Dairy Analytics

Submission on draft review of Fonterra's 2019/20 Milk Price Manual

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Summary

This submission is a response to the foreign exchange provisions in the Commerce Commission's draft report "Review of Fonterra's 2019/20 Milk Price Manual: Dairy Industry Restructuring Act 2001."[1]

First, we wish to highlight to the Commission that in the 2019 Farmgate Milk Price Statement, Fonterra has taken active steps to reduce transparency around their foreign exchange hedging practices by withholding pertinent information. We call on Fonterra to reinstate the publication of this information and to provide meaningful justification for why it was removed.

Second, we agree with the Commission that "there should be more transparency of information on the actual foreign exchange rates achieved by the notional processor." We call on Fonterra to "[provide] an updated estimate for the average FX conversion rate assumed to be achieved by the notional processor throughout the season." We disagree with Fonterra and believe this reporting to be inside the scope of the Manual.

Third, we invite the Commission to consider excluding the gains and losses from foreign exchange hedging from the calculation of the Farmgate Milk Price.

About Dairy Analytics

We (Dairy Analytics) run an independent website, dairyanalytics.co.nz, which issues probabilistic forecasts of the Farmgate Milk Price over the season. Our motivation is two-fold:

i) to provide an independent check on the forecasts issued by Fonterra; and
ii) to educate market participants (e.g., farmers, banks, brokers, and Fonterra customers) about the true level of uncertainty in the Farmgate Milk Price over the season.

A key component of our forecast is an estimate for Fonterra's hedged foreign exchange rate. Increased transparency by Fonterra with regard to their foreign exchange hedging will allow us to improve our forecasts of the Farmgate Milk Price, thereby improving the decision making of market participants who utilize the Dairy Analytics forecast.

[1] Commerce Commission "Review of Fonterra's 2019/20 Milk Price Manual: Dairy Industry Restructuring Act 2001" (15 October 2019)

Reduction in transparency in the 2019 Milk Price Statement

In their annual Farmgate Milk Price Statement, Fonterra have traditionally supplied the following paragraph discussing their foreign exchange hedging (subject to changes in the date and the specific numeric constants; this one is taken from the 2018 statement):

> As at 31 July 2018, Fonterra had foreign exchange contracts in place for approximately 73 per cent of the USD-equivalent operating cash flow exposure expected to impact on the Farmgate Milk Price for the 2019 Season. If the balance was hedged based on a spot exchange rate of 0.6821, the average USD:NZD conversion rate would be 70 cents.

In the 2019 Farmgate Milk Price Statement[2], this paragraph was deleted.

The Commission should be familiar with the specifics of the paragraph since it was the subject of discussion in their report "Review of Fonterra's 2018/19 base milk price calculation: Dairy Industry Restructuring Act 2001."[3] In particular, TDB Advisory[4] called for Fonterra to issue the "approximately 73 per cent" and "70 cents" values in greater precision (e.g., to four significant figures). With regard to the specific points raised in that report:

(2.117) We disagree with Fonterra's position "that the additional precision requested by TDB … would not in fact provide any additional information to third parties given the level of forecasting uncertainty at the time of publication of the Milk Price Statement." Extra information is always useful, even if it must be interpreted by third parties through the lens of Fonterra's assumptions. It is also important to note *that Fonterra already has the information requested*. They are just choosing the less transparent route of publishing less accurate data.

(2.118) We agree with the numerical results of Fonterra's analysis. However, this does not mean that the data is not useful since it pins Fonterra to a specific value at a specific time. Moreover, if we initially under-estimated the milk price, it is likely that Fonterra will have too. Therefore, we can factor in that they may need to convert more USD into NZD, pushing the "approximately 73 per cent" value down. In this case, it is material whether Fonterra's forecast was 69.51 or 70.49 cents and 72.51 or 73.49 per cent.

(2.119) In line with our analysis in 2.117 and 2.118, we believe that a greater level of precision may assist independent processors to monitor changes.

However, regardless of the request for additional precision, we are strongly opposed to the complete removal of this information in the 2019 Farmgate Milk Price Statement.

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[2] Fonterra "2019 Farmgate Milk Price Statement 2019"

[3] Commerce Commission "Review of Fonterra's 2018/19 base milk price calculation: Dairy Industry Restructuring Act 2001" (12 September 2019)

[4] TDB. Advisory "Submission on draft report on review of Fonterra's 2018/19 draft milk price manual" (15 November 2018)

Moreover, in addition to the quoted paragraph described above, two other relevant paragraphs were deleted. These paragraphs have been included verbatim in every Farmgate Milk Price Statement since 2012. The paragraphs help provide context for Fonterra's foreign exchange hedging, including a *why* (to provide certainty and reduce volatility) and a *how* (forward contracts with an 18-month horizon), and are as follows:

> The Manual provides for the conversion of notional USD Farmgate Milk Price receipts to NZD for each month at the average rate at which Fonterra converts its USD-equivalent foreign currency receipts for the month, taking into account the costs and benefits of Fonterra's hedging activities. Fonterra's policy is to hedge 100 per cent of net recognised foreign currency trade receivables and payables. It also requires hedging of forecast cash receipts from sales for a period of up to 18 months within limits approved by Fonterra's Board. Fonterra uses forward foreign exchange contracts and currency options to hedge its foreign exchange risk.
>
> Fonterra's hedging policy is designed to provide certainty and to reduce the impact on the Farmgate Milk Price of volatility in the NZD, and results in the spot exchange rate at a point in time being reflected in the hedged conversion rate over the subsequent 18 months.

We consider the complete removal of this information from the 2019 Farmgate Milk Price Statement to be an active step against the Commission's recommendation for greater transparency.

Removing the information makes it impossible for independent third parties to assess Fonterra's current position, and it leaves the *why* and *how* components of Fonterra's foreign exchange hedging in question and open to change without notice.

We ask that Fonterra reinstate the deleted paragraphs in future Milk Price Statements and provide meaningful justification for the removal of the paragraphs in the 2019 statement.

Comments on increasing the transparency of foreign exchange reporting in the draft review

The reduction in transparency also relates to the Commission's call for increased transparency of foreign exchange hedging rates in the Commission's draft review of Fonterra's 2019/20 Milk Price Manual[5].

We agree with the conclusion that "there should be more transparency of information on the actual foreign exchange rates assumed to be achieved by the notional processor."

We agree with the suggestion that Fonterra "[provide] an average FX conversion rate assumed to be achieved by the notional processor throughout the season."

We disagree with Fonterra "that this matter is outside [the] scope of [the] manual" for the following reason.

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[5] Commerce Commission "Review of Fonterra's 2019/20 Milk Price Manual: Dairy Industry Restructuring Act 2001" (15 October 2019)

150A(2) of the Act[6] "provides for contestability in the market for the purchase of milk from farmers if any notional costs, revenues, or other assumptions taken into account in calculating the base milk price are practically feasible for an efficient processor."

We interpret "other assumptions" to include Fonterra's foreign exchange hedging strategies. This is backed by 150B(c) of the Act, which explicitly allows the "gains and losses experienced by new co-op resulting from foreign currency fluctuations, including from new co-op's foreign currency risk-management strategies, [to be] incorporated in the base milk price."

We also interpret "practically feasible for an efficient processor" to mean "desirable," since we believe the notional processor would not engage in practices that lead to undesirable outcomes, even if they are feasible.

The desirability of foreign exchange hedging is material, because work undertaken by undergraduate students at Northwestern University in Chicago[7] concluded that "Fonterra's current hedging strategy is inconsistent with [their] goal of reducing volatility in revenue and prices paid to farmers." To the contrary, the students report that "their hedging strategy sometimes amplifies the volatility of the exchange rate."

The amplification of the volatility can be explained by the (small) correlation between the NZD and the milk price. A simplified explanation is as follows: if Fonterra hedge their foreign exchange on a rising USD milk price, the correlated rise in the NZD:USD exchange rate will lead to a positive payoff in NZD from the hedge, thus increasing the Farmgate Milk Price. In the opposite case, hedging on a falling USD milk price will lead to a negative payoff in NZD from the hedge, thus decreasing the Farmgate Milk Price.

However, the students noted that "there were some limitations that may have affected our analysis and findings," including a "small sample size" and the fact that "Fonterra's financial statements are particularly vague with respect to describing their hedging strategy." These limitations suggest a cautious approach to interpreting the underlying conclusion (that hedging increases volatility); however, it reinforces the view that *more* transparency is sorely needed.

In light of the findings by the students, it is not apparent that a notional processor (or other independent processors) would engage in foreign exchange hedging, *as practiced by Fonterra over the last decade*. This is particularly relevant because, as discussed above, Fonterra have removed their justification and (vague) methodology from the 2019 Farmgate Milk Price Statement.

It is important to note that in general, there are valid reasons for processors to engage in risk-management strategies as they apply to their foreign currency exposure. One important reason

[6] NZ Govt. "Dairy Industry Restructuring Act 2001" (1 October 2018)
[B] Baron et al. "Final Report on Predicting Hedged Exchange Rates" (19 March 2019)

is to provide certainty for budgeting purposes. However, the exact mechanism and level of hedging is not "one-size-fits all" and will depend upon the risk appetite of each processor.

Thus, in our view, the mechanisms by which the notional processor is assumed to hedge their foreign exchange, and their reasons for doing so, are material matters inside the scope of the Manual.

Removing foreign exchange hedging from the Manual

The previous two sections lead us to question the utility of including the hedged exchange rate in the Manual. In fact, Section 150B(c) of the Act allows, but does not require, the base milk price to include gains and losses from foreign exchange fluctuations.

Therefore, we suggest that the Commission explore the implications of removing the provision for incorporating gains and losses from foreign exchange hedging from the calculation of the Farmgate Milk Price.

This has three main benefits:

i) it simplifies the calculation of the Farmgate Milk Price;
ii) it obviates the need for transparency relating to foreign exchange hedging; and
iii) it allows Fonterra (and other independent processors) to assume a different risk profile to the notional processor.

As stated earlier, there is also no evidence that removing hedging from the calculation would increase the volatility in the NZD Farmgate Milk Price.

The Commission could justify the removal on the basis that foreign exchange hedging as undertaken by Fonterra is not necessarily needed nor desirable for an efficient processor.

Moreover, the current approach is in violation of Principle 3 of the Manual[8], which calls for "changes in foreign currency exchange rates… to pass through to the Farmgate Milk Price (as suppliers have better incentives and capabilities to manage these types of risks)."

As evidenced by the lack of a reduction in the Farmgate Milk Price volatility, Fonterra's hedging strategy must be a business decision to improve their internal budgeting decisions. Thus, Fonterra should incur the risk (though its earnings) of its hedging decisions.

We look forward to hearing the Commission's thoughts on the topics raised in our submission.

Dr. Oscar Dowson

[8] Fonterra "Farmgate Milk Price Manual" (1 August 2019)