The Chair and Members
Commerce Commission

POST CONFERENCE RESPONSE OF GODFREY HIRST:

CAVALIER WOOL HOLDINGS/NEW ZEALAND WOOL SERVICES INTERNATIONAL

We set out below Godfrey Hirst's response to the various legal issues and factual matters raised or indicated for discussion at the conference.

Castalia's response to the economic issues raised at the conference is **attached** as Appendix A.

Summary

The Commission's competition analysis that it cannot be satisfied that the acquisition would not substantially lessen competition is correct. There would be no independent supplier of scouring services in either market. There is no realistic threat of new entry as cost would be prohibitive and a potential entrant faces significant practical impediments.

Authorisation of the acquisition should not be granted. Section 67(3)(b) requires a high test, distinguishable from that under section 61, and it is not satisfied by a bare positive margin.

Further, where there is uncertainty surrounding the purported "benefit to the public", as with all the benefits claimed by CWH, authorisation must be declined. That uncertainty, at the least, must be addressed by a scaling down of those benefits in accordance with a likelihood spectrum. Here, the superstore concept should be dismissed due to the high degree of contingency attached to it; the quality benefit either is illusory or cannot be considered as a benefit as it is not dependent on rationalisation or concentration of ownership; and the reduction in production and administration costs must be discounted to the extent that they have not been tested by the public. None satisfies the high degree of certainty required.

More generally, there must be substantial doubt as to whether CWH – as a matter of law and fact – will be able to procure WSI to sell the scours and land and buildings to effect the rationalisation required to access those benefits. The legal constraints on major transactions and related company transactions impose very high thresholds. There would be a very real prospect of CWH getting effective control of WSI but not able to give effect to the rationalisation benefits claimed.

Other unsubstantiated claims by CWH are also disputed. First, the "weak seller argument" is irrelevant here as competitive and alternative business models encourage dynamic efficiency through innovation and a vertically integrated merchant scour is a viable business model. Second, the claimed constraint on raising prices from a potential new entry would be ineffective because scouring prices would need to increase substantially before a new entrant could be compensated for the demonstrated costs and risks involved with new entry.

With regard to detriments, the Commission's radical departure from its previous approach fails to take account of the impact of vertical integration. Product market competition in the downstream market, such as the carpet market, would not mitigate the effects of vertical integration; nor would the presence of individual shareholders.

Those detriments would also occur in the Australian downstream market and those consequences in Australia are relevant to the Commission's analysis. Certainly, they would be of interest to the ACCC.

The Scouring Agreement does not protect Godfrey Hirst because of its limited term. The true intention of the parties as to the term of the Scouring Agreement is reflected in clause 2.1 of the executed agreement.

Analysis of the detriments that takes proper regard of downstream effects, consistent with the Commission's own Guidelines and previous practice (as endorsed by the Courts), produces a ménage of allocative, productive and dynamic efficiency losses of over $100 million. That is the true measure of risk to the New Zealand wool industry, and loss to New Zealand, that the acquisition represents. That figure is well in excess of any benefit to the public, even under the most favourable assumptions made by the Applicant, or allowed by the Commission in the Draft Determination.

As a matter of process, the extensive confidentiality constraints, imposed by the Commission at the request of the Applicant, have both resulted in great uncertainty and impeded the full involvement of interested parties. It is essential that this deficiency be counted against the Applicant in assessing the authorisation.

Acquisition would substantially lessen competition

Godfrey Hirst agrees with the Commission's preliminary view in the Draft Determination that neither existing nor potential competitors would be likely to sufficiently constrain the merged entity. Thus, the Commission cannot be satisfied that the acquisition would not have, or would not be likely to have, the effect of substantially lessening competition in the North and South Island markets for wool scouring services.

The only substantive argument raised by CWH contrary to that finding was the risk of loss of greasy wool volumes to off-shore scouring facilities or threatened loss to new entry.

As was demonstrated at the conference, off-shore scouring in fact provides no constraint for wool required for domestic processing or processing in Australia.

As to CWH's arguments for threat of new entry, these comprised broad claims as to availability of sites and either second-hand or Chinese-built scours that would enable entry by a "determined" entrant.

Future Consultants, on behalf of WSI, expressed the contrary view that the Commission "materially over-estimated the threat of new entry" and supported that assertion with detailed costs for a new entrant 2.4 metre scouring operation in Hawkes Bay.

CWH responded at the confidential session on 6 May 2011 by tabling meticulous re-analysis of that model entitled "1x2.4m New Entrant Comparative 28/04/11", which purported to show that the putative new entrant could have lower operating costs than Future's model suggests. None of the detail of those models was available to Godfrey Hirst for scrutiny.

To overcome that deficiency, Godfrey Hirst considered afresh all aspects of the potential for entry in the North Island. The detailed model prepared by Godfrey Hirst is attached as **Appendix B**. This shows conclusively that:

- the unavailability of second hand machinery means that any potential new entrant will need to install new plant and equipment at a higher capital cost;
- cheaper Chinese built wool scouring machinery is not a realistic option;
- a 3 metre scour is the most cost effective new entrant model;
- a new entrant requires capacity in both islands;
- scour location and specialised buildings mean new greenfields developments in each island;
- staff recruitment constraint would increase operating costs; and
- capital cost for a new entrant is estimated at $37.6million.

Authorisation of acquisition involves a high test

Unlike with a clearance, an authorisation is not merely a ruling that the proposed transaction does not invoke the statutory prohibition in section 47 on acquisitions that have the effect of substantially lessening competition. Rather, it is an exemption granted by the Commission from that statutory prohibition. Such exemption can only be granted if the Commission is satisfied that the acquisition will result, or will be likely to result, *in such a benefit to the public that it should be permitted*: section 67(3)(b).

That wording is noticeably different from that used in section 61(6), which prescribes the basis on which the Commission may grant authorisation of restrictive trade practices. The formula there is that the Commission must be satisfied that the proposed contractual arrangement will in all the circumstances result, or be likely to result, *in a benefit to the public which would outweigh the lessening in competition that would result, or would be likely to result or is deemed to result therefrom*.

The difference is deliberate. The previous threshold of dominance in section 47 (prior to the 2001 Amendment) focussed on the resulting *market position of the merged entity*; whereas the wording of the restrictive trade practices prohibitions in sections 27 and 28 focuses on the *relative movement along the competition continuum that the arrangement would give rise to.* As dominance involved a higher threshold, to offset a finding of dominance, authorisation under section 67(3)(b) would require significantly more countervailing public benefit than a finding of substantially lessening competition might involve.

Section 67(3)(b) was unchanged in 2001 despite the change to section 47 to align that prohibition with section 27. As a consequence, in considering an application for authorisation of an acquisition, the Commission still must focus on the resulting market position (and consequent market power) of the merged entity, rather than simply the degree of movement along the continuum that now is required to trigger section 47.

Leaving section 67(3)(b) unchanged was also deliberate. Authorisation of an acquisition involves permanent and irreversible structural change to the market. Once such authorisation has been granted, it cannot be revoked or varied - unlike authorisation of a restrictive trade practice. Further, as was discussed at the conference, authorisation of an acquisition cannot be granted subject to conditions intended to litigate its competition consequences – again, unlike authorisation of a restrictive trade practice.

It follows that the Commission must be more cautious and apply a comfortable margin of benefit when considering authorisation under section 67(3)(b), rather than a bare positive margin (as the wording of section 61(6) contemplates).

That is especially so with the present application, which is the first occasion on which the Commission has been required to consider authorisation of an acquisition only, since the 2001 amendment.

In *Air New Zealand/Qantas* the Commission was considering both authorisation of an acquisition and authorisation of a strategic alliance, with those authorisations expressed to be co-dependent on each other. That co-dependence negated the need to distinguish between the two authorisation tests.

Unfortunately, the High Court on appeal against the Commission's determination in that case, compounded the uncertainty, when it opined that:

> *[33] The tests under ss 61 and 67 are substantially the same. Both require a consideration of whether there is likely to be a lessening of competition and an assessment of public benefit. The way in which public benefit is required to be weighed is subtly different, but the practice of the Commission, sanctioned by the Court, is that there is no material difference between the tests mandated by the two sections.*

That statement was made by the High Court without benefit of argument, and is manifestly wrong. The wording of section 67(3)(b), which is the *only* test the Commission can apply in relation to the present application, expressly requires a positive finding – on the balance of probabilities – that the acquisition will result in such benefit that it should be permitted. That wording does not indicate that a bare positive margin over detriments is sufficient, nor does it prescribe a weighing of detriments. Rather, the quantum of benefit required must be relative to the resulting market position and market power of the merged entity. Further, it must be assumed that any change to market structure will be permanent; with the authorisation irrevocable, invariable and unable to be mitigated by enforceable behavioural conditions.

In this case, the resulting market position and market power of the merged entity would be at the extreme end of the continuum. CWH, post-acquisition, will operate the only scours within New Zealand; new entry will be unlikely; and availability of off-shore scouring will provide no alternative for those consumers, like Godfrey Hirst, that further process wool within New Zealand. Further, the vertically integrated nature of CWH will enable it to leverage that market power into downstream (and upstream) markets.

Thus, the relative lessening of competition required to trigger the section 47 prohibition substantially understates the structural consequences that would result. It follows that authorisation should only allow those consequences if the resulting public benefit clearly outweighs them.

Certainly, the Commission's initial margin of $4 million net benefit is manifestly inadequate to satisfy that high test.

Uncertainty must work against the applicant
Not only does section 67(3)(b) involve a high test, but any residual uncertainty at the end of the process must work against the Applicant. For example, this means that the Commission's preliminary view (in paragraph 242) that "comparatively greater weighting"

be given to the benefits because of the potentially wider range of the detriments, cannot be correct.

In *Commerce Commission v Woolworths Ltd* (2008) 12 TCLR 194 the Court of Appeal concluded that there are three options available to the Commission when determining an application for clearance of an acquisition under section 66. First, if the acquisition would not substantially lessen competition, grant the clearance. Second, if the acquisition will substantially lessen competition, decline the clearance. Third, if there is uncertainty as to whether or not granting the clearance would substantially lessen competition, decline the clearance.

Indeed, the Court of Appeal expressly rejected the High Court's finding that the choice for the Commission (in relation to section 66) was effectively binary in nature: a substantial lessening of competition was either likely or not. The Court of Appeal said:

> *We consider that the High Court was wrong in its approach to uncertainty. The Commission and thus the Court should grant a clearance only if satisfied that a substantial lessening of competition is not likely. In applying this test, it is open to the Commission or Court to decline a clearance and say that, "We are not sure and therefore we are not satisfied that there will be no substantial lessening of competition" (although we accept that it might be better to avoid using the word "sure" given its use in the criminal law as a synonym for proof beyond reasonable doubt).*

As is stated above, clearance is a ruling that the acquisition would not breach section 47, whereas authorisation is effectively a grant of exemption from that general prohibition that is otherwise applicable to all firms operating in or seeking to enter New Zealand (as well as to the Crown). However, with both clearance and authorisation, the respective tests in the Act require the Commission to "be satisfied" before acquiescing in the Applicant's request.

There is no basis for applying a lesser standard of certainty where that request is for authorisation.

Thus, as with clearance, the Commission must decline authorisation if it is not satisfied that such benefit will result, or will be likely to result, that the acquisition should be permitted.

Benefits must be likely to result

As was demonstrated at the conference, the area of greatest uncertainty in relation to the application, are the benefits claimed by CWH. Far from having "a higher degree of certainty", the evidence received by the Commission casts considerable doubt as to the quantum, or even the existence, of each of the benefits claimed by the Applicant.

In summary:

- reduction in production and administration costs are disputed and not all dependant on the acquisition;
- there is considerable uncertainty as to valuation and likely proceeds of sale;
- the wool super store concept is being explored by other participants in the wool industry and is not dependent on the acquisition;

- wool quality benefits are disputed as to fact and any such benefits (to the extent they exist) could be made available to WSI without the acquisition.

The Commission in *Air New Zealand/Qantas*, stressed in a number of places, that the onus of proof lies with the applicant to satisfy the Commission on the balance of probabilities of the various matters it is asserting. In particular, the Commission noted:

> *As with authorisations under section 67(3), the onus of proof lies with the applicant to satisfy the Commission that the proposed arrangement does not substantially lessen competition or that the arrangement results in such a benefit to the public that it ought to be permitted.*

That means, in the present case, that *all* assertions in relation to the benefits claimed to arise from the acquisition must be proved. As the High Court observed approving the Commission's Air New Zealand/Qantas determination:

> *The public benefit test also requires an examination of likely results. In this context, likely refers to probable outcomes rather than possible or speculative effects.*

That requires proof not only of the likely result claimed as a benefit, but also that such outcome would not otherwise occur.

Unfortunately judicial consideration of precisely where in its process the Commission must consider the likelihood of a benefit occurring, has become somewhat muddled. The High Court in *Ravensdown Corporation Limited v Commerce Commission* HC WN AP 168/96 9 December 1996 (unreported) suggested that, when applying section 67, it is benefit to the public as an "end result" that must be likely:

> *What is required is that the Commission make a facts-based assessment of benefits and detriments, adopting a quantitative approach where possible, and on the basis of that assessment decide if it is satisfied the acquisition is at least likely to result in such benefit to the public that it should be permitted. In short, the test of likelihood is to be applied at the end of the process.*

Such an approach seemingly would relieve the Commission of the need to consider the likelihood of each component of public benefit independently to determine whether or not that is sufficiently likely to include in the calculus. But that approach directly conflicts with the earlier approach in *Air New Zealand v Commerce Commission* [1985] 2 NZLR 338, where the Court held that each factor had to be probable in order to be considered relevant to the calculus.

The *Ravensdown* gloss also conflicts with the analysis that applies in the competition stage of the process. There, the Commission must proceed by determining which counterfactuals are likely (in the sense that there is a real and substantial risk of those counterfactuals occurring) and then compare the state of competition in those counterfactuals to the likely state of competition in the factual.

Irrespective of where "likely" should be applied in the authorisation context –in relation to each factor or at the end of the process – the overall approach is clear: there must be a scaling down of any benefit claimed in accordance with a likelihood spectrum.

For each of the benefits claimed by CWH that scaling down - for uncertainty and execution risk - must be substantial.

Superstore concept is highly contingent

There is a high degree of contingency, both legally and commercially, in relation to the claimed superstore concept. Indeed, so much so that the claimed benefit should be dismissed in its entirety rather than discounted.

First, the superstore concept is not new to the wool sector. If it were thought to have sufficient merit, it could occur in any event, without the acquisition, through industry participants forming a joint venture to acquire the requisite logistical services and provide an enhanced service offering.

Such combination could be effected in various ways, that would allow the joint venture participants to retain their separate identities and remain in competition. In short, the superstore concept does not depend on the acquisition. There is no nexus between throughput required to support the superstore and the merged entity as presumably CWH and WSI – along with other industry participants – could commit sufficient volumes contractually to make the concept viable.

Further, there is too much uncertainty as to how the superstore would be established by the merged entity. Given the Commission's own competition analysis, it must be assumed that the merged entity would have at least a substantial degree of market power. To the extent that the merged entity would need to acquire any assets of a business to establish the superstore, that acquisition itself could substantially lessen competition and consequently need a further authorisation. In any event, the merged entity as operator of the superstore would want to enter into a series of arrangements with the suppliers of various services to the superstore, as well as industry participants who want their wool handled there. All such arrangements, taken together as section 3(5) requires, may also give rise to a substantial lessening of competition or foreclosure.

Either way, the complex matrix of competition risks associated with a superstore established and operated by the merged entity is likely to necessitate the participants in the concept having to come to the Commission seeking authorisation for it.

Y Value benefit

As was demonstrated at the conference, the higher Y value being claimed by CWH for wool scoured in its scours cannot be given any weight.

The material produced by CWH to support that contention is not conclusive, particularly when the results for Awatoto are compared to WSI's results for Whakatu. In fact, the comparison of Awatoto and Whakatu scoured base Y trended results over the last five years, as provided to the Commission, indicates clearly that a change in the mix of wool types processed is the more plausible explanation.

CWH have referred to "evidence" supporting their claimed improvement in base Y. Godfrey Hirst disputes this: they have provided nothing that enables actual comparison between greasy inputs and scoured outputs.

The only greasy input data provided by CWH is the NZWTA North Island test results at Fig 6, page 33 of the Application. This chart has been used to support a relatively flat base Y claim for wool produced over the period covered (00/01 – 08/09) and is the only greasy input data that CWH have produced. However, that chart does not show that the mix of wool types processed at Awatoto over the same period was unchanged. In fact that assumption is highly unlikely given the changes in wool types being processed at Whakatu over this period.

CWH have interpreted ambivalent information in the manner that best assists their claim, without supporting evidence.

Even assuming the claimed Y value enhancement were in fact real, that enhancement would not constitute a public benefit because there is no nexus between the proposed acquisition and the benefit occurring. CWH itself states that the quality of scouring has been incrementally increasing over the past ten years and there is no reason that process would not continue. Further, there is no reason why any enhanced technology that gives rise to the higher Y value could not be obtained by WSI in the counterfactual either through WSI developing that technology itself or licensing it from CWH or another supplier.

In short, the claimed quality improvement could be achieved irrespective of the proposed acquisition and consequently cannot be considered a benefit in this context.

Reduction in production and administration costs

Various reductions claimed by CWH under this heading were keenly disputed at the conference by other parties. In particular:

- fixed line charges;
- energy unit costs;
- labour savings;
- maintenance costs; and
- capex.

As Godfrey Hirst has previously submitted, and repeats below, the extensive confidentiality accorded to the Applicant in this case has substantially hindered parties with relevant industry experience from commenting on the detail of those claims. The resulting lack of transparency has meant those claims have not, for the most part, been subjected to the rigorous testing that the requirement of certainty as to benefit involves.

To the extent that that detail has not been made available for testing by interested parties, the benefit said to result from claimed reductions must be discounted. The “higher degree of certainty” that the Commission attached to benefits cannot be sustained if that quantification results from one party only being heard on the issue.

Put simply, natural justice requires that any benefit claimed for public must be discounted to the extent that it cannot be fully tested in public by the public, as the authorisation process contemplates.

To the extent it can, Godfrey Hirst makes general comment on CWH’s claims. Godfrey Hirst agrees that some savings in fixed line charges will be made as a result of rationalisation from four sites to two.

Godfrey Hirst disputes however any claim that substantial savings in energy units could be achieved. Godfrey Hirst’s experience, having operated scours itself for a number of years, is that increasing run rates through a scour results in increased energy consumption although not quite in proportion. This is because the "additional" wool that is being processed through higher run rates requires just as much energy to move, heat and dry as wool processed at slower run rates. Substantial savings therefore are not possible.

It is further apparent that, in relocating the scours, CWH intends modifying them. Again, the details of the proposed modifications are confidential, but it is understood increased greasy opening capacity will be installed. Such machinery in fact utilises large electric motors that consume significant amounts of electricity. CWH's claim that less electrical units will be consumed per kg of wool processed seems unrealistic.

In terms of heat, the energy source is either gas in the North Island or coal in the South Island. These energy sources have very different unit costs so care must be taken to ensure that a proper comparison is made. In particular, any comparisons relating to heat, between CWH's 3m scour at Timaru and WSI's 3m scour at Whakatu, would be seriously flawed.

Godfrey Hirst notes that WSI's Kaputone plant is heated by high pressure hot water rather than by steam. Hot water is more efficient than steam as a heat source. First, it doesn't require heating to such high temperatures as steam. Second, it is returned to the boiler at a higher temperature so does not require as much re-heating and finally, being denser than steam, water is a more efficient heating medium. Converting the Kaputone plant from hot water to steam therefore could only result in increased coal consumption per kg of wool processed.

Substantial execution risk

More generally, there must be substantial uncertainty as to whether *any* of the above commercial benefits claimed by CWH to arise from rationalising WSI's scours with the existing CWH plants and sale of the land and buildings at WSI's Kaputone and Whakatu sites, in fact will come to pass.

WSI is a publicly owned company listed on the New Zealand Exchange's Alternative Market. In the event that CWH were to acquire control of the shares in WSI presently held by Plum Duff Limited and Woolpak Holdings Limited, that would only give CWH control of 63.8% of the shares in WSI. Presumably however the proposed sale of WSI scours to CWH and sale of the land and buildings to other parties would comprise a major transaction for the purposes of the Companies Act, which would have to be approved by shareholders of WSI by special resolution.

Further, the prohibition on related party transactions in Listing Rule 9.2 would prevent CWH from voting the shares it controlled in relation to that special resolution.

Those statutory and Listing Rule requirements present a very real barrier to CWH being able to execute its rationalisation plans despite having acquired effective control of WSI.

Put bluntly, that would mean all of the competition consequences coming to pass without any of the claimed benefits able to be accessed.

Treatment of detriments a radical departure

The Commission's treatment of detriments in the draft determination represents a radical departure from its previous approach to this vital aspect.

That departure is particularly acute in relation to loss of dynamic efficiency. Generally speaking, concern as to the potential "chilling effect" that the proposed acquisition may have on innovation in the relevant industry, has been of greatest concern to the Commission. Here however, a derisory figure has been adopted in the draft determination for loss of dynamic efficiency.

Further, the quantum of that figure, as well as how that figure has been calculated, again have been shielded from scrutiny by the extensive confidentiality claims allowed.

Nevertheless, the draft determination does disclose the Commission's approach:

- First, a "moderate" range of dynamic efficiency losses of 0 to 1% has been adopted;

- Second, that range has been applied to industry revenue from scouring services only.

Both those elements involve significant departure. As to the range applied, this is described as "conservative" because the Commission used the narrower range of 0.5 to 1% in relation to air services in *Air New Zealand/Qantas*.

But, a more relevant comparison would be the Commission's approach to the dairy industry merger proposal, where a range of 1 to 5% was applied.

Moreover, with both the airline and dairy industry proposals, those factors were applied to total industry revenue, not merely an isolated component of the industry. Scouring services account for a mere 5 to 6% of the value chain of the wool industry. Vertical factors must be taken into account in assessing detriments where the relevant good of service comprises a vital industry input.

Impact of vertical integration ignored

The Commission's market analysis must look broader than merely at the markets for wool scouring services and supply of wool grease. By virtue of being vertically integrated, CWH will be able to leverage its market power in relation to wool scouring services into downstream markets. Thus, the narrow approach taken in the draft determination in defining relevant markets fails to take account of the impact that vertical integration will have on the downstream markets.

There is ample authority for the proposition that consideration must be given to the ability that a vertically integrated firm has to leverage its market power into other functional levels. Indeed, the Commission's own 'Mergers and Acquisitions Guidelines 2003' outline that where acquisitions involve vertically integrated businesses, the lines between the functional levels in a market can be blurred or eliminated. In such circumstances, the Guidelines mandate that separate relevant markets at each functional level affected by the acquisition should be identified and the impact of the acquisition on each functional level assessed.

Here that means the impact of the proposed acquisition on the downstream markets, especially the manufacturing of carpets, must also be assessed.

The Australian Competition and Consumer Commission (*the ACCC*) similarly clarifies the importance of vertical integration in its 'Merger Guidelines November 2008'. The ACCC states at paragraph 4.41 that "the purposive nature of market definition can require the product or geographic dimension of the market to be extended… to include other functional levels in the vertical supply chain...". The guidelines emphasise at paragraph 7.58 that horizontal acquisitions can be affected by vertical integration and that "[w]here a merger involves both horizontal and vertical competition issues, the ACCC will assess the merger based on the combined horizontal and vertical impact on competition".

The Courts have adopted the same approach. For example, the High Court in *Air New Zealand & Anor v Commerce Commission & Anor* ((2004) 11 TCLR 347) expressly recognised the importance of vertical integration in paragraph 45 stating "[t]he elements of market structure which are conventionally singled out for examination" include "the character of vertical relationships with customers and with suppliers and the extent of vertical integration".

By ignoring vertical integration in this case the Commission has confined its attention to the 5-6% of the value chain for wool and ignored the significant adverse consequences for the rest of the industry.

Further, there is no evidentiary basis for the Commission's assumption that the presence of CWH's two minority shareholders would provide an effective check on CWH's ability to leverage its monopoly power at scouring level into those downstream processing markets where it faces competition from Godfrey Hirst and others. First, both Direct Capital and ACC are relative new comers to the sector, which they could exit as readily as they have entered.

Second, the assumption that those minority shareholders will be able to exert a substantial degree of influence over CWH is inconsistent with the Commission's own approach to "associated persons", where the Commission generally looks for a "much higher level of shareholding [than 15%]" with regard to the ability to exert a substantial degree of influence. The Commission also recognises, in the associated persons context, that mere ability to appoint a director may not be sufficient to exert influence. Rather, "the actual extent of the influence derived from those directorship links will differ, depending on such factors as size of the boards of directors concerned, and the role taken by particular board members in day-to-day management and strategic issues".

Here, CWH's use of its market power will manifest itself at day-to-day management level – for example, in prioritising client's conflicting demands when scours are capacity constrained – rather than in strategic decision-making at Board level. The ACC and Direct Capital appointed directors will have no visibility at the operational level where CWH's market power is most likely to be exercised against downstream competitors.

Impact in Australia is also relevant

The vertical impact of the acquisition would be significant not only in New Zealand but also in Australia, where Godfrey Hirst's plants also consume substantial volumes of greasy wool scoured in New Zealand, to produce carpets which compete with those produced by CWH.

However, as the term "market" is defined for the purposes of section 47 primarily as "a market in New Zealand...", that raises a jurisdictional issue as to whether effects on Australian – based manufacturers are also relevant to the Commission's consideration.

Again, the starting point must be that this application is not for a ruling that the acquisition would not or would not be likely to breach section 47, but an exemption from that prohibition in the broader public interest. While section 3A expressly requires the Commission to "have regard to any efficiencies" when determining whether or not, or the extent to which, a benefit to the public will result, efficiencies are not the exhaustive consideration.

The Commission Guidelines state, and the Courts have recognised, that intangible benefits are to be included where they otherwise satisfy the criteria. The Guidelines also state that benefits to foreigners may be counted to the extent that they also would involve benefits to New Zealanders.

It follows that preventing detriments, including detriments to foreigners that would also involve detriments to New Zealanders, must be a relevant consideration. Such detriments would include structural changes to markets that are competition – impeding.

Here, if authorisation were granted, the merged entity indisputably would have a substantial degree of power in the markets for scouring services in New Zealand. Information provided by CWH as to the reduced capacity for scouring of greasy wool in Australia indicates that the merged entity would also have a substantial degree of power in the scouring services market in New Zealand and Australia for the purposes of both section 36A of the Commerce Act and section 46A of the Competition and Consumer Act 2010 (Australia). Given that the legislatures of both New Zealand and Australia have imposed additional behavioural constraints on firms with power in trans-Tasman markets, preventing structural change to such markets that would enable, or conduct that would be tantamount to, exercise of trans-Tasman power must be a relevant consideration.

Prospectively, there is also the firm commitment of both Governments to competition law and policy which will enhance a single trans-Tasman economic market. Indeed, even under existing legislation there must be a concern on the part of the Commission that its counterpart ACCC would be interested in this acquisition occurring outside Australia but having a vital effect on wool processing markets in Australia, pursuant to section 50A of the Competition and Consumer Act.

Term of Scouring Agreement

It was claimed by CWH that Godfrey Hirst's downstream interests are protected from such threat of sabotage by the long term Scouring Agreement that Godfrey Hirst and CWH entered into. But that arrangement is not in fact long term. Godfrey Hirst's considered legal position in relation to the term of the Scouring Agreement is as follows:

[

]

In addition to that brevity of term, there is practical exposure if CWH fails, or is unable, to honour its obligations under the Scouring Agreement. At present, WSI constitutes a ready alternative provider.

Confidentiality

As previously submitted, the volume of material that the Commission has ordered, at the Applicant's request, to be excluded from the public on the basis of confidentiality has significantly hindered the ability of interested parties to provide analyses by people with industry expertise. Such analyses are of particular relevance in the consideration of benefits and detriments.

Since we expressed concern as to lack of transparency in our 27 April 2011 submission, there have been two practical examples of the hindrance experienced by Godfrey Hirst . Both occurred at the conference on 4-6 May 2011.

First, the meticulous analysis of the "1 x 2.4m New Entrant Model Comparative 28/4/11" tabled by CWH at the confidential session on 6 May 2011 was of no assistance to Godfrey Hirst as an interested party without the presence of our clients themselves, as industry experts. It was not necessary for this discussion to be excluded due to confidentiality. It was simply a model. Without input by people with industry knowledge, the model has no value to the Commission.

The last minute offer from CWH's counsel to make the material from this confidential model available provided no solace, given that by that stage Godfrey Hirst personnel were no longer in attendance. Consequently, the model and material included in the model could not be effectively discussed due to the confidentiality constraints.

Second, the number of industry experts CWH brought to the conference was disproportionate to that of any of the interested parties. Because CWH had full knowledge of the contents of its submission, this meant that they were able to have someone on hand for every issue in relation to any area of industry expertise. It would not have been feasible for Godfrey Hirst or other interested parties to provide such an array of personnel because they could not have known which expertise were likely to be required, not having seen the confidential material.

It is essential that the Commission considers the effect that so extensive confidentiality has had on the ability of testing by interested parties and the uncertainty surrounding the benefits claimed.

Yours faithfully

Grant David

PARTNER

DIRECT: +64 4 498 4908
EMAIL: grant.david@chapmantripp.com

APPENDIX A

CWH and WSI: Post-Conference Submission

18 May 2011

This report responds to a number of issues raised during the Commerce Commission Conference held on 4-6 May 2011, on which expert economists were asked to submit further evidence. The issues covered in this report follow the order in which they were raised during the Conference, rather than any order of priority or relative importance.

The Conference raised broad questions regarding the potential detriments and benefits of the proposed merger of CWH and WSI. My focus in responding to these questions has been on establishing the appropriateness of Castalia's previous estimation of likely allocative detriments, and on justifying the Commission's consideration of vertical detriments that may arise from a scouring monopoly with the ability to foreclose downstream rivals in the wool processing market. The other questions address the broader elements that underpin the net benefits and how the Commission should address particular claims.

Under some very favourable assumptions, the application claimed benefits of $42.61 million to $63.37 million. The Commission in its Draft Determination assessed the benefits at the much more modest $25.87. In response to the issues raised during the Conference, I remain confident that the benefits are likely to be towards the lower end of the range.

More importantly, as this report shows, any plausible assessment of the detriments in both the market for wool scour services and the downstream markets produces a figure well in excess of either the realistic or even the highly favourable assessment of benefits.

Table 1: Summary of Estimates of Detriments of Proposed Merger

		Castalia Submission	
Efficiency Loss	**Description**	**Treatment**	**Estimated Impact**
Allocative inefficiency	Price rises lead quantity to fall	Price increase resulting from competitive pressure due from China, exposing China-destined wool exports to shift	[ ]
Productive inefficiency	Costs are higher due to lack of competitive pressure	As per NERA report. We suggest use of the mid-point estimate, as no suggestion that distribution of outcomes is skewed	[ ]

		Castalia Submission	
Efficiency Loss	**Description**	**Treatment**	**Estimated Impact**
	One-off rationalisation costs	Treated as a detriment of the merger. Likely to be substantially higher given labour market conditions, and includes both transitional unemployment costs and lower wages post-merger	[ ]
Productive inefficiency (supply risk)	Increased risks of supply interruptions	Estimated using the expected value of lost production (increasing outages by 1% of actual production)	[ ]
	Increased labour costs due to likelihood of union hold-up	Assumed that labour costs represent 50 % of total variable costs and assumed that labour costs rise by an additional 3% per annum. While some increase in labour costs is a transfer, higher staffing levels and lower productivity associated with union power are a welfare loss	[ ]
Dynamic inefficiency	Demand does not expand due to limited incentives to innovate and invest	Elimination of merchant scouring leads to lower product innovation	[ ]
Impact on Downstream Markets	Opportunity to foreclose rivals in the downstream market	Effects of non-price discrimination on productive efficiency of downstream rivals' carpet manufacturing, in terms of both operating costs and product quality risks	$57 million to $60 million
Total Detriments			**Over $100 million**

WOOL SCOUR MARKET DYNAMICS AND ALLOCATIVE EFFICIENCY

At the Conference, the Commission asked economists to explore how to think about allocative inefficiency when different customers for wool scouring will have different demand elasticities, and given the potential for at least some degree of price differentiation.

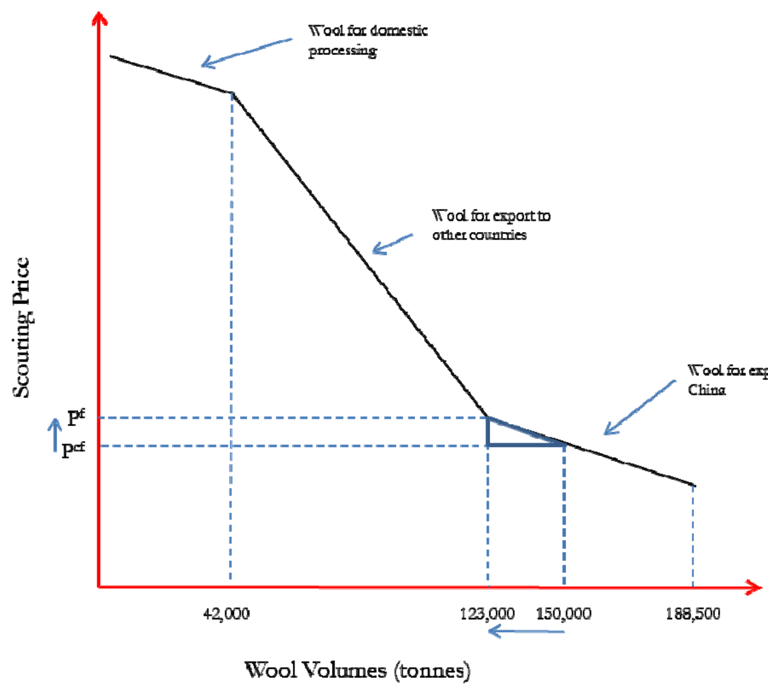
In my view, different demand elasticities are largely irrelevant to the calculation of the likely allocative detriment—i.e. the size of the welfare triangle lost due to the movement along the demand curve—because a plausible reduction in quantity demanded is likely to come solely from scouring of wool destined for China.

I agree with the Commission's view that the likely responses to price changes will differ across different customer groups for wool scouring services in New Zealand, based on the different substitution possibilities available to those customer groups. There appear to be three broad customer groups:

- **Wool for domestic processing**—these customers have a low elasticity of demand for New Zealand scouring due to the cost of transporting greasy wool to China and re-shipping clean wool back to New Zealand, or of shifting production to China
- **Wool for export to third countries**—these customers have a relatively higher elasticity of demand for New Zealand scouring, depending on transport costs and logistics of scouring in China, then on-shipping to the country of destination
- **Wool exported to China**—these customers have the highest demand elasticity for New Zealand scouring due to opportunities to export greasy wool and scour in China.

According to the Draft Determination, at current prices 188,500 tonnes of wool is produced in New Zealand, with 78 percent (147,000 tonnes) scoured in New Zealand. A further 22 percent of New Zealand wool is scoured for downstream processing in New Zealand (42,000 tonnes) and 43 percent is scoured for export to countries other than China (81,000 tonnes). Of the wool exported to China, 57 percent is greasy, and the remaining 43 percent is scoured in New Zealand. This market breakdown is shown in Figure 0.1, using the approximate figures from page seven of the Draft Determination. Figure 0.1 also depicts a demand curve with three different slopes, reflecting the different price responsiveness of three different customer groups summarised above.

Figure 0.1: Demand Elasticity for New Zealand Wool Scouring Services



The fact that a fairly even mix of greasy and clean wool is exported to China at the moment (a 57/43 split) suggests that there are a number of factors unrelated to the New Zealand scouring price that influence the choice between scouring in New Zealand and scouring in China.

To estimate the substitution possibilities for New Zealand scouring services, scouring needs to be considered as part of a broader wool supply chain that includes: when the customer needs the wool to be delivered; the availability of wool types, blends, and general qualities; storage; shipping; the ability to manage processing quality; end-consumer destination; and overall process and logistics coordination.

The decision to shift production off-shore is therefore not a binary decision based solely on the cost of scouring in New Zealand. Because customers have varying abilities to control the costs and wool quality in these downstream elements of the supply chain, there is unlikely to be a sudden threshold along each part of the demand curve relating to each distinct customer group. Rather, the demand curve will be a downward sloping curve, with a greater number of customers gradually preferring to switch to a Chinese scour as New Zealand scouring prices rise.

The analysis presented in the original submission, which relied on Mr Mellsop's estimates, showed that a price rise would be profitable for a plausible range of demand elasticities. Let us now assume that these demand elasticities apply only to scouring of wool ultimately destined for China, and that the demand in the other two categories will not be affected by the price rise.

Based on the volume breakdown of scouring demand, we can ask whether an estimate of the loss in allocative efficiency is affected by the fact that we now concentrate on the relevant part of the demand curve, rather than looking at the overall demand.

My estimates, as shown in Figure 0.1, assume an increase from the counterfactual price (P^{cf}) to the factual price (P^{f}) of 20 percent. On the basis of various submissions received, this appears to be a reasonable estimate of the difference between the current prices and the potential price threshold at which it becomes generally cheaper to scour in China. Assuming a linear demand curve with a plausible elasticity of -1.1 over the relevant range (i.e. up to the first kink in the curve), I estimate that this price increase could reduce the quantity of New Zealand scouring demanded by around 27,000 tonnes per year. As I mentioned previously, this elasticity is consistent with NERA's critical loss analysis, and would therefore still be profitable for the merged entity.

On this basis, New Zealand will continue to scour 120,000 tonnes of wool a year, which is sufficient to retain the economies of scale and stop the industry from disappearing.

On the basis of this calculation, the total allocative inefficiency arising from the acquisition would be [ ]. This is the same estimate presented in Castalia's first submission to the Commission (dated 4 March 2011) in response to the Application. In other words, taking into account different demand elasticities of different customer groups makes no difference to the analysis.

VERTICAL INTEGRATION CREATES SIGNIFICANT DOWNSTREAM DETRIMENTS

I now turn to the question of whether the post-acquisition company will have an incentive to sabotage its downstream rivals. In Castalia's previous submission, and during the conference, I presented a range of plausible actions in which an upstream monopolist could engage in order to disadvantage its competitors' downstream businesses. Since the current market structure does not create such incentives, I do not believe it is fruitful to look for the existing evidence of such activities. Rather, I interpret the Commission's questions as asking economists to examine the incentives to engage in non-price discrimination, given the post-transaction business structure and the fact that the downstream product market—the market for carpets—will remain competitive.

I argue that product market competition, in this case, does not mitigate concerns of vertical foreclosure. I also argue that the presence of independent shareholders does not alter the incentive on the upstream monopolist.

Including potential detriments in the Australian downstream wool sector, I estimate that non-price discrimination could drive additional costs into the downstream market (for no offsetting benefits) of approximately $57 million to $60 million over five years, applying a 10 percent discount rate.

Economic theory on the incentives to sabotage

Economic theory (and commercial practice) makes it clear that an upstream monopolist will have an incentive and an ability to use non-price discrimination to increase its revenues in the downstream markets.[1] CWH, as an upstream monopolist, could increase its competitors' costs, reduce their operating efficiencies, and reduce the quality of the product offered to downstream competitors through:

- Discretionary queuing practices that result in delays and require downstream rivals to hold more inventories

[1] Economides, N. (1998) "The Incentive for Non-Price Discrimination by an Input Monopolist," *International Journal of Industrial Organization* 16 pp271–284.

- Setting restrictive product or process specifications that affect downstream rivals' equipment compatibility, or
- Prioritising Cavalier wool in order to ensure final customers perceive greater quality from Cavalier than its competitors.

The economics literature refers to activities of this sort that disadvantage or foreclose downstream rivals as *sabotage*, and typically assumes that sabotage serves to raise the operating costs of downstream rivals. ***I would like to emphasise that I use the term sabotage in its economics literature sense, without any inference of improper conduct by any party.***

Economides (1998) and Mandy (2000) demonstrate that strong incentives for sabotage can arise when the affiliate and rival produce homogeneous products, and as long as the downstream affiliate of an upstream monopolist is at least as efficient as the downstream rival in serving customers, the merged entity will eventually capture all of the rival's demand.[2] The Commission has previously recognised this ability to discriminate in favour of downstream affiliated activities.[3]

While some forms of sabotage may increase rivals' operating costs (e.g. causing productions delays and imposing standards that are particularly costly for downstream rivals to adopt), other forms of sabotage may primarily reduce the demand for rivals' products (e.g. degrading the relative quality of competitors' products and limiting the ability of competitors to test new products and deliver them to customers). Quality, in this context, could include on-time delivery and the ability to produce special runs for large customers. Broadly speaking, sabotage arises from the ability of the vertically integrated supplier to treat its own downstream business and its rivals differentially.

In addition to sabotage, an input monopolist may have an incentive to engage in *self-sabotage* if the symmetric application of the resulting higher costs or lower quality harms competitors more than it harms its own downstream affiliate.[4] This may be the case, for instance, if a cost increase is particularly detrimental to competitors (e.g. because they face a greater risk of bankruptcy or use the more costly input more intensively) or if competitors serve customers that value service quality or brand recognition particularly highly.

Overall, the literature notes that by inducing downstream rivals to reduce their output, cost-increasing sabotage can decrease demand for the upstream product (e.g., access to the wool inputs), and thereby reduce upstream profit when the price of the upstream product exceeds its marginal cost of production. Thus, the literature suggests that because sabotage and self-sabotage generally increases the downstream profit and reduces the upstream returns of the vertically integrated supplier, the likelihood of sabotage in practice is an empirical matter that merits investigation on a case-by-case basis.

I agree that the presence of outside shareholders in the ownership structure of the upstream monopolist could deter *self-sabotage*, although as I discuss below, it may be difficult to monitor. However, in my view, the presence of outside shareholders will not deter sabotage in this case, because sabotage is possible without reducing the profits of the upstream monopolist (or reducing them by such a limited extent as to escape detection).

---

2 Ibid note 1 and Mandy, D (2000) "Killing the goose that may have laid the golden egg: only the data know whether sabotage pays" *Journal of Regulatory Economics* 17 pp 157-172.

3 See for instance *Air New Zealand and Qantas Airways Final Determination*, Decision 511 at paragraph 877.

4 Sappington, D.E.M. and Weisman, D.L. (2005) "Self Sabotage", *Journal of Regulatory Economics* 27(2), pp155-175.

As discussed in the previous section, very low elasticity of demand for wool scouring in New Zealand for use in carpet manufacturing in Australia and New Zealand means that sabotage can increase the profits of the downstream affiliate without affecting the profits of the monopolist.

Structural responses to the vertical incentives to sabotage

There is considerable debate in the economics literature on the trade-offs between (i) reductions in incentives for anti-competitive conduct, which results from complete structural separation between the upstream monopoly and downstream competitive services (often combined with more targeted conduct regulation), and (ii) possible losses in efficiencies that were generated by vertical integration.

In other sectors, where concerns about sabotage arise, regulators (including the Commerce Commission) have promoted structural solutions such as a form of functional separation, where careful protocols incentivise the upstream monopolist to act solely in its own interest on matters relating to access, while enabling the management of the vertically integrated entity to make joint decisions for the upstream and downstream businesses which are motivated by efficiency considerations. For example, this is the logic which has been applied to the telecommunications sector.

Using the analysis which has been applied to other sectors, it is clear that effective functional separation has two main components:

- The boundaries between the upstream and the downstream operations have to be carefully defined in order to ensure alignment of incentives. In general, the upstream business should have control and an economic interest in all the facilities required to provide wool scouring services. If the boundary for functional separation includes many points of cross-over (requiring the upstream business to contract with related parties to provide the required services), separation becomes less transparent and effective, and
- It is critical that performance incentives for the personnel involved in key decisions recognise the objectives of functional separation. If personnel in the upstream business unit are remunerated on the basis of the performance of the integrated entity, or if their promotion depends on the decisions of managers who are in turn remunerated on the basis of the overall performance, any functional separation is likely to become less effective.

The post-transaction business structure does not appear to have any of the elements which would resemble an effective functional separation. The management contract between the downstream entity and the upstream monopolist, and the many points of cross-over between the upstream and downstream businesses, create precisely the kind of setting which the Commission has found very troubling in other sectors.

Product market competition and wool substitutes do not reduce incentives to sabotage

One of the arguments raised at the conference was that the incentive to foreclose or sabotage was mitigated by competition in the downstream product market—in this case the market for carpets, including non-wool and wool-blend carpets.

The economics literature suggests that vertical foreclosure, such as non-price discrimination, would benefit a vertically integrated carpet producer by enabling the upstream monopolist to capture market share in the downstream market. In this case, any increase in demand for Cavalier's carpet would arise as Godfrey Hirst's output declines due to sabotage.[5]

These incentives do not change with competition between the product and any substitutes. In this case, synthetic carpets may be considered to be substitutes for purely woollen carpets in some applications. Although woollen carpets have substantial physical differences from synthetic materials and are generally considered a high-quality 'natural' product (there is a strong regional preference for wool over man-made fibres), some consumers will be largely indifferent to the alternative materials or origins of carpet. Competition will therefore exist where consumers trade off price and quality.

In industries with significant fixed costs (such as carpet manufacturing), there may be a limit to how much rivals can undercut each other to gain market share because producers need to recover their fixed costs over time. The problem of recovering fixed costs essentially means that marginal cost pricing is not a viable strategy to gain market share, and some form of average cost pricing is required to recover costs.

The costs of carpet manufacturing relate to a fairly common set of fixed costs (including marketing), which need to be recovered through sales volumes. The presence of margins to recover fixed costs means that producers will have strong incentives to maximise volumes because the more volume they achieve, the more profit they make. This means that although the vertically integrated monopolist in wool scouring may have no ability to increase downstream product prices without causing a shift in demand to other products, it could increase its profits by gaining market share and increasing sales volumes through sabotage.

By sabotaging its rival, a vertically integrated monopolist can increase its market share without encouraging customers to substitute to imported woollen carpets and synthetics. The vertically integrated monopolist will be able to gain market share as a result of a) its rivals' costs increasing, b) its rivals' operating efficiencies reducing, or c) the quality of the service offered to its rivals (and therefore the quality of the end-products) deteriorating. In this respect, quality includes all aspects of timeliness and product management.

The independent shareholder in CWH does not reduce incentives to sabotage

At the Conference, Mr. Mellsop argued that CWH will face little incentive to foreclose downstream rivals because the present ownership structure includes a 50 percent shareholder with no downstream interest (an "outside" or "independent" shareholder).

The presence of an independent shareholder also does not alter incentives to foreclose if there are no or limited costs to the upstream business, but clear benefits to the downstream business. Such actions could include using input information and imposing supply risks on the rival carpet manufacturer. If these actions continue over time, the downstream affiliate (Cavalier) will be in a better position to capture market share.

Even where costs are imposed on CWH, an independent shareholder would only be able to alter the incentive if it had an effective ability to monitor operational-level decisions and conduct of CWH. Since individual actions of management will not become the subject of Board scrutiny, Board representation by independent shareholders would only play a role if sabotage can clearly be identified as the reason for profits not meeting the required targets. Since the Board will not have any information on what the profit could be without sabotage, and since there are usually numerous and complex reasons for any level of performance, it is difficult to see how outside shareholders could detect the effects of sabotage. In any case, as I

[5] Mandy, D. & Sappington, D.E.M (2007) "Incentives for sabotage in vertically related industries" *Journal of Regulatory Economics* 31(3), pp235-260.

explained above, I believe that low demand elasticity would make sabotage profitable for both the upstream and the downstream entities.

This is reinforced by the fact that the independent shareholders do not have a history of operating scours and will be unlikely to take an active interest in the more technical aspects of scouring to which the potential anti-competitive conduct relates. In other words, these decisions are unlikely to have much visibility at the Board level—any increase in costs from non-price discrimination (such as scheduling a rival's scouring) is likely to be small, and therefore unlikely to gain the attention of an independent shareholder.

It also appears that the personal incentives of CWH management may be linked to the performance of Cavalier's carpet business (or overall Group performance) through the management contract in place. This would strengthen the incentives for discrimination, and suggests there may be an explicit presumption that Cavalier wool will be prioritised over downstream rivals' wool.

To understand whether an independent shareholder would restrain foreclosure incentives, the Commission also needs to know more about the rules for decision-making in the event of a 50/50 split of the Board (along shareholder lines). If Cavalier has the casting vote in the event of a split, then independent shareholders will clearly have no ability to prevent foreclosure in downstream markets (even if this raises costs for CWH to the point where the Board becomes involved).

Even assuming some potential damage to the upstream business, there will be ample opportunities to compensate an independent shareholder for any costs imposed. For example, an independent shareholder may be willing to trade-off scheduling policies proposed by management for more favourable dividend policies at the CWH Board level.

Vertical effects on downstream processing in Australia

The vertical effects on wool processing in Australia are a specific consideration under the Commerce Act, and are relevant to the present case because of the absence of scours in Australia. The vertical effects on downstream wool processing in Australia are largely the same as the effects in New Zealand. Cavalier and Godfrey Hirst carpets are intense rivals both in Australia and in New Zealand, however Cavalier does not appear to manufacture woollen carpet in Australia.

Quantifying the detriments of vertical foreclosure

The competitive detriments caused by the incentives on a vertically integrated monopolist to benefit its downstream operations are additional to any price effects captured in the calculation of allocative inefficiency, and need to be estimated separately.

It is very difficult to categorically calculate the potential downstream detriment caused by the potential for non-price discriminatory foreclosure, but what is clear is that the downstream effect could be significant if exercised and possibly difficult to detect immediately. A plausible estimate of the detriments arising from vertical restraints—consistent with the Commission's past approaches—could be based on assuming that CWH is able to increase the costs faced by Cavalier's rivals to the extent of 5 percent of their downstream wool carpet sales. This provides a good order-of-magnitude estimate of the very real potential for sabotage.

The wholesale value of New Zealand scoured wool sold into the Australian residential and commercial markets for the 2010 calendar year is estimated from the Australian Carpet Institute figures as being between AU$200m—$215 million, or NZ$270.91—$291.228 million at current exchange rates. I do not have data for Cavalier's market share in Australia. Applying a 5 percent factor to reflect potential competitive detriments to 75 percent of the market produces in an NPV of detriment of between NZ$42.4 million and NZ$45.6 million (using a 10 percent discount rate over five years).

Godfrey Hirst estimates that, excluding Cavalier (i.e. including Godfrey Hirst carpets and imports of New Zealand wool carpets manufactured in Australia), New Zealand wholesale carpet sales totalled NZ$71.943 million in the last calendar year. Again, applying an estimated increased cost of 5 percent to these sales yields a vertical detriment of $15 million NPV over five years.

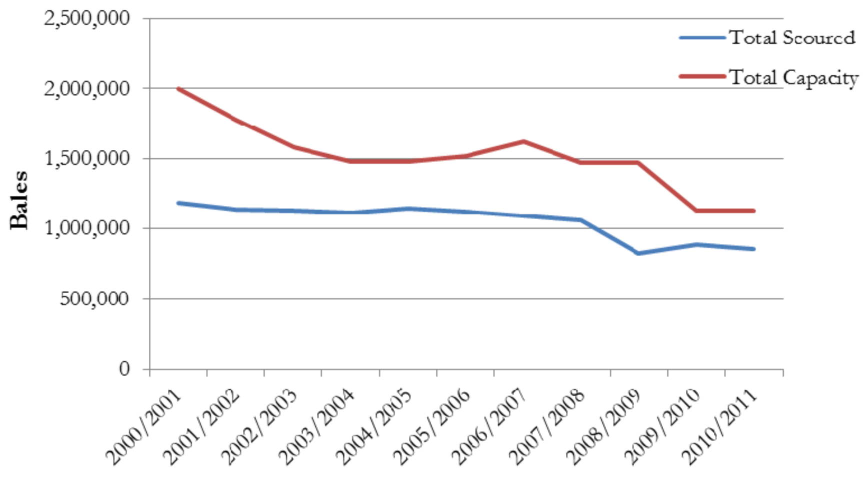
Y-BENEFITS DO NOT RELY ON FURTHER INDUSTRY RATIONALISATION

CWH claims that improvements that further industry rationalisation will lead to dynamic efficiency gains, which will offset dynamic efficiency losses from the reduction in competition. The argument is that changes in practices which improve quality are only economic if implemented in the process of plant rationalisation.

CWH has suggested that historical improvements in the whiteness of scoured wool (Y-benefits) provide a useful measure of such dynamic benefits. There was considerable debate at the Conference about the measure of Y-benefit, and to what extent it may be capturing input composition rather than quality improvement. Putting this debate aside (fascinating as it was), my view is that changes in the wool scouring industry over the past 10 years indicate that past Y-benefits did not appear to require rationalisations. Hence, it is difficult to see why further rationalisation is needed to maintain the gain.

The trend of increasing asset utilisation by wool scours is shown in Figure 0.1. In 2000/2001 industry assets were used at approximately 60 percent of capacity. By 2010/2011 capacity utilisation had increased to around 75 percent.

Figure 0.1: Capacity and Total Wool Scoured 2000 - 2011



Source: Godfrey Hirst

Industry data on rationalisation from Godfrey Hirst shows that as scours have been closed and equipment shifted, the width of scours has increased through capital expenditure on newer equipment.

Table 0.1 lists the scours that were operating in 2000/2001, with the scours that are still operational in 2010/2011 highlighted in red. This indicates that production has shifted towards the wider scours that remain operational.

Table 0.1: Wool Scouring Plant Characteristics

Scour	Location	Owner	Configuration		Capacity
			2000	2011	(bales)
Lichtenstein	Auckland	Merchant Cavalier	2x2.4m	Closed 2000	240,000
Waikato	Nth Waikato	Dale/Marquet	1.8m	Closed 2000	80,000
Hawkes Bay	Napier	Ferrier/Cavalier, now CWH	2x2.4m	2x2.4m	240,000, now 260,000
Clive	Napier	Godfrey Hirst	2.0m	2.0m	100,000
Whakatu	Napier	NZWSI	1.8m	3.0m	200,000
Kakariki	Fielding	Feltex	2.4m, 1.2m	Closed 2006	160,000
Seaview	Wellington	ADF/Modiano/Charguer	2.0m	Closed 2003	100,000
Kaputone	Christchurch	NZWSI	3.0m	3.0m	200,000
Ashburton	Ashburton	Laycock Family	1.2m	Closed 2006	40,000
Winchester	Nth Timaru	Ferrier/Modiano/Fuhrmann	2.4m, 2.0m	Closed 2006	200,000
Fairlie/Canterbury	Timaru	Charguer, now CWH	2.4m	2.4m, 3.0m	120,000, now 340,000
RF Scour	Dunedin	Pyne Gould Guinness	2.4m, 2.0m	Closed 2002	200,000
Clifton	Invercargill	Godfrey Hirst	2x2.4m	Closed	240,000

Scour	Location	Owner	Configuration		Capacity
			2000	2011	(bales)
				2011	

Source: Godfrey Hirst Limited

To the extent that quality changes relate to scouring processes, it appears that the main effects relate to:

- Increased scour throughput, with the survival of larger scours
- Specific production efficiencies through better equipment specifications and improved technology.

It is possible that the average quality of scoured wool has been improving due to increased throughput. CWH links increased throughput to rationalisation. However, I see no reason why increased throughput can only occur through concentrating ownership. Throughput is a measure of asset utilisation, and management practices, pricing, and demand can all affect utilisation independently of ownership.

There are also other possible technology improvements that could have led to the claimed Y-benefits. Scouring practices and chemicals may have changed (without any link to concentrated ownership), as additional knowledge is gained on what works best.

Overall, spending to improve efficiency by using better equipment more effectively may have been justified by increased throughput at each scour (i.e. by taking advantage of economies of scale). There is no need to concentrate ownership to capture these benefits.

EXPECTED VALUE OF BENEFITS

At the hearing, the Commission raised the question of whether the expected value of benefits and detriments should be used to estimate the impact of the acquisition. This requires probabilities to be assigned to "likely" impacts and would result in efficiency effects being weighted by the chance they have of eventuating.

There are two possible methods of calculating the benefits and costs:

- **A binary assessment of likelihood that makes no adjustment for probability**—First, assess the likelihood of the particular outcome occurring. Then, if the Commission is satisfied that the outcome is "likely" on the balance of probabilities (more likely than not), the impact is calculated by assuming that the outcome will occur with absolute certainty
- **An expected value approach**—First, assess the likelihood as a probability of the outcome occurring. Then, multiply the potential value change by that probability to obtain an estimate of the impact.

These alternatives appear to describe the legal test as currently applied (a binary assessment of likelihood that makes no adjustment for probability) and an economic or mathematical approximation (an expected value approach). Posner (1973) argues that the law in general should utilise an expected value approach to appraise legal disputes,[6] and more recently Katz and Shelanski (2007) have advocated an expected value approach for use in US merger

[6] Posner, R A (1973) "An Economic Approach to Legal Procedure and Judicial Administration" *Journal of Legal Studies* 2, 399.

analysis.[7] A significant advantage of using the expected value approach highlighted in the literature is that it accounts for low probability, high impact outcomes, ensuring that serious detriments with less certain probability are not ignored.

Under the Commission's assessment in the Draft Determination, many of the possible effects of the proposed merger were set at zero because their probability did not reach the Commission's 'likely' threshold. Under an expected value calculation, the average expected detriments of dynamic detriments (for example) would not be valued at zero, while uncertain productive benefits would not contribute to the net benefits in their entirety.

I do not wish to comment on the legal issues relating to a switch to an expected value approach. However, if the Commission were to switch to an expected value approach, as an economist, I would argue that this should be applied to all detriments and benefits, not just to a few selected ones. The likely effect on the analysis is likely to be very significant, and would require a further Conference to test the new approach.

WEAK SELLING ARGUMENT IS NOT SUBSTANTIATED

All parties agree that the wool scouring industry in New Zealand currently has two business models—merchant and commission scouring—and that the acquisition would result in the end of merchant scouring. In my view, it is not clear that one business model is clearly any 'better' or 'worse' than the other, although the presence of competing models clearly contributes to innovation.

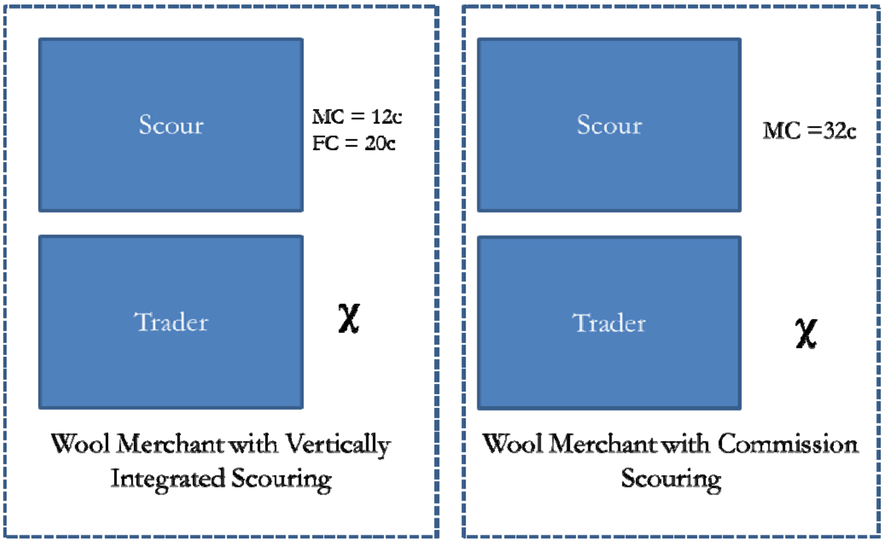
CWH contends that WSI has been a "weak seller" of wool based on an unsustainable business model—merchant scouring. This is based on a belief that a vertically integrated merchant scour has a lower marginal cost, and will be driven down to sell wool at its marginal cost by buyers with bargaining power.

The two different ways of operating wool scouring operations mean that a wool merchant utilising a commission scour (such as CWH) faces higher marginal costs than a wool merchant that is vertically integrated with the scour (such as WSI). This is because a vertically integrated scour needs to maintain the costs associated with owning scouring assets (i.e. whether there is greasy wool available or not), whereas a wool merchant purchasing the scouring services can either hold the wool or sell it greasy.

A stylised example of these alternative cost models is shown in Figure 0.1. In this example, CWH claims that the wool price might be forced down to φ + 12c for a merchant scour, but only φ + 32c for a merchant purchasing the services of a commission scour. The claim is that the vertically integrated scour would be a weak seller in the face of concentrated and powerful overseas wool buyers by being more likely to accept a lower price, undercutting other merchants relying on commission scouring at a total wool price of φ + 32c.

[7] M L Katz & H A Shelanski (2007) "Merger Analysis and the Treatment of Uncertainty: Should We Expect Better?" *Antitrust Law Journal* 74 537, pp538-539.

Figure 0.1: Downward Pressure on Merchant and Commission Scouring



The weak seller claim ignores the possibility of all wool merchants putting downward price pressure on commission scours (i.e. by threatening to hold on to wool, seeking other alternatives, or selling wool greasy). If the vertically integrated scour is not covering all of its costs, then it will also struggle to sustain high prices to the upstream wool trader. In other words, it is not clear why the downward pressure exerted by aggressive wool buyers would stop at the scouring factory gate.

It is also unclear why a merchant scour would accept a price that results in losses, simply for the sake of increasing scouring throughput. If no contribution is made towards the fixed costs of the scour, a weak seller could not survive and the price would rise to reflect what the market could sustain—in line with profit maximisation.

Even if the claim of weak selling is an accurate characterisation of previous management behaviour at merchant scours, the most likely result in the counterfactual would be for shareholders to demand that prices return to as much as φ + 32c, or they would exit and merchant scour would fail. The factual scenario of a monopoly based on commission scouring is not the only, or even the most likely, result.

Contrary to the claim of weak selling, having competition and alternative business models adds to the ability of the wool industry to achieve dynamic efficiency through innovation. Commission scours have established ways of innovating and improving quality, while merchant scours deal with the same market opportunities, pressures and risks differently. It is not obvious to me that one method of achieving wool quality and meeting customer needs is better than the other. However, it is clear that vertically integrated merchant scouring is a viable business model with strong incentives to innovate (as noted in our previous submissions).

MARKET ENTRANTS FACE A HIGH INVESTMENT HURDLE RATE

The final matter raised at the Conference that we comment on in this note is the competitive constraint on raising prices from a hypothetical market entrant that develops a new scouring facility. The strength of this constraint clearly depends on the rate of return that investors in a new facility would achieve after meeting costs. Best practice regulation and commercial reality both suggest that a new entrant to the New Zealand scouring market would face a considerably higher investment hurdle rate than faced by an existing player, which means that prices would need to rise substantially before attracting entry.

Regulatory practice in estimating the weighted average cost of capital (WACC) for an investment or business is based on finance theory, and specifically the application of the Capital Asset Pricing Model (CAPM). This theory holds that only systematic risks are reflected in the WACC because investors are able manage all other risks through diversification. A naïve application of finance theory in this case might suggest that the unique risks facing greenfield developments and the risks of competing against a monopolist with incentives to destroy a fledgling business do not affect WACC.

This application of finance theory puts regulatory practice squarely at odds with commercial reality. The non-systematic risks mentioned above will clearly affect the appetite of investors to put their capital into a project—driving up the returns expected from such an investment. These risks also change the nature of investors that will find such an investment attractive. In a market with declining sales and limited opportunities to quickly realise value through exit, an investor could only be compensated for taking risk through cash-flows earned over a long period of time.

Regulators overseas have developed ways to account for the additional risks associated with greenfield projects, which if properly applied can bridge the apparent gap between finance theory and commercial reality. For example, the Independent Pricing and Regulatory Tribunal (IPART) in New South Wales incorporates non-systematic risks by sensitivity testing cost assumptions (such as capital and operating costs, fuel costs, debt costs, customer demand) and ensuring that projects will be able to meet the hurdle rate of return and other financial benchmarks.[8]

Applying this approach suggests that scouring prices would need to increase substantially to compensate a hypothetical investor in a new wool scouring operation in New Zealand for the significant risks involved. Such prices would reflect the need to recover high fixed costs, the regulatory barriers associated with resource consenting, and occupational safety requirements.

[8] For a good application of this approach see IPART (2008) "Islanded Networks". Available online at: http://www.ipart.nsw.gov.au/files/Islanded%20networks%20-%20Principally%20in%20relation%20to%20combined%20heat%20and%20power%20schemes%20-%20Consultation%20Paper%20-%20September%202008.PDF

APPENDIX B

Scour Costing

Godfrey Hirst has estimated the capital cost a new entrant would need to overcome in order to provide a competitive scouring service in New Zealand.

Godfrey Hirst has the experience necessary to reliably estimate the likely new entrant cost, having operated scours in New Zealand and Australia for in excess of fifteen years prior to 2009. During this time the Company installed new and second hand scouring plant and equipment throughout New Zealand, USA, Australia and China including wool pressing, wool grease recovery and associated necessary ancillary services and machinery.

Godfrey Hirst completed the rationalisation of five scours throughout New Zealand and Australia in 2000 (2), 2001, 2002 2003 and 2006 so has knowledge and experience in the second hand market for such equipment. With the exception of several old style conventional wool scours that would be unsuitable in any case, Godfrey Hirst has been unable to locate any second hand wool scours that would enable a new entrant to cheaply enter the New Zealand wool scouring market. Godfrey Hirst is aware of several component items of surplus wool scouring equipment currently owned by Cavalier however it is not likely this machinery would be available to any potential competitor.

It is therefore Godfrey Hirst's considered opinion that the only realistic option for any serious new entrant would be to install new plant, although we have estimated the expected likely cost of a second hand 2.4m scour for comparison purposes based on known sales of comparable equipment over the past several years.

With regard to new scours, Godfrey Hirst does not consider that a cheap 2.0m working width Chinese built plant presents a viable alternative to more expensive NZ built equipment, as has been suggested by Cavalier. With plant reliability and efficiency being so critical to the success of any scouring business and product quality just as important to its customers it is unlikely any knowledgeable new entrant would risk Chinese built scouring machinery. Chinese built scours are simply copies of other manufacturers plants that have been built without the knowledge and intellectual property amassed over several decades of product development and innovation. The fact that Andar continues to build wool scours for Chinese processors despite competition from cheaper Chinese machinery manufacturers confirms the view that the more expensive New Zealand built plant is the better and more cost effective option in all respects.

Notwithstanding this, and accepting Cavalier's estimate of US$1M for a Chinese built 2.0m working width wool scour, it is Godfrey Hirst's opinion that the likely total cost for a Chinese built wool scour would be similar to the estimated second hand price model as detailed in our cost estimate.

Godfrey Hirst has obtained a price from Andar Holdings for a new 3m scour. The cost difference between new 3m and 2.4m wide scours has been estimated at around 15% so it is unlikely any new entrant would elect to install a 2.4m plant when the more efficient 3m version is so close in price. Certainly any decision to install a new 2.4m scour would doom the new entrant to inefficient processing and higher unit costs in virtually every input in exactly the same manner as a new 2.0m Chinese built plant would. This means that the committed volume necessary to stimulate a potential new entrant into action is also higher and therefore more unlikely.

Godfrey Hirst also records that the cost of the scour itself is less than half of the total cost of all the plant and equipment necessary to operate a wool scour. Other necessary plant includes greasy wool blending and opening machinery, wool grease recovery plant, high density pressing, bale coring and wool testing equipment, water heating plant/boilers, compressed air and electrical services etc. These additional items are included in the cost estimate. With regard to estimated second hand prices Godfrey Hirst has been unable to confirm the existence of any suitable available second hand equipment other than off-the-shelf items common to many industries such as water heaters and air compressors etc.

Godfrey Hirst believes that, in order to provide a competitive commission scouring service, any new entrant would need to establish processing capacity in both the north and south islands. New entrants with capacity in one island only would not be able to attract commission processing because CWH would discriminate against customers of the new entrant by setting tariffs higher in the island where there was no alternate processor. Further, any merchant looking to establish scouring for their own needs would also be constrained in a similar manner for any other island scouring they required unless competition existed in that island also.

The location of any scour within each island is also important and has the ability to add significantly to operating costs if ill considered. Assuming the factual and established Superstores in each island would limit any new entrant to within close proximity of the incumbent, ie Napier/Hastings and Timaru. Wool scours require specialised buildings with large open plan floor areas with abundant water supply and effluent disposal. The scour hall itself needs to be around 100m long by at least 10m wide with no obstructions and purpose built in-floor drainage. Godfrey Hirst has been unable to locate any suitable existing buildings in either the Napier/Hastings or Timaru areas so considers a new building development in an established Industrial Park the only viable option.

A further significant barrier to any new entrant would be staff recruitment, particularly at a senior production level. The knowledge and skills required to operate a wool scour only come with experience and in the factual CWH will possess all the human resource meaning the new entrant would have to recruit existing CWH staff, presumably by offering better pay and conditions. This situation in itself presents a concern that suitable staff may prove difficult to acquire and/or result in increased operating costs for all processors.

	New 3M Plant			Second Hand 2.4m Plant		
Item	**Details**	**Cost**	**Total**	**Details**	**Cost**	**Total**
Site						
Sorting Floor	Feed hoppers x4	480,000		Feed hoppers x3	150,000	
Sorting Floor	Weighbelts x4	140,000		Weighbelts x3	30,000	
Sorting Floor	Controller	50,000		Controller	25,000	
Sorting Floor	Short wool openers x2	300,000		Short wool openers x2	100,000	
Sorting Floor	Decotter	300,000		Decotter	100,000	
Sorting Floor	Conveyors etc	60,000		Conveyors etc	20,000	
Sorting Floor	Opener/blender	200,000	1,530,000	Opener/blender	60,000	485,000
Scour	Per Andar Quote	5,500,000		s/h scour	1,000,000	
Scour	Scour install/electrical	500,000	6,000,000	Scour install/electrical/freight	1,000,000	2,000,000
Press	Press, ducting & install	2,500,000		Press, ducting & install	1,200,000	
Press	Corer	300,000		Corer	150,000	
Press	Wool testing	150,000		Wool testing	50,000	
Press	Dust system	120,000	3,070,000	Dust system	100,000	1,500,000
Automation and Control	Included in scour cost	0	0	Scour automation/data capture and Information systems	150,000	150,000
Grease recovery	Dirt Removal/Process piping etc	150,000		Dirt Removal/Process piping etc	120,000	
Grease recovery	Primary Separators x2	400,000		Primary Separator	100,000	
Grease recovery	Purifier	250,000		Purifier	80,000	
Grease recovery	Cream Tanks x4	60,000		Cream Tanks x3	15,000	
Grease recovery	Purified grease tank	15,000		Purified grease tank	5,000	
Grease recovery	Bulk Grease Tank	120,000	995,000	Bulk Grease Tank	60,000	380,000
Services	Compressed air and reticulation	80,000		Compressed air and reticulation	40,000	
Services	Hot water	40,000		Hot water	40,000	
Services	Not needed (direct gas burners)	0	120,000	Boiler/steam generation and reticulation	200,000	280,000
Consultancy	Engineering & Design		500,000	Engineering & Design		500,000
Total - Plant and Equipment			12,215,000			5,295,000
Site	Assume undeveloped site in established Industrial Park, 15000m2	1,000,000		Assume existing property, approx 10000m2, 6000m2 buildings	4,000,000	
Buildings	8000 m2 building, $600 psm	4,800,000		Site modifications/development	300,000	

	New 3M Plant			Second Hand 2.4m Plant		
Item	**Details**	**Cost**	**Total**	**Details**	**Cost**	**Total**
Grounds	Sealing/landscaping	500,000		Included buildings	0	
Water	Bore	100,000		Included buildings	0	
Effluent services	Included buildings	0		Connect to Municipal sewer	150,000	
Consultancy	Resource consent	100,000		Resource consent	100,000	
	Engineering & design	100,000		Engineering & design	100,000	
Total - Land and Buildings			6,600,000			4,650,000
Grand Total			18,815,000			9,945,000