

Global dairy directions

Directions newsletter

February 2018

fresh *agenda*

Directions newsletter – February 2018

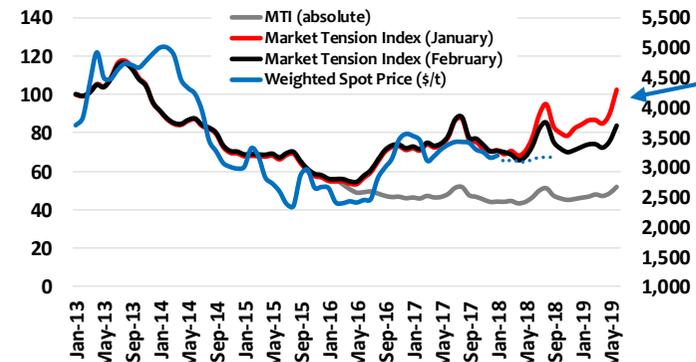
This newsletter summarises our short term outlook for the balance of supply and demand in global dairy markets, forming a key part of our Global Dairy Directions (GDD) analysis to subscribers.

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](#).

Key features of this update

- **The outlook for 2018 has improved a little** since our January update, mainly reflecting a firmer EU market due to demand-side support for higher butterfat and cheese prices, which have reset expectations for values through H1-2018. For more details on the changes [see page 9](#).
- There are many important variables in play affecting the short-term outlook – most significantly the extent of EU milk growth through the peak period, and the effect on product-mix choices. A weaker EU spring peak - if the weather again deviates from forecasts - will keep the market firmer for longer.
- Now that sales of intervention stocks have started with a trickle at prices below €1200/t, SMP prices will remain weak but fresh production should command a premium.
- Domestic EU butterfat demand is crucial to market direction in 2018. EU demand signals have in recent weeks underpinned butter prices above €4,500/t, while futures have sped higher. As buyers look to cover requirements further into 2018, and butter values settle in that vicinity, it will provide the Commission with a clear guidance each time it weighs a potential SMP tender sale, in order to stabilise EU farmgate milk prices above or near 30c/kg.
- The returns from the SMP/butter stream will drive cheese values. If butter prices weaken, more milk will move to cheese in western Europe and put pressure on export prices for semi-hard cheese in all regions. Soft US prices in the short-term will add to that pressure.
- Weak SMP prices (and softer vegetable oil prices) will continue to limit WMP values – although export availability is unlikely to change with limits on NZ output and the overall market likely to remain in balance.
- The chart on the right compares the projected fundamental values (PFVs) in our January outlook against the signals from GDT and futures markets. 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](#).

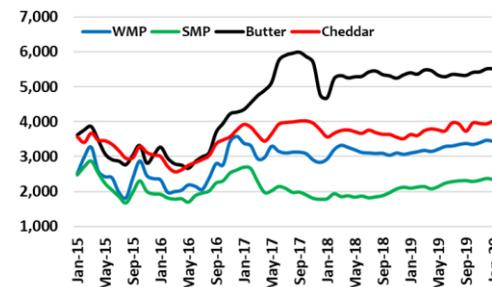
Market tension (LHS) v spot prices (RHS)



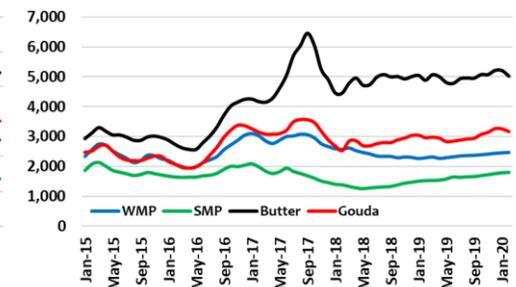
The MTI has declined from our January update due to the projected changes in milk production in key exporters, and various changes in the outlook for product mix and import demand across various regions.

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 international price movements.

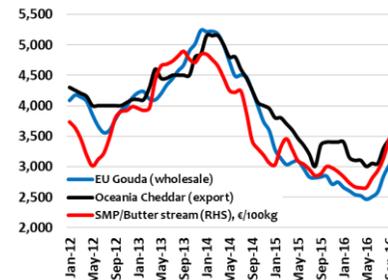
Oceania export prices and PFVs (US\$/t)



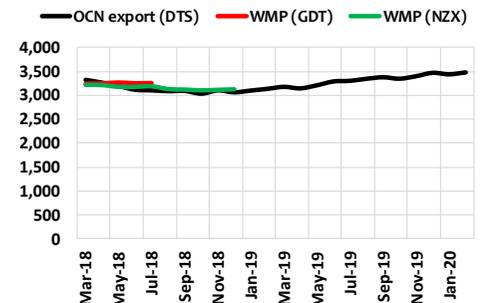
EU internal wholesale prices and PFVs (€/t)



Cheese price comparison (US\$/t)

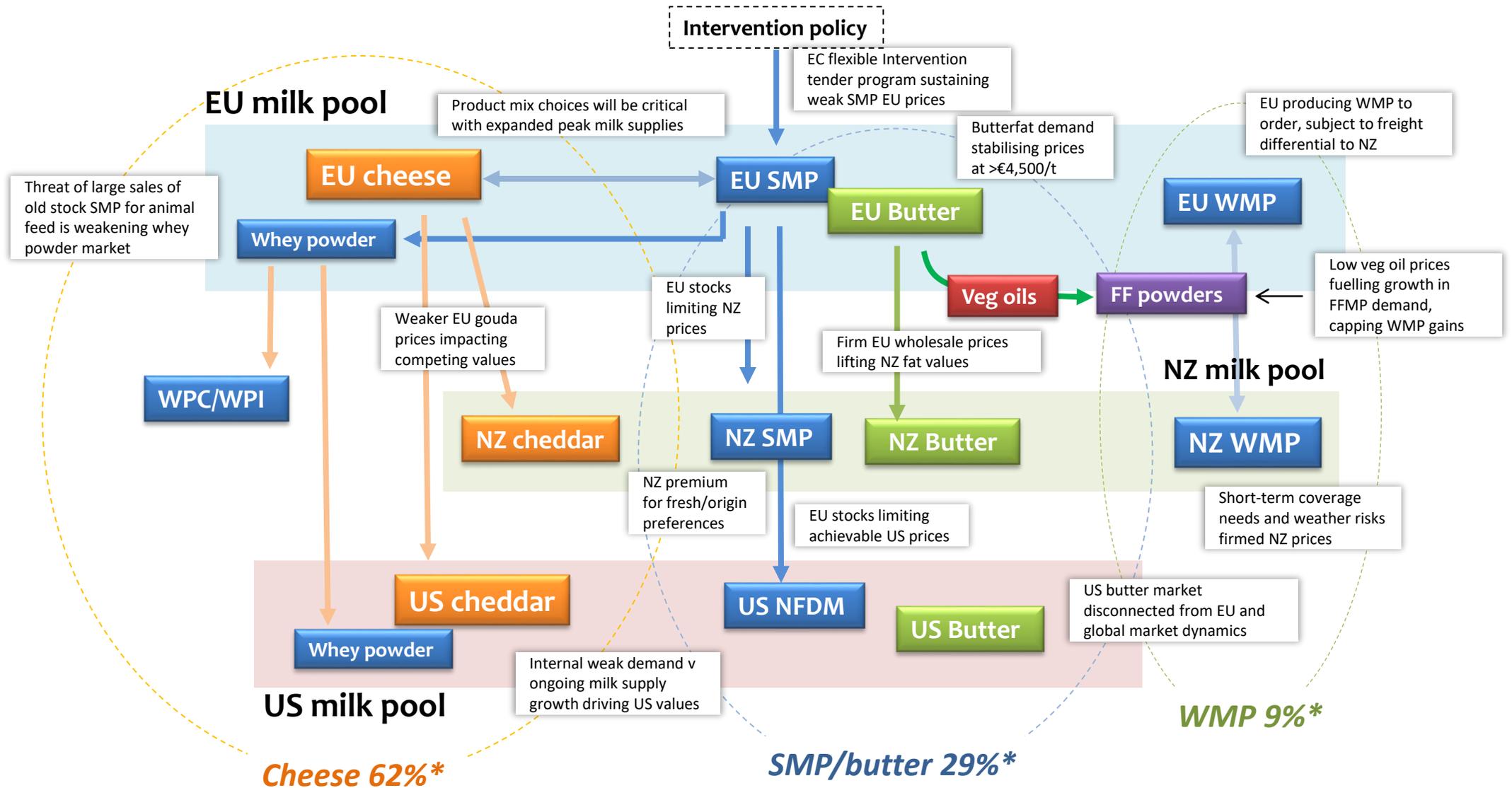


WMP : DTS value v GDT v NZX, USD/t



The major influencers of the outlook

The global market outlook is affected by a complex and interconnected relationships that impact market fundamentals:



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

Commodity situation & outlook

Risks affecting the outlook

The table below shows the major product groups and the risks affecting prices over the next year.

Product	Current factors	Outlook considerations	Value direction
Cheese	<ul style="list-style-type: none"> Firming EU market with tight local supplies Cheese trade slowed in late 2017 as prices firmed. EU Gouda and Cheddar prices slumped in reaction, since correcting as lower prices spurred clearance sales. Weak US market on sluggish demand, but over-stocked situation is easing 	<ul style="list-style-type: none"> EU cheese output will increase more than 3% in H1-2018 with superior stream returns Improved EU demand, and revival of growth in Korea, China and Mexico, are critical to the balance US market balance is fragile with weak demand signals but slowing milk output. US retail market growth is expected to improve, foodservice is likely to remain sluggish in the short-term 	<p>EU: weaker after peak Oceania: weaker US: improving late 2018</p>
SMP	<ul style="list-style-type: none"> Prices weighed by large EU stocks (regardless of age), and flexible tendering system Premiums for fresh-produced NZ SMP Firm butter market has improved SMP/butter stream returns Worsening trend for US NFDM stocks-to-use with increased production and weak Mexican demand 	<ul style="list-style-type: none"> EU availability of fresh product likely to be adequate over 2018 with expected peak milk surge Lower EU output later in 2018 may spur sales out of intervention stocks Sustained demand from SE Asia and China critical to market balance Mexico facing uncertainty in NAFTA talks but has high stocks to clear 	<p>Flat, gradually improving, driven by EU benchmarks</p>
Butter	<ul style="list-style-type: none"> Demand recovery in EU quickly firmed the market Risk of push-back at prices above €4,500/t Export sales to some developing markets remain weak at high prices 	<ul style="list-style-type: none"> Competitive stream returns in the EU will support 3-5% growth in butter output in H1-2018. Cream demand critical to available butterfat supplies in EU NZ prices will be driven by EU export values and aggregate export demand 	<p>EU/Oceania: Weaker with the EU peak US: Improving</p>
WMP	<ul style="list-style-type: none"> NZ season challenges and weak growth expectations limits availability EU uncompetitive and making consignments to order Demand and prices limited by substitution with fat-filled products Chinese demand critical to overall market balance. 	<ul style="list-style-type: none"> WMP prices into Q2 and Q3-2018 will be pegged by the ongoing weakness in SMP rather than NZ availability. Limited additional growth in EU output despite better stream returns 	<p>Flat to a little weaker</p>
Whey	<ul style="list-style-type: none"> Increasing availability with growth in cheese output Risk of moderate SMP sales from intervention weakening WPC34 and whey powder prices Build-up of stocks of WPC-80 in the US in H2-2017 drove producers to dry whey powders 	<ul style="list-style-type: none"> Weaker SMP prices and stronger cheese output will keep downward pressure on commodity whey product values Significant diversion of discounted SMP intervention stocks into feed sector may weaken whey markets, and make higher-value lines more appealing Improved demand for higher WPC lines critical to rebalancing the category 	<p>Weaker for dry whey products</p>

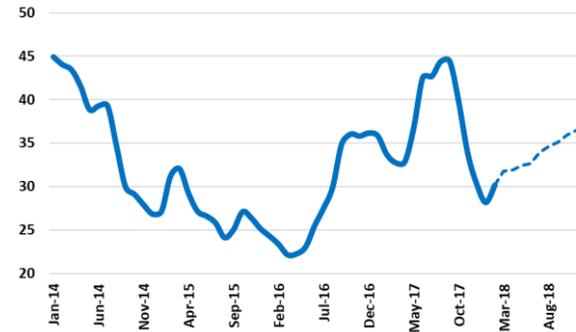
EU: butterfat demand holds the key

- The EU is expected to increase milk production through the spring peak at 2.5 to 3%. Weekly production data from major producers suggests a gradual slowing of year-on-year growth rates.
- The weather outlook remains positive for spring after a mild winter. Major storms across the continent are not forecast to last past mid-March. The spring weather outlook for much of Western Europe is favourable – warmer and wetter than normal.
- The EU domestic wholesale market has firmed as cheese supplies quickly tightened in response to the plunge in prices. Butter buyers came back to the market to cover positions, pushing prices past €4,500/t with the implied fat values in cream prices even higher.
- Our projected butter values are lower, but remain above €4,500/t with increased peak availability. **Sustained domestic demand growth** at close to 1% above the prior year in H1-2018 is critical to our outlook – but values are highly sensitive. **We illustrate a sensitivity scenario on this variable on page 8.**
- The firm butterfat market has given the EC leeway to take a flexible approach to tender sales of intervention stocks. To date, small sales have been made at an average close to €1,100/t, which does not risk sending farmgate milk prices below 30c/kg. This program will keep SMP prices weak, while fresh SMP is earning a premium of up to €200/t. Whey markets are weaker with the risk of old-stock SMP going into the animal feed market.
- With projected fat and SMP values that take account of the expected spring surge in milk, we forecast farmgate milk prices will stay above 30c in key countries, as shown in the chart on the top right. Growth expectations will vary at a country level, but in overall terms, **this should keep EU milk collections growing through 2018 (albeit less than 0.5% in Q4-2018).**

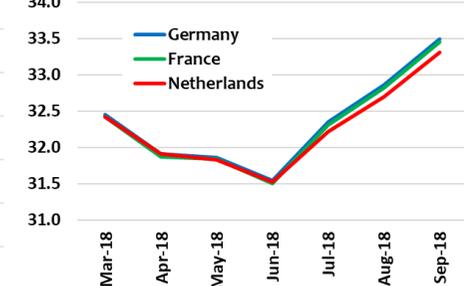
NZ: fluctuating and varied conditions

- There is now minimal drought exposure for the remainder of the season after recent rains. Some regions are now struggling to cope with too much water to re-ignite pasture.
- We have moderated the outlook for milk production through the current season. The high monthly comparables of last year will be hard to beat. Our outlook is for milk collection to remain well behind for the rest of 2017/18, leaving milk down 2% for the season ending in May.
- Attention turns to the 2018/19 season, where there is no confidence of production growth beyond a recovery to 2015/16 levels, which should be delivered with reliable conditions and normal pasture growth. There is little scope for expansion – banks and equity investors are urging and taking a more cautious involvement approach, and the sector fears a tougher regulatory environment with promises made by the new NZ Government.
- Milk prices for 2017/18 may weaken a little from here as careful GDT management should see Fonterra end the season close to their NZ\$6.40/kgMS forecast payout.

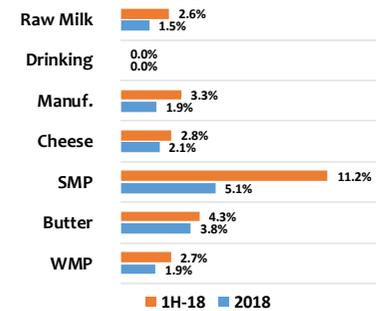
Hypothetical farmgate prices based on SMP/butter returns from whole milk with 4% fat and 3.4% protein (€/100kg)



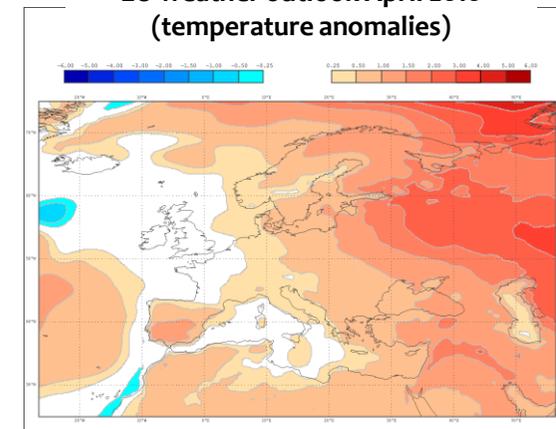
Farmgate milk value projections - based on commodity product mix (€/100kg)



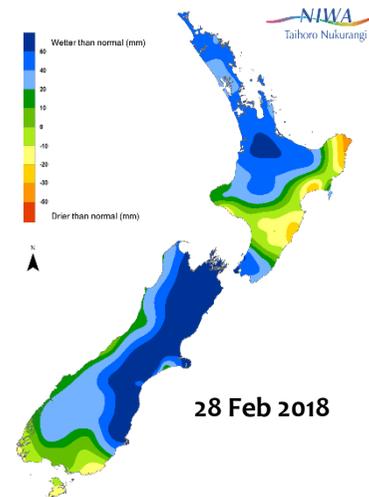
YOY growth in EU output



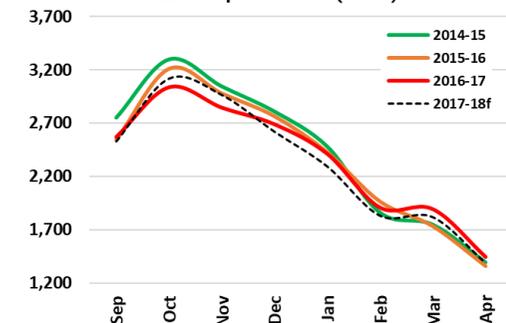
EU weather outlook April 2018 (temperature anomalies)



Soil moisture anomaly



NZ milk production ('000t)

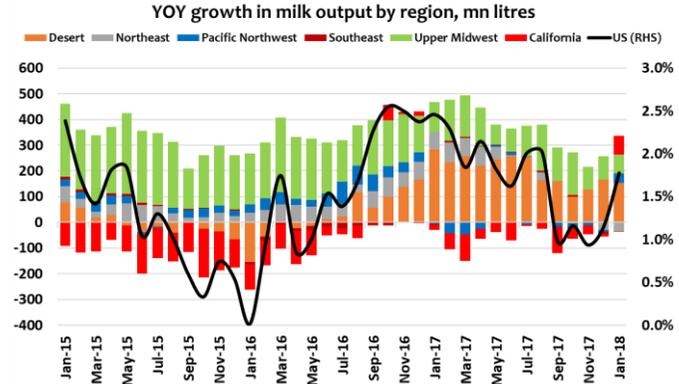


US markets unsettled on weak demand

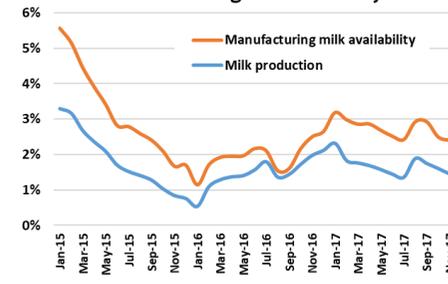
- Farm margins will likely shrink (see chart on far right) for much of H1-2018, before an improvement later in the year. This should continue to tighten milk supply over that period.
- January's milk supply growth surprised with better feed quality and higher cow numbers (and growth in California for the first time in a year), defying weaker economics. It reminds the market that farmers will chase higher marginal incomes where available.
- There is little overall change in the US outlook, with an expected improvement in cheese demand later in 2018 and a further slowing in milk output holding the key, This is factored into cheese futures (US\$300-400 stronger by Q4-2018) and class III milk prices (back towards \$16/cwt) by end of year.
- Gains in US cheddar prices could be smaller if US exporters meet stiffer competition from the cheaper EU supplies. If this makes exports less attractive, US milk prices may not recover as fast and this in turn may keep milk production growth more subdued.
- The cheese inventory position has improved a little – foodservice sales kicked up at the end of the year.
- Latest data shows fluid milk sales again worsened, which pushes more milk to manufacturing than the headline milk supply changes.
- The NFDM market remains relatively weak with the key Mexican market demand sluggish, and ongoing pressure from cheap EU supplies. The US butter market is also weak – immune from the high fat prices elsewhere – making the cream market critical to stream returns for low-fat powder production.

Other suppliers

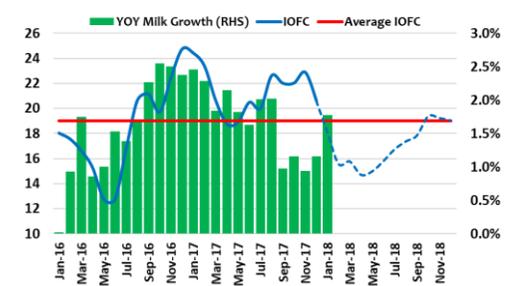
- Despite the hotter summer conditions, southern **Australian** region milk added 6% over the (weak) 2017 comparative in January. Milk supply in northern regions was well down, which will soak up some of that gain, yet conditions remain favourable.
- Latest product output data shows the recovery in cheese (which is partially) import replacement) and WMP output at the expense of SMP and fats.
- In Latam, weather may again play havoc with milk production. **Argentina's** milk collections improved strongly in January (by almost 13%, over large negative comparatives), exceeding even 2015 collections for the month.
- **Turkey's** milk supply strengthened 10% in December to pull milk supply up to a loss of just 1.5% after a horror start. The resurgent milk output has been directed to better-returning cheese, production was ahead 4% on the reduced milk flow and exports were 5% ahead in 2017. Exports of milk and cream into local regions also more than doubled.
- **Canada's** milk supply growth remained close to 7% as 2017 ended, helping exports of SMP for the year triple, to reach close to 72,000t of SMP



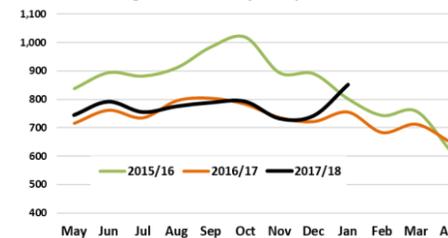
Rolling average milk production v manufacturing milk availability



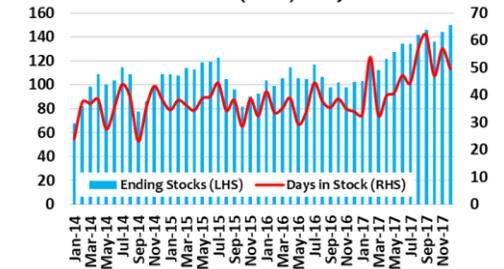
Farm Bill Margin Calculation, c/kg of milk



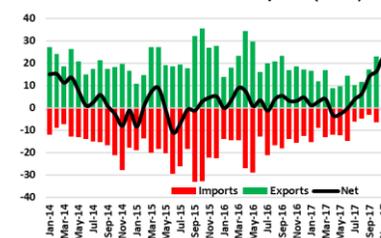
Argentina monthly milk production



US NFDM stocks ('000t) v days in stocks



South America WMP net exports ('000t)



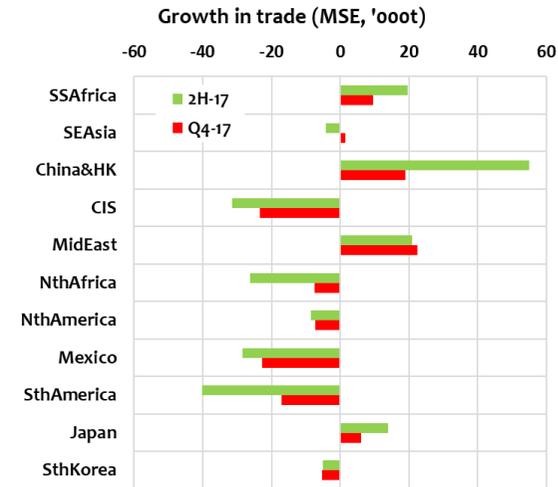
Demand drivers

Overall

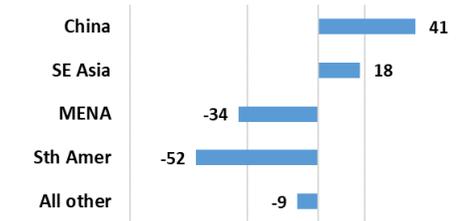
- With the prospects of stronger milk supplies in the EU and possibly lower product prices, the adequacy of buyer coverage into 2018 will continue to be an important factor in the short term.
- Alongside this, as EU and US cheese availability also increases, buyers who have reasonable cover can probably afford to sit on their hands in the short term, awaiting developments on weather events and milk production gains (and changes in product mix) in Europe.
- Recent trade – in Q4-2017 – was stronger than the prior year with a limited number of markets as shown. In overall terms, total trade in milk solids equivalents (MSE) was down 0.7% in H2-2017 and by 1% in Q4-2017,
- By our assessment, activity will improve at recent and projected SMP and cheese prices given the recent demand trends in 2017 which suggest some unfilled pipelines.

China remains critical – weaker milk output helps

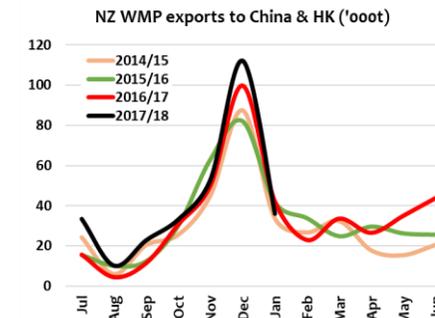
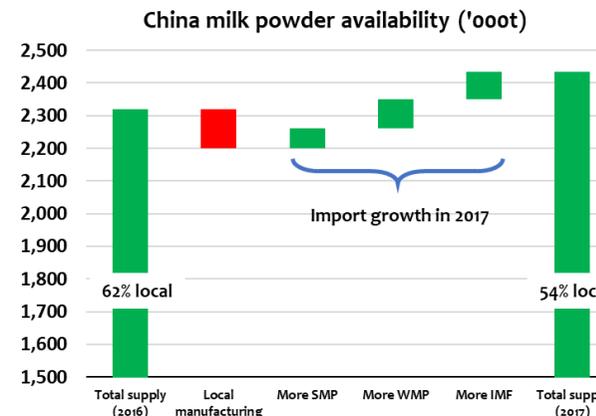
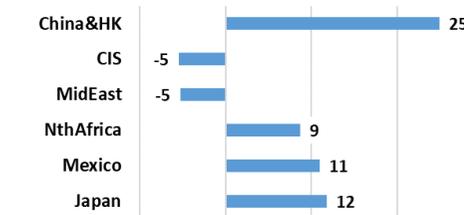
- China is critical to the global market balance for commodity milk powders including whey products, while its internal milk use continues to change.
- Patterns of month-to-month trade continued to vary. With the higher shipments in December, January WMP export shipments from NZ were down on the prior year. Over the peak shipment period of November to January, 2017/18 NZ exports were ahead less than 3%.
- Higher peak powder requirements aligned with a fall in local powder output. Local milk powder output (WMP and infant formula) in 2017 was well down (by 8.4%) on 2016, with overall supplies topped up with imported powders, suggesting that total powder supplied to the Chinese market grew 5% - imports grew 27%. Late in the year, local milk powder output was reported in official numbers to be down 15-20%.
- Reports suggest lingering weaker milk production in early 2018 after production slowed in late H2-2017. Yet farmgate milk prices in late 2017 did not indicate any apparent shortage in local farm supplies.
- Meanwhile liquid milk output reportedly fell heavily by around 7-8% in the closing months of late 2017, indicating by our reckoning that powder use in fluid products tanked late in the year. Chinese processors remain optimistic for fluid milk market growth of 5-6% with small gains in unit prices after discounting tactics to retain market shares weighed on values in 2017.
- We expect China's WMP imports will lift 4-5% in 2018.



Changes in WMP export ('000t) in 2017

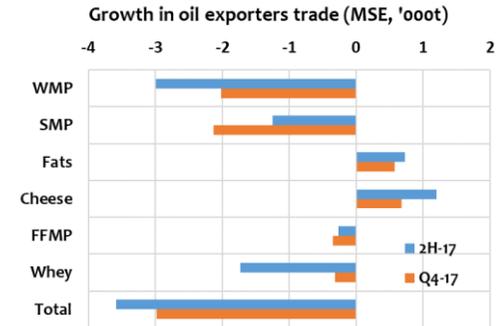
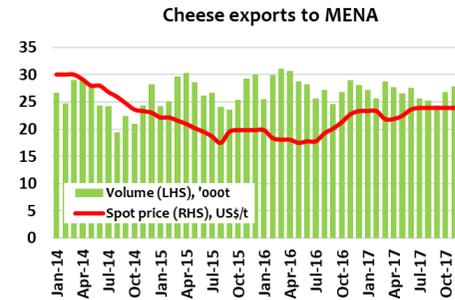


Change in SMP export ('000t) in 2017



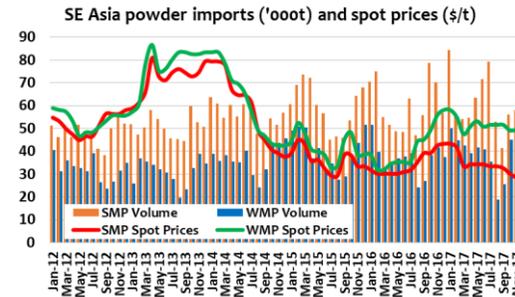
MENA shows a flicker of growth

- There is some positive change in the economic outlook for the MENA region with a better outlook for oil markets.
- Attractive SMP prices may propel further recovery in trade after a strong finish in Q4-2017. Butter and cheese weakness in the region in 2017 will probably extend, although some better value in EU cheese prices may sustain trade in early 2018.
- Oil prices rallied into early 2018 on expectations that global over-supply had been sufficiently eroded, but prices have since fallen back with many energy analysts suggesting a ceiling was reached and that additional low-cost production would be encouraged.
- While higher average prices will flow to producers in 2018, OPEC production cuts remain in force through 2018, meaning constraints on growth will persist.

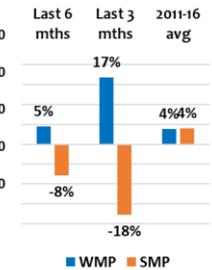


SE Asian should resume strength

- SE Asian SMP buyers paused in Q3 and Q4 2017, with trade to all major markets weaker, but we'd expect to see stronger gains in 2018 at low protein prices. Butter markets proved resilient at sharply higher prices, and assumptions of ongoing steady growth appear reasonable.
- We expect a pick-up in SMP trade with some latent capacity evident to take advantage of value-buying. WMP imports rallied late last year, but we'd expect little growth over the full year given the size of the premium over SMP.
- Our outlook has the region growing SMP demand at 4% in 2018 at lower prices, but on **page 8** we look at the effect of a 5% higher demand. Quieter import activity in Indonesia would suggest scope for a stronger market return in the coming year.
- We expect growth in the cheese market to slow to 7% in 2018.

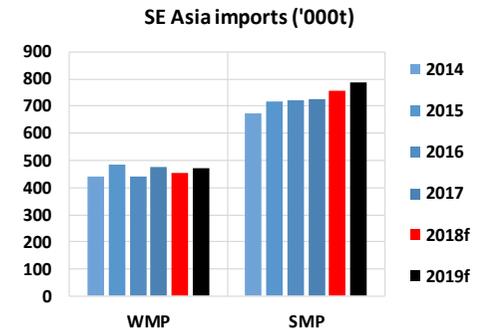
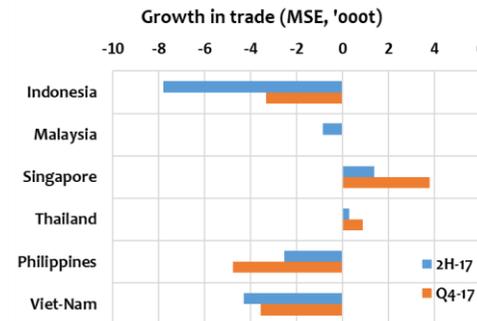


Recent trends



Uncertainty and good stockpiles in Mexico

- We expect small shrinkage of 1% in SMP trade in 2018, after 10% expansion in 2017, while the cheese trade is assumed to grow 5%, after slowing 2% in 2017.
- Milk production in Mexico grew close to 2% last year.
- NAFTA negotiations hang over business and consumer confidence with little resolved to date. Latest official data says the economy is growing a little slower than expected, with rising inflation eroding potential expansion. Higher prices and more expensive household debt could weigh on consumer demand.



Scenarios for product values

Fundamental values v forward prices

- 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.
- These projections, shown as “DTS” in the charts, are compared on **page 1** to futures quotes and GDT results at the time of writing.

Short-term outlook – the key variables at play

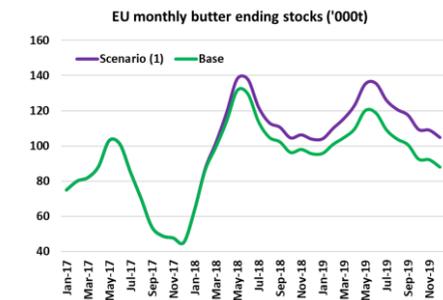
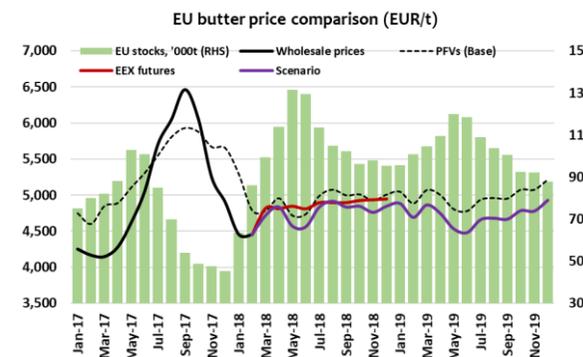
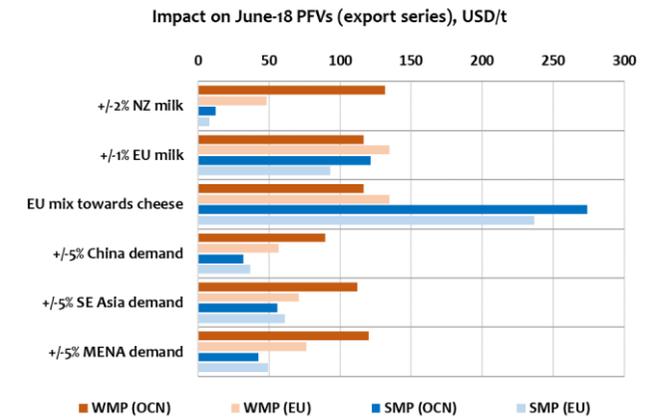
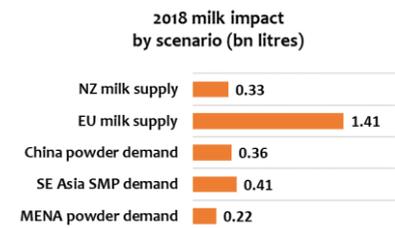
- Our Dairy Trade Simulator (DTS) enables testing of the sensitivity of the market outlook through to Q1-2020. Several variations have been run against a base scenario to illustrate the materiality of each variable on short-term market outcomes. The table on the right shows the range of outcomes under different scenarios as variations in some key assumptions from the baseline.
- The charts show the likely impact on fundamental values of changing each of these variables in **either direction**. The scenarios have different effects on projected values for each of the Oceania and EU products based on observed influences from our analysis.

Butter

- We have modelled the sensitivity of EU butter prices to a change in domestic consumption growth in H1-2018. The base outlook assumes consumption in that period grows at close to 1% - we have alternatively modelled the impact on projected stocks and values with a 1% reduction from that base (that is demand would be flat over this period).
- In this case projected EU butter values fall €150-175 with 1% weaker demand. That effect can be extrapolated for every 1% fall in demand.
- If demand is flat over the full year, our projected values fall to a range of €4300-4400/t through 2018. The **grid of milk values (below)** from the SMP-butter stream shows the potential impact of that value range.

		Butter wholesale prices, €/t								
		4,000	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800
SMP wholesale prices, €/t	1,000	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.4	27.9
	1,100	25.0	25.5	25.9	26.4	26.9	27.4	27.9	28.4	28.9
	1,200	25.9	26.4	26.9	27.4	27.8	28.3	28.8	29.3	29.8
	1,300	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.2	30.7
	1,400	27.8	28.3	28.7	29.2	29.7	30.2	30.7	31.2	31.7
	1,500	28.7	29.2	29.7	30.2	30.6	31.1	31.6	32.1	32.6
	1,600	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.0	33.5
	1,700	30.6	31.1	31.5	32.0	32.5	33.0	33.5	34.0	34.5
	1,800	31.5	32.0	32.5	33.0	33.4	33.9	34.4	34.9	35.4

Assumption	Base outlook	Variation
NZ milk supply	-1.1% in 2017/18; +1.9% in 2018/19	Varies +/- 2% through the end 2018/19
EU milk supply	+2.6% in 1H-18; -0.4% in 2H-18	Varies +/- 1% through 2018
EU product mix	SMP up 5.1%, butter up 3.8% in 2018	Move more milk to cheese (and away from powders) to maintain output as in the base scenario
China WMP/SMP import demand	WMP up 1.7%, SMP up 4.4% in 2018	Varies +/- 5% through 2018
SE Asia SMP demand	+3.8% in 2018	Varies +/- 5% through 2018
MENA WMP/SMP import demand	WMP -5.5%, SMP +4.0% in 2018	Varies +/- 5% through 1H-2018



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 engage in the **Dairy Trade Simulator (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 2018 outlook after the net effect of:

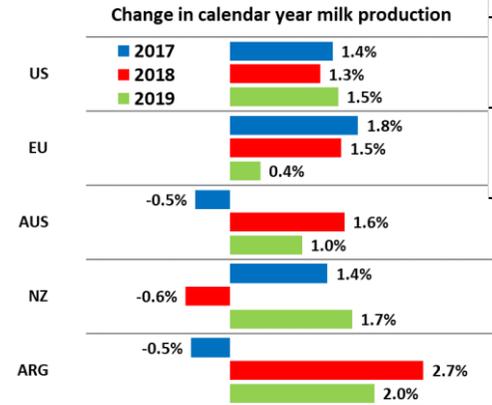
Supply side

- We expect EU's milk output to grow 2.6% in 1H-18 and 0.4% in 2H-18. We have lifted expectations for 2H-18 as farmgate prices are projected to remain healthy with stronger fat valuations in recent weeks. Despite milk growth slowing in latest data, we still expect double-digit growth in SMP output during 1H-18.
- Following three consecutive seasonal falls, NZ's milk supply is expected to rise by 1.9% in 2018/19. We have adjusted product mix so that WMP output is in line with available manufacturing milk into next year.
- US January milk production was stronger than expected.
- Adjustments to historical balance sheets across exporting countries and products.

Demand side

- Actual December world shipments for WMP and SMP were stronger than projected by 14,000t and 8,000t respectively. Cheese and butter & oil exports were weaker however - down 5,000t and 1,000t respectively.
- Changes to short-term demand across certain regions and products.
- NZ's WMP exports to China & HK in January were significantly weaker than in the same month last year. Over the full year, we expect WMP shipments to this region to grow but at a subdued rate.
- Overall, WMP trade is expected to again be weaker in 2018 as buyers focus on cheaper alternatives, particularly in price-sensitive regions.
- The assumptions behind this outlook are reviewed monthly based on updated trade data and other insights. Significant changes made in the tables on the right from last month's outlook 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 – highly relevant given the proportion of cheese and butter consumed in the EU and US.
 - Changes in major commodity stocks held by major exporters.

Short-Term Milk Supply Growth (YOY)											
	NZ	EU	US	AUS	ARG	BEL	UKR	BRA	URG	TUR	CAN
Feb-18	-4.0%	3.0%	1.2%	3.0%	0.0%	3.0%	0.8%	1.5%	0.0%	5.0%	4.5%
Mar-18	-4.0%	2.9%	1.2%	3.0%	1.0%	2.0%	1.0%	1.5%	1.0%	5.0%	3.0%
Apr-18	-4.0%	2.6%	1.1%	2.0%	2.0%	2.0%	1.0%	1.5%	1.0%	5.0%	3.0%
May-18	-4.0%	2.3%	1.1%	1.0%	2.0%	2.0%	1.0%	1.5%	1.0%	5.0%	3.0%
Jun-18	-2.0%	1.9%	1.0%	1.0%	2.0%	2.0%	1.0%	1.5%	1.0%	4.0%	3.0%
Jul-18	0.0%	1.1%	1.0%	1.0%	2.0%	2.0%	1.0%	1.5%	1.0%	2.0%	2.5%
Aug-18	2.0%	0.8%	1.2%	1.0%	2.0%	2.0%	1.0%	1.5%	1.0%	2.0%	2.5%
Sep-18	2.0%	0.3%	1.3%	1.0%	2.0%	2.0%	1.0%	1.5%	1.0%	2.0%	2.5%
Oct-18	1.5%	0.1%	1.4%	1.0%	2.0%	2.0%	1.0%	1.5%	1.0%	2.0%	2.5%
Nov-18	1.0%	0.0%	1.4%	1.0%	2.0%	2.0%	1.0%	1.5%	1.0%	2.0%	2.5%
Dec-18	3.0%	0.2%	1.4%	1.0%	2.0%	2.0%	1.0%	1.5%	1.0%	2.0%	2.5%
Q1-19	2.0%	0.3%	1.5%	1.0%	2.0%	2.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Q2-19	2.0%	0.4%	1.5%	1.0%	2.0%	2.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Q3-19	1.5%	0.5%	1.5%	1.0%	2.0%	2.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Q4-19	1.5%	0.5%	1.5%	1.0%	2.0%	2.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Q1-20	1.5%	0.5%	1.5%	1.0%	2.0%	2.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Q2-20	1.5%	0.5%	1.5%	1.0%	2.0%	2.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Q3-20	1.5%	0.5%	1.5%	1.0%	2.0%	2.0%	1.0%	1.5%	1.0%	2.0%	2.0%
Q4-20	1.5%	0.5%	1.5%	1.0%	2.0%	2.0%	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	MidE	CIS
Jan-18	3%	-15%	10%	30%	-40%	-5%	15%	10%	0%	10%	10%	2%	3%	-5%	-5%
Feb-18	-5%	10%	0%	-10%	-30%	10%	5%	10%	5%	-5%	10%	2%	3%	-5%	-5%
Mar-18	-10%	0%	0%	-10%	-20%	5%	5%	10%	5%	-5%	10%	2%	3%	-5%	-5%
Apr-18	-10%	15%	0%	-10%	-20%	0%	5%	10%	5%	-5%	5%	2%	3%	0%	-5%
May-18	-5%	5%	0%	-10%	-20%	-5%	5%	10%	5%	-20%	5%	2%	-10%	0%	-5%
Jun-18	3%	0%	-10%	-10%	-10%	-5%	5%	10%	-5%	-15%	8%	2%	3%	0%	-5%
Jul-18	5%	5%	-5%	0%	-10%	-5%	5%	10%	-5%	0%	6%	2%	3%	0%	5%
Aug-18	0%	-10%	-5%	0%	-10%	5%	5%	-5%	-5%	10%	6%	2%	3%	0%	10%
Sep-18	0%	-10%	-15%	0%	-10%	15%	-5%	0%	25%	10%	6%	2%	3%	5%	10%
Oct-18	-10%	10%	-20%	5%	-5%	15%	-5%	0%	5%	10%	6%	2%	3%	5%	10%
Nov-18	-5%	10%	-25%	5%	-5%	15%	5%	0%	5%	5%	6%	2%	3%	5%	5%
Dec-18	-15%	0%	-35%	5%	-5%	15%	5%	10%	-5%	5%	6%	2%	3%	5%	5%
Q1-19	2%	5%	0%	0%	2%	4%	3%	3%	3%	3%	6%	2%	3%	5%	5%
Q2-19	2%	5%	0%	0%	2%	4%	3%	3%	3%	3%	6%	2%	3%	5%	5%
Q3-19	5%	5%	5%	0%	2%	4%	3%	3%	3%	3%	6%	2%	3%	5%	5%
Q4-19	5%	5%	5%	0%	2%	4%	3%	3%	3%	3%	6%	2%	3%	5%	5%
Q1-20	0%	5%	0%	0%	2%	4%	3%	3%	3%	3%	6%	2%	3%	5%	5%
Q2-20	0%	5%	0%	0%	2%	4%	3%	3%	3%	3%	6%	2%	3%	5%	5%
Q3-20	0%	5%	0%	0%	2%	4%	3%	3%	3%	3%	6%	2%	3%	5%	5%
Q4-20	0%	5%	0%	0%	2%	4%	3%	3%	3%	3%	6%	2%	3%	5%	5%

Projected fundamental values – January 2018

This page provides a summary of the projected fundamental values (PFVs) for key product series.

	-----Oceania export PFVs (US\$/t)-----				-----EU internal wholesale PFVs (€/t)-----				-----EUR export PFVs (US\$/t)-----	
	WMP	SMP	Butter	Cheddar	WMP	SMP	Butter	Gouda	EUR WMP	EUR SMP
Mar-18	3,320	1,849	5,320	3,754	2,616	1,341	4,782	2,851	3,408	1,404
Apr-18	3,262	1,872	5,254	3,772	2,525	1,290	4,956	2,861	3,364	1,402
May-18	3,191	1,832	5,286	3,722	2,466	1,264	4,716	2,696	3,277	1,362
Jun-18	3,116	1,865	5,299	3,672	2,415	1,289	4,739	2,696	3,202	1,392
Jul-18	3,104	1,814	5,424	3,765	2,346	1,310	4,991	2,764	3,217	1,447
Aug-18	3,087	1,841	5,451	3,694	2,332	1,324	5,074	2,803	3,198	1,468
Sep-18	3,092	1,875	5,348	3,645	2,334	1,339	4,996	2,799	3,202	1,491
Oct-18	3,035	1,963	5,313	3,642	2,287	1,390	5,009	2,893	3,163	1,589
Nov-18	3,103	2,067	5,245	3,565	2,315	1,449	4,927	2,949	3,206	1,674
Dec-18	3,063	2,118	5,339	3,519	2,302	1,480	5,007	3,040	3,189	1,716
Jan-19	3,099	2,091	5,402	3,640	2,264	1,516	5,047	3,046	3,207	1,793
Feb-19	3,135	2,121	5,359	3,610	2,288	1,533	4,885	2,964	3,269	1,820
Mar-19	3,176	2,137	5,479	3,751	2,315	1,540	5,070	2,980	3,336	1,832
Apr-19	3,145	2,071	5,463	3,800	2,269	1,548	5,001	2,947	3,315	1,873
May-19	3,208	2,135	5,326	3,772	2,292	1,590	4,805	2,834	3,351	1,930
Jun-19	3,288	2,232	5,286	3,742	2,320	1,654	4,779	2,850	3,392	2,017
Jul-19	3,301	2,276	5,354	3,975	2,349	1,642	4,936	2,885	3,436	2,061
Aug-19	3,343	2,303	5,340	3,941	2,362	1,660	4,959	2,920	3,456	2,087
Sep-19	3,374	2,308	5,325	3,735	2,373	1,665	4,952	2,944	3,472	2,096
Oct-19	3,344	2,281	5,412	3,972	2,389	1,701	5,076	3,072	3,498	2,145
Nov-19	3,396	2,319	5,428	3,953	2,410	1,729	5,074	3,142	3,529	2,184
Dec-19	3,466	2,369	5,515	3,945	2,438	1,765	5,214	3,265	3,571	2,234
Jan-20	3,435	2,340	5,506	4,028	2,453	1,794	5,210	3,258	3,594	2,274
Feb-20	3,475	2,358	5,401	4,027	2,468	1,807	5,021	3,169	3,617	2,293

- 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 is an exception - Kempten); EU export PFVs are based on USDA Dairy Market News series.