

# New Zealand Dairy Companies Review

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TDB Advisory Limited  
Level 5, Wakefield House  
90 The Terrace  
Wellington, New Zealand

#### Principal contacts for this report:

Geoff Taylor, Director  
geoff.taylor@tdb.co.nz  
027 465 0024

Nigel Atherfold, Director  
nigel.atherfold@tdb.co.nz  
027 4650 057

Tom Stannard, Analyst  
tom.stannard@tdb.co.nz  
027 800 8988

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TDB confirms that it has no conflict of interest that could affect its ability to provide an unbiased report. For completeness, it is disclosed that in the last 24 months, TDB has advised on:

- the sale of shares in Open Country Dairy Limited;
- the sale of shares in Miraka Limited;
- the valuation of water rights for large-scale dairy farming; and
- the proposed changes to the Dairy Industry Restructuring Act for Goodman Fielder.

The principal contacts for this report, as noted above, are:

- investors in Fonterra (FSF) shares;
- investors in and former directors of Open Country Dairy Limited; and
- directors of other dairy farming businesses that are Fonterra Co-operative Group Limited suppliers and shareholders or Synlait Milk Limited suppliers or MyMilk suppliers.

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# Overview

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The purpose of this report is to review the structures, strategies and financial performance of New Zealand's dairy companies. Last year's report looked at the comparative performance of Fonterra's New Zealand-based milk processing competitors. Those competitors had in aggregate revenues of over \$2.5b, a share of the NZ-based milk processing market of 16% and returns on invested capital of over 10%. We found that the often promoted "move up the value chain" from commodities to more specialist products had not been necessary to achieve strong risk-adjusted financial returns. Open Country Dairy's (OCD) strategy of being a low-risk commodity processor had proven to be successful while Tatua had performed the best of the companies on an adjusted return on assets (ROA) basis. Tatua's value-add strategy required substantial investment across a relatively small pool of milk and would be difficult to replicate across a much larger business. Synlait had delivered good risk-adjusted returns in the specialty ingredients and infant formula markets and Westland had tried to move up the value chain but had achieved the lowest return on assets of the dairy companies.

In this year's report we have increased our analysis of Fonterra and added The a2 Milk Company Ltd (ATM). As processors move towards a higher value product mix, ATM is now the benchmark point of comparison in the consumer market segment. We find that over the last three years, Tatua has achieved the highest adjusted return on assets of the traditional milk processors (18% p.a.), followed by OCD (11%), Synlait (9%) and Fonterra (7%).

The Tatua outcomes remain outstanding and are often used as a benchmark amongst dairy farmers and commentators; however, the relatively small volumes of milk processed by Tatua make it flawed as a valid benchmark for the industry. Other larger scale NZ competitors have now differentiated more clearly into the market segments of commodities, value-added ingredients and consumer products. The best performers in each of these segments are Open Country Dairy, Synlait and The a2 Milk Company respectively. Bundled together these companies provide a comparator for the industry that suggests Fonterra's global "volume into value" strategy has not resulted in additional shareholder value beyond what could have been expected from a NZ-based commodity and ingredients processor.

We have not seen evidence of growth in returns above the milk price, with Fonterra's returns to farmers and shareholders being behind those of its now higher growth and higher returning competitors. This value gap is made more relevant where we estimate that these best performing companies will increase profits through to 2020 without investing in riskier offshore assets and while paying higher milk prices to farmers.

Given the lack of evidence of an adequate risk-adjusted return for Fonterra's supplier shareholders, it seems reasonable for Fonterra's shareholder farmers to ask how much capital is employed in the consumer and food service segments and whether an improved return could be achieved by separating these segments into a transparent business that has to compete for its farmer shareholders' capital rather than be protected within the processing co-operative company.

Looking across the dairy industry, the processing sector has successfully transitioned into a more competitive segment since the Dairy Industry Restructuring Act (DIRA). DIRA established Fonterra in 2001 and since then Fonterra's market share has fallen steadily, from 96% in 2001 to 82% in 2017. Our estimate is that, in the most probable low NZ milk growth scenario, Fonterra's NZ volume-based market share will fall further to around 78% by 2020. As Fonterra continues to lose market share, the case for retaining special legislation that provides it with special privileges (and restricts Fonterra) gets weaker.

This report provides an overview of the NZ dairy industry, its current major participants, their market shares and financial performance. The report also provides benchmarks for the NZ dairy industry and a comparison of capital structures and organisational forms of the industry participants. Finally, we provide an analysis of the different companies' market positioning and strategic direction before commenting on the outlook for the industry.

# New Zealand dairy

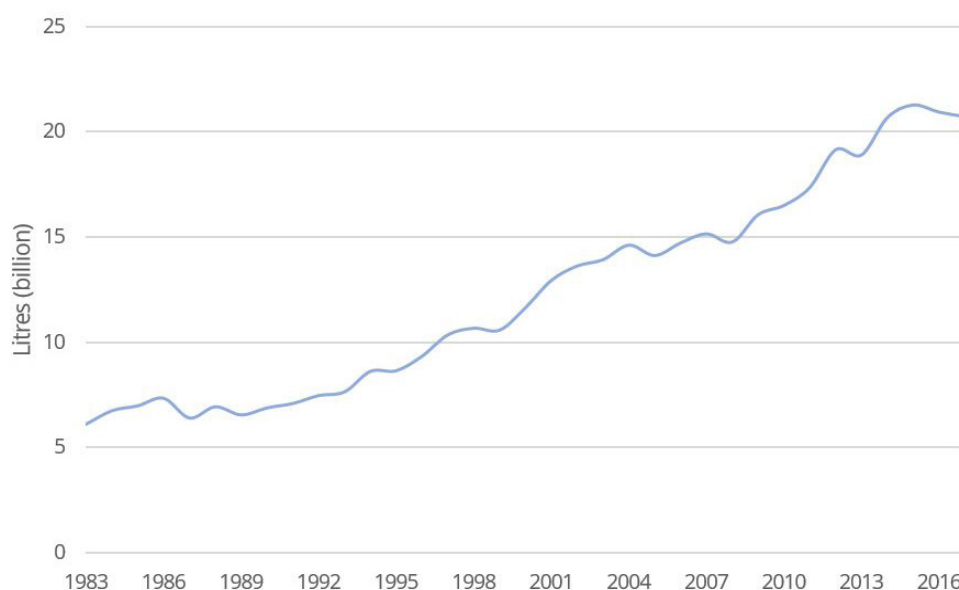
## The New Zealand dairy industry

The NZ dairy industry is notable for the very high proportion of production that is exported. Only 4% of the milk produced in NZ is consumed domestically with the remaining 96% exported. Very little liquid milk is exported because milk is perishable. The processors in NZ collect the liquid milk and transport it to manufacturing sites where water is extracted (milk is about 90% water) to produce longer-life products that can be stored and shipped to export markets. These dried products are mainly bulk commodities such as whole milk powder (WMP) and skim milk powder (SMP). With so much production exported, the milk price paid to NZ farmers is largely a function of international commodity prices.

## Industry growth

As presented in Figure 1, milk volumes rose at an average annual growth rate of 3.6% during the 1980s and 1990s and 2.8% since the 2001 regulatory changes to the industry. The tapering off in volume growth in recent years is expected to continue in 2018. With two months left to go of the current season, the latest forecasts are for volumes to be down 1-2%.

Figure 1: Milk production in New Zealand



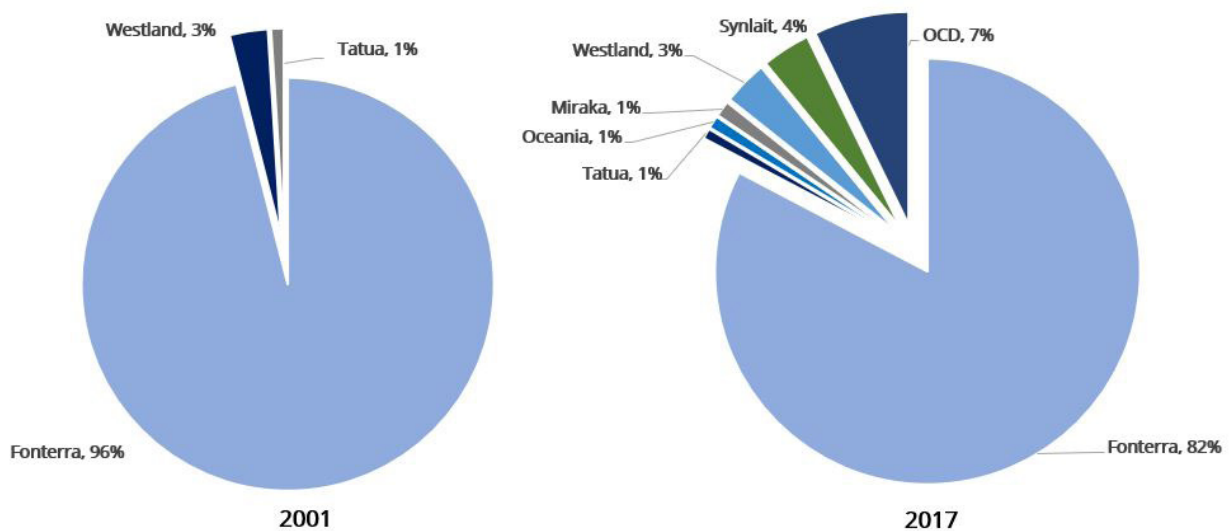
Source: DairyNZ & TDB Advisory analysis

NZ's milk volume growth has slowed over the past three years because of low milk prices and environmental limits. The new Government reflects voters' concerns about the environmental costs of the industry's growth and has a coalition agreement that includes a commitment to stop Government funding of irrigation schemes. The Minister of Agriculture has also announced a comprehensive regulatory review of the industry. We expect the scope of the review to include a thorough examination of how to remove the special regulation governing the industry or, at the very least, how to change the regulations to make them more equitable for all existing and potential domestic industry participants and less onerous on Fonterra in the areas of new milk collections and exported milk supply.

## Industry market shares

Since 2001 Fonterra's market share of the milk processed in NZ has fallen from 96% to 82% and the number and scale of its competitors has increased significantly. Figure 2 presents the change in the market share of milk volume collections between 2001 and 2017.

Figure 2: Dairy companies' volume-based market share



Source: DairyNZ, Company annual reports & TDB Advisory analysis

Despite the recent slowing in NZ milk production, from 2001 to 2017 total NZ milk volumes have grown by 52% or around 470m litres per year. Therefore, while Fonterra's market share has fallen, its milk volume collections have grown by 37%. For a highly perishable product that can't be stored, that growth carries with it the consequence of having to invest in increased processing capacity for the forecast peak milk volumes<sup>1</sup>. This level of growth means that it has been very difficult to do anything with the additional volume other than to channel it into commodity exports.

With Fonterra collecting over 300m of the average 470m litres of "new milk" per year, the remaining 170m litres has been going to Fonterra's competitors. Combined, these competitors now process 18% of NZ's milk.

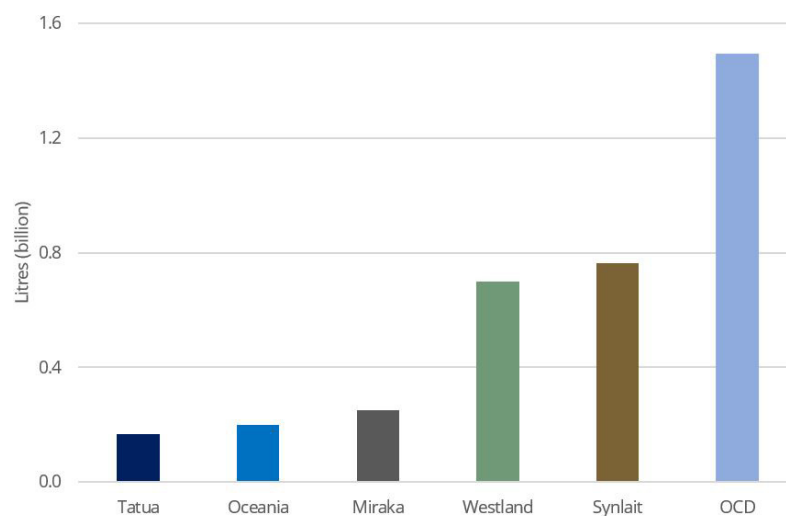
<sup>1</sup> As context, average annual growth of close to 500m litres is approximately twice the current annual milk volumes of an average milk powder plant and twice the volumes of the highest returning processor Tatua.

## NZ dairy processing competitors to Fonterra

The collective size of Fonterra's processing competitors has become significant. With more than \$3 billion in sales their revenue is approximately 50% of NZ's total meat processors' revenue and is now larger than the sheep and beef segments individually. With total milk volumes of over 3.5 billion litres p.a. they are now 40% of the size of Australia's total milk processing volumes.

Figure 3 presents the 2017 milk processing volumes for the six most substantial NZ competitors to Fonterra.

Figure 3: Processed milk volumes, 2017



Source: Company annual reports & TDB Advisory analysis

Fonterra's two largest competitors are Open Country Dairy (OCD) and Synlait Milk Company (Synlait). Combined OCD and Synlait represent 60% of the non-Fonterra market and had milk processing volume growth of 15% last year. Of more significance is the growth implied by their estimated market values - the market value of OCD and Synlait's combined equity is estimated to be \$2.9 billion which translates into \$15 of equity per kilogram of milksolids (kgMS) processed. By way of comparison, the market value of Fonterra's equity is \$6 per kgMS. This value differential implies significantly higher forecast growth rates of volume and profitability for Fonterra's competitors. We discuss those forecast volume growth rates in the outlook section later in this report.

A summary of the major dairy processing companies is provided in Table 1. The table sets out past growth in volume processed, total revenue for the 2016-2017 season and total revenue per kgMS. The table also outlines the key products, the sales channels and the ownership structure of each firm.

Table 1: Summary features of the dairy companies

Company and year established	Volume growth rates 2012-2017	Revenue 2017	Revenue per kgMS 2017	Product positioning	Sales channels	Ownership
Fonterra 2001	0.12%	\$19.2b	\$12.60	Branded consumer goods, dairy ingredients, and processed commodity powders.	Largest global exporter of dairy products. 95% of local production is exported to over 100 countries.	Co-operative ownership for farmer shareholders/suppliers who purchase an ownership stake consistent with their supply volume.  Fonterra Shareholders Fund (FSF) is publicly traded on the NZX and ASX and gives non-voting right ownership to retail and institutional owners.
Open Country Dairy 2002	12%	\$1.1b	\$8.73	Commodity powders and cheese, with some movement recently into higher value ingredients (mozzarella curd, mature cheddar, whey protein concentrate).	100% exports to over 64 countries Sells direct to trade customers 20% of sales through OLAM (a 15% shareholder)	NZ public unlisted company, Talley's 76%, OLAM 15%, sixty others 9%.
Synlait 2007	8%	\$759m	\$11.69	Ingredient powders, infant formulas, cream, UHT and specialty ingredients.	Sells direct to business partners and trade buyers.  2% of sales to Bright Dairy (a 39% shareholder)	Publicly owned and listed on NZX and ASX.  Major shareholders are Bright Dairy 39%, A2 Milk 8.2% and Mitsui 8.4%.
Westland 1938	4%	\$630m	\$10.60	Base commodities through to branded consumer products, powders, UHT milk, butter, and yoghurt.	Export to 60+ countries.	Co-op owned by 429 farmer suppliers.
"Tatua 1914"	3%	\$332m	\$22.16	High value speciality ingredients, caseinate, whey protein and anhydrous milk.	Progressively established offshore offices once separated from NZDB/Fonterra	Co-op owned by 113 farmer suppliers.
Miraka 2011	4%+ (TDB estimate)	\$125m+ (estimate based on plant capacity)	n/a	Whole milk powder, UHT Milk.	100% exports to over 23 countries. Sells through broker, Vinamilk, and Shanghai Pengxin.	Owned by 29 mainly Maori incorporations. The two largest shareholders are Wairarapa Moana and Tuaropaki each with 29%. Vinamilk is a dairy products enterprise in Vietnam and has a 21% stake.
Oceania 2013	15%+ (TDB estimate)	\$200m+ (estimate based on plant capacity)	n/a	Whole milk powder, infant powders, UHT milk.	Exported through Yili (100% owner) sales channels	100% Yili Industrial Group.
Yashili 2013	N/A	\$200m+ (estimate based on plant capacity)	n/a	Yashili does not collect any milk directly from farmers, it purchases ingredients from other processors and then manufactures infant powders.	Exported through Yashili and Danone sales channels	100% Yashili Group (25% owned by Danone).

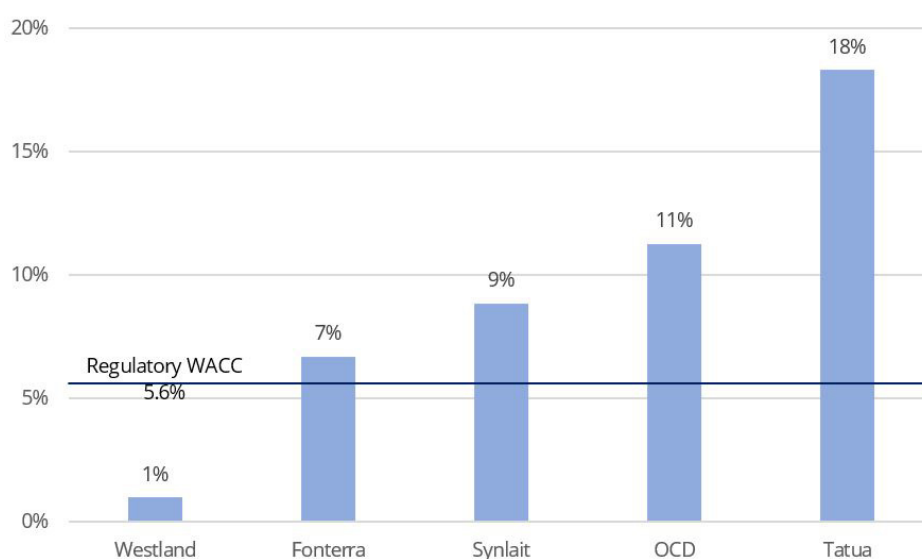


## Financial performance

This report focuses on an adjusted measure of return on assets<sup>2</sup> as our primary measure of financial performance. Unadjusted return on assets<sup>3</sup> does not provide a neutral basis for comparing the returns of the companies because the milk price paid by farmer-owned co-ops includes both a cost-of-milk portion and a portion of the co-op's profit. Therefore, to assess the respective financial performances of the different dairy companies on a comparable basis, we have to adjust the EBIT results by standardising the cost of milk to the regulated farmgate milk price (FGMP). Further, to take out extraordinary outcomes from any particular year we have compared the average ROA across the last three years.

Figure 4 below shows the average adjusted ROA of each firm over the last three years.

Figure 4: 3-year average Adjusted Return on Assets



Source: Company annual reports & TDB Advisory analysis

Once each company's milk payout is adjusted to the regulated FGMP, Tatua shows the highest ROA at 18% p.a. on average over the last three years. OCD has averaged 11% over the period and Synlait 9%. Fonterra's average adjusted return of 7% p.a. exceeds the regulatory weighted average cost of capital (WACC) of 5.6% for a commodity processor but not equity analysts' estimates of the WACC for Fonterra given its investments in higher risk non-commodity business activities<sup>4</sup>. Westland's adjusted return over the last three years has been only 1% p.a.

<sup>2</sup> Adjusted ROA is calculated as  $\text{EBIT} + (\text{company payout} - \text{FGMP}) \times \text{kgMS}$  and allows comparability across company ownership structures.

<sup>3</sup> Unadjusted return on assets (ROA) =  $\text{EBIT} / \text{Average}[\text{Opening Total Assets}, \text{Closing Total Assets}]$ .

<sup>4</sup> The industry WACC (of 5.6%) noted in the diagram is the regulator's assessment of the expected return from a hypothetical efficient commodity processor. While it is an appropriate benchmark for OCD, it is only relevant for the commodity business segments within the other companies. Based on equity analysts' assessments of the different public dairy companies better WACC guidelines for the other businesses range from 8% to 10% (Fonterra 8.1%, Synlait 8.6%, ATM 9.3%).

# Benchmarks for the industry

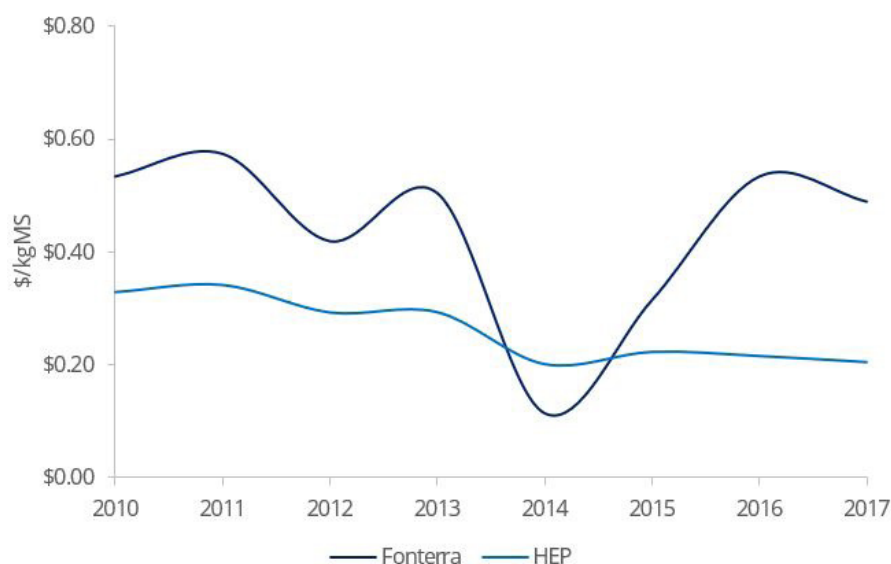
This section addresses the industry benchmarks for performance. We compare the hypothetical efficient processor (HEP) (constructed by Fonterra and reviewed by the Commerce Commission to set a farmgate milk price for Fonterra) to Fonterra as well as some of its competitors. We then build a new market-based comparator for the benchmarking of Fonterra.

## Fonterra's performance versus the hypothetical efficient processor

When Fonterra was created in 2001 there were no reliable industry benchmarks. In the absence of these the regulator created a hypothetical efficient processor (HEP)<sup>5</sup> as the benchmark competitor to Fonterra. The HEP was created to, amongst other things, establish a fair farmgate milk price (FGMP).

Figure 5 compares the estimated net profit after tax per kgMS for the HEP with Fonterra's actual NPAT per kgMS.

Figure 5: Fonterra NPAT/kgMS vs. hypothetical efficient commodity processor



Source: Fonterra milk price statements, Fonterra annual reports & TDB Advisory analysis

Figure 5 shows that since 2010 Fonterra's profits have been greater than would be expected from the HEP. However, Fonterra has invested in materially more than just processing commodities. It also has ingredients, food service and consumer business segments. It is not transparent the amount of capital Fonterra has invested in the non-commodity segments so we have estimated it by recognising Fonterra's total assets of \$18 billion and then deducting the regulator's estimate that \$8 billion of NZ processing assets would be needed to efficiently process all of Fonterra's NZ's milk. This logic suggests that the non-commodity investments are around \$10 billion of assets. This estimate of the size of the investment and the fair milk price to deliver an adequate return on that investment is becoming less relevant for the industry as large-scale export competitors have emerged as a point of comparison for Fonterra. In the next section we introduce those market-based benchmarks.

<sup>5</sup> As a proxy for NPAT/kgMS we use the hypothetical efficient processor's capital cost allowance calculated in Fonterra's Milk Price Statements adjusted for tax and depreciation.

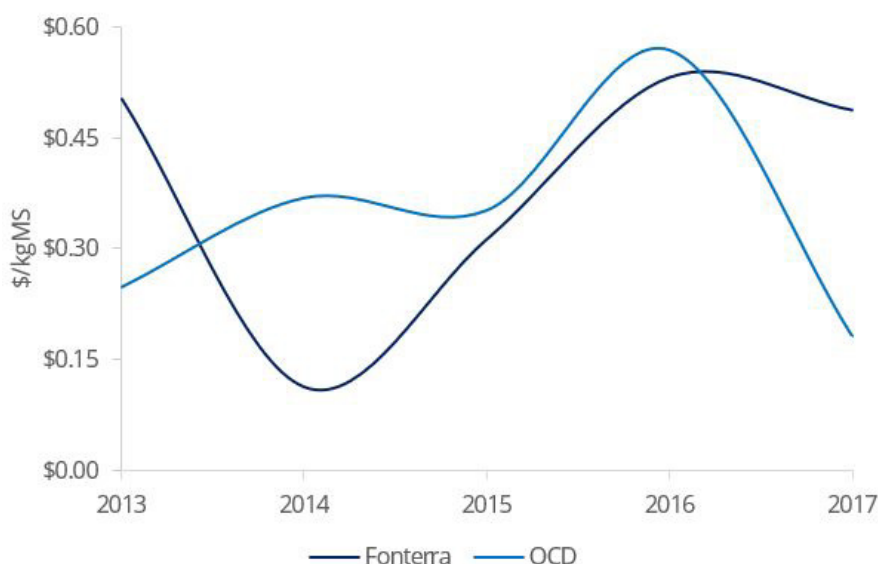
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## OCD, Synlait and a2 Milk as the market benchmarks

The previous section in this report indicates the best performing and largest scale companies competing in Fonterra's commodity and ingredient segments are OCD and Synlait<sup>6</sup>.

OCD is now the established low-cost commodity processor (in terms of both capital and operating costs) and is the largest of Fonterra's NZ competitors. OCD has four processing sites. It is a public unlisted company and has an estimated market equity value of \$1.3 billion<sup>7</sup>. The comparison of OCD with Fonterra in Figure 6 shows that Fonterra's NPAT/kgMS (from all of its business segments) has been similar to OCD's. It would not be unreasonable for Fonterra's farmer shareholders to query why Fonterra has not achieved a higher return on average than OCD given Fonterra is invested in a range of more risky activities than just commodity processing. We would also note the poor 2017 OCD and think that it will revert to a normalised and growing return in 2018.

Figure 6: NPAT/kgMS for Fonterra and OCD



Source: Company annual reports & TDB Advisory analysis

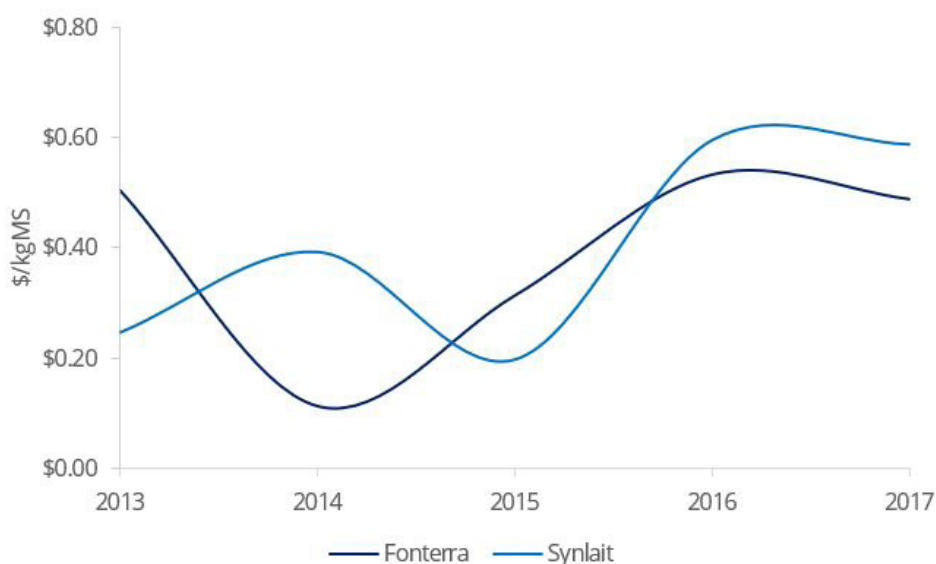
Synlait manufactures dairy ingredients and is the established market benchmark for the industry's ingredients segment. It is a publicly listed company and the market value of its equity is approximately \$1.6 billion. Figure 7 compares Synlait's and Fonterra's profits in-terms of NPAT/kgMS.

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<sup>6</sup> We have not chosen Tatua as the benchmark for the ingredients sector because its volumes are too low to be comparable.

<sup>7</sup> OCD is not listed and so we have estimated a valuation range based off methodologies including: the most recent OCD valuation methodology done under the takeover code in 2014 updated for current inputs; a current dcf value and comparables based off other NZ dairy companies. The \$1.3b estimate is a mid-point of that range and translates into \$11 per KgMS for 100% of the company.

Figure 7: NPAT/kgMS for Fonterra and Synlait



Source: Company annual reports & TDB Advisory analysis

The comparison shows that Synlait's profits have also been similar to Fonterra's for each unit of milk.

Both OCD and Synlait are public companies with good access to capital. They have both moved well beyond their start-up phases with positive operating cashflows being reinvested in further growth opportunities. When we bundle OCD and Synlait together the resulting consolidation is probably a fairer point of comparison (than just OCD) for the industry and Fonterra. A merged OCD and Synlait would be a milk processing company with 6 sites spread evenly across the North and South Islands, with a commodity and ingredients business collecting 11% of NZ's milk volumes without any investment in offshore assets. The comparison with Fonterra (again using the average of the last five years), is shown in Table 2.

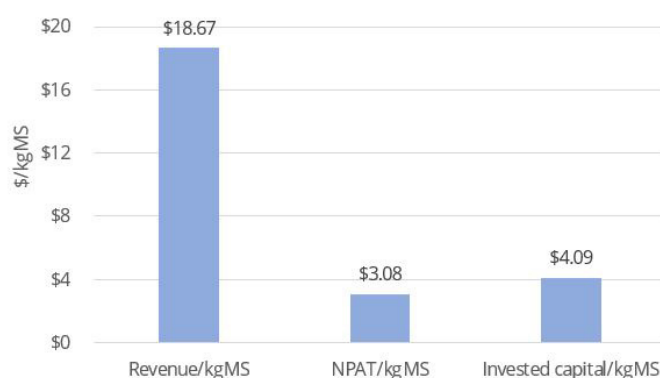
Table 2: OCD/Synlait market-based benchmark portfolio

5-year average (2013-2017)	OCD	Synlait	Consolidated (OCD & Synlait)	Fonterra
NPAT (\$m)	\$33	\$23	\$56	\$600
NPAT/kgMS	\$0.34	\$0.42	\$0.37	\$0.39
Dividend payout ratio	0%	0%	0%	79%

The above benchmark comparison shows a combined OCD/Synlait as having similar profits per kgMS as Fonterra. Both OCD and Synlait currently elect to invest 100% of their profits in further growth whereas Fonterra distributes about three quarters of its profits as a dividend.

The comparison has limitations because Fonterra has food service and consumer market segments while OCD and Synlait do not. Fonterra has about one third<sup>8</sup> of its revenue in the consumer segment (Anchor, Kapiti, Anlene, etc.) but does not disclose the value of assets supporting that consumer business. The missing comparable segment to attain a market-based benchmark for Fonterra is a multinational consumer brands business. Fortunately, The a2 Milk Company (ATM) is now of a size (with a consumer product mix in Australasia, North America and Asia) that it can now be used as that comparable. ATM does not collect or process any milk directly. It is a publicly listed company and has an equity market value of more than \$10 billion (as at April 2018). ATM is now profitable and cashflow positive. Figure 8 shows ATM's revenue per kgMS, net profit after tax per kgMS and invested capital per kgMS<sup>9</sup>.

Figure 8: ATM's 2017 performance



Source: Company annual reports & TDB Advisory analysis

Interestingly, Figure 8 shows ATM has a similar volume of invested capital per kgMS as OCD, the benchmark commodity processor, at \$4. ATM's NPAT per kgMS of \$3 is well in excess of the processing companies.

We adopt ATM as a suitable comparator for Fonterra's consumer brands business. When we merge ATM with OCD and Synlait we get a benchmark that incorporates all of Fonterra's and the industry's consolidated business segments. Key 2017 metrics for the four companies and the consolidated OCD, Synlait and ATM company are presented in Table 3.

Table 3: OCD/Synlait/ATM market-based benchmark portfolio

2017 actuals	OCD	Synlait	ATM	Consolidated (OCD, Synlait & ATM)	Fonterra
NPAT (\$m)	\$23	\$38	\$91	\$152	\$745
NPAT/kgMS	\$0.18	\$0.59	\$3.08	\$0.79	\$0.51
Market share	7%	4%	0%	11%	82%

Table 3 above shows that in 2017 an equally weighted benchmark portfolio of OCD/Synlait/ATM generated 79c per kgMS of NPAT compared with Fonterra's 51c.

<sup>8</sup> Fonterra 2017 annual results presentation pg 29.

<sup>9</sup> We estimate ATM's volume of milk sales by noting that Synlait reports supplying 225m litres to ATM for the 2017 year and that represents 65% of total A2 certified milk globally. This implies 29.4m kgMS of A2 milk.

# Organisational form and capital structure

This section reviews the organisational and capital structures of the NZ dairy companies. We discuss the ownership, debt levels and access to capital of the companies as well as investment in capital and strategic acquisitions since the inception of Fonterra.

## Corporate structures

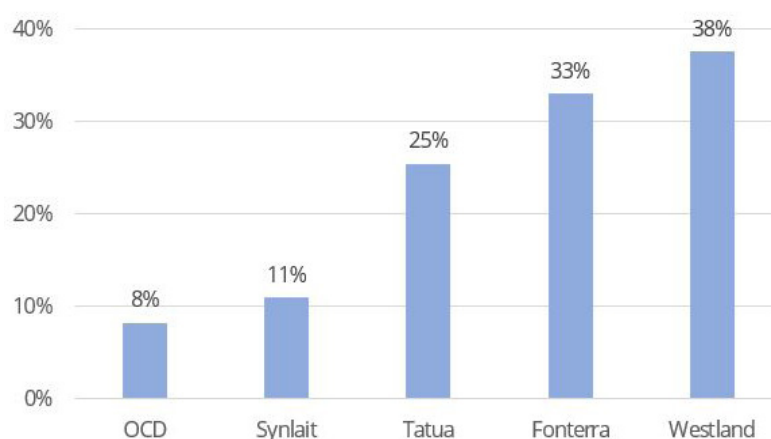
The corporate structures of the dairy companies vary considerably. The different corporate forms include:

- a majority owned farmer co-operative (Fonterra);
- two wholly farmer-owned co-operatives (Tatua and Westland);
- a publicly-owned but unlisted NZ code company (OCD);
- NZX and ASX listed companies (Synlait & ATM) with proportions of the firms owned by offshore trade investors;
- a privately-owned company (Miraka) with an offshore trade investor with offshore distribution channels; and
- two privately-owned subsidiaries of offshore food companies (Oceania and Yashili) with significant offshore distribution channels.

## Debt levels of the companies

Given the long-life infrastructure nature of the assets of the dairy processors, it is not surprising that debt features as a permanent source of capital for most of the companies. The amount of working capital debt employed during the year fluctuates significantly owing to the seasonal nature of the industry. Figure 9 below presents the current leverage levels in the industry.

Figure 9: Net debt to total assets



Source: Company annual reports & TDB Advisory analysis

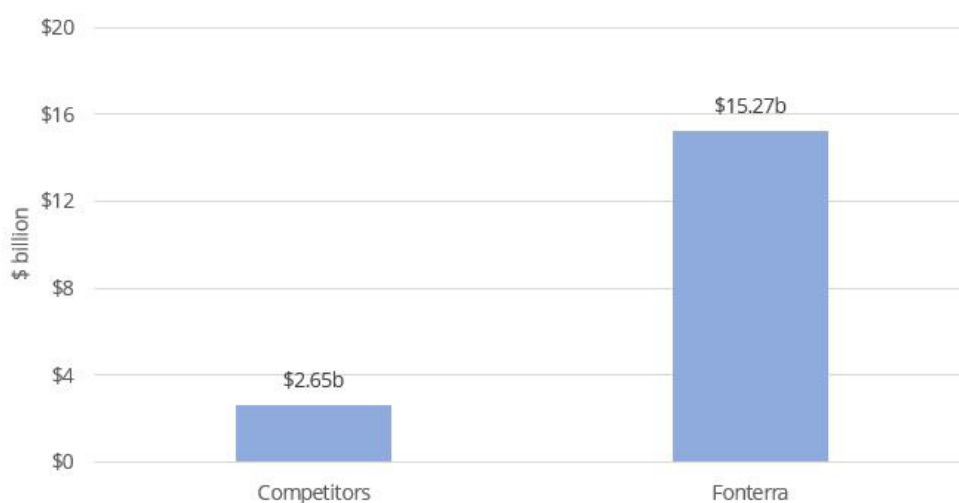
The three co-operatives have larger volumes of debt than the publicly owned firms. This leverage is not surprising given co-operatives' payments to farmer-suppliers rank behind bank debt and the co-operatives access to equity is limited compared with the public companies.

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## Access to capital

A concern raised when Fonterra was formed was that growth would be constrained because of a co-op's relatively limited access to capital. That does not appear to have been the case. Fonterra has accounted for approximately \$15 billion of the \$18 billion of new investment in the industry with close to \$3 billion invested by Fonterra's competitors as Figure 10 below illustrates.

Figure 10: Change in invested capital, 2001-2017



Source: Company annual reports & TDB Advisory analysis

Fonterra's average annual investment of close to \$900m compares with its current annual depreciation charge of over \$500m, which suggests that Fonterra has been investing up to \$400m p.a. more than the expected cost of the replacement of its old assets. We estimate that Fonterra would have to be investing a minimum of \$100m p.a. to build increased plant capacity for NZ milk growth so that suggests that in the region of \$300m p.a. has been invested in non-commodity and offshore assets.

It is difficult to identify the offshore portfolio in detail; however, a review of the last ten years of Fonterra news and financial statements show these offshore investments included:

- Chinese farms, cows, processing and a branded infant formula business;
- Australian dairy processing, R&D, distribution and marketing assets;
- a US whey processing company;
- a joint-venture (49% stake) in Russia; and
- a 10 per cent equity stake in a Lithuanian dairy company.

We cannot unbundle the Fonterra investments beyond their disclosures in investor presentations of the ingredients business unit and consumer and foodservice business unit. In the disclosures Fonterra reports 2017 returns on capital of 10.3% and 47.2% for the respective business units. We find this difficult to reconcile<sup>10</sup>.

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<sup>10</sup> See page 11 [https://www.fonterra.com/content/dam/fonterra-public-website/pdf/Fonterra\\_Annual\\_Results\\_presentation\\_2017\\_NZX.pdf](https://www.fonterra.com/content/dam/fonterra-public-website/pdf/Fonterra_Annual_Results_presentation_2017_NZX.pdf).

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## Invested capital since 2001

A breakdown of the estimated \$3 billion of capital invested by Fonterra's competitors since 2001 is shown in Figure 11.

Figure 11: Invested capital since 2001



Source: Company annual reports & TDB Advisory analysis

There has been a spread of investment across the commodities, ingredients and consumer business segments. The performance of the individual companies is discussed in the individual company sections that are presented later in this report. Points to note include:

- several start-up failures in the “other” category;
- Westland’s returns being poor and the company now focussing on cost reduction;
- Tatua’s investment has been high relative to its volume of milk with returns of above 15%;
- OCD and Synlait’s invested capital of close to \$500m each has tripled in value to be now worth close to \$1.5 billion for each company; and
- ATM’s investment of \$120m is now worth around \$10 billion.

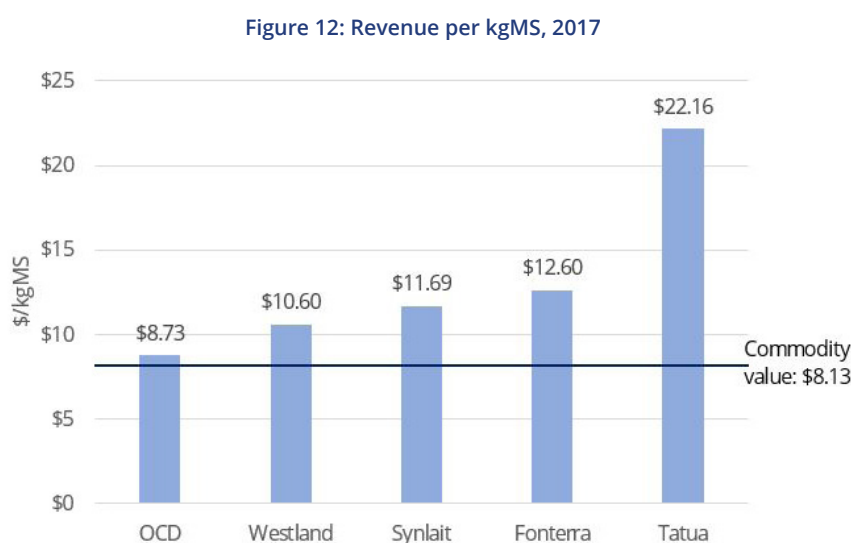


# Market positioning and strategic direction

The competing processors have adopted a range of different strategies. In this section we look at the different strategies and reflect on the trade-off between risk and return.

## Commodities through to consumer products

Figure 12 below provides the revenue per kgMS of each company in 2017. The revenue per kgMS acts as a proxy for the product mix of the firms. High revenue per unit of product output indicates more specialised and higher margin (and value-added) ingredients production whereas low revenue per unit of output represents a commodity focus for the firm.



Source: Fonterra 2017 milk price statement, Company annual reports & TDB Advisory analysis

The line on the graph represents the regulator's estimate of the NZ dollar value of a benchmark commodity product mix (milk powders and bi products) of export sales calculated for the HEP and used as a benchmark for Fonterra in deriving the FGMP.

## Costs of supporting the differing product mixes

Various industry commentators have referred to the benefit of growing the value-added component of milk sales. In last year's report we highlighted how difficult that could be. On the one hand the growth in milk volumes was overwhelming value-added opportunities, but even if the industry were to produce a product mix similar to Tatua it would require an investment in fixed assets of a further \$675,000 (over \$4kgMS<sup>11</sup>) per NZ farmer shareholder. To compare that with current invested fixed capital, Figure 13 presents the 2017 fixed assets per kgMS by company.

11 DairyNZ 2016-2017 statistics reports average total production per herd was 157,560kgMS.

Figure 13: Fixed assets per kgMS

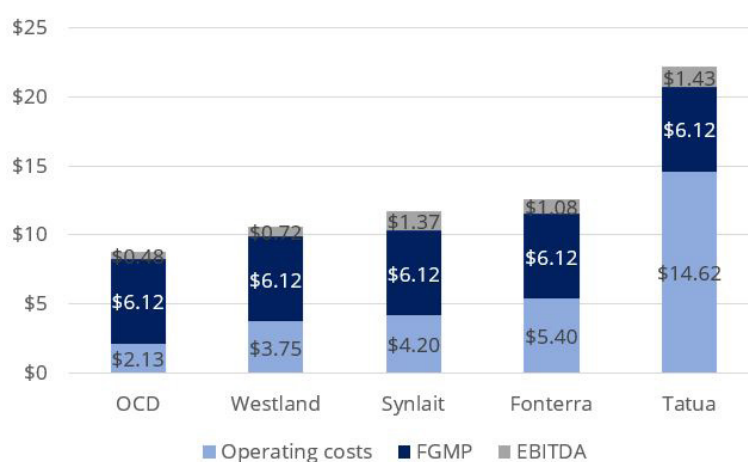


Source: Company annual reports & TDB Advisory analysis

Figure 13 highlights that the higher margin, more value-added production carries with it an increased level of investment. In fact, Tatua, the highest margin processor, has invested, in-terms of fixed assets, almost three times more than OCD (the lowest value-added producer) per unit of production.

Operating cost comparisons similarly show the variation in product mix within the companies. Although there is not enough public information to directly compare operating costs Figure 14 presents our estimate that is derived by taking each firm's EBITDA per kgMS (as a proxy for an earnings margin) and the FGMP from the total revenue per kgMS.

Figure 14: Breakdown of revenue per kgMS



Source: Company annual reports & TDB Advisory analysis

Our estimate of operating costs range from just over \$2 per kgMS (in the case of OCD) to above \$14 per kgMS (in the case of Tatua). When the regulated cost of milk is added onto these it shows just how different the low-cost commodity processor (OCD) is from the higher value model adopted by Tatua, with both being profitable.

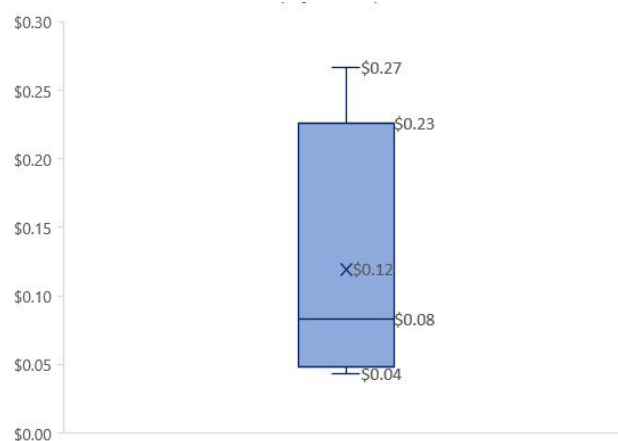
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## Milk price differences and strategies

While Fonterra is required to pay the regulated milk price (FGMP), other companies can negotiate their milk price with farmer suppliers. Most companies in the start-up phase have paid a higher milk price and then moved down to the FGMP as volumes grew.

Figure 15 presents the distribution of the three-year average (2015-2017) premium or discount paid by Fonterra's competitors at the farm-gate. The data presented in Figure 15 shows a range around the FGMP of +\$0.04 to +\$0.27. The outlier is Oceania which guaranteed a minimum milk price of \$4.50 when the FGMP fell to \$3.90.

Figure 15: Three-year average milk-payout surplus distribution



Source: Company annual reports & TDB Advisory analysis

On average the premium offered by competing firms was 12c/kgMS above the FGMP. This included Synlait paying on average 4c/kgMS above the FGMP, OCD paying on average 6c/kgMS above the FGMP and Miraka offering until recently 10c/kgMS above the FGMP. We have excluded Tatua and Westland because we are focusing on 'new' milk and the actions that competitors are taking to acquire market share.

In addition to offering a premium for milk collections some companies have moved to differentiate themselves with quality incentives, volume premiums, and transport differentials. For instance, OCD pays the full price of milk earlier than the rest of the industry, a tactic which is worth approximately 5.7c per kgMS to farmers<sup>12</sup> on an annual basis. OCD also offers a fixed price for specific volumes of milk during the year.

If Fonterra was allowed to pay a higher milk price to defend its volumes, we would expect a continuation of premiums being paid by the competitors. Also, we would expect an acceleration of the introduction of risk-transferring pricing structures that increase the competitive edge and longevity of the competitors. Such arrangements could include:

- longer-term milk supply agreements;
- fixed milk price contracts; and
- toll processing pricing.

<sup>12</sup> Estimated as the present value difference between the Fonterra and OCD sequential payments schedules. The assumed discount rate for the calculation is 6.5% which is thought to be a reasonable rate associated with on farm debt cost.

# Outlook

This section presents a forecast market share analysis of the NZ milk processing market. The analysis assumes no growth in total milk volumes over the three years to 2020.

We estimate the growth of each of the competitors to Fonterra based on their committed investments, access to capital, and in Westland's case, a return to competitiveness that retains its current volumes. Given our estimates for growth by the competitors we assume that Fonterra makes up the remainder of the milk production.

Table 4 presents the historical and forecast growth, the current dividend pay-out ratio and net debt to total assets for each company.

**Table 4: Company milk volume growth rates and leverage**

Companies	Growth rates 2012-2017 (% p.a.)	Forecast growth rates 2018-2020	Dividend pay-out ratio 2017	Net Debt to Total Assets, 2017
Fonterra	0.12%	-2.44%	83%	33%
OCD	12%	8%	0%	8%
Synlait	8%	7%	0%	11%
Westland	4%	0%	not applicable	38%
Tatua	3%	0%	not applicable	28%
Miraka	4%+ (TDB estimates)	0%	not applicable	not disclosed
Oceania	15%+ (TDB estimates)	28%	not applicable	not applicable

We project that OCD's processing volumes will increase by 8% per year. This is a slow-down from its 2012-2017 growth rate of 12% p.a. and is driven by its construction of a new plant in Waikato which is expected to be operational by 2018.

We project that Synlait's processing volumes will increase by 7% p.a. until 2020. This estimate is lower than historical growth and is based on market expectations that the company will expand its high margin and lower volume product lines.

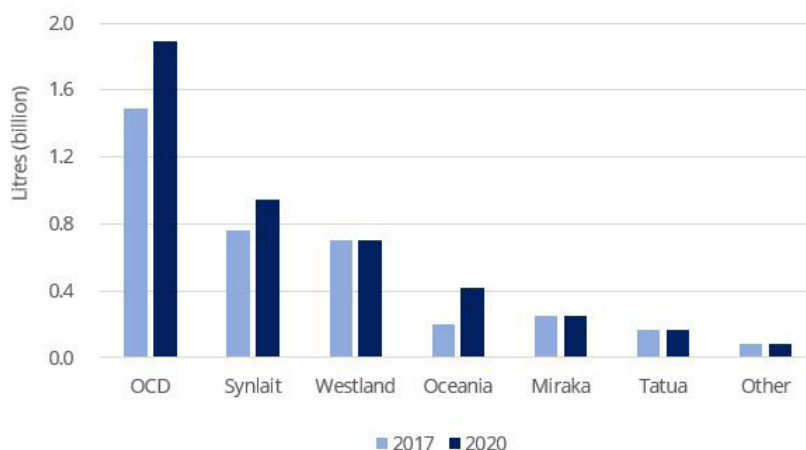
We assume no growth for Westland, Tatua and Miraka because we are not aware of any planned increase in production or capacity for these firms. Lastly, we project 28% p.a. growth in processing volumes for Oceania as it is expected to complete its new plant which will add 220m litres of milk processing capacity by mid 2018.

If NZ's total milk production remains constant out to 2020 our projections for the other companies imply that Fonterra will lose 1.6% of its processing volume each year.

## Forecast market shares

Taking the growth rates from the previous section, the forecast volumes for Fonterra's competitors to 2020 are shown in Figure 16.

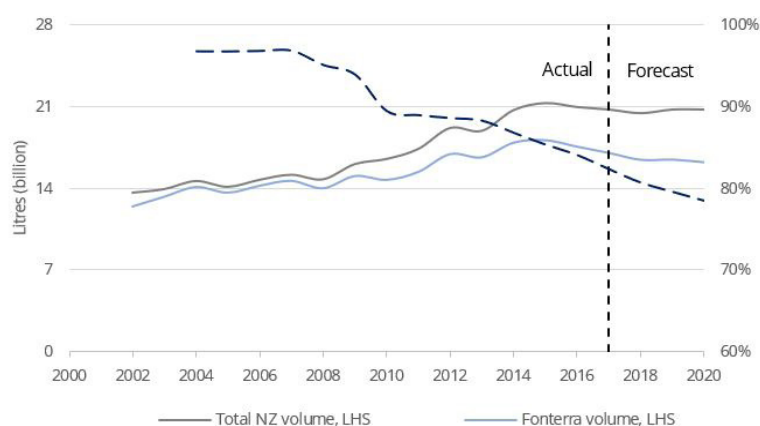
Figure 16: Forecast milk collection volume, 2017-2020



Source: Company annual reports & TDB Advisory analysis

If we overlay those volumes assuming nil growth in industry milk volumes through to 2020, Fonterra would lose approximately one billion litres of milk (representing 4% of its current market share). The resultant volumes and Fonterra market share is presented in Figure 17. This milk loss is significant in such a capital-intensive business and represents the equivalent of three average sized milk powder plants.

Figure 17: NZ and Fonterra's milk volumes, 2000-2020



Source: Company annual reports & TDB Advisory analysis

In that scenario, Fonterra's market share would fall below 78% in both the North and South Islands. Under the original DIRA legislation, that market share would have triggered a review and, subject to adequate competition, the expiration of DIRA. Those market share thresholds no longer exist and last year the Commerce Commission found that there still isn't sufficient competition in the farm gate market<sup>13</sup>.

<sup>13</sup> Review of the state of competition in the New Zealand Dairy Industry, 1 March 2016, Commerce Commission.

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## Forecast earnings performance

In the second section of this report we concluded that OCD, Synlait and ATM are the benchmark dairy companies in the commodity, ingredient and consumer segments, respectively.

All three are public companies (OCD is unlisted) and have a combined value of equity of over \$12.9 billion, which is a significant premium per kgMS above the equity value of Fonterra. This indicates a lot of growth is built into the values of OCD, Synlait and ATM compared with Fonterra. We have therefore forecast the relative performance of the four companies out to 2020 and the results are presented in Table 5.

Table 5: Forecast consolidated earnings, 2020

2020 forecast	OCD	Synlait	ATM	Consolidated (OCD, Synlait & ATM)	Fonterra
NPAT (\$m)	\$62	\$97	\$334	\$493	\$850
NPAT/kgMS	\$0.39	\$1.21	\$4.30	\$2.05	\$0.62
Market share	9%	5%	0%	14%	78%

The consolidated position of the three benchmark companies shows how far ahead the aggregate benchmark is forecast to be relative to Fonterra. If the three companies' profits were bundled into the milk price there would be an additional payment of close to \$1.50 per kgMS by 2020<sup>14</sup> compared with Fonterra.

## Regulatory review

A major issue impacting on the outlook for the dairy companies will be the new Government's forthcoming review of the DIRA.

The review will take place against a backdrop of increasing concerns about the performance of Fonterra; questions around whether the restrictions on Fonterra and the privileges it enjoys under the DIRA are still warranted; and increasing societal concerns about the environmental impacts of dairy farming.

We expect that the review will trigger consideration of a number of issues, including:

- possible removal or phasing out of the regulated milk price;
- the potential for stranded assets and therefore those with spare capacity fighting harder to keep milk volumes resulting in greater variations in milk prices from competing dairy companies; and
- the potential for reduced consumer protection in the domestic market if Goodman Fielder loses its guaranteed access to Fonterra's milk at the regulated price.

Despite the claimed strategic rationale for establishing Fonterra under special legislation, it is not clear, some seventeen years later, that Fonterra has created value. We have not seen evidence of increased returns above the milk price, with Fonterra's returns to farmers and shareholders behind those of its now higher growth and higher returning competitors.

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<sup>14</sup> The forecast uses brokers' estimates for Synlait, ATM and FSF. TDB has forecast OCD based on a normalised toll processing return for its milk volumes.

# Fonterra Co-operative Group

## Organisation

Fonterra is cooperatively owned by farmer shareholder suppliers who purchase an ownership stake consistent with their supply volume. In addition to the farmers' capital, the Fonterra Shareholders Fund (FSF) is publicly traded on the NZX and ASX and represents a further 7% to 12% of total equity. FSF securities are non-voting securities owned by retail (including farmers) and institutional investors.

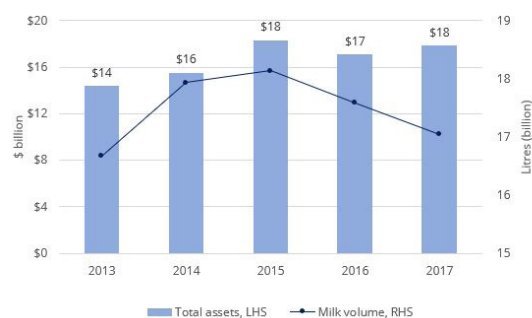
## Market position and growth

Fonterra is the world's largest dairy exporter and accounts for approximately 30% of global dairy trade. It processes 17 billion litres (82%) of NZ's milk production and 2 billion litres of Australia's milk production (making it the largest milk processor in Australia). In addition to accessing other international milk pools it is vertically integrated from commodities through to consumer brands and has significant investment in offshore sales channels. While the consolidated revenue mix is referred to as two thirds commodities and ingredients and one third consumer and foodservice, it is not clear what contributions come from commodities only.

## Strategy

Fonterra has a strategy to optimise NZ milk supported by its offshore milk pools. This strategy translates into an aim of shifting more NZ volumes into higher value products alongside selective investment in offshore milk pools and distribution channels to support higher value offshore markets. The success of this strategy should show up in its revenue/kgMS rising relative to the commodity value of milk (FGMP).

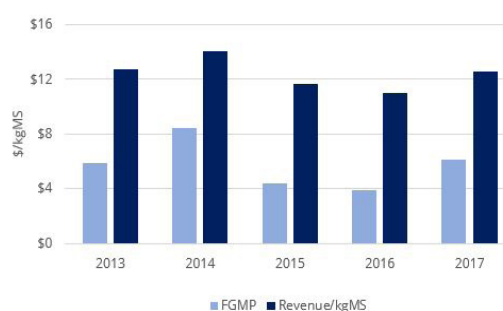
Growth in assets and volumes collected



Revenue/kgMS, 2017



Revenue/kgMS and FGMP



# Fonterra Co-operative Group

## Financial performance

Fonterra's NPAT fell 11% in 2017 to \$745m.

Within the business segments, the decrease in earnings in Ingredients was partially offset by an increase in earnings in Consumer and Foodservice.

Fonterra's return on assets follows its EBIT performance. Returns have consistently been below its WACC of 8% indicating that the company has consistently failed to provide its shareholders with an adequate risk-adjusted return.

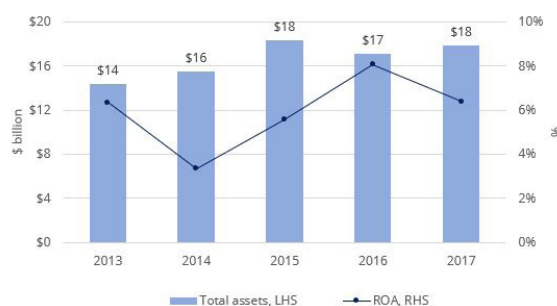
The 2017 dividend remained the same as 2016 at 40c per share (kgMS) and so was a higher percentage of NPAT than would normally be the case.

## Capital structure

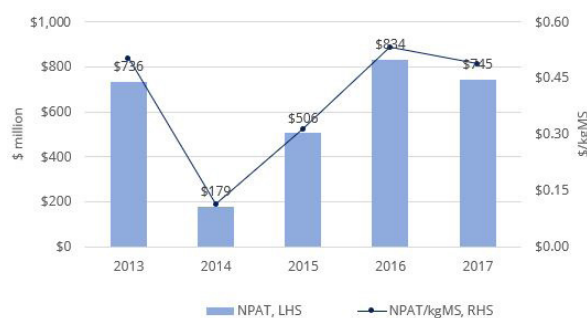
Fonterra's debt is much the same as the previous year and supports a stable S&P credit rating of A-. The co-operative payments system (where NZ farmers as supplier shareholders are subordinate to other creditors) gives Fonterra greater financial flexibility than a company structure and supports a short-term credit rating of A1+, the highest achievable and the same as the NZ Government.

The current level of debt is close to Fonterra's long term optimal capital structure and should give it continued access to debt capital.

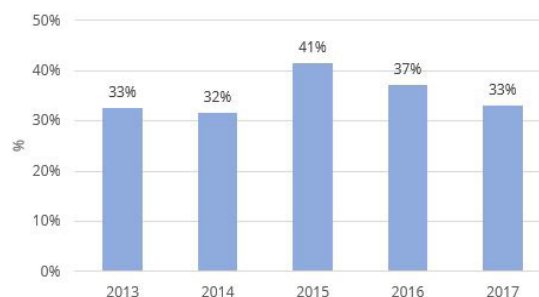
Total Assets, ROA



NPAT



Net Debt to Total Assets





# Open Country Dairy

## Organisation

OCD began as a commodity cheese manufacturer in the Waikato in 2002. Since then OCD has expanded with powder plants in Southland and Taranaki. It has recently announced the addition of another Waikato plant at Horotiu.

OCD is the second largest milk processor in New Zealand and the world's second largest supplier of WMP (behind Fonterra).

OCD is a public unlisted company with an initial public offer of securities in 2002. OCD is majority owned by Talley's Group Limited (76%) with Olam International Limited owning 15% and more than 50 shareholders holding the 9% balance.

## Market position and growth

OCD processed 6.9% of New Zealand's milksolid volumes in the 2017 season, up from 6.2% in the 2016 season.

OCD is the only one of the new processing companies to have grown its milk collection and processing presence across a number of regions – Waikato, Taranaki, and Southland.

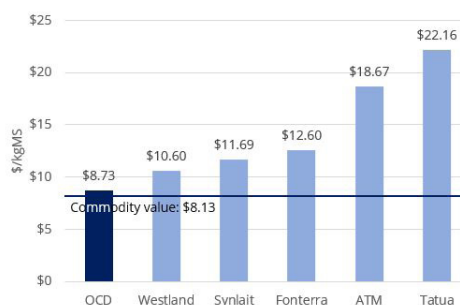
OCD has established itself as the benchmark low cost processor and with the lowest operating costs in the sector is profitable notwithstanding having the lowest value product mix in the industry.

On a milk volume basis, OCD is the fastest growing processor in New Zealand. Its milk volumes have grown by almost 12% p.a. for the last five years. With the new capacity currently being built we expect growth to continue.

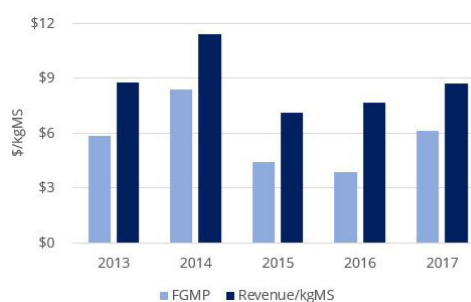
Growth in assets and volumes collected



Revenue/kgMS, 2017



Revenue/kgMS and FGMP



# Open Country Dairy

## Strategy

OCD is continuing its volume-based strategy but is now extending its product range to allow it to optimise production according to prevailing commodity prices. It has invested in increased cheese capacity and has recently referred to higher value product development projects.

OCD has differentiated itself with farmer suppliers from the other processors by paying the full milk price earlier than the rest of the industry. We estimate that this is worth approximately 5.7c/kgMS in terms of time value of cashflow. That could result in a higher return for farmers while even on a like-for-like basis OCD has managed to slightly exceed the FGMP over the last 12 years.

## Financial performance

FY2017 was a poor year for OCD. Its profitability at the EBITDA line was almost half what it was the previous year.

The margin contraction is likely to have been from sales phasing. We have compared OCD's result with the calculations that are the input to the regulatory milk price. Our analysis suggests that the profit decline was a non-recurring fall in gross margin where OCD under-performed at the revenue line (rather than milk cost per kgMS) by approximately 15c per kgMS.

## Capital structure

OCD continues to use retained earnings to fund its expansion. As at 30 September 2017 (OCD's balance date versus 31 July for the industry) OCD reported net debt of \$57 million. At the end of September OCD carries more (debt-funded) inventory on its balance sheet than it does at the end of July. We estimate that OCD had no core debt as at the end of July.

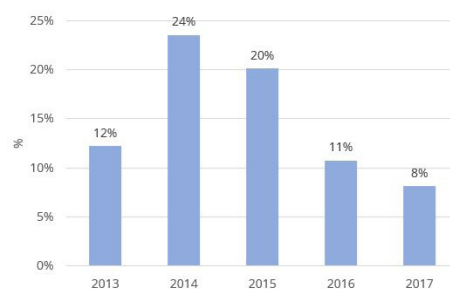
Total Assets, ROA



NPAT



Net Debt to Total Assets



# Synlait Milk

## Organisation

Synlait began in 2000 as a collection of large-scale Canterbury dairy farms. Synlait Milk Ltd (SML) was established in 2007 and in 2008 began processing milk supplied from Synlait Farms and other Canterbury farm suppliers in a newly constructed powder plant.

In 2010, Synlait Farms was separated from the milk processing business and Bright Dairy became a 51% shareholder in SML. This decreased to 39% when the firm listed on the NZX in 2013. Synlait is now listed on both the NZX and ASX and has a number of trade investors, including Bright Dairy (39%), The a2 Milk Company (8%) and Mitsui (8%).

## Market position and growth

Synlait is located in Canterbury and while it has so far concentrated its manufacturing base in Dunsandel, it has more recently purchased a canning facility in Auckland, opened an R&D centre in Palmerston North and purchased a site in North Waikato for infant formula manufacture.

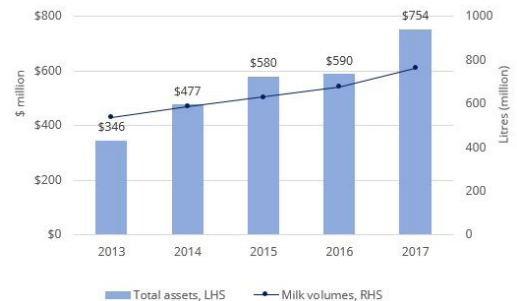
Synlait processed 3.5% of New Zealand's milksolid volumes in the 2017 season, up from 3.1% in the 2016 season. Its milk supply has increased by almost 5% p.a. for the last five years.

Synlait is well established with a high level of credibility with its Canterbury farmer-suppliers. It has historically paid its farmer-suppliers a milk price similar to the FGMP and has topped that up with premiums paid to farmers with Synlait-accredited Lead with Pride farming practises and to farmers who supply grass-fed milk and A2-protein only milk.

## Strategy

Since its 2013 IPO, Synlait has successfully positioned itself as a business-to-business (B2B) manufacturer of high-value specialty ingredients. It has progressively shifted more volume to infant formula base powders, canned infant formulas and cream. As a result, Synlait has generated an increasing premium per kgMS over commodity values. Synlait has recently entered the domestic market in the South Island through a supply contract with Foodstuffs South Island.

Growth in assets and volumes collected



Revenue/kgMS, 2017



Revenue/kgMS and FGMP



# Synlait Milk

## Financial performance

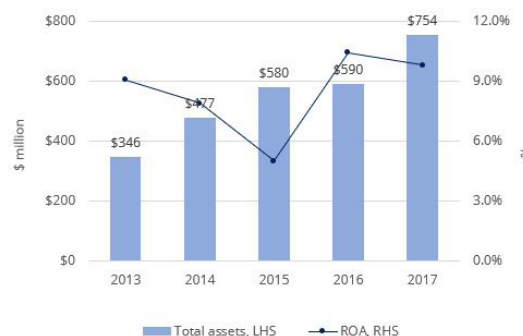
Synlait forecast to investors during its 2013 IPO that growth into higher-value products would flow through to the bottom line relatively quickly. That has been the case with NPAT increasing by almost 40% p.a. over the last four years.

Synlait's B2B strategy means that it is focused on making a margin that reflects the value it brings to contracted relationships while mitigating exposure to price risk, either on the farmer side with the milk cost or on the customer side. Synlait's increasing EBIT margin trend over the last five years indicates that it has done this very well.

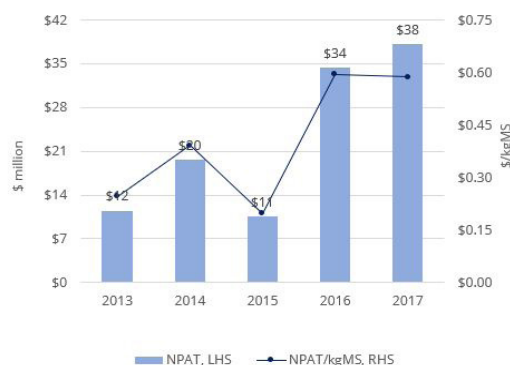
## Capital structure

Synlait has used surplus cash to reduce debt. Its net debt to total assets peaked at 45% two years ago and is now down to 11%. Synlait has announced that it will use internally generated cash flows and debt to fund its planned capex - \$125 million for a liquid milk plant in Canterbury and \$260 million for the recently announced wet-mix plant in Pokeno (North Waikato).

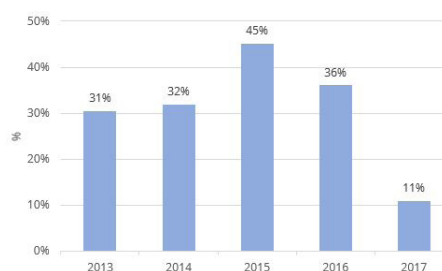
Total Assets, ROA



NPAT



Net Debt to Total Assets



# Tatua Co-operative Dairy Company

## Organisation

Tatua is a co-operative owned by its 113 farmer-suppliers. It has a single manufacturing site and office just outside of Morrinsville in Waikato. The company celebrated 100 years of operations in 2014.

## Market position and growth

Tatua's share of NZ milk collections is 1%. After making the decision to not be part of Fonterra, it has successfully grown its high value ingredient products business.

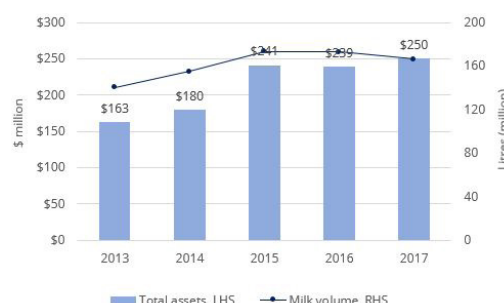
The company's focus is on export markets with sales in over 60 countries. Since losing its sales channel through NZDB with the establishment of Fonterra in 2001, it has established its own export sales channels and opened offices in Japan, China and the USA.

Tatua has increased its value to its farmer-supplier shareholders by making the highest milk payments in the industry while still retaining sufficient earnings to fund its investment in modern manufacturing capability that produce specialised ingredient products and small volumes of consumer products. The products include caseinate, whey protein concentrate and anhydrous milk fat.

## Strategy

Tatua has a strategy that is focussed on sustainability and returning more to its suppliers than would be delivered under a milk-volume growth strategy. Tatua aims to be the leading global supplier of specialised dairy products. Across the last five years, it has consistently achieved a high sales price per unit of milk relative to the regulated commodity price model.

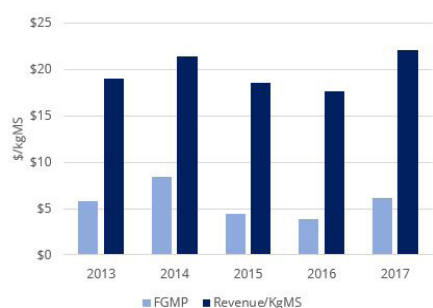
Growth in assets and volumes collected



Revenue/kgMS, 2017



Revenue/kgMS and FGMP



# Tatua Co-operative Dairy Company

## Financial performance

Tatua's financial performance in FY2017 was good. It increased its revenue/kgMS to \$21.90 from \$18.60 and its earnings before interest, tax and milk price per kgMS (EBITMP/kgMS) to \$7.80 from \$6.40.

Its revenue per unit of milk is still the highest in the industry and it continues to generate the highest returns on its invested capital.

Tatua's superior performance is reflected in it consistently paying its farmers more for their milk than any other NZ processor.

To compare Tatua's performance with the other processors, we have adjusted its financial results by changing its milk price to the farmgate milk price. This change has significantly increased its EBIT from \$9.9m to \$24.5m for 2017. The adjustment more correctly shows Tatua's return on invested capital of 9% in 2017 which is down from 15% in 2016 and 27% in 2015 but still above the industry average.

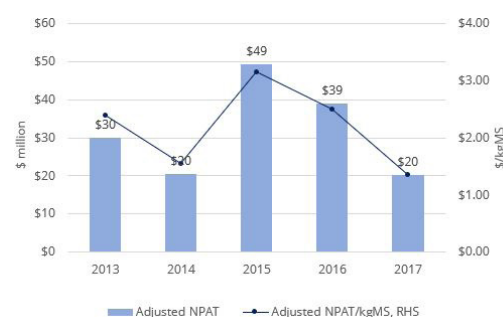
## Capital structure

As a co-operative, Tatua has a limited base of equity from its farmer-supplier shareholders and has used debt and retained earnings to fund capital expenditure. Debt increased significantly in 2015 to fund the purchase of a specialised powder dryer and it has remained steady at around 25% to 30% of total assets since. Its debt to assets ratio is relatively low given its underlying profitability and compared with the other co-operatives.

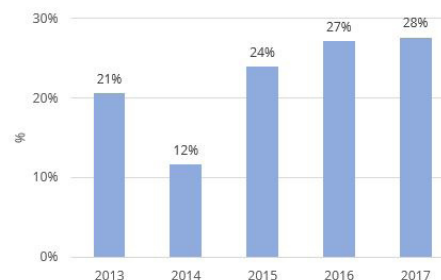
Total Assets, ROA



NPAT



Net Debt to Total Assets



# Westland Co-operative Dairy Company

## Organisation

Westland is a co-operative company. It has 342 shareholders and 420+ supplying farms. It has its main manufacturing site in Hokitika and additional manufacturing capacity in Canterbury. Its production ranges from base commodities (powders, milk fats, butter) through to consumer products (powdered yogurt, UHT and butter).

## Market position and growth

Westland processed 3.5% of New Zealand's milk solid volumes in the 2017 season, down from 3.7% in the 2016 season.

Within its primary catchment its milk collection is protected by the cost of transporting milk across the Main Divide. In Canterbury it competes for milk supply with both Fonterra and Synlait.

## Strategy

Westland has invested significantly since 2012 in product capability that moves it away from base commodity production. The strategy of offering differentiated products continues and has been refreshed by new management.

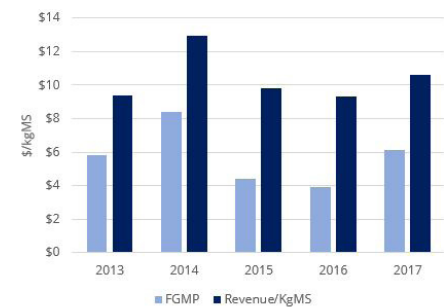
Growth in assets and volumes collected



Revenue/kgMS, 2017



Revenue/kgMS and FGMP



# Westland Co-operative Dairy Company

## Financial performance

Westland went through a large amount of organisational change during FY2017 with the appointment of a new CEO and changes in other senior management positions. These changes together with recent under-performance from a financial perspective led to a thorough examination of Westland's business.

Westland under-performed the rest of the industry in FY2017 from a milk payout to farmer / shareholder perspective paying \$5.18 (implicitly including any dividend) versus the FGMP of \$6.12 (which excludes any dividend).

The cause of the under-performance was the revenue line where Westland has not benefited enough yet from its focus on differentiated products even though it is having to bear the relatively high cost of their production.

Having said that, Westland's recent focus on costs appears to have had an immediate impact with costs (excluding milk costs) decreasing by approximately \$0.50 / kgMS in the last year.

Westland's financial performance in the current season will be telling as all the changes made last season start to have an impact and (so far) commodity prices have been relatively consistent with last season.

## Capital structure

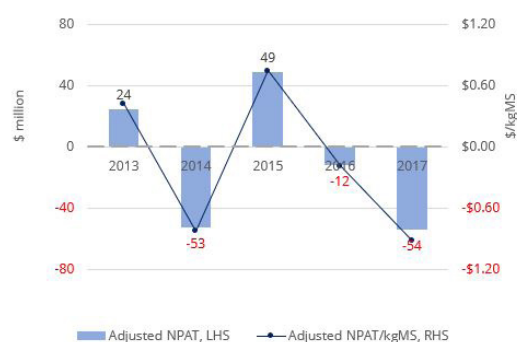
As a co-operative Westland has a permanent base of equity from its farmer-supplier shareholders and has used debt and retained earnings to fund its capital expenditure. The co-operative structure means that Westland has limited access to capital, which is mitigated somewhat via Westland entering into joint ventures and strategic partnerships.

Westland's debt to total assets is the highest in the industry at 39% but it is down from 43% and both Synlait and Fonterra have carried higher debt levels in the past.

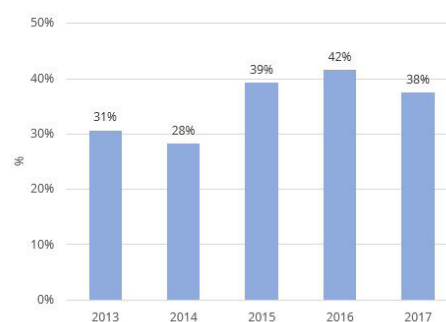
Total Assets, ROA



NPAT



Net Debt to Total Assets





# The a2 Milk Company

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## Organisation

The a2 Milk Company (ATM) was founded in 2000. It is publicly listed on the NZX and ASX. ATM is strictly a marketing company. It does not collect any milk or process any dairy products itself. Instead it has entered into strategic supply agreements with dairy processors in both foreign and domestic markets. In New Zealand it has supply agreements with Fonterra and Synlait and in Australia it has supply contracts with Fonterra, Moxey Farms and Leppington Pastoral Co. It has direct relationships with farmers in the U.K. that were initially set up by dairy processor Müller Wiseman Dairies (MWD) through a joint venture. In 2014 ATM acquired the full rights to the joint venture from MWD and it now has relationships with farmers and farms in Shropshire, Staffordshire, Cheshire and North Wales. ATM has high institutional ownership of its equity at over 50%. ATM has also made equity investments in partners and owns 8.2% of Synlait Milk's ordinary shares.

## Market position and growth

ATM is currently supplied with 225m litres of NZ milk per year from 60 certified farms with the milk collected and processed by Synlait. ATM recently announced a NZ and Australian supply deal that has increased the probability of the growth that is built into its share value.

In the 2016-2017 fiscal year ATM's sales grew by 133% in China and other parts of Asia, with the sales primarily being infant formula. Sales in Australasia grew by 48% and sales in the US and UK grew by 15%. The Australasian segment continues to make up a majority of its reported sales (at \$439m) with the China segment growing to \$89m for FY2017. ATM has increased its focus on its infant formula product line which has grown from representing 10% of total company sales in 2014 to approximately 72% of total company sales in 2017.

## Strategy

ATM sells high margin product through the grocery channel. It has managed to position itself as offering a healthier alternative to other cows' milk via its A2 beta-casein certification.

ATM sells milk that only contains the A2 beta-casein, which is a specific milk protein. Virtually all dairy herds in NZ include cows that produce A2 beta-casein milk as well as cows that produce A1 beta-casein milk but it generally all goes into the same vat. ATM reports anecdotal evidence that people who consume A2 protein milk digest it easier and feel better than they do after having consumed A1 protein milk.

# The a2 Milk Company

## Financial performance

ATM has experienced extremely high earnings growth in recent times with EBIT growing rapidly through 2015 to 2017. This growth-in-earnings news has been very well received by the equity market and translated into share price growth of more than 300% between early 2016 and early 2018.

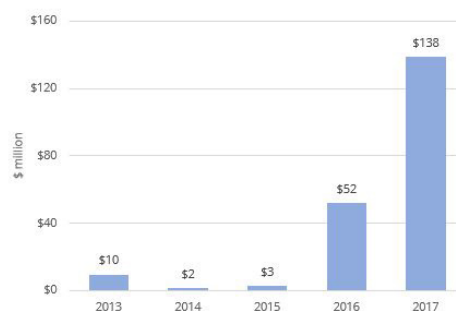
Inevitably ATM's high earnings path has attracted competitive attention with both Nestle and Mengnui recently announcing A2 protein plans.

With heightening interest in A2 milk, it is also likely that NZ farmers will breed for A2 herds exclusively as quickly as they can.

## Capital structure

As a marketing company, ATM has very little in the way of fixed assets and it carries a surprisingly small amount of inventory meaning that its capital usage is very efficient. Other than equity, the largest single item on its balance sheet is cash.

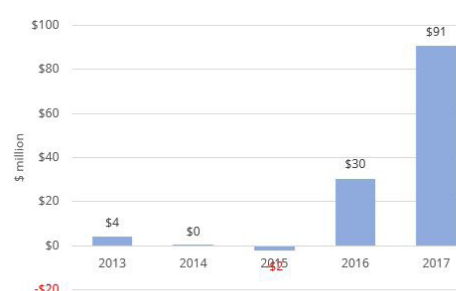
EBIT



Revenue/kgMS, 2017



NPAT



# Oceania Dairy

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## Organisation

Oceania is a limited liability company owned by Yili International Development Company Limited and Hong Kong Jingang Trade Holding Company Limited, both of which are 100% owned by the Inner Mongolia Yili Industrial Company Limited (Yili), a company domiciled in China and listed on the Shanghai Stock Exchange.

Yili is the largest dairy producer in China and the eighth largest dairy company in the world.

Oceania is located on a single site at Glenavy in South Canterbury. Milk processing commenced in August 2014 in stage one of a three-stage development with completion due in time for the 2019 season. The second stage was completed in time for the 2018 season. It is estimated that current capacity is 420 million litres and will be 630 million litres once stage three is completed.

## Market position and growth

Oceania produces milk powder that is exported to its parent in China for the manufacture of infant formula. Its planned three-stage development would see it eventually processing approximately 3.5% of New Zealand's milk.

## Strategy

Yili's strategy is to develop the New Zealand pasture-fed milk story to support a premium pricing strategy for its infant milk formula products.

In order to support its new farmer-suppliers, Oceania guaranteed them a minimum price of \$4.50 early in the 2015/16 season when the eventual FGMP was \$3.90.

## Financial performance

Comparative analysis of Oceania's financial performance is difficult. Its financial year end is 31 December (compared to an industry norm of 31 July), which means that the period over which it generates its revenue is different to Fonterra and the commodity prices it is exposed to are also different to Fonterra. Yet its goal is to pay its suppliers a milk price similar to the FGMP for each milk season. When its accounts are prepared each year it uses Fonterra's current FGMP forecast as its milk price.

At the EBIT line over the last two years, Oceania has recorded a loss owing to the high level of depreciation it has recorded relative to the industry.

# Mataura Valley Milk

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## Organisation

Mataura is a limited liability company incorporated in 2008 that is currently 87.5% owned by China Animal Husbandry Group. China Animal Husbandry Group is a Chinese state-owned enterprise.

Mataura is located on a single site at McNab just north of Gore in Southland.

Mataura is in the process of recruiting milk with a processing start date of August 2018. Suppliers are required to buy one share for every kgMS supplied at a cost of \$2.00 per share. Mataura intends to pay its suppliers the equivalent of the FGMP plus \$0.10. It also intends to pay suppliers premiums for best on-farm practice and environmental stewardship.

China Animal Husbandry Group is expected to end up owning 71.8% with 20% owned by milk suppliers and the remainder owned by Hamilton-based powder company BODCO and Mataura directors.

## Market position and growth

Mataura plans to manufacture premium nutritional formulas as well as skim milk powder and whole milk powder. It will be a relatively small plant (100 million litres) with a small number (30) of milk suppliers producing approximately 30,000 tonnes of infant formula. 85% of production will be exported. The cost of the plant is expected to be \$240 million.

## Strategy

Mataura's strategy is to try and use the New Zealand pasture-fed milk story to support a premium pricing strategy for its infant milk formula products.

## Capital structure

As noted above, Mataura is a limited liability company which is expected to be 20% owned by farmer suppliers and 71.8% owned by China Animal Husbandry Group.

# Miraka

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## Organisation

Miraka was incorporated in 2010 and is owned by a group of Māori trusts and partners. The Māori entities include Wairarapa Moana Trust and Tuaropaki Trust. The strategic partners are Vinamilk, a leading dairy enterprise in Vietnam and Global Dairy Network, a NZ based international dairy selling agent.

Miraka is located on a single site in Mokai, 30km northwest of Taupo. It is supplied by 100 farms within an 85km radius of its plant and exports to more than 23 countries each year.

## Market position and growth

Miraka has the manufacturing capacity to process 250m litres of milk p.a. It began producing only WMP commodities and then expanded into ultra-heat treated (UHT) milk, which is a higher margin business-to-business (b2b) product line. Currently it processes approximately 200m litres of milk for powders and 50m litres of UHT p.a.

Although approximately 80% of its volumes are processed into WMP, WMP accounts for 60% of its revenue.

Miraka is entirely export focused. As noted above it processes and exports commodities and ingredients products; however, it has begun to diversify into producing more value-added products aimed primarily at the Chinese market. In July 2017 it announced a new consumer brands product, Whaiora. Whaiora is a natural smoothie blend and is the company's first consumer brand product. It will compete in the "lifestyle" consumer market<sup>15</sup>.

## Strategy

The company's strategy is to promote its products internationally as being a guardian of resources. Miraka uses renewable geothermal energy alongside the manufacturing site in a way that positions it as having the lowest carbon footprint of the NZ processors. It has also been developing incentive schemes for its suppliers based on environmental benchmarks and pays a premium to its farmers if they meet certain environmental credentials<sup>16</sup>. It has also expressed an intention to continue its diversification into high margin value add products.

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<sup>15</sup> [http://www.nzherald.co.nz/business/news/article.cfm?c\\_id=3&objectid=11890814](http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11890814)

<sup>16</sup> <https://www.stuff.co.nz/business/farming/agribusiness/90117484/value-added-the-right-move-but-it-will-come-with-challenges>

