



CWH/NZWSI merger - further comments on Professor Guthrie's reports

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1. Introduction

Regarding the proposed merger of CWH and NZWSI, Professor Graeme Guthrie has filed a report with the Commerce Commission, dated 13 July 2015 (the **Guthrie Report**), setting out some comments on the effect of the proposed merger on wool merchants' export decisions.

We have three sets of comments on the Guthrie Report. The first set of comments relate to the internal inconsistencies in the argumentation (see section 2 below). The second set of comments relate to the materiality (or otherwise) of the option value described by the Guthrie Report (see section 3 below).

The third set of comments is the most important, being that even if the Guthrie Report's arguments about switching costs were correct, the evidence in fact suggests that CWH is constrained by greasy exports to China, and that the constraint from NZWSI is minimal (see section 4 below).

In section 5 we provide some brief comments on aspects of Professor Guthrie's 23 June 2015 report. Many of the comments made by Professor Guthrie in that report are addressed by our 13 July 2015 report, but we comment on some remaining issues in this report.

2. Internal inconsistencies

The Guthrie Report contains analysis¹ that decomposes a merchant's cash flows into various components and then compares the cash flows between:

- Scouring greasy wool in New Zealand and then selling the resulting clean wool to an overseas buyer; and
- Selling greasy wool to an overseas buyer.

The Guthrie Report then argues that, in addition to the various cash flows, an intangible factor that merchants should consider is that it is easier to control scouring quality if scouring in New Zealand than it is if scouring overseas.

However, this analysis is not internally consistent. Control over scouring quality will only be important if a merchant is concerned about the quality of the clean wool it delivers. If that is the case, then the relevant cash flow comparison would be between scouring in New Zealand (and selling the resulting clean wool to an overseas buyer) versus scouring overseas (and selling the resulting clean wool to an overseas buyer). In contrast, the Guthrie Report's cash flow counterfactual is selling greasy wool directly to an overseas buyer – in that case there would be no need for the merchant to worry about control over scouring quality overseas, since the merchant would not be selling clean wool.

¹ See in particular the table on pages 1 and 2.

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To put this another way, if the scouring quality distinction is to be relevant to the comparative analysis, then the Guthrie Report's cash flow table would need to be amended in two ways, being the:

- Addition of a new row, capturing the cost of scouring 1kg of greasy wool overseas, with the incremental cash flow being an outflow to the overseas scourer; and
- Change of the outflow in the (existing) final row to a zero, because in both scenarios the same volume of wool would be sold clean.

Likewise, the payoff methodology described on pages 3 and 4 of the Guthrie Report would have to be amended in two ways:

- Deleting the first item that is subtracted, because under both scenarios the wool would be sold clean; and
- Adding a further item to be subtracted, being the scouring charge paid to the overseas scourer.

The Guthrie Report is also internally contradictory – it argues that the merchants will be very reluctant to switch to exporting greasy wool (e.g., at page 3), but that they would also be unlikely to enter the scouring industry in response to price rises (page 4). However, if it is that important to continue scouring in New Zealand, then merchants would in fact have a strong incentive to enter.

3. Real option

The Guthrie Report makes the argument that by switching to exporting greasy wool to China, merchants would destroy the option to wait and make this switch in the future (pages 2-3 of the Guthrie Report).

In our view, the Guthrie Report overstates the materiality of the destroyed option when a merchant switches to exporting greasy. The Guthrie Report makes this out to be an all or nothing decision (for example, it talks about “abandoning” the selling clean “business model”). However, CWH has estimated that approximately [REDACTED] of its customers (and [REDACTED] by volume) already split their sales between clean and greasy. NZWSI has indicated that [REDACTED] of its commission scouring customers export both clean and greasy wool. Since merchants can and do export both clean and greasy wool, a decision to switch between these two is not as irreversible as the Guthrie Report makes out.

On the demand side, the Guthrie Report claims that switching between clean and greasy wool would require merchants to incur additional costs to rebuild their customer base. However, the evidence suggests that individual wool buyers in China purchase both clean and greasy wool, which would allow merchants to retain their existing customers while switching volumes between clean and greasy. We understand from CWH that there are two types of wool buyers in China: traders, which purchase wool and sell to end users (mills); and the mills themselves, which purchase wool either from these traders or directly from New Zealand merchants. We understand that mills typically purchase either only clean wool or only greasy wool (depending

on whether they have their own scouring plants),² but that wool traders purchase a mix of both clean and greasy wool. For example, [REDACTED].

Furthermore, 24% of the wool clip is already exported greasy³ (and this share has been increasing), suggesting that the impediments to doing so are not as high as the Guthrie Report suggests. In other words, merchants' "reluctance to switch" is already being overcome, and the option to sell greasy is being exercised at today's prices.

Professor Guthrie also argues that he "would expect the value of a merchant's delay option to be significant" (page 3), because of factors such as "unpredictable fluctuations in exchange rates, transportation costs, and the demand for wool in China" (page 3). What is striking about this list is that these factors would apply very similarly to exporting clean and exporting greasy, i.e., the merchant would face similar risks whichever "business model" it adopts.

4. Constraint on pricing

In essence, the key argument in the Guthrie Report appears to be that it would take a large price increase to incentivise merchants to switch to exporting greasy wool. Indeed, Professor Guthrie reports that one of the merchants he interviewed "indicated that scouring costs would have to rise by 25-30% before he would have to consider abandoning NZ-based scours and exporting greasy wool instead" (page 3).

This may or may not be true – it is a (hearsay) statement about what a particular merchant might do in response to a hypothetical question. We can place far more weight on actual decisions that have been made. As we have pointed out on several occasions, we know for a fact that:

- 24% of the wool clip goes to China greasy, a share that has been increasing (in other words, overseas scours are already "in the market"); and
- CWH has been [REDACTED] its real prices, while still losing share of the wool clip.

As discussed in our 13 July 2015 report, this evidence suggests that the constraint on CWH comes predominately from greasy exports to China, and that the constraint from NZWSI is minimal. Indeed, to the extent that any switching has occurred, the evidence in our 13 July 2015 report suggests it is to greasy exports in China, rather than between CWH and NZWSI.

We note also in respect of the constraint on New Zealand scour pricing:

² Nonetheless, we understand from CWH that at times integrated mills with their own scouring plants may purchase clean wool rather than greasy wool, depending on market conditions or if their scouring equipment is not available.

³ Data is for the year ended June 2014, calculated as greasy China exports of 38,858,000kg out of a total wool clip of 164,102,000kg (source: Beef + Lamb New Zealand data).

- While there may well be some merchants (such as the two interviewed by Professor Guthrie) that are unlikely to switch from exporting clean wool to exporting greasy wool, they will be “protected” from higher prices by those merchants that are willing to switch;⁴ and
- In any case, the constraint on the scour does not need to come from a “clean” merchant becoming a “greasy” merchant. Given there are already “greasy” merchants (i.e., those who export at least some of their wool greasy), if the scour raised price then “clean” merchants would be able to pay less for wool so would lose auctions to “greasy” merchants. This would allow “greasy” merchants to switch more of their volumes to exporting greasy, which would undermine the scour price increase.

5. Professor Guthrie's 23 June 2015 report

In this section we comment on two specific aspects of Professor Guthrie's 23 June 2015 report.

5.1. Review of the hurdle rate literature

Professor Guthrie refers to his 21 April 2015 report, in which he cites various papers in the economics literature regarding hurdle rates, and our 9 June 2015 file note in which we reviewed the literature that Professor Guthrie cited.

Professor Guthrie's key argument is that (page 4 of his 23 June 2015 report):

“The literature I cited provides useful information on the size of the hurdle rates relative to the WACC. NERA ignores that and tries to draw inferences about the level of the hurdle rate from this literature.” (Emphasis original.)

We find this assertion very odd, because drawing inferences about the level of the hurdle rate is exactly what Professor Guthrie does in his 21 April 2015 report. He states in that report (page 4):

“... the evidence I have just summarized shows two things ... Second, required rates of return in excess of 15% are plausible ... using a required rate of return equal to 20%, which I believe is consistent with the evidence summarized above.”

5.2. Risk transfer and the hurdle rate

At pages 5-6 of his 23 June 2015 report, Professor Guthrie sets out various points relating to Gavin Lonergan's report, and so we do not comment on them. However, we do comment on one critique made by Professor Guthrie of NERA. Professor Guthrie states that (page 6):

⁴ At least, this would be the case in the absence of price discrimination. If price discrimination was possible, we would expect the allocative efficiency detriments from the merger to be materially lower than those estimated so far.

“...contracting and other arrangements result in a transfer of risk, but they do not result in the reduction of risk that would be required to lower the hurdle rate as claimed by NERA.”
(Emphasis original.)

Professor Guthrie is responding to a point made in our preliminary comments on his 21 April 2015 report, where we noted that our entry modelling assumes that entry will be underwritten by contract or vertical integration.

However, the nature of the risks being discussed by Professor Guthrie differs from those that we were referring to. Professor Guthrie is analysing “harvest” risk. He states in his 8 May 2015 report (at page 3) that:

The customers who sign up for these contracts are taking on the risk that would otherwise be borne by the entrant’s shareholders. If harvests are down due to exogenous events, or down as an endogenous response to poor industry returns, then customers still have to pay the scouring firm.

In contrast, we are analysing incumbent behaviour risk, i.e., the risk that once an entrant has sunk its capital, the incumbent will reduce its price. The fear of this risk might deter entry in the first place.

The industrial organisation literature finds that a strategy to address this risk is for the entrant to enter into long-term contracts or vertically integrate.⁵

⁵ See, e.g., chapter 11 of Carlton, Dennis and Jeffrey Perloff (2005), *Modern Industrial Organization*, Prentice Hal, 4th Ed.

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