

Global dairy directions

Directions newsletter

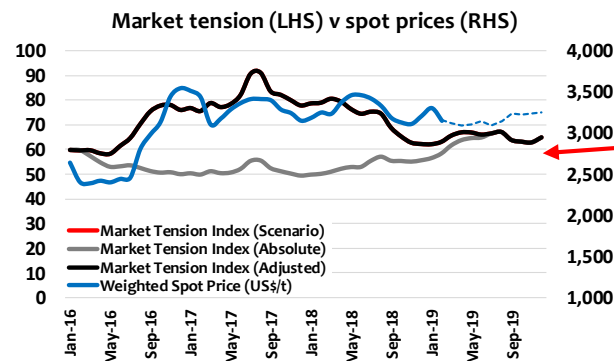
February 2019

freshagenda

This newsletter summarises our short term outlook for global dairy markets, and is a key part of our Global Dairy Directions (GDD) product.

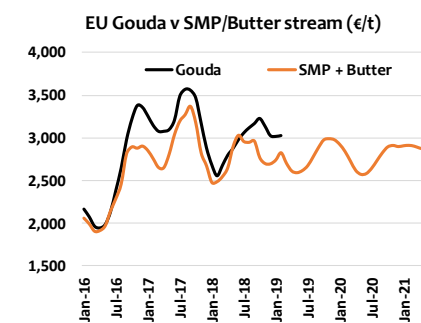
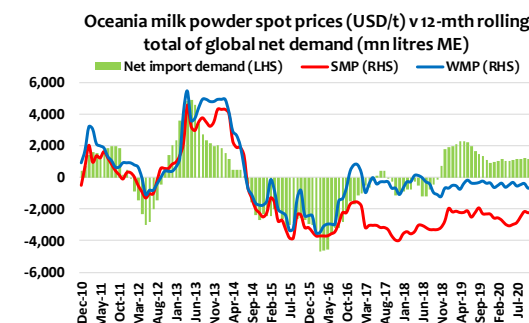
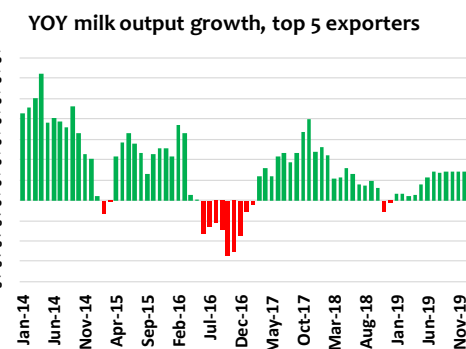
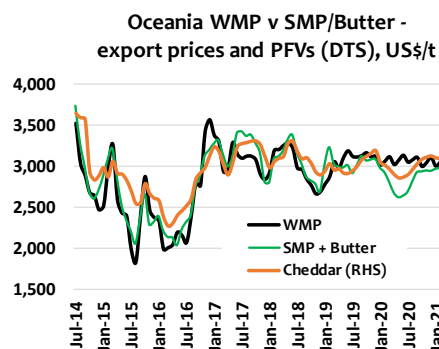
Summary of the outlook

- The fundamentals underpinning the global market outlook continue to gradually improve as global milk supply slows and demand remains strong. This should keep prices relatively stable in the short-term. As for our recent outlook, the separate drivers of fat and protein values in Europe and Oceania have different implications for each of the respective commodities.
- Our analysis is based on dairy market fundamentals. However, readers cannot afford to ignore the economic and political context for the outlook. Uncertainty as to the ongoing effects of the US-China trade dispute (especially if the punitive tariff action escalates) and the convoluted pathway through Brexit are clear and present dangers to market stability in H1-2019.
- Minimal growth in EU milk output, the clearance of intervention stocks, and the surge in demand for SMP will continue to support protein prices, but the prospects for the European spring hold the key to sustained recovery. Butterfat prices in Europe have stabilised but will also remain sensitive to availability.
- Chinese milk powder demand has helped tighten the NZ balance sheet despite the growth in WMP output, and any further deterioration in NZ pasture conditions would put further upward pressure on WMP prices.
- Market sentiment has improved in the US with shrinking milk growth. Cheese markets have rallied with tighter cheddar availability and risks of a shift in product mix given the divergent returns to regulated milk classes.
- Global risks remain mixed, but promising signs of easing tensions between the US and China will boost confidence should that promising spin actually lead to a removal of tit-for-tat tariffs. A steady recovery in oil prices will improve regional demand from MENA which has slumped in recent months.
- The charts on the right show the **projected fundamental values (PFVs)** in our outlook. Tables of the PFVs across major supply regions are included on **page 10**. The outlook remains sensitive to key supply and demand-side variables as shown on **page 8**.
- The fundamentals in the outlook have been modelled using our **Dairy Trade Simulator (DTS)** for major commodity categories, based on expected global milk supply, product output, domestic use in major exporting regions and trade. An overview of the approach taken in developing this product is explained on our [website](#).



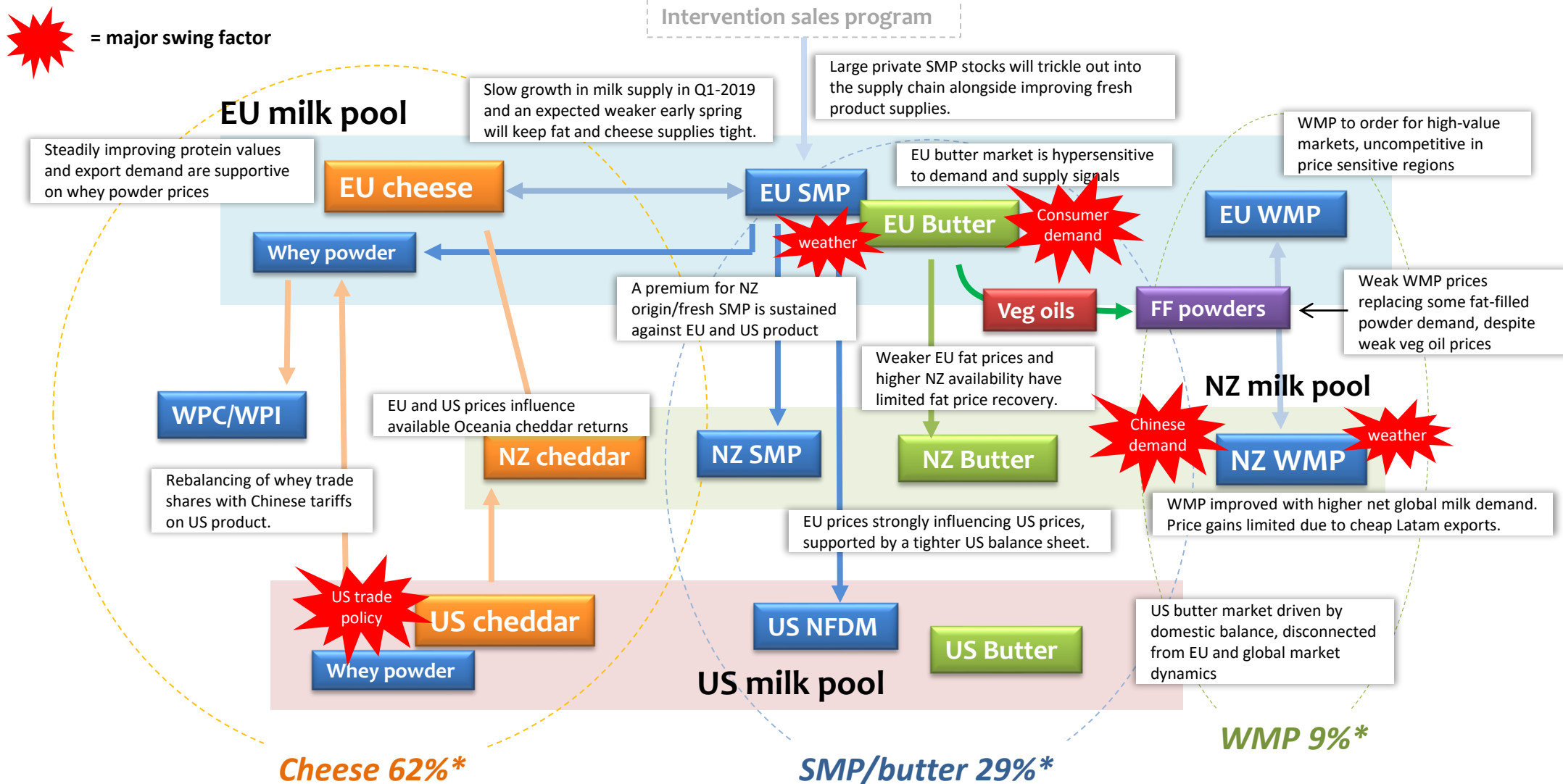
The MTI is affected by the projected changes in milk production in key exporters, and various changes in the outlook for product mix and import demand across various regions. Revised historical trade and production data also impacts the MTI from time to time.

The market tension index is a measure of market shortage (high tension) or surplus (low tension) based on an estimate of the prevailing stockholdings of milk powders by exporters. In the past, the index has been a useful forward indicator of commodity price movements.



The major influencers of the outlook

The global market outlook is affected by complex and interconnected relationships that impact market fundamentals. We have highlighted the large impact factors for the short-term outlook. Europe remains the driver of fat and protein values, but weather and regional commodity balance sheets affect values in the US (for non-fat milk powder and cheese) and NZ (for all major commodities).



*total production as a share of aggregate milk collections in major exporting regions

Commodity situation & outlook

Factors affecting the outlook for commodities are summarised below:

Product	Current factors	Outlook considerations	Value direction
SMP	<ul style="list-style-type: none"> • EU prices gradually firming with slower output and strong demand, eating into overall stocks • Sustained premiums for NZ SMP over EU and US product • Superior Class IV returns in the US influencing milk use • Growth in export trade remained strong in Q4, driven by US and EU. • Increased volumes of subsidised Indian exports late in 2018 	<ul style="list-style-type: none"> • Improving spring milk supply in EU will increase fresh product availability • Supply chain stocks may weaken demand later in 2019 - availability strongly depends on EU spring flush • Demand may be constrained by well-stocked markets and growing economic caution 	<ul style="list-style-type: none"> • EU firmer, subject to spring milk flush. • Oceania will closely follow trends with a premium to fresh EU product • US should gradually improve following the EU, subject to resilience of Mexican demand
Butter	<ul style="list-style-type: none"> • EU market weakening slowly but close to €4300/t. • Slower EU milk supply has not significantly weakened butter output • NZ prices fragile but following EU's lead, with slower stock turnover. • Slow and patchy recovery in overall trade, highly conditional on affordability in developing regions • US market steady despite overall demand being ahead of supply 	<ul style="list-style-type: none"> • Improving spring milk supply in EU will improve product availability • Values sensitive to likely spring flush availability and resilience of demand • NZ values will take their lead from EU trends, but have further downside risk with increased availability and patchy developing market demand • US to push higher subsidisation of exports using CWT 	<ul style="list-style-type: none"> • EU: steady sensitive to spring availability and retailer demand • Oceania: steady, following EU directions, but risks with higher NZ availability. • US: steady on slow demand gains
Cheese	<ul style="list-style-type: none"> • Improving EU prices with slower growth in supply and better SMP/butter stream returns • US sentiment weak, but price rally due to Class III and IV divergence • Small gains in trade after weaker import demand in US, Australia, Korea and China 	<ul style="list-style-type: none"> • EU cheese output slower, tightening availability. • US domestic demand should improve, while export growth depends on tariff removal • US stocks-to-use remaining weak with capacity additions • Uncertain timing for removal of Mexican and Chinese tariffs 	<ul style="list-style-type: none"> • EU: slightly firmer on SMP/butter stream • Oceania: firmer on improved protein values • US: improving gradually with tighter supply
WMP	<ul style="list-style-type: none"> • Moderate growth in NZ milk supply in 2018/19 • Strong growth in Chinese demand to rebuild stocks at attractive prices has kept the NZ balance sheet relatively tight in early 2019 	<ul style="list-style-type: none"> • Dry NZ conditions may weaken season run-down and slightly tighten availability • Improved oil market may revive MENA demand • Slowing output and lower stocks in Latam producers 	<ul style="list-style-type: none"> • Trending firmer in short-term with tighter NZ availability after surge in exports
Whey	<ul style="list-style-type: none"> • US market remains weaker with weak export prospects, despite improved output of WPC products • Weaker whey and animal feed prices in China • Improving WPC-80 markets as stocks ease 	<ul style="list-style-type: none"> • Recent alignment of protein values (whey powder v SMP) • Weaker prospects for export demand will loosen the US balance sheet • Ongoing rebalancing of trade market shares between the US and EU • Sustainability of demand for WPC lines at firmer prices 	<ul style="list-style-type: none"> • EU/Oceania: remaining firm • US: steady at current levels, subject to resolution of the Chinese trade dispute

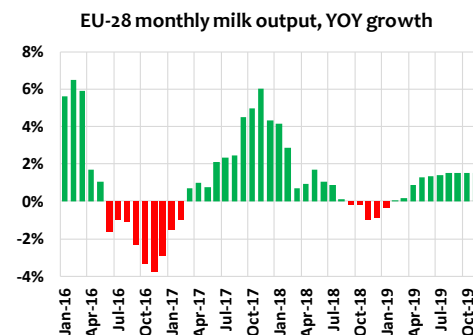
Supply drivers

EU winter effects unfolding

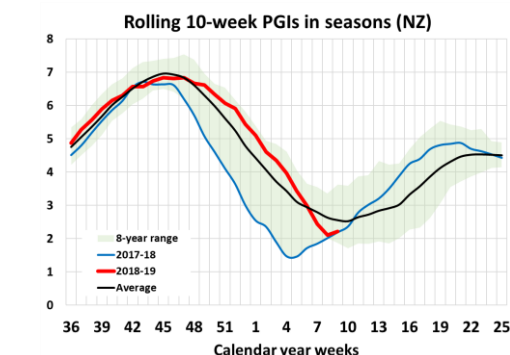
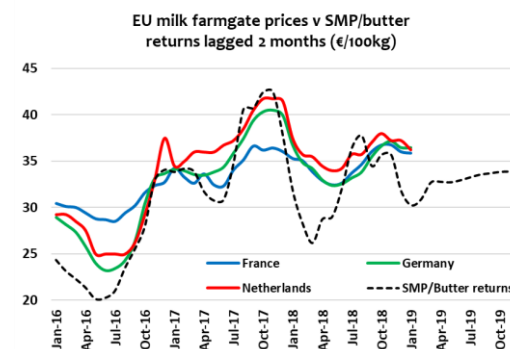
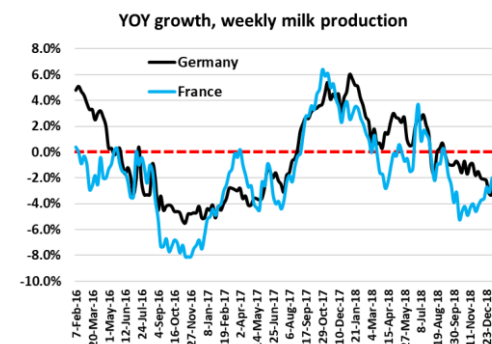
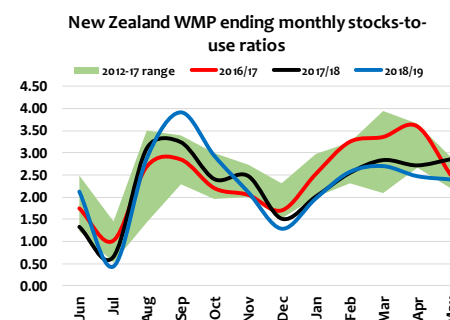
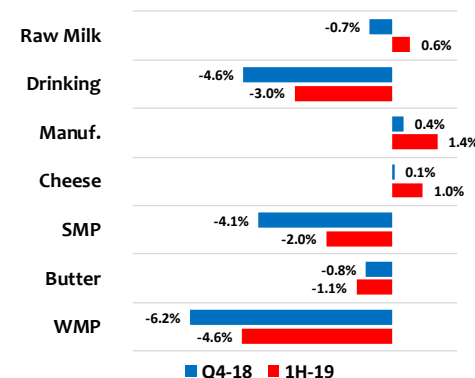
- Milk production has improved faster than expected in some key countries, with mild winter weather. France (especially in the east) and Netherlands remain the weak spots.
- EU milk output shrank by close to 0.4% in January (using the AGAE data series for Italy), and was close to flat in February. Milk solids have also improved in aggregate compared to recent months. We expect a small year-on-year gain of 0.2% in March, with steady improvements beyond.
- Will the EU come surging out of the blocks in spring? At this stage weather looks to continue mild but rainfall in several regions has been less than normal. The effects of feed shortages on yields are likely to slow the spring growth for some.
- Farmer cashflows have been helped by processors keeping milk prices in 35-36c region by major dairy companies. Feed prices are mixed with record hay prices in some regions, while corn markets are weaker in the outlook.
- The surge in Irish milk output has kept butter and SMP production from falling as far as what the overall EU milk availability might have suggested. We have reassessed EU product mix assumptions for recent adjustments to milk collections.
- A delay in the Brexit vote seems the most likely step forward but far from assured given the depth of political divide among UK lawmakers. The Government has now introduced the spectre of applying tariffs on UK imports to protect farmers. There remain moderate risks for disruption to cheese trade into the UK, and potential impact on other commodities (especially for Irish producers) if disruption causes a shift in milk use.

NZ: Dry may slow the finish

- The strong YOY growth in milk production will slow in February as conditions dried out. Pasture growth has worsened but was alleviated by some recent rains, however the effects will vary across regions. The buffer of irrigation and abundant summer silage production will assist the Sth Island.
- The conditions may limit the typical autumn recovery in grass growth and increase the pace of seasonal wind-down in milk production. Late-season 2018 comparatives were also strong, making increases very difficult. We have lowered our projected **NZ growth to 3.4% in 2018/19**. Given the variability in weather outlook, we assess a **1% swing either way in coming months on page 8**.
- The improved GDT results have firmed full-season milk price expectations closer to NZ\$6.30/kgMS, with recent results equivalent to better than NZ\$6.60/kgMS per Fonterra's manual. Upwards revisions in forecasts are likely.
- The strength of additional export demand (including January trade) in this season will keep the NZ WMP balance sheet relatively tight through to the start of the new season. Further pressure on late-season production will increase this tension, and may lift prices marginally.



YOY growth in EU output



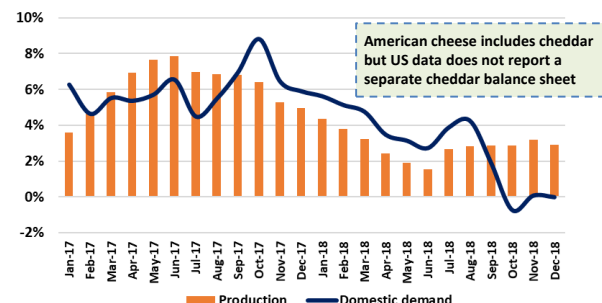
US will firm with slower milk growth

- There are no indicators suggesting a prompt pick-up in US milk output. Milk production growth is expected to remain below 0.5% in January and February as ongoing consolidation driven by poor farm economics was layered with harsh cold weather in several regions.
- Our outlook suggests US milk growth will improve in Q2-2019, averaging 0.7% in H1-2019, lifting to 1.4% in H2-2019.
- Slower milk output, low cheddar production and divergent Class III and IV pricing have spurred a cheddar price rally. US domestic demand has slowed, while exports to Mexico and other key markets have weakened. Slower milk supply will keep cheddar supplies tight in the short-term, but sustained demand growth will be necessary underpin any ongoing recovery if scheduled capacity additions add to supply.
- NFDM prices will track EU prices, subject to the US NFDM balance sheet, which has weakened with the collapse in domestic use, despite slowing production. While output will remain constrained, Mexican demand will be critical to keep the market balanced. The flare-up in unrest in Venezuela will continue to slow flow-through trade.
- The US whey powder market remains weak as export prospects have tanked, with the loss of the Chinese market, further exacerbated by the ongoing spread of the African virus in the pig herd, which has now moved into Vietnam.

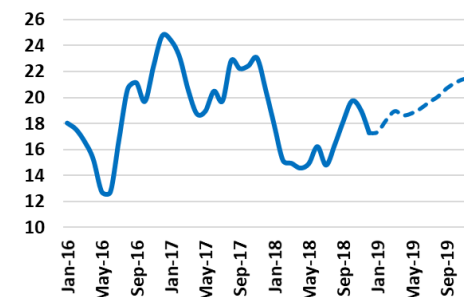
Other producers

- **Argentina's** milk output continued to slow with poor weather, altering WMP availability. The latest export data from January showed a marked slowing in sales to Algeria. Weather has improved and should see milk collections stabilise. We still expect a 0.8% lift in 2019.
- Trade from Argentina and Uruguay (combined) into Brazil lifted sharply again in January with pressures on milk availability due to challenging weather. Brazilian milk costs remain elevated, sustaining the attraction for powder imports from neighbours. Argentina's prices continue to provide a considerable advantage for importers.
- **Australia's** milk supply outlook has worsened with very hot summer weather and deteriorating farm cashflows. Milk supply pressure will likely see milk prices pushed higher as domestic cheese and fat prices also climb.
- We have revised our milk collection forecast to a decline in 2018/19 of 5.4%, before a 0.8% recovery in 2019/20. A seasonal rain "break" before mid-April is now critical to any water availability in Nth Victoria to avert a further collapse in milk output in this and the next season.
- **Indian** exports of SMP jumped in December on higher subsidies but these were dropped in late January. Trade in January may have been sustained depending when the message reached exporters.

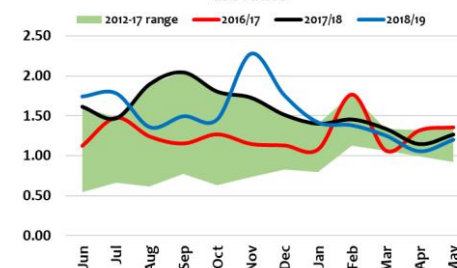
Rolling 6-month demand & production growth for American cheese



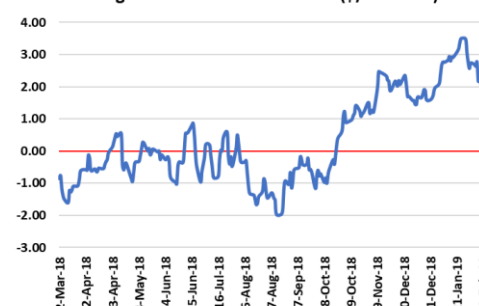
MPP milk margin (c/kg)



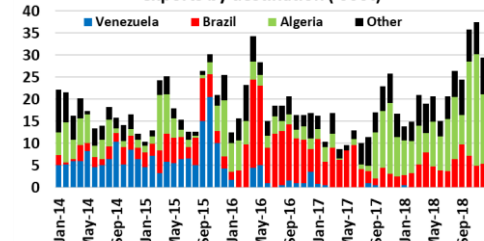
United States SMP ending monthly stocks-to-use ratios



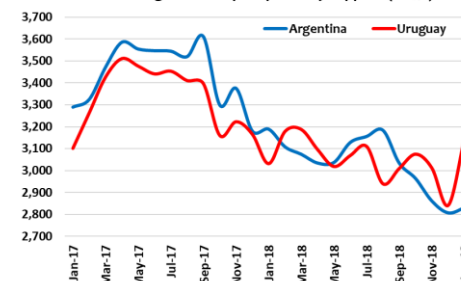
Margin of Class IV over Class III (\$/cwt milk)



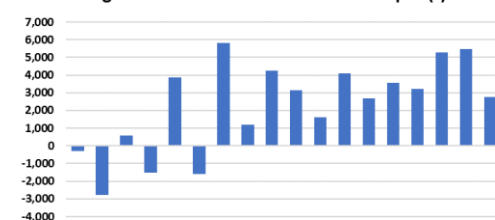
Uruguay and Argentina combined WMP exports by destination ('000t)



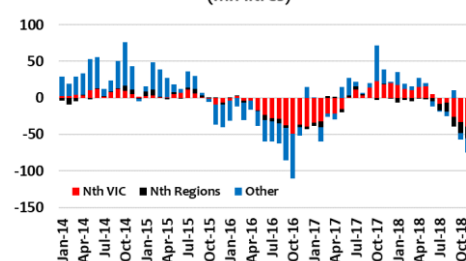
Brazil's average WMP import prices by supplier (US\$/t)



Argentina's YOY increases in WMP output (t)



YOY growth, Australian milk production (mn litres)



Demand drivers

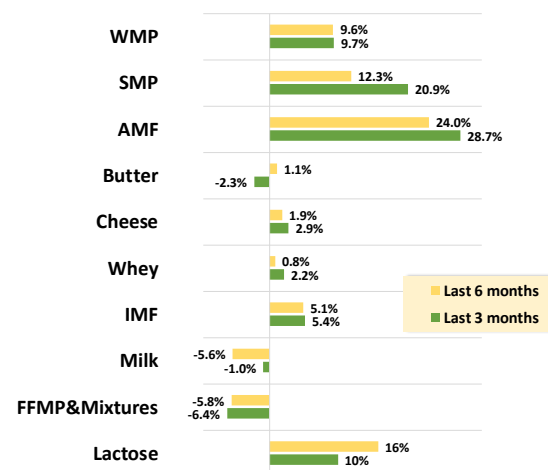
Overall

- Trends in recent trade will be summarised in a separate **Trade Insights Report** covering **December** data which will be mailed once actual US and Canada trade data is released. Assumptions have again been made for US and Canada trade in December for the purposes of this newsletter (see **page 9**), to provide the global summary of trends as on the right.
- Global dairy trade continued its strong year-on-year growth in December (9% in milk solids equivalent) continuing the late-2018 trend.
- Low prices continued to spur strong SMP trade which was up by more than 20% in Q4-2018, while stock-building in China has sustained WMP demand offsetting a slowing of trade into other regions.
- Butterfat continued to rebuild but this remains patchy, with butter trade stalling in late 2018, weakest across developing regions. Much of AMF's YOY growth is explained by higher sales into North America, displacing some of the US cream trade.
- Overall cheese trade ended 2018 a little stronger, but only due to higher cross-border CIS and South American activity, with Japan inevitably slowing after a strong first 9 months of 2018.
- Strong WMP trade continued in January, driven by NZ, as Latam exports slowed.
- Oil prices improved in February with the effects of production constraints and sanctions, with more supply risks in the outlook according to the latest update from the International Energy Agency. The ongoing expansion of US shale oil production will keep prices in check however.

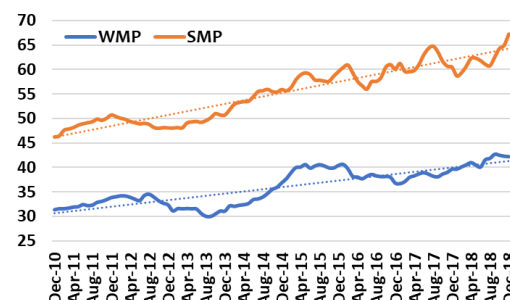
SE Asia surge may slow

- Low prices have sustained strong trade, but from our trend analysis it would seem that the SE Asian region has now bought above trend through to the end of 2018.
- The sustainability of the demand surge will come down to relative affordability in each major country as prices firmed in early 2019, and whether supply chains are well stocked to cover requirements well into the year.
- The table on the right shows the apparent capacity for further demand from ASEAN countries based on our analysis of trends in shipments and landing costs in market currencies. Further growth in SMP is assured, while WMP is less convincing.
- Slower growth of the Chinese economy – influenced by the trade dispute with the US – continues to be discussed as a threat to the Asian regional economic outlook, but is yet to show up in any of the trade data for milk powder commodities. Cheese and butter trade is likely to be affected by that caution, and continued weaker through the end of 2018.
- We have not changed our powder import demand assumptions in our base projections, but include further potential changes in demand as a scenario on **page 8**.

YOY growth, shipments by top 12 exporters



Milk powder exports to SE Asia 12-mth rolling average ('000t)

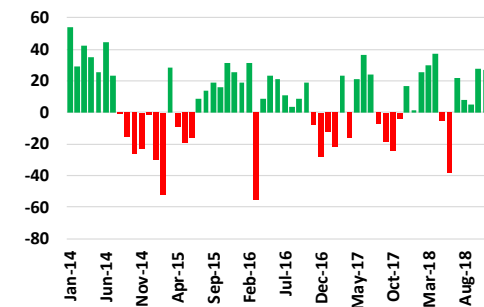


Indicators from analysis of price sensitivity in SE Asian countries

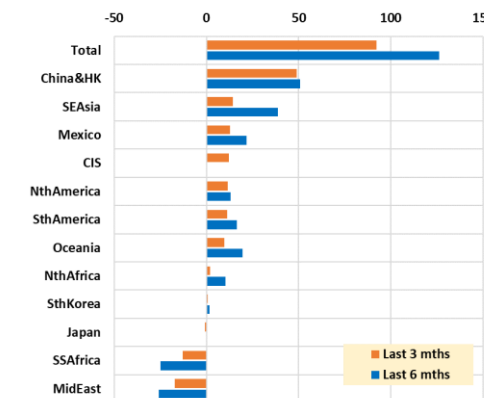
	WMP	SMP
Indonesia	?	✓
Malaysia	X	X
Singapore	?	?
Philippines	X	✓
Thailand	✓	?
Vietnam	?	✓

✓ = further scope for growth; X = unlikely to grow further; ? = uncertainty

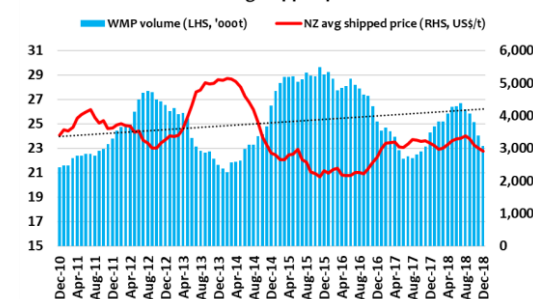
Growth in MSE trade ('000t)



Growth in MSE import demand by region ('000t)



WMP exports to Middle East 12-mth rolling average v NZ avg shipped prices



Will China keep going?

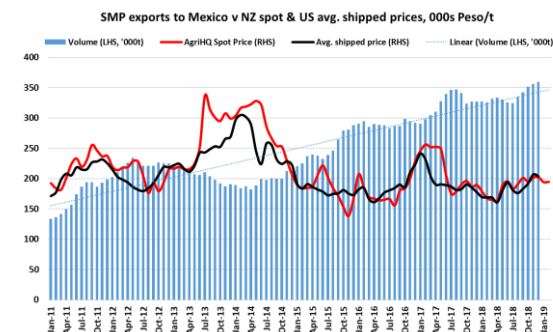
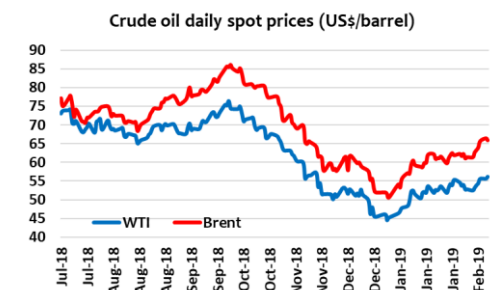
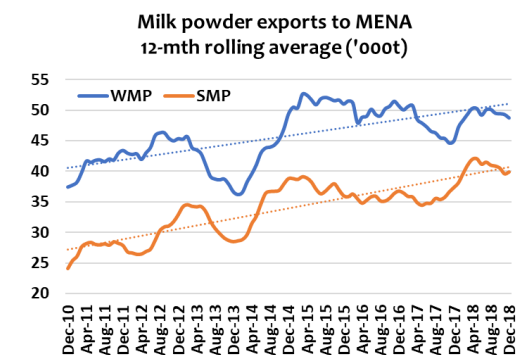
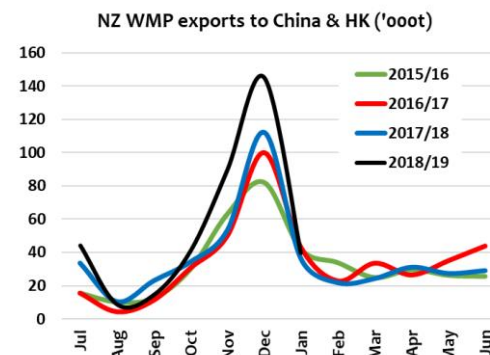
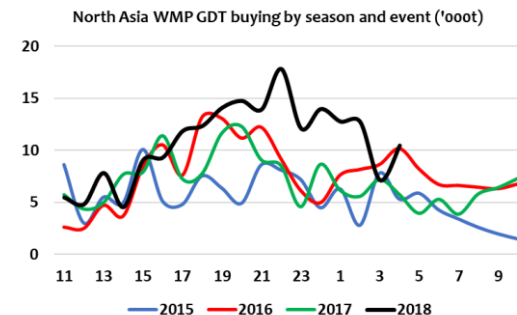
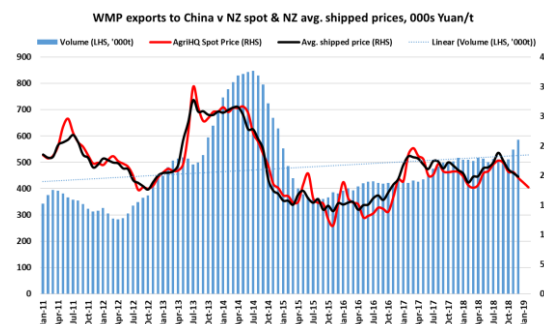
- The activity of Chinese buyers in recent GDT events is evidence of continued good demand for relatively cheap product, which was sustained in January exports from NZ, which were 11% higher year-on-year.
- It is expected that growth in imported WMP and SMP will continue at slower rates than the peak shipping period as internal milk use continues to change. Our 2019 assumption sees WMP shipments falling 1.5% over the full year (with a weaker finish), while SMP will grow 3%.
- A scenario evaluating the effect of a further 10% gain in H1-2019 of Chinese demand is included on **page 8**.
- We've haven't seen any new data regarding the extent of decline in local milk production and milk powder output, which confuses the apparent gap in powder requirements.
- Cheese and Infant formula trade picked up late in 2018, while butterfat remained steady after a strong year.

MENA: Middle East remains weak

- Despite continuing attractive prices, trade into the region slowed in recent months, with Algeria continuing as the standout in WMP taking advantage of cheap South American product. Buying slowed in January according to NZ and Latam data.
- Middle East demand is growing in SMP, but other categories are weaker.
- Oil prices improved but are likely to remain range-bound (Brent at US\$60-70/bbl) through 2019, providing at least relative stability to dependent regional economies after the slump in December and January.

Mexico – rising costs slows demand

- As part of the assumptions made in lieu of December trade data, it is assumed US NFDM shipments to Mexico grew 12% over the same month in 2017, lifting annual trade 25% over 2017, while cheese trade remained sluggish, slightly down as the year finished.
- Despite a firmer NFDM market in the US, shipped prices at the end of 2018 were assumed to remain close to US\$2,000/t (FOB). Higher prices early in 2019 have slowed activity, which we assume will show up in Q1-2019 trade.
- Cheese trade has been steady against past comparatives, but is likely to pause with a rising US market. The lingering retaliatory tariffs imposed by Mexico in response to US steel tariffs will limit growth.
- We have not yet altered **our outlook** and expect growth in SMP trade of 3% in 2019, after growing 11% in 2018. Despite the improved prospects for tariff removal, cheese trade is assumed to grow by 4% in 2019.



Scenarios for product values

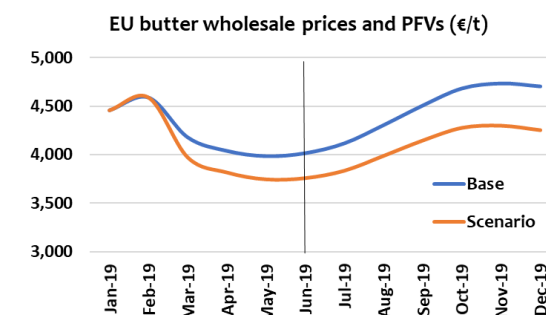
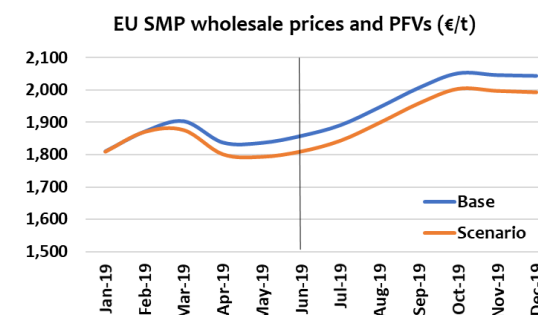
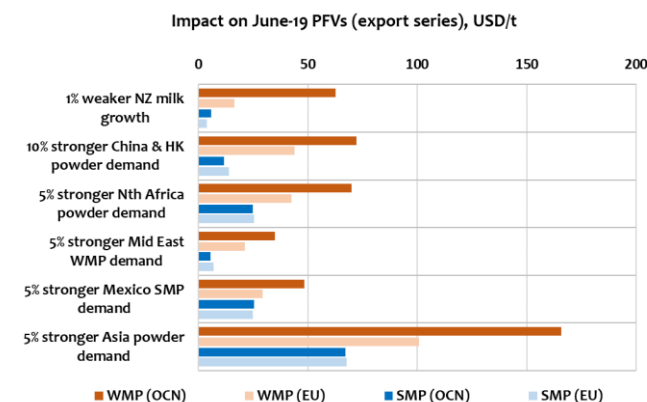
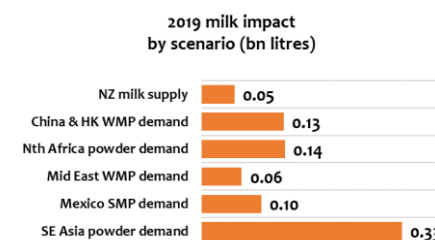
Short-term outlook – the key variables at play

- Our revised outlook for **projected fundamental values (PFVs)** in each series is based on the variables used in our base case scenario. Our full monthly product value projections across region/product pairs are shown on **page 10** of this document.
- Our DTS enables rapid “what-if” testing of the sensitivity of the market outlook through to Q2-2021. Several variations have been run against a base scenario to illustrate the materiality of each variable on short-term market outcomes.
- The table on the top right shows the range of outcomes under different scenarios as variations in some key assumptions from the baseline, selected based on our **analysis of critical variables which are open to conjecture** affecting the short-term.
- The charts below that table show the likely impact on PFVs and milk impact (in milk equivalents) of changing **each** of these variables in **either direction**.
- The scenarios have different effects on PFVs for each of the Oceania and EU products given observed influences from our analysis.

EU milk supply changes

- We have adjusted our forward milk output and product mix assumptions after analysing recent production trends across the EU, including the influence of changes in major countries. This affects our **projected SMP and butter stocks**, also taking account of weaker fluid milk use (which was down 2.7% in the EU in 2018, increasing milk available for manufacturing); product mix changes; and expected demand in domestic and export markets.
- Milk collections through the remainder of Q1 and Q2-2019 are strongly dependent on weather. Continued mild winter weather and supportive milk prices will keep overall production losses to a minimum.
- We have adjusted EU product output to take account of a change in the assumption for EU milk supply in H1-2019. It is assumed that milk production is 0.5% higher than that assumed in our baseline outlook, while additional milk is assumed to be allocated to maintain 1.5% growth in cheese output, with the remainder to SMP and butter during February to June.
- That would yield an additional 9,000t of SMP (reducing the PFVs for SMP by €50/t) and 9,000t of butter (which is far more sensitive, reducing the PFVs by €260/t) by June 2019.

Variable	Base outlook	Variation
NZ milk supply	+3.4% in 2018/19	Varies +/- 1% to May 2019
SE Asian import demand	WMP up 3.4% in 1H-19 SMP up 4% in 1H-19	Varies +/- 5% to the end of H1-19
Nth Africa import demand	WMP down 5.7% in 1H-19 SMP down 5.3% in 1H-19	Varies +/- 5% to the end of H1-19
Middle East WMP demand	Down 11% in H1-19	Varies +/- 5% to the end of H1-19
Mexico SMP demand	Up 3% in H1-19	Varies +/- 5% to the end of H1-19
China WMP import demand	Up 6.4% in H1-19	Varies +/- 10% to the end of H1-19



The assumptions in the base outlook

Global Dairy Directions – our updated base outlook

- Our outlook is sensitive to assumptions as to milk supply growth, product mix, domestic consumption in key export markets and import demand. Subscribers who utilise the **DTS** can undertake additional testing of the sensitivity of the outlook to those variables.
- Overall, our outlook for the global dairy market **altered** from the January 2019 outlook after the net effect of the following changes in assumption variables:

Supply side

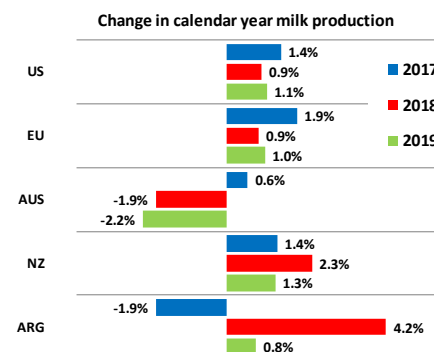
- Weaker NZ's milk production through to the end of the 2018/19 season
- Faster recovery in EU milk growth into Q1-19 but still with large differences among major producing countries
- Weaker US milk production in Q4-18 and Q1-19
- Changes to EU and US product mix - reflecting the latest market prices, dairy product output data

Demand side

- Actual global December 2018 SMP shipments were **stronger** than projected by 48,000t. WMP was stronger by 2,000t. Butter & oil (butter equivalent) actual trade was 3,000t stronger, while cheese was 2,000t weaker than projected.
- Weaker domestic butter demand in the US
- NZ WMP exports to China & HK in January were worse than expected
- Changes to short-term demand across certain regions and products
- Changes to trade shares between major exporters

December trade assumptions

- For the US, we assume SMP/NFDM and butter exports continued to grow strongly, but cheese and whey were slightly lower than in the prior month
- For Canada, we assume December exports grew at the same % rate as in the November quarter
- The assumptions are reviewed monthly based on updated data and other indicators and insights. Significant changes in the tables on the right from last month include:
 - Milk production growth for major exporters (changes in black per table on right)
 - Import demand growth by region (changes in black per table on right)
 - The product mix of major exporters
 - Growth in domestic consumption in major producers/exporters
 - Changes in major commodity stocks held by major exporters
- Assumptions for US and Canadian exports in December



Short-Term Milk Supply Growth (YOY)											
	NZ	EU	US	AUS	ARG	BEL	UKR	BRA	URG	TUR	CAN
Jan-19	7.7%	-0.4%	0.3%	-7.0%	-2.0%	0.0%	-2.1%	1.5%	2.0%	2.0%	1.0%
Feb-19	5.0%	0.0%	0.3%	-6.0%	-2.0%	0.0%	1.0%	1.5%	2.0%	2.0%	1.0%
Mar-19	2.0%	0.2%	0.5%	-6.0%	-2.0%	0.0%	1.0%	1.5%	2.0%	2.0%	1.0%
Apr-19	-6.0%	0.9%	1.0%	-6.0%	-2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	1.5%
May-19	-8.0%	1.3%	1.3%	-6.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	1.5%
Jun-19	1.0%	1.4%	1.0%	-3.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	1.5%
Jul-19	1.0%	1.4%	1.5%	-1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Aug-19	1.0%	1.5%	1.3%	0.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Sep-19	1.0%	1.5%	1.4%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Oct-19	1.0%	1.5%	1.4%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Nov-19	1.0%	1.5%	1.4%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Dec-19	1.0%	1.5%	1.4%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Jan-20	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Feb-20	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Mar-20	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Apr-20	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
May-20	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Jun-20	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Jul-20	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Aug-20	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Sep-20	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Oct-20	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Nov-20	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Dec-20	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Jan-21	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Feb-21	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Mar-21	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Apr-21	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
May-21	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Jun-21	1.0%	1.2%	1.5%	1.0%	2.0%	1.0%	1.0%	1.5%	1.0%	2.0%	2.0%

Short-Term Import Demand Growth (YOY)													
	WMP					SMP					Cheese		Butter
	SEAsia	China/HK	Mide	NoAf	SthAm	SEAsia	China/HK	Mide	NoAf	MEX	SEAsia	CIS	Japan
Jan-19	5%	11%	-20%	-15%	0%	4%	3%	3%	-10%	3%	8%	2%	5%
Feb-19	3%	5%	-20%	-15%	0%	4%	3%	3%	-10%	3%	8%	2%	5%
Mar-19	3%	5%	0%	-10%	0%	4%	3%	3%	-10%	3%	8%	2%	5%
Apr-19	3%	7%	-10%	-5%	0%	4%	3%	3%	-10%	3%	8%	2%	5%
May-19	3%	7%	-10%	15%	0%	4%	3%	3%	3%	3%	8%	2%	5%
Jun-19	3%	3%	5%	15%	0%	4%	3%	3%	15%	3%	8%	2%	5%
Jul-19	-10%	3%	5%	-20%	0%	4%	3%	3%	3%	3%	8%	2%	5%
Aug-19	-5%	3%	5%	-20%	0%	4%	3%	3%	3%	3%	8%	2%	5%
Sep-19	3%	3%	5%	5%	0%	4%	3%	3%	3%	3%	8%	2%	5%
Oct-19	3%	3%	5%	5%	0%	4%	3%	3%	3%	3%	8%	2%	5%
Nov-19	3%	-20%	5%	5%	0%	4%	3%	3%	3%	3%	8%	2%	5%
Dec-19	3%	-5%	5%	5%	0%	4%	3%	3%	3%	3%	8%	2%	5%
Jan-20	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
Feb-20	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
Mar-20	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
Apr-20	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
May-20	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
Jun-20	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
Jul-20	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
Aug-20	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
Sep-20	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
Oct-20	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
Nov-20	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
Dec-20	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
Jan-21	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
Feb-21	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
Mar-21	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
Apr-21	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
May-21	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%
Jun-21	3%	3%	3%	3%	2%	4%	3%	3%	3%	3%	8%	2%	3%

Projected fundamental values – January 2019

This page provides a summary of the projected fundamental values (PFVs) 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
Mar-19	3,056	2,435	4,129	3,532	953	2,778	1,903	4,179	2,887	2,888	750	3,086	2,187
Apr-19	2,974	2,405	4,081	3,556	935	2,703	1,837	4,041	2,779	2,906	729	3,085	2,194
May-19	3,108	2,407	4,042	3,481	923	2,730	1,836	3,986	2,711	2,837	714	3,124	2,197
Jun-19	3,191	2,444	4,063	3,475	919	2,754	1,858	4,018	2,719	2,846	714	3,157	2,233
Jul-19	3,122	2,297	4,050	3,522	919	2,761	1,891	4,119	2,743	2,873	716	3,110	2,250
Aug-19	3,116	2,402	4,142	3,602	925	2,749	1,946	4,306	2,842	2,976	731	3,090	2,333
Sep-19	3,133	2,515	4,244	3,712	933	2,749	2,006	4,507	2,964	3,104	751	3,089	2,425
Oct-19	3,167	2,378	4,347	3,768	943	2,710	2,051	4,682	3,088	3,089	771	3,105	2,446
Nov-19	3,116	2,371	4,387	3,821	940	2,682	2,046	4,733	3,142	3,143	779	3,064	2,440
Dec-19	3,124	2,368	4,416	3,865	936	2,679	2,043	4,703	3,183	3,184	784	3,057	2,441
Jan-20	3,017	2,273	4,288	3,663	928	2,575	2,055	4,527	3,126	3,127	772	2,967	2,415
Feb-20	3,064	2,279	4,113	3,615	918	2,601	2,056	4,286	3,037	3,038	754	3,027	2,424
Mar-20	3,118	2,225	3,883	3,545	902	2,628	2,034	4,010	2,923	2,924	732	3,090	2,394
Apr-20	3,023	2,130	3,685	3,456	883	2,530	1,994	3,769	2,789	2,790	706	3,015	2,284
May-20	3,078	2,089	3,602	3,398	869	2,555	1,978	3,666	2,694	2,695	687	3,074	2,260
Jun-20	3,137	2,122	3,592	3,412	866	2,581	1,992	3,668	2,689	2,690	684	3,133	2,288
Jul-20	3,052	2,165	3,648	3,455	868	2,483	2,037	3,762	2,719	2,720	687	3,058	2,317
Aug-20	3,083	2,303	3,744	3,546	876	2,498	2,093	3,917	2,809	2,810	701	3,104	2,417
Sep-20	3,111	2,427	3,841	3,640	885	2,511	2,143	4,080	2,914	2,915	719	3,137	2,508
Oct-20	3,000	2,399	3,921	3,716	890	2,396	2,173	4,222	3,020	3,021	736	3,014	2,524
Nov-20	3,046	2,413	3,932	3,752	891	2,409	2,180	4,259	3,078	3,079	745	3,033	2,539
Dec-20	3,113	2,433	3,880	3,773	889	2,431	2,190	4,203	3,121	3,122	750	3,065	2,559
Jan-21	3,003	2,481	3,858	3,741	884	2,431	2,210	4,195	3,125	3,127	749	2,991	2,598
Feb-21	3,053	2,506	3,839	3,728	879	2,446	2,220	4,187	3,122	3,123	747	3,012	2,620

- To derive monthly PFVs, we use an econometric multiple regression 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; European internal wholesale PFVs projections are based on the weekly EC series (Gouda and Edam are an exception - Kempten); EU export PFVs are based on USDA Dairy Market News series.

