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Public version

Memo

To: Phil Taylor, David Blacktop and Kate Frankish, Bell Gully
Date: 10 March 2011
From: James Mellsop, Kevin Counsell and Will Taylor
Subject: CWH/WSI - Review of Castalia Report

1. Introduction

Castalia has prepared a report dated 4 March 2011, commissioned by Godfrey Hirst ("GH"), analyzing the economic effects of the proposed CWH/WSI merger. You have asked for our review of the Castalia report.

Many of the issues raised by the Castalia report are factual, and are best addressed by CWH. In this memo, we limit our comments to the economic analytical issues raised by the Castalia report.

2. The WSI Business Model

The Castalia report claims (e.g., in sections 2.2.2, 4.2 and 6.1) that the merchant scour model is more innovative than the commission scour model. The main economic claim appears to be that a vertically integrated scour has more interest in quality than a commission scour. It is not clear to us why this should be the case – a commission scour would benefit from any expansion of demand that merchants can create through innovation, and so would presumably be willing to help create that innovation.

Furthermore, we find it difficult to reconcile the Castalia argument with the evidence that:

- There has been a trend away from the merchant scour model; and
- Over the period 2002 to 2010, WSI has earned an average return on assets of 5.7%, which is likely to be below its cost of capital.

Finally, the Castalia argument appears to overlook the fact that the merged entity would be 50% owned by Cavalier Bremworth ("CB"), and so would have a degree of vertical integration. This leads us onto the next issue raised by the Castalia report – the claimed potential for downstream anticompetitive conduct.

3. Potential for Downstream Anticompetitive Conduct

The Castalia report claims (section 5.1) that the vertically integrated merged entity/CB would have an incentive and ability to raise the costs of its downstream rivals through means such as: forcing competitors to hold more stocks; changing the scour line specifications to make it more difficult to produce the quality required by competitors; and processing CB wool at preferred times.

The means of raising rivals' costs identified by the Castalia report are forms of behaviour known as "input foreclosure": tactics employed by the upstream division (in this case, the merged scour) such as refusing to deal, withholding quantity or degrading quality that raise the costs of firms competing with the downstream division (CB), thereby relaxing the competitive constraint on the downstream division.

However, vertical integration on its own is not sufficient to imply that such foreclosure will occur. What needs to be determined is whether the vertically integrated firm has both the *incentive* and the *ability* to engineer foreclosure against its downstream rivals.

There are actually countervailing effects on profit from input foreclosure. While the balance of effects depends on variables such as the volume foreclosed, the level of diversion from rivals to CB, and upstream and downstream margins, the important point to note is that a foreclosure strategy is likely to trade-off reduced profit for the merged scour in exchange for higher profit for CB.[1] One of the critical facts that the Castalia report has ignored is that the merged scour would be half-owned by the ACC and Direct Capital, who have no financial interest in CB (that we are aware of). Under a foreclosure strategy, the ACC and Direct Capital would share in the lost profits of the strategy, while not sharing in the benefits of the strategy (that accrue solely to CB). Accordingly, as 50% shareholders in the merged scour, neither the ACC nor Direct Capital are likely to be interested in a foreclosure strategy.

Furthermore, the merged scour's ability to foreclose GH would be constrained by **[**

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4. Allocative Inefficiency

The Castalia report claims that we have underestimated the allocative efficiency losses. This claim is driven by an assumption that it is **[ ]**% more expensive to export wool to China, scour it

[1] Attempting to disadvantage one customer compared to another is unlikely to be privately profitable for a scour, but may be if the scour has a financial interest in the favoured customer.

there, and import it back into New Zealand, than it is to scour wool in New Zealand. Based on this assumption, Castalia claims that the merged entity would raise price by **[ ]**%.

Whether this **[ ]**% cost difference assumption is valid is a factual issue that is best addressed by CWH. However, even if this assumption is correct for wool exported to China and imported back again, it would not be correct for wool that is not destined to come back to New Zealand. Accordingly, the $**[ ]**m figure that Castalia calculates, which appears to be based on the price of all volumes rising by **[ ]**%, is incorrect.

In fact, it seems unlikely that the assumed **[ ]**% price increase (if this is based on a valid assumption) would occur even for wool that is ultimately used in New Zealand. We have already noted that price discrimination based on wool destination does not appear to occur in scouring.[2] **[**

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There are also some further analytical problems with the Castalia claim:

- Even if it is correct that the option to scour in China and then bring the wool back into New Zealand is **[ ]**% more expensive than scouring in New Zealand, it does not necessarily follow that the merged scour would raise its prices by **[ ]**%, even leaving aside the constraints discussed above. Like any profit maximizing firm that faces a downwards sloping demand curve, the merged scour would set quantity where marginal revenue equals marginal cost. It is quite plausible that the resulting price, even if a monopoly one, would be below the Chinese scouring price.

- The Castalia analysis implies that the main constraint on CWH today is WSI, but this seems inconsistent with WSI's small market share of the contestable commission scouring volumes,

[2] See footnote 21 of our 8 February 2011 report.

the reluctance of merchants to scour with WSI, WSI's capacity constraints and the significant quantities of wool exported to China greasy.

- The final sentence on page 15 (starting "This estimate of demand elasticity is consistent …") implies that the Castalia report interprets the output of a critical loss analysis as being the *actual* demand elasticity. In fact, the output of a critical loss analysis is the *critical* demand elasticity. Critical loss analysis tells us nothing about *actual* demand elasticities, as we noted in our 8 February 2011 report.

5. Plant Outages

The Castalia report claims (page 16) that the loss of plant redundancy and the greater potential for industrial strife would lead to additional plant outages of 1%, which the report argues equates to a $**[ ]**m efficiency loss (although in the Castalia summary table this figure is quoted as $**[ ]**m).

We cannot comment on the factual legitimacy of this claim, and the 1% assumption. Regarding the $**[ ]**m ($**[ ]**m), we have not been able to replicate this figure exactly, but it appears to be the product of the average scouring price multiplied by 1% of annual quantity - we calculate the 5 year present value of this to be **[ ]**.[3] However, we note that if there was an outage, then there would also be some avoided costs that should be netted off the estimated efficiency loss. Modifying the above calculation to use the gross margin (price minus average variable cost) gives a 5 year present value of **[ ]**.

Furthermore, we understand that wool can be transported between Islands, and that the merged entity would have insurance to cover the transport costs. This would further reduce any efficiency loss (as would the ability to export greasy wool in the event of a scour outage).

6. Labour Costs

The Castalia report argues (page 16) that the merged entity would become a monoposony employer, but then argues that the merged entity would face *higher* wages, which is of course the opposite of what one would expect with a monopsony. More generally, the analysis in our 8 February 2011 report already accounts for productive inefficiency, and so it is inappropriate to add any further costs.

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[3] **[ ]**

7. Dynamic Inefficiency

The Castalia report is critical of our price effect alteration to the Commission's dynamic efficiency model (pages 16-17). The Castalia report's argument appears to be that price would not drop with the shift to a monopoly. But this misunderstands the dynamic inefficiency analysis, as we never claim that price would drop. For the counterfactual, our analysis takes the current demand curve and shifts it out, and assumes that price would rise as a consequence. The outward shift is what New Zealand would miss out on in the factual.

8. Labour Cost Reductions

The Castalia report claims that the redundant staff will find it hard to obtain new jobs, because Whakatu and Kaputone are "rural". This is an incorrect characterization. Whakatu is between Napier and Hastings, and Kaputone is virtually in Christchurch.

9. Land Values

The Castalia report claims that the land values used in our report are too high. We understand that information regarding the derivation of these land values has already been filed with the Commission.

10. Quality Benefits

The Castalia report claims that the quality benefits are overstated, because the merged entity will have less pressure on it to raise quality. This seems to miss the point that the quality improvements are a by-product of the capex required to restructure CWH and WSI’s operations in the factual.