data is limited to the current year only.
- Trade in the broad FFMP & mixtures category was flat in the first 7 months of 2020, however if the decline in Russian demand is ignored, trade expanded 3% in this period, supported by a 9% lift in demand from Sub-Saharan Africa. Lower WMP prices and rising veg oil values improved competitiveness of WMP over FFMP in trade with MENA and Sub-Saharan Africa.
- Veg oil prices rebounded in Q2-2020 with strong food-security buying by China and production challenges in palm plantations in SE Asia. The short-term outlook for palm oil is complex however and depends on sustained demand from China and India, and the alleviation of production constraints.
- The future demand from China may be complicated with plans to buy larger volumes of soybeans to bolster pig feed, potentially creating a glut of soybean oil.
- Nonetheless, USDA expects global stocks-to-use for **both palm and soybean oils** were expected to fall.
- The economic conditions in price-sensitive markets of the Middle East and Sub-Saharan African countries will likely worsen and increase the preference for FFMP.
- We have projected a comparison between projected fundamentals for WMP (Oceania) and a FFMP shadow-value on **page 12**. This shows the gap narrowing with firmer palm oil and SMP values.



2.4 The base scenario - PFVs

This table provides a summary of the project fundamental values for key product series.

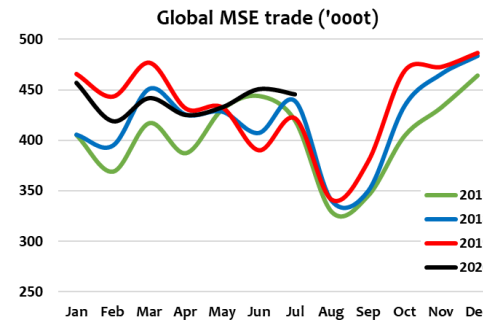
| | -----Oceania export (US\$/t)----- | | | | | -----EU internal wholesale (€/t)----- | | | | | | --EUR export (US\$/t)-- | |
|--------|-----------------------------------|-------|--------|---------|------|---------------------------------------|-------|--------|-------|-------|------|-------------------------|-------|
| | WMP | SMP | Butter | Cheddar | Whey | WMP | SMP | Butter | Edam | Gouda | Whey | WMP | SMP |
| Oct-20 | 2,995 | 2,799 | 3,389 | 3,750 | 965 | 2,588 | 2,165 | 3,309 | 2,828 | 2,830 | 700 | 3,029 | 2,713 |
| Nov-20 | 2,983 | 2,782 | 3,373 | 3,752 | 975 | 2,583 | 2,245 | 3,311 | 2,871 | 2,873 | 707 | 3,018 | 2,671 |
| Dec-20 | 2,996 | 2,792 | 3,427 | 3,763 | 984 | 2,590 | 2,312 | 3,312 | 2,903 | 2,905 | 711 | 3,027 | 2,665 |
| Jan-21 | 2,988 | 2,779 | 3,365 | 3,833 | 977 | 2,596 | 2,294 | 3,259 | 2,879 | 2,880 | 706 | 3,035 | 2,676 |
| Feb-21 | 2,974 | 2,774 | 3,345 | 3,827 | 972 | 2,590 | 2,277 | 3,269 | 2,874 | 2,875 | 704 | 3,023 | 2,701 |
| Mar-21 | 2,961 | 2,784 | 3,412 | 3,820 | 977 | 2,569 | 2,323 | 3,262 | 2,901 | 2,903 | 707 | 2,997 | 2,713 |
| Apr-21 | 2,963 | 2,782 | 3,364 | 3,797 | 971 | 2,579 | 2,310 | 3,242 | 2,892 | 2,893 | 704 | 3,011 | 2,711 |
| May-21 | 2,970 | 2,799 | 3,408 | 3,822 | 967 | 2,597 | 2,302 | 3,224 | 2,887 | 2,889 | 702 | 3,027 | 2,696 |
| Jun-21 | 2,989 | 2,793 | 3,422 | 3,799 | 967 | 2,607 | 2,317 | 3,238 | 2,904 | 2,905 | 704 | 3,041 | 2,696 |
| Jul-21 | 3,004 | 2,776 | 3,382 | 3,804 | 964 | 2,616 | 2,322 | 3,174 | 2,890 | 2,892 | 700 | 3,054 | 2,722 |
| Aug-21 | 3,023 | 2,808 | 3,327 | 3,758 | 948 | 2,620 | 2,247 | 3,162 | 2,840 | 2,842 | 690 | 3,059 | 2,743 |
| Sep-21 | 3,033 | 2,787 | 3,366 | 3,731 | 936 | 2,625 | 2,194 | 3,176 | 2,812 | 2,814 | 684 | 3,067 | 2,726 |
| Oct-21 | 3,048 | 2,781 | 3,363 | 3,764 | 943 | 2,632 | 2,246 | 3,232 | 2,856 | 2,858 | 690 | 3,071 | 2,662 |
| Nov-21 | 3,064 | 2,768 | 3,261 | 3,776 | 946 | 2,639 | 2,290 | 3,219 | 2,872 | 2,874 | 692 | 3,081 | 2,654 |
| Dec-21 | 3,098 | 2,775 | 3,257 | 3,749 | 940 | 2,650 | 2,285 | 3,154 | 2,840 | 2,842 | 684 | 3,096 | 2,655 |
| Jan-22 | 3,116 | 2,791 | 3,389 | 3,701 | 920 | 2,657 | 2,193 | 3,132 | 2,781 | 2,782 | 672 | 3,106 | 2,653 |
| Feb-22 | 3,128 | 2,798 | 3,375 | 3,704 | 915 | 2,663 | 2,182 | 3,157 | 2,784 | 2,786 | 671 | 3,115 | 2,716 |
| Mar-22 | 3,142 | 2,803 | 3,456 | 3,741 | 922 | 2,670 | 2,245 | 3,169 | 2,827 | 2,829 | 677 | 3,123 | 2,733 |
| Apr-22 | 3,154 | 2,806 | 3,437 | 3,731 | 918 | 2,675 | 2,251 | 3,095 | 2,812 | 2,813 | 673 | 3,131 | 2,687 |
| May-22 | 3,173 | 2,821 | 3,417 | 3,730 | 911 | 2,683 | 2,231 | 3,101 | 2,807 | 2,808 | 670 | 3,141 | 2,711 |
| Jun-22 | 3,200 | 2,817 | 3,465 | 3,703 | 889 | 2,691 | 2,112 | 3,190 | 2,768 | 2,769 | 662 | 3,153 | 2,705 |
| Jul-22 | 3,224 | 2,828 | 3,151 | 3,711 | 893 | 2,699 | 2,168 | 3,085 | 2,770 | 2,772 | 660 | 3,164 | 2,667 |
| Aug-22 | 3,226 | 2,844 | 3,011 | 3,719 | 892 | 2,702 | 2,191 | 3,052 | 2,772 | 2,774 | 659 | 3,168 | 2,755 |
| Sep-22 | 3,236 | 2,861 | 3,065 | 3,772 | 902 | 2,707 | 2,266 | 3,092 | 2,827 | 2,829 | 667 | 3,175 | 2,723 |

- To derive monthly PFVs, we use an econometric multiple regressions approach. Separate equations are estimated across region/product pairs based on historically available information on supply and demand variables sourced from public sources and own estimates.
- Historical actual price data sources: Oceania export PFVs are based on the AgriHQ weekly series (except whey – Dairy Australia); European internal wholesale PFVs projections are based on the weekly EC/Kempton/Zuivel/Agrimer series; EU export PFVs are based on USDA Dairy Market News series and internal market PFVs on CME series.

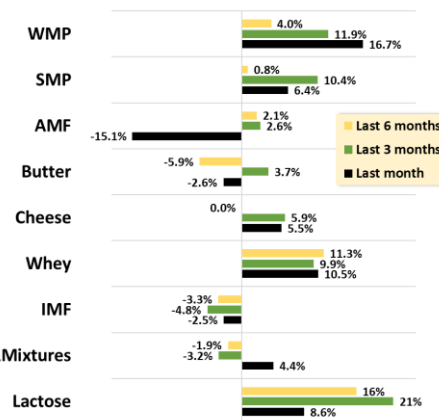
2.5 Global trade trends

Trade resilient through early stages of pandemic

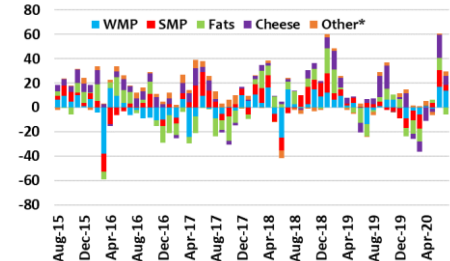
- Global trade remained well above the prior year in July, with sustained healthy rises in milk powders, cheese, whey products and lactose, while butterfat trade slowed. The strong exports in the month took overall trade for first 7 months of 2020 0.6% higher than the 2019 comparative.
- July exports increased 5.7% YOY** in milk solids equivalent (MSE) terms, lifting trade over the last quarter by 6.8%. The large increases in June and July trade have however now offset the weaker trade in the first 5 months of the year.
- The trend in YOY changes has been improving since the COVID-19 disrupted trade in March, but June's surge couldn't be repeated in July. Milk powder and cheese trade growth slowed, despite still large gains, while butterfat had a moderate contraction.
- North African purchases drove the lift in milk powder trade, especially in WMP, while strong SE Asian shipments of SMP were also a feature.
- Global cheese trade continued year-on-year improvement but remains a patchy performance. The biggest contributors to growth in recent months were Ukraine (with plunging local milk supplies), Sth Korea, Japan (both on the COVID rebound) and the UK which is re-stuffing its supply lines after a false-start Brexit last year and re-openings after COVID lockdowns.
- Despite prices remaining weak, overall butterfat trade stalled in July after the strong showing in June. Overall butterfat trade lagged 4% behind the prior year for the 7 months to July, and sales to developing world markets dipped below the comparative after 3 months of solid gains, mainly into China and MENA.
- China and SE Asian strong demand for whey and lactose continued in July. MPC trade lifted 3% in July and grew 5% in the first 7 months of 2020 to 169,000t, which was weakened by a slump in May. Growth has chiefly come from Nth Africa and Sth Korea in 2020.
- The strong recovery in SMP and WMP kept North Africa in position as the region with biggest growth, and in July managed to expand trade across all categories that we track. China moved back towards the top of the table mostly due to the size of the growth in whey demand, but also with stronger butterfat and powders.



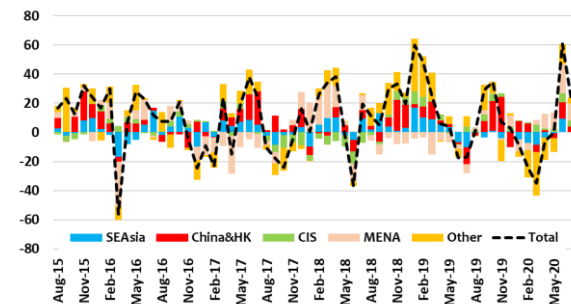
YOY growth, shipments by top 12 exporters



Growth in MSE trade by product ('000t)



Growth in MSE trade by destination region ('000t)



3. Hot items

Features in this section

The ongoing impact of COVID-19 [18-19](#)

Sensitivity to risk factors [20](#)

EU milk and product output [21-22](#)

US milk and product output [23-24](#)

China's new equilibrium [25](#)

Sth East Asia's appetite in recession [26](#)

Uncertain oil markets [27](#)

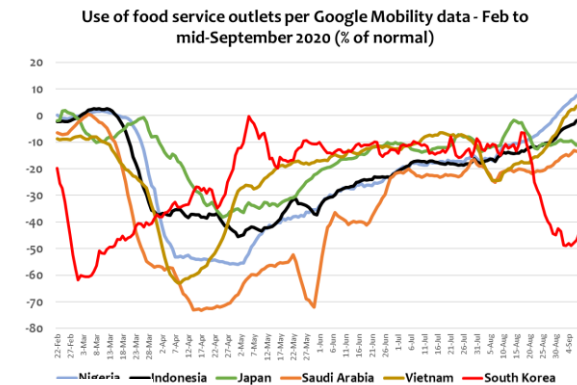
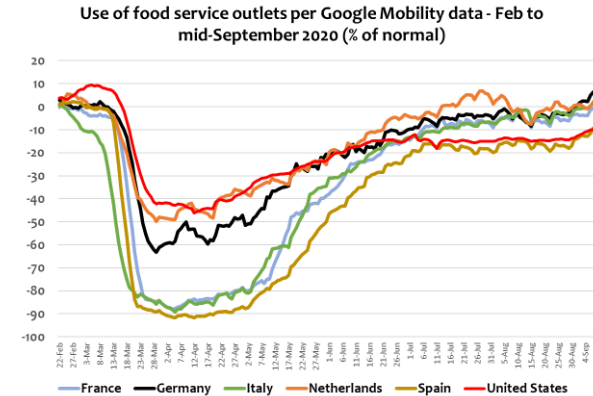


3.1 COVID-19

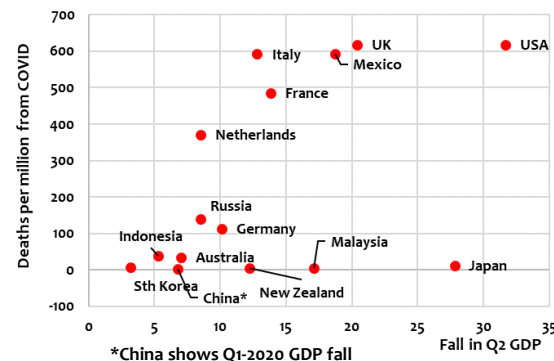
A very long, bumpy road to “normal”

- COVID-19 remains the major factor impacting the outlook for dairy markets, with the combined physical restrictions on exposed food sales channels and the pervasive economic impacts on households due to lost employment.
- The first wave impacts brought a severe market reaction due to the huge uncertainty of how consumers would respond to challenging movement restrictions. That reaction was most certainly due to the poor visibility of information and understanding of the existing patterns of dairy consumption across products, sales channels and eating occasions.
- The upshot from that early phase was that grocery shopping to replace meals formerly consumed out of the home essentially held dairy's demand intact.
- The impacts of the heavier exposure to food service in the US were somewhat muted by actions of industry to slow milk output (despite government paying farmers to stay in business) and by government purchases that will total 2-2.5% of annual milk collections.
- COVID-19 is now out of control in a number of major population regions. We are well into 2nd and 3rd wave phases of the spread of infections across the US and EU. We will likely see a reversion into movement restrictions and food outlets closures again – especially with colder weather placing greater limits on venues.
- Whether there will be the strict lockdowns of the kind implemented in April and May is uncertain – the political juggle between economic impact and protecting health of populations is clearly getting harder for many governments, and there is a sweeping realisation that the world has to cope with this disease until vaccines are available, which will be well into 2021.
- Dairy markets appear calm ahead of this inevitability – possibly assuming the impact will be milder than the first time round.
- The major difference now is that the world is further into a deep recession and early stimulus measures are wearing off. Household finances will be in somewhat worse shape than earlier without some of the cushions that eased the pain. It is inevitable that consumers make choices to save money in food purchases, which exposes the broad dairy category to some risks in coming months.

COVID-19 impacts on mobility and economies



Deaths per million v GDP fall in Q2-2020



3.2 COVID-19 – where to from here?

The high-level impacts of the pandemic are summarised as follows:

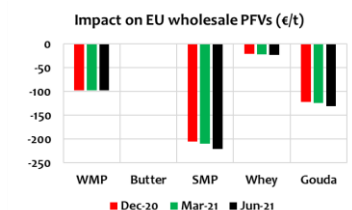
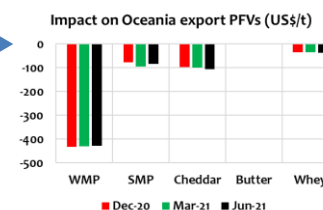
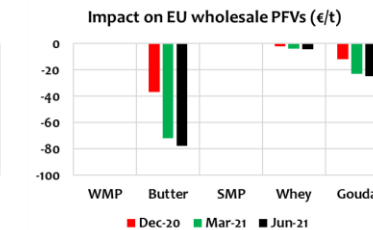
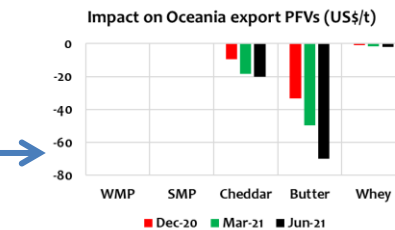
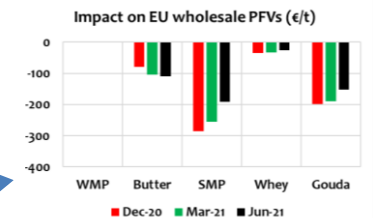
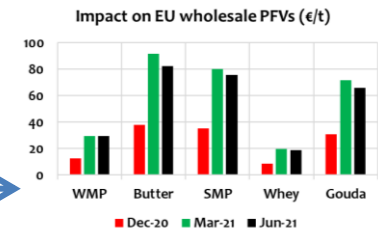
| | Current situation | Q4-20 | Q4-20 | Q1-21 |
|--------------------|--|---|-------|-------|
| US | <ul style="list-style-type: none"> Inconsistent COVID restrictions, cases rising into a 3rd wave Stuttering restarts and windbacks to food service Butter demand initially up strongly, but tapering, supplies helped by good cream demand Cheese demand down a net 1% over 4 months to July, large-scale fast-food segment resilient | <ul style="list-style-type: none"> Run-out of consumer stimulus payments – 2nd phase? Government food purchases extended into Q4, further discretion to support the market exists through Q3-2021 Cooler weather forcing foodservice outdoor venue limits Rising milk supplies and weaker food service cream demand | | |
| EU | <ul style="list-style-type: none"> Relaxed COVID restrictions spurred cases into strong 2nd wave, responses will vary with political v healthcare priorities Return of restrictions, foodservice closures across region Cheese and butter demand likely stayed intact in net terms with a lower foodservice exposure than the US | <ul style="list-style-type: none"> Resolution of EU stimulus package will be critical to the outlook Early return to restrictions will again stall foodservice recovery Retail demand will likely support balance in dairy, subject to household affordability Slow return to workplaces, affecting commuter/convenience food outlets | | |
| China | <ul style="list-style-type: none"> Consumer demand has partially recovered, eating out remains well below prior levels Strong food security purchases of food commodities Stronger demand for fresh dairy Stronger price competition to spur demand | <ul style="list-style-type: none"> Gradual improvement in demand across the category Rebuilding food service sales and ingredient demand Strong support for online platforms likely to persist Food security commodity inventory locked into buying behaviour | | |
| SE Asia | <ul style="list-style-type: none"> COVID infections are well-controlled in many countries, but large variations due to cultural settings Low prices spurred powder buying Butterfat trade has stalled, cheese remains resilient | <ul style="list-style-type: none"> Likely greater price sensitivity to rising milk powder prices Affordability will be influenced by macro impacts on regional currencies Rebuilding foodservice sales subject to improved business and tourism travel | | |
| Japan | <ul style="list-style-type: none"> The quick recovery from infections with cultural discipline | <ul style="list-style-type: none"> Further direct stimulus is likely required in Japan to cushion household impacts | | |
| Korea | <ul style="list-style-type: none"> Weak consumer stimulus measures to date in Japan Resilient cheese demand at lower prices | <ul style="list-style-type: none"> Strong support for online platforms likely to persist | | |
| Middle East | <ul style="list-style-type: none"> Varied impacts across the region with exposures to oil and travel/tourism, and labour supply | <ul style="list-style-type: none"> Slow, volatile recovery in oil revenues | | |
| Nth Africa | <ul style="list-style-type: none"> Lesser effects on oil importers Low powder and butterfat prices have spurred buying | <ul style="list-style-type: none"> Recovery in consumer spending hinges on effectiveness of consumer subsidies Likely greater price sensitivity to rising milk powder prices | | |

3.3 Sensitivity to risk factors

The COVID-19 scenarios

- Given the complexity and uncertainty of global dairy supply and demand dynamics, scenario-analysis remains the most productive way to meaningfully assess risks using developing indicators as the extent of demand destruction, pace of recovery and supply-side responses.
- We have tested the **sensitivity of the projected fundamental values** of dairy commodities (as an indicator of potential price impacts) through Q2-2021 to changes in key variables in the COVID-19 dashboards in the DTS-Live simulation tool.
- These rely on projection formulae we have developed from recent pricing trends and influences. The projected impacts of changing outlook variables differs between regions, based on what has typically driven recent historical commodity price movements.

| What if? | What we changed from the base scenario | What happens in this stand-alone outcome? |
|--|--|---|
| 1. EU milk growth varies by 0.5% | EU milk 0.5% slower from Q4-20 to Q2-21 (base scenario sees milk output growing close to 1% in this period, without changing the % product mix) | As this is a post-peak change and no alteration of product mix, there is little impact. |
| 2. Cheese demand slows, leaving more milk for SMP/butter | EU cheese output is flat in 2H-2020 (base was 1.0%). SMP output grows just 13.5%, butter 7% | A moderate impact on SMP and cheese values in the EU, less direct impact on NZ prices |
| 3. Butter trade is weaker with poor food service demand | World trade in butter is down 10% in H2-2020 (base case assumes a flat demand change) and is flat in H1-2021 (base case assumes growth of 4.5%). | This has a relatively small impact on NZ and EU prices as only a small share of global production is exported |
| 4. WMP and SMP trade is weaker in the short term | World WMP and SMP trade decline 5% below base in H2-2020 (base case assumes they are down 5% and 0.4% respectively). | This has a significant impact on milk powder PFVs. In Oceania, WMP and in Europe SMP is relatively more affected. |



3.4 EU milk and product output

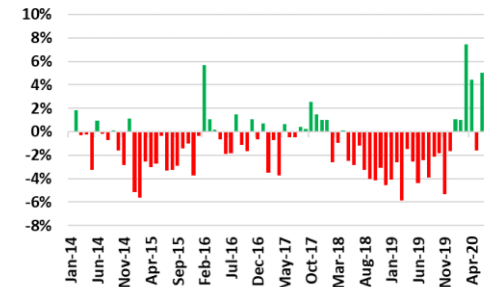
Critical issues/indicators

- Wholesale prices continue a slow uneasy recovery, supported by strong retail sales and increased sales from food service outlets.
- That will change as lockdowns are imposed with COVID infections out of control on much of Western Europe.
- Cheese and butter markets have been relatively stable, buoyed by persistent retail demand and good exports, while SMP prices reflect a relatively tight balance sheet.
- It is likely that larger cream surpluses will develop, without summer ice-cream demand and the disruptions to food service usage, creating vulnerability for butterfat values.

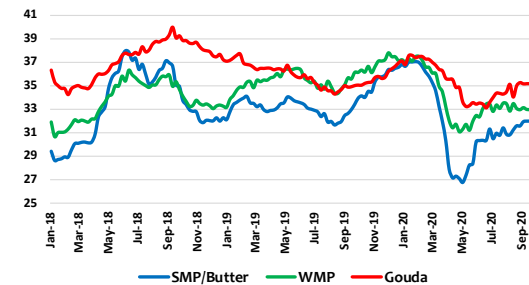
Outlook assumptions

- Our base scenario assumes cheese and butter demand are flat in H2-2020.
- Export trade remains important with the US priced out of most key markets (other than for cheddar barrels) for much of that period.
- Exports to the crucial UK market face the uncertainty of the Brexit outcome. Unavoidable disruptions seem more likely regardless of agreement on tariffs, which may see a higher volume shipped in coming months.

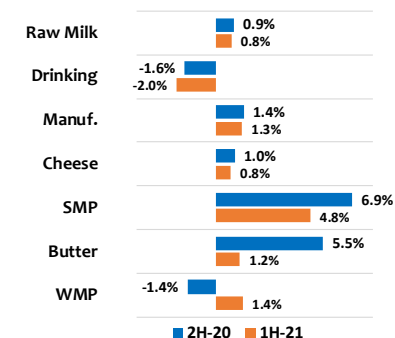
YOY growth, EU drinking milk production



EU gross stream returns (€ c/kg)



YOY growth in EU output



EU markets

Product mix

- Growth in cheese output was sustained at more than 2% through Q2 as demand remained resilient. We see this growth rate slowing in H2-2020 as greater discretion affects demand.
- We have modelled the product mix based on a mass balancing of milk components, assuming slowing milk growth, declining fluid milk sales, weaker cream demand and sustained lower growth in cheese output. This supports a projection of higher output of butter and SMP as shown.
- Domestic processed food demand for SMP and the likely improving demand for FFMP in price-sensitive developing regions are both critical factors in overall use of skim milk solids.

- We assume EU drinking milk sales will fall by 2% in H2-2020, resuming past trends.
- Our base scenario for EU product mix assumes manufacturing milk growth will be 1.3% in H2-2020.
- With lower cream demand, butter output will also grow, but this will be curbed by a shift in cheese demand away from low-fat varieties more exposed to discretionary spending and in food service markets.

3.4 EU milk and product output

Critical issues/indicators

- EU milk production growth has been inconsistent across major regions in summer, slowing in August, but is expected to improve in coming months.
- Weekly German and French collections improved in September after retreating in August.
- Pasture growth indicators have improved in most regions but remain weak across northern France, where conditions are forecast to improve in coming weeks.
- While Ireland and the UK were affected by wet weather, feed supplies have improved. The weather outlook remains close to normal in coming months according to EFFIS.
- The hot, dry conditions in France and Eastern Europe and soil moisture deficits across Germany and Netherlands have pushed corn crop expectations lower but are unlikely to significantly impact cost of grain to milk producers.
- Feed prices have lifted €5-10/t but remain below averages of recent years.

Outlook assumptions

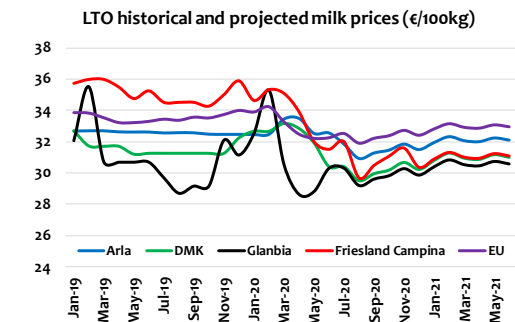
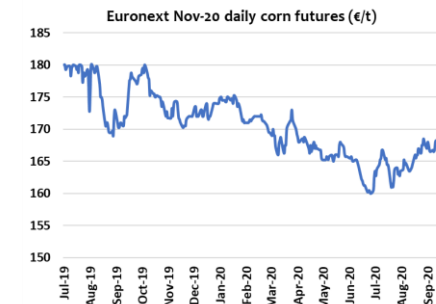
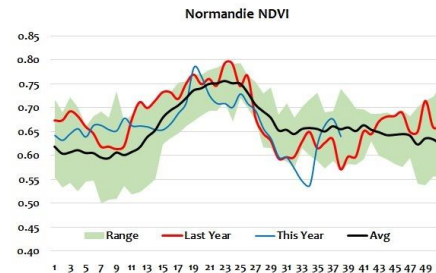
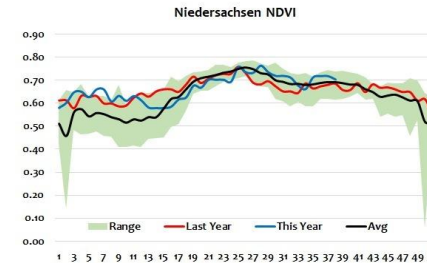
- The growth in milk collections will improve in Q4 to average 0.8% over the prior year.

Milk production

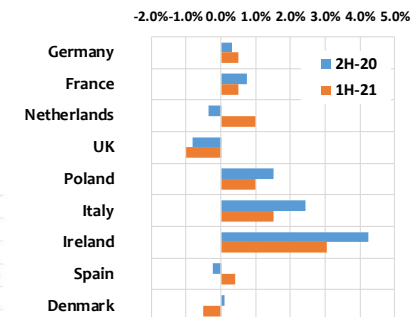
Milk prices

- The gradual rise in commodity prices has lifted our calculated EU Commodity Milk Value. The outlook suggests projected milk prices will remain steady over coming months.
- Individual country milk price averages will vary depending on product mix.
- Milk prices remain well below prior year levels in most countries which will help slow growth in milk output.

- In our base scenario, the projected CMV remains around 30c (euros) in the period through to June 2021 based on our outlook.
- This will be sensitive to commodity prices and some regions far more vulnerable to SMP and butter prices.



2020 milk output growth



3.5 US milk and product output

Critical issues/indicators

- Volatility in cheese markets will probably remain a feature in the short-term but lessen as cheese supply improves with strong Class III returns, increasing milk flows, and more cheese production capacity.
- Meanwhile retail demand is sustained, fast-food demand remains resilient, and small volumes are being procured by government aid programs.
- While COVID-19 continues to spread, inconsistent measures affect consumer mobility and food service. With cooler weather arriving, the dining-out sector remains fractured and uncertain.
- Consumer spending will come under further pressure as cash stimulus measures fade.
- Cream multiples have weakened in recent weeks as milk supplies increase – especially in south west regions – and summer cream demand abates.

- There was a small H1-2020 increase in cheese production in efforts to meet expected weaker overall demand.
- Tight cheddar supplies will ease as milk supply in key cheese-production regions starts to grow and new facilities come into production, supported by Class futures pricing.
- Without the benefit of strong summer ice-cream demand, surplus cream supplies will lift butter production in H2-2020, keeping pressure on wholesale prices.

Outlook assumptions

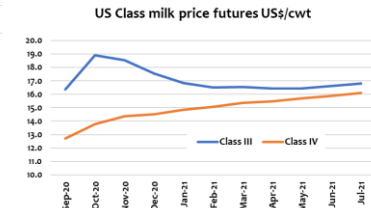
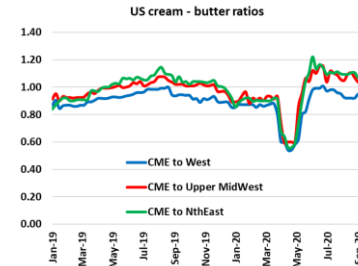
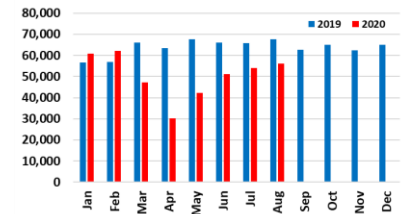
- Our base scenario sees cheese demand in H2 growing 1.3%, after a 0.5% decline in H1.
- We assume NFDM usage in H2-2020 will fall 1% YOY.
- Beyond the short-term shortages, our assessment of fundamentals suggest cheese prices will settle in Q4 to globally-competitive levels, in line with futures.
- We assume that US government food box purchases will account for 2.3% of US milk supply in 2020, based on assumptions of program product mix and contractor buying prices into the boxes.

- Cheese production is assumed to grow 2.9% in H2-2020.
- Our base scenario for US product mix assumes NFDM/SMP output will increase 3.8% in H2-2020, alongside growth in manufacturing milk at 2.4%.
- Butter output will increase 7.6% in H2-2020.

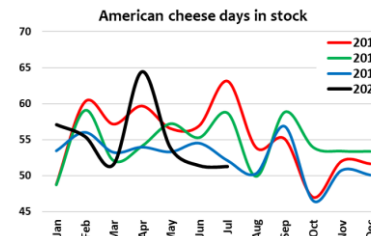
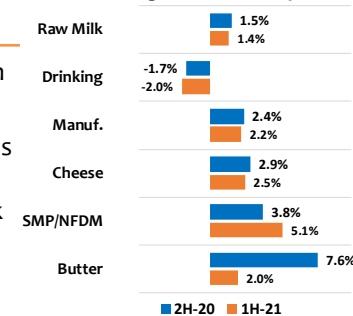
US markets

Product mix

US Census Bureau "food service and drinking places" sales (US\$m)



YOY growth in US output



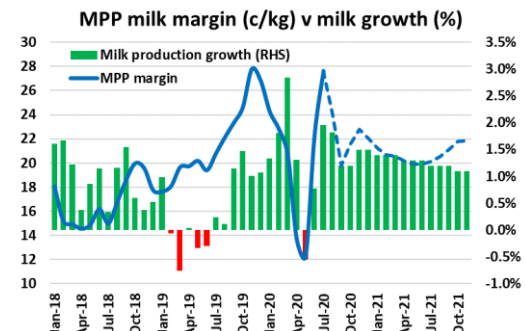
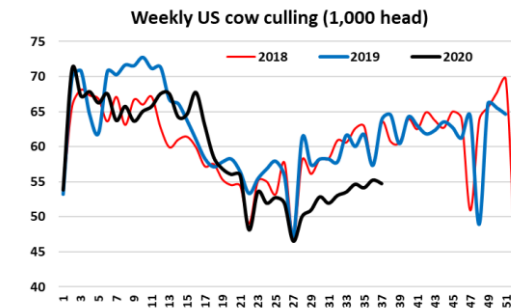
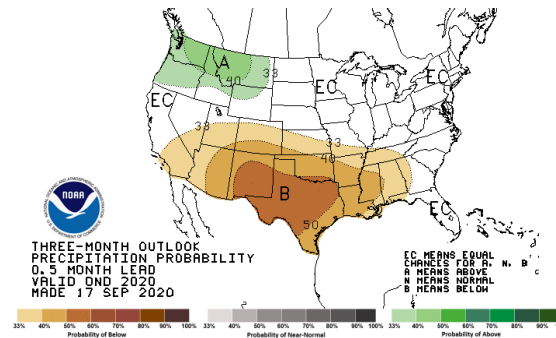
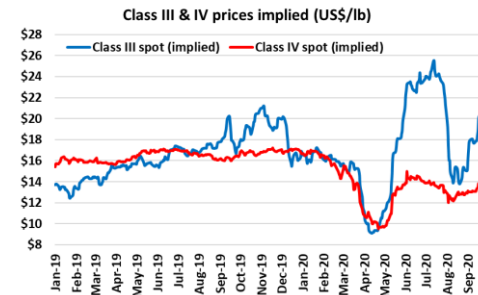
3.5 US milk and product output

Critical issues/indicators

- Favorable margins and further USDA assistance will support increased growth in milk collections through Q4-2020 and H1-2021.
- Cow numbers fell 35,000 in Q2 but had only recovered a portion of those losses by August. August numbers were still 0.5% higher than a year earlier, despite the reduced culling, suggested far lower rates of replacement with young stock. Cow-culling was 10% lower in the 4 weeks to mid-September.
- Cow numbers were 2.5% higher in South West states, but flat in California.
- Feed prices will put margins under a bit of pressure going forward, with a 10% lift in corn prices since early August due to fears as to corn yields and tighter global supplies.
- Dry conditions across the Sth West will extend as La Niña conditions develop putting feed cost under increased pressure.

Outlook assumptions

- We estimate milk production was ahead 1.2% in September. Monthly output will rise 1.5% YOY by the end of 2020.
- In 2021, we project growth of 1-1.5%.
- It is assumed significant supply management constraints that materially impact milk collections will not be applied in coming months



Milk production

Milk prices

- Milk margins will improve greatly in the coming months, including the effect of additional CFAP payments, although directed mostly at smaller producers.
- Milk producers won't see the full benefit of high product prices. The spike in Class III milk prices with the CME cheese prices will again result in some heavy discounts to milk prices in monthly payouts
- Projected all-milk prices are expected to average US\$18.10/cwt in Q4-2020 and slip to US\$17.45/cwt in Q1-2021.

3.6 China: back to normal?

Critical issues/indicators

Outlook assumptions

Markets

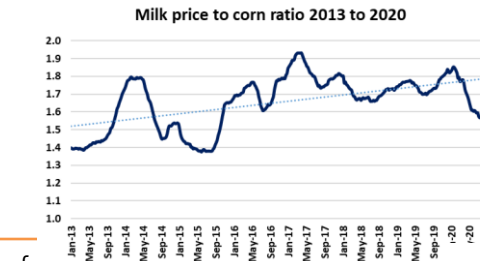
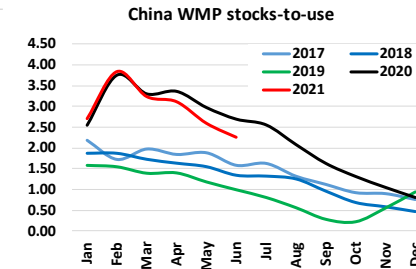
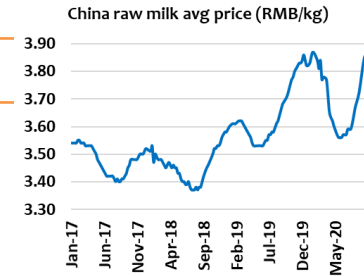
- The Chinese market continues to slowly recover and return towards pre-COVID levels. Eating out reportedly remains subdued.
- Weaker foodservice markets will remain a fixture as consumers avoid eating out and spend frugally.

Milk production

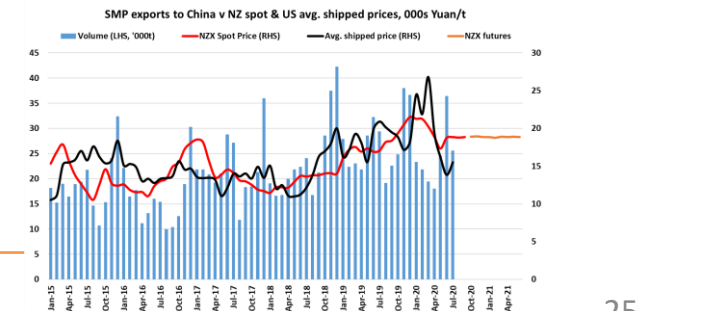
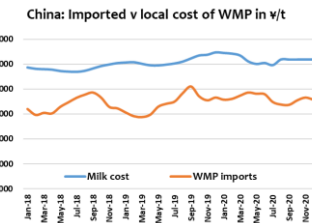
- Who do you believe on Chinese production? Official data reported by government suggests 8% H1-2020 growth in collections from licensed stations. Rabobank reports 5%.
- Yet total product output of reporting dairy companies contracted 1% in this period, including a 15% fall in milk powder output.
- Milk prices have surged 8% since late May as processors chased improved supply and contend with higher feed costs. Corn prices have jumped 17% this year, pushing the **milk over corn margin to the lowest in 5 years**.

Import demand

- The incentive to import lower-priced WMP remains strong to dilute WMP costs despite the existence of heavy local stocks. This price advantage is projected to continue as shown, based on current milk prices and projected GDT landed prices from recent events.
- SMP remains affordable at forward prices, based on purchasing history. Chinese buyers have been persistently involved in recent GDT events, and trade has been below trend.
- There is potentially some headroom for whey demand into this market. Recent trade exceeded the previous record annual haul in 2017 but the structure of the pig farm market is now more sophisticated supporting a greater use of whey proteins.



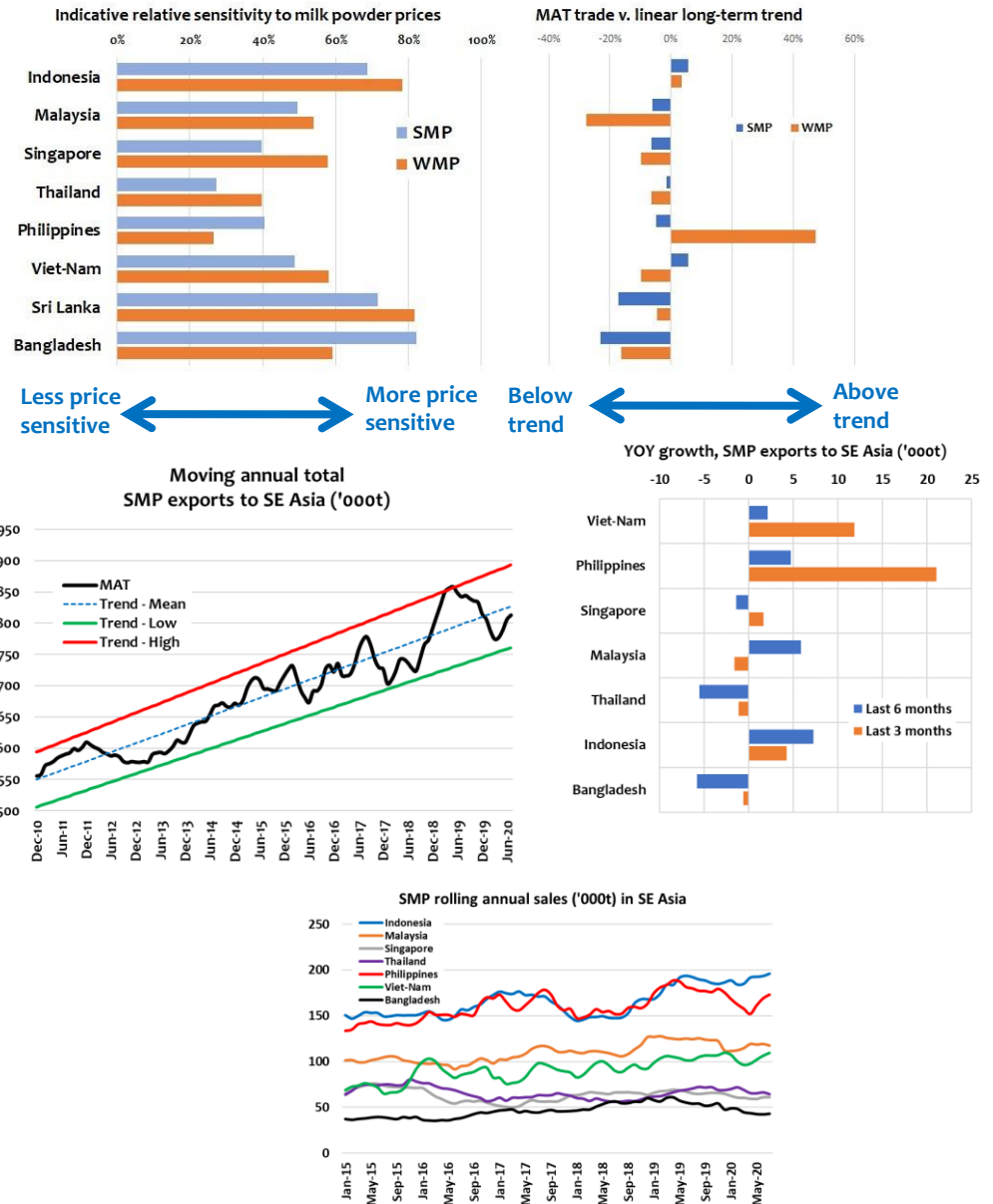
Source: BOABC



3.7 Developing Asia: how much appetite?

Will demand growth recover at lower prices?

- Sth East Asian economies are being impacted by reduced tourism and travel, as well as the flow-on effects of slower activity in the US and EU. China's rapid recovery will help mitigate this to some extent.
- The region will survive the worst due to the discipline in managing pandemic infections. The greatest risk however remains in the major powder markets of Indonesia, Philippines, Bangladesh and Sri Lanka.
- Despite the economic damage, in the short-term the attractiveness or otherwise of buying prices is the biggest driver of milk powder commodity trade in the region. Charts on the right show the apparent sensitivity to prices (based on recent trade data) and trade compared to trend.
- The uncertainty in the outlook however around COVID impacts on local food markets and developments in US and EU dairy markets will mean many buyers will continue to purchase cautiously and hand-to-mouth.
- There was a strong rebound in trade in response to low prices, but this has been uneven across major countries.
- Recent spot and futures prices, even adjusted for currency movements, have lowered landed product costs and affordability would appear favorable.
- We assume an 8% fall in WMP trade for 2020 (5% down for Aug-Dec), with flat SMP trade (which implies it will be flat for Aug-Dec compared to 2019).
- Regional cheese trade has been resilient in recent times, growing 5% in the first 7 months of 2020, but may yet be impacted by slowing food service activity. We assume trade will be flat in 2020 after growing 7% in the first four months of 2020.
- Fat demand in total however slowed 4% in the 7 months to July, with butter faring far worse, shrinking 18% in the three months to July but will also suffer similar pressure to cheese.
- We assume weaker AMF demand (by 2%) while butter trade will be flat in the remainder of 2020, as lower prices stimulate a recovery.



3.8 MENA

Critical issues

MENA in general

- The steady recovery in crude oil prices since June stumbled in September as prospects for demand recovery weakened, influenced by the surge in 2nd wave COVID cases in Europe and other populous regions.
- Major MENA economies are steadily recovering as restrictions ease
- The weak outlook for economies will put further pressure on consumer spending power, likely forcing buyers to remain cautious and cost conscious.
- Consumer subsidies will be critical to support household spending – and keeping the peace!

Dairy demand

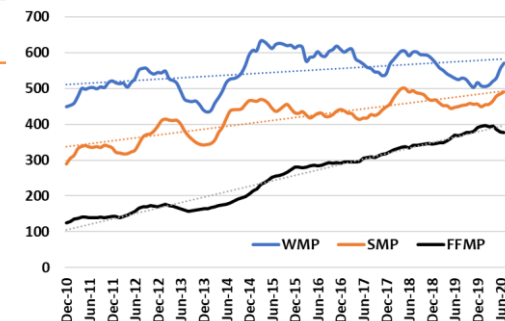
- **Nth Africa's** trade has surged with large Algerian tenders – WMP shipments almost doubled in the three months to July, and were 26% up in the first seven months of 2020. SMP trade grew faster, up 29% which includes stronger sales to Egypt, up 28% in the 3 months to July.
- WMP shipments to the **Middle East have taken advantage of lower prices**, growing 8% in the July quarter, led by small gains into the UAE.
- FFMP trade has slowed 7% over the year, and 19% in the July quarter.
- SMP exports have also picked up after a slow start when prices were much higher, but are 4% lower in 2020.
- As butterfat prices tumbled trade has responded, lifting 31% to the MENA region in the three months to July and up 6% over 2020.
- Butter trade has improved with a strong leap in sales to Egypt which were 70% higher in the first 7 months of 2020.

Outlook factors

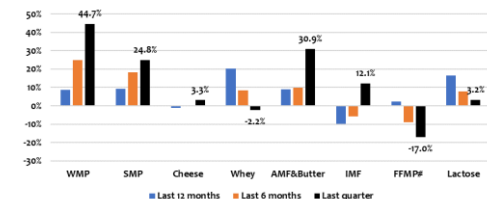
- EIA still holds the view that crude prices will steadily improve through Q4-2020 and 2021, if production cuts hold. The fragile OPEC+ deal to curb output is the largest downside risk to prices.
- In its latest outlook IMF expected MENA's real GDP to fall 5% in 2020 (oil exporters shedding just 1.1%), recovering 3.1% in 2021.

- We expect overall dairy demand to remain subdued and more acutely price-sensitive.
- In our base scenario, WMP demand will lift 4% in Middle East for 2020 while SMP demand will fall 9%.
- In our base scenario, WMP demand will fall 5% in Nth Africa for 2020 while SMP demand will rise 6%.
- Butterfat trade into the region will also suffer despite lower prices and is now assumed to fall 6% in the Middle East in 2020.

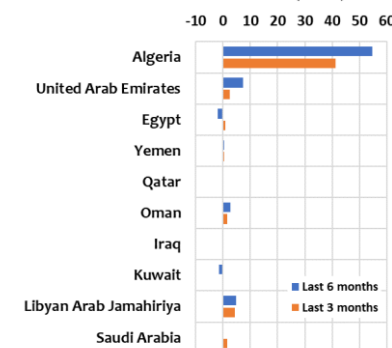
Milk powder exports to MENA MAT ('000t)



Total exports to MENA - YOY % change



YOY growth, WMP exports to selected MENA countries ('000t)



4. The impact on Oceania milk prices

Features in this section

Australian milk values [29-30](#)

NZ: Milk price outlook [31](#)



4.1 Australia

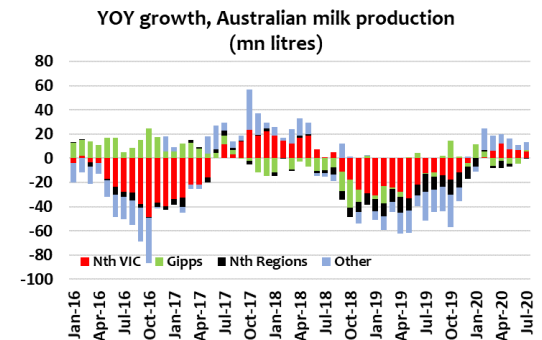
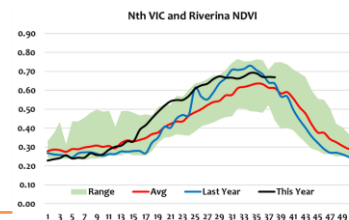
Critical issues

Outlook factors

Milk production

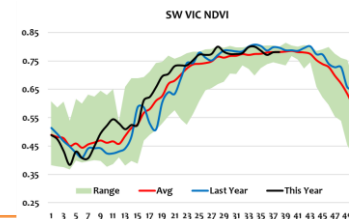
- After strong recovery in milk production in H1-2020, growth in collection slowed, with some regions complaining of too much rain that slowed pasture growth.
- Pasture conditions remain highly favorable in major southern regions for peak milk production in coming months. Water levels in irrigation storages in the Murray Darling Basin have continued to improve. Feed grain prices have fallen back to long term averages.
- Conditions in smaller, fresh milk regions in northern states are still dry, which will ensure more milk is bid away from manufacturing regions, limiting increases in production of cheese and ingredients.

- We expect the year-on-year increases in milk production will steadily ease through H2-2020 and fall behind in H1-2021.
- The outlook for the H2-2020 is a rise of 3%, slowing to a 1% contraction in H1-2021 due to the very strong comparatives from the first half of 2020.

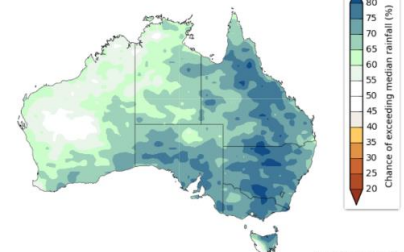


Milk prices

- The weather outlook across southern regions remains supportive of pasture conditions. The southern region rainfall outlook has improved markedly in the past few months.
- A La Nina event has been officially declared for eastern regions which is expected to deliver more rain later in spring.



July to Sept 2020 rainfall outlook

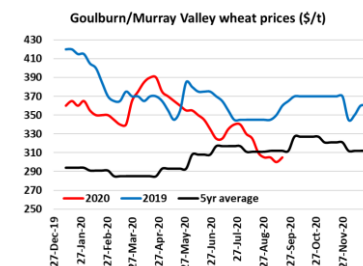


Issued: 24 September 2020

Products

- Feed grain prices have fallen in recent months with widespread recent rainfall and a stronger A\$, falling below the 5 year average. Weakness in prices is aided by the larger global supplies of grain. Hay prices in southern regions have dropped below 5-year averages in all regions.
- Grain prices in northern regions are a little higher than those shown and but also below than average.
- Water levels in irrigation storages in the Murray Darling Basin have improved with regional rainfall and water prices have fallen back to affordable levels.

- The risk of ongoing farm exits remains if conditions change in summer.
- Attrition in northern regions will continue despite firm milk prices.



4.1 Australia

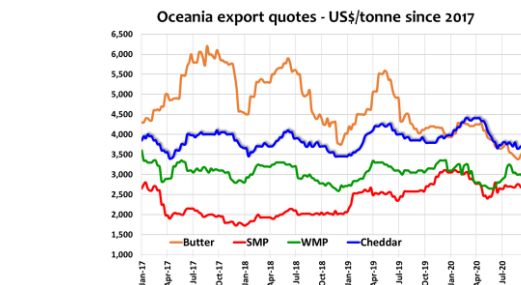
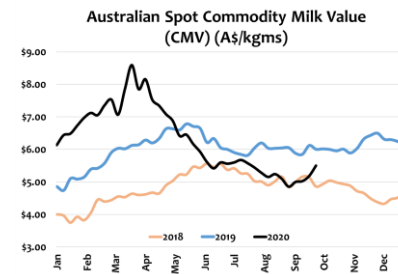
Critical issues

- Spot commodity milk values continued to weaken with the decline in Oceania prices and the strengthening of the A\$ against the US\$.
- There is a wide range of forecasts for the A\$ v US\$ over the next year, with the average over the relevant period for our forecast near US72c.
- Spot commodity milk values fell to near A\$5/kgms but with a recent rally following the US\$'s recent recovery.
- Butterfat prices in the local market have weakened significantly since the impact of COVID-19 on food service demand, including the impact of surplus cream which is increasing butter output. As outlets reopen these exposures will ease, although a stronger spring flush will keep butterfat prices under pressure.
- The full 2019/20 season dairy product output was finally released in late September. The YOY gains in milk output in H1-2020 – coupled with the closure of food service under COVID restrictions – drove a 8% increase in butter output in the half.
- While cheese output grew marginally in the first half, full 2019/20 season output was 4% lower. SMP production fell 19% in the season.

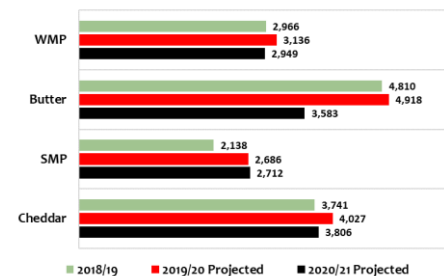
- There will be little prospect of any upside (through step-ups) in milk prices given the slippage in the commodity milk value with the weaker US\$.
- Average milk prices for manufacturers are broadly in the range of A\$6.40 to A\$6.60/kgms.
- There is a large range of milk prices being paid across southern regions, with a significant and sustained influence of domestic milk buyers on the terms of milk supply agreements and their seasonal milk payment rates and incentives.

Outlook factors

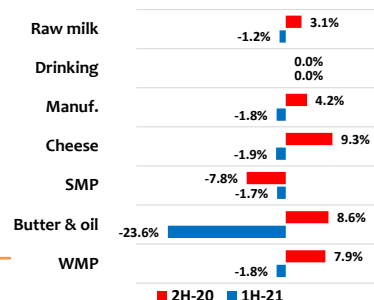
- Our mid-range estimate for the **commodity milk value** in 2020/21 has fallen to near A\$5.30/kgms using the base scenario in this outlook, sensitive to cheese and fat prices and the value of the A\$.
- This has fallen from A\$5.90 in June at the time milk prices were set in the industry.
- Butterfat prices will remain vulnerable to influence of lower NZ export prices if there is increased availability through the peak of the NZ season and demand from food service channels in developing markets remains weak.
- Cheddar prices are also exposed to increased competition from NZ and the EU, while the US is out of the money for at least H2-2020 given the volatility in their wholesale market.
- A\$/US\$ volatility with trade and geopolitical issues may affect commodity milk values.



Product values used in outlook modelling (US\$/t)



YOY growth in Australia output



Commodity price changes



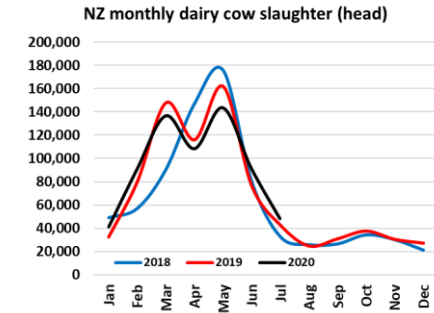
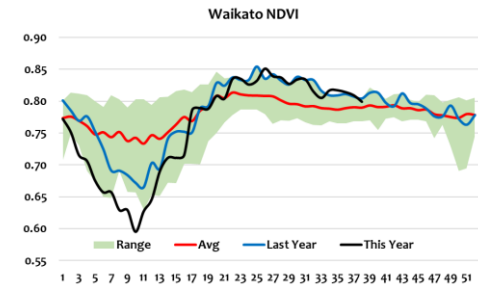
4.2 NZ season starts strongly

Critical issues/indicators

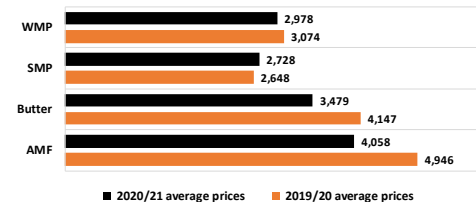
- Milk collections have grown at a faster rate in the early months of the 2020/21 season with good pasture conditions.
- Soil moisture has improved markedly over winter in most regions, with good grass growth. The likely La Niña event which typically provides drier conditions in the North Island and eastern South Island will pose a risk to soils in summer.
- Bought-in feed grain prices may be lower based on Australian prices, while PKE costs are elevated with reduced supplies at origin.
- Herd numbers are likely to be similar to the prior year. Cow culling has been less than 1% above the prior year since the start of 2020.

Outlook assumptions

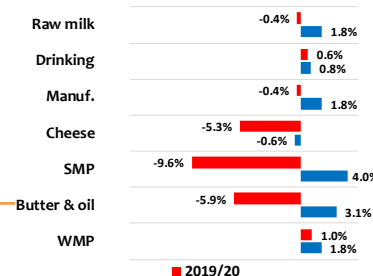
- We assume milk output will be 1.8% higher in 2020/21.
- Margins for producers will tighten significantly as milk prices are likely to be \$1/kgms lower than 2019/20 and costs continue to rise.



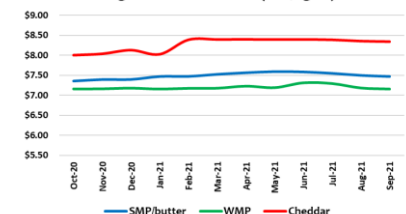
Expected average prices v prior year
GDT & DTS projected average



YOY growth in New Zealand output



NZ gross stream returns (NZ\$/kgms)



Milk production

Milk prices

Product mix

- We estimate Fonterra's 2020/21 milk price (based on the reference formula) will be in the range NZ\$6.40 to \$6.70/kgMS.
- NZX milk price futures for 2020/21 were trading at NZ\$6.70/kgms at the time of writing.
- We have adjusted the 2019/20 season product mix based on the recently disclosed usage of milk in major commodities. This indicated lower use of NZ milk in base commodities, but a shift in milk to WMP, away from butter & AMF production.
- Stream returns continue to favour cheese in the short-term, but export competition will remain intense with the potential weakening of domestic markets in the EU and US.