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Public version

MEMO

TO:	Reuben Irvine, Commerce Commission
DATE:	22 December 2014
FROM:	James Mellsop and Will Taylor
SUBJECT:	CWH/WSI - responses to Commission questions on cost benefit analysis
COPY:	Phil Taylor, Glenn Shewan, Penny Pasley and Emma Harris, Bell Gully

1. Introduction

We have been asked to respond to a variety of questions raised by Commission staff in respect of our cost benefit analysis of the proposed CWH/WSI merger.[1] We set those questions and our responses out in this memo.

2. Surplus transfers

2.1. Treatment of transfers to foreigners

In our cost benefit analysis, we have treated surplus transfers as being neutral – in other words, we have taken a total surplus approach. This was the approach adopted by the Commission in *Decision 725*, and is the general approach set out in the Commission's *Authorisation Guidelines* (paragraph 53).

However, Commission staff have noted that in the present case the merged entity would be 45% owned by Lempriere, which is an Australian business. Accordingly the question has been raised as to whether any surplus transfer to Lempriere from New Zealanders should be regarded as a detriment.

As a general statement, we think that such transfers should be treated neutrally. New Zealand benefits from foreign investment, and so profit flows that reward or more generally incentivise such investment should not be regarded as a detriment to the New Zealand economy.

Furthermore, for all we know, Lempriere might invest any transfer back into the New Zealand economy.

However, it is plausible that a transfer to foreigners could reflect rents that serve no valuable purpose from the perspective of New Zealand, and are greater than that required to incentivise foreign investment or other socially valuable functions (e.g., properly defined monopoly rents). In

[1] These questions were specifically asked by Reuben Irvine, Senior Economist, during a call on 15 December 2014.

such circumstances, it might be appropriate to treat such transfers as being a detriment to New Zealanders.

Great care would be needed in attempting to delineate such "functionless rents" from those that benefit or are neutral for New Zealanders. Difficulties involved in this sort of exercise would include identifying an appropriate cost of capital, and taking into account that what might appear to be monopoly profits on a static view might actually be the legitimate payoff for an earlier investment, innovation or cost reduction on a more dynamic view.

If there are considered to be functionless rents, then they could only be considered detriments to the degree they represent a transfer from the New Zealand public to foreigners. Relevant to this is both the foreign ownership of the merged entity, and also the foreign ownership of the merged entity's customers, being the wool merchants in the present case. As the Commission noted in *Decision 505* (paragraph 449):

> *In the present case, the Commission considers that it is not necessary for it to assess whether any transfers would fall into the 'functionless monopoly rent' category as the overseas ownership of the Pohokura JV and of the major gas purchasers are similar – perhaps around 70% of each. Thus even if there were such transfers, the net effect would be very small or zero.*

In the present case:

- The foreign ownership of the merged entity would be approximately 45% (a more accurate estimate would involve checking the share register of each owner);[2] and
- In the 2013/14 year, approximately **[REDACTED]**% of CWH volumes for merchants were for foreign-owned merchants.[3]

On its face, it could even be argued that any transfer would on balance be from foreigners to New Zealanders, and that this should be treated as a benefit of the proposed transaction. However, at least in the present case where (like *Decision 505*) there is a material level of foreign ownership on both sides of the market, we would advise the Commission to keep away from this type of approach (in either direction), for the following reasons:

- The difficulty in delineating functional from functionless rents;
- The difficulty in tracing ownership (for example, some shareholders in Lempriere might be domiciled in New Zealand, and some shareholders of what is ostensibly a foreign-owned merchant might be domiciled in New Zealand); and
- The surplus could end up being reinvested in New Zealand anyway.

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[2] **[REDACTED]**

[3] Source: CWH analysis.

Even if we could be confident about identifying functionless rents being transferred from New Zealanders to foreigners, it is also important to note that these would (presumably) be taxed by the New Zealand Inland Revenue Department, and so only the post-tax surplus could be considered a detriment.

2.2. Impacts on participants in vertically related markets

In the context of the foreign versus New Zealand transfer issue, Commission staff have also asked for our views regarding impacts on growers and on firms that buy wool from merchants ("buyers").

The first point we wish to make is that if the standard is a total surplus one, then it is not necessary or appropriate to review surplus changes in vertically related markets to the wool scouring market. By analysing surplus changes in the wool scouring market alone, we can calculate total welfare effects in all vertically related markets.[4]

We also note the legal position, as set out in the 18 May 2011 Bell Gully letter to the Commission in respect of the previous authorisation application (page 5):[5]

> *It is only those detriments which arise in the market in which the identified substantial lessening of competition occurs that are relevant in the public benefit calculus.*

Now suppose despite these points it is considered appropriate to analyse transfers to or from participants in vertically related markets.[6] Any attempted analysis of incidence in vertically related markets would become complex and potentially arbitrary, as the following would have to be determined:

- The extent of pass-through by merchants of scouring price increases to growers and buyers, and the timeframe for that pass-through. Unless grower supply of wool is perfectly inelastic (which it would not be – the declining supply of wool in New Zealand suggests that growers respond to relative price signals), growers would not bear the full incidence of a scouring price increase. Likewise, it is unlikely that the global demand for New Zealand wool is perfectly elastic. Therefore in reality there would be some sharing of the incidence between merchants, buyers and growers, even if the bulk falls on growers. Furthermore, pass-through to growers might be retarded by forward buying and long-term contracts; and
- Ownership (domestic versus foreign) of those growers and buyers (as well as ownership of the merchants, relevant to the extent price increases are not passed through).

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[4] See Just, R, D Hueth and A Schmitz (1982) *Applied Welfare Economics and Public Policy*, Prentice-Hall, 187.

[5] That letter records a series of Commission decisions and court case law supporting this quote.

[6] As far as we are aware, the Commission did not consider transfers in vertically related markets (e.g., from New Zealand gas consumers) in *Decision 505*.

3. Dynamic efficiency detriments

We have been asked by Commission staff whether we consider the technique (which we will refer to here as the "revenue approach") adopted by the Commission in *Decision 725*, and consequently in our 22 October 2014 report, to quantify dynamic efficiency detriments is sufficiently broad to capture all relevant effects.

In particular, we understand Commission staff to be asking whether there could be some sort of negative impact of the merger on the business model and investment, not captured by the existing technique.

Because dynamic efficiency is about having the appropriate incentives and ability to make decisions over time, it is more difficult to quantify than allocative and productive efficiency effects. Probably the most developed, rigorous techniques relate to new products, such as Jerry Hausman's analysis of mobile telephony in the US,[7] and the Commission's approach in the *Ruapehu* decision.[8]

However, precisely because dynamic efficiency is broader than just new products, the Commission chose to use the revenue approach in the *Air NZ/Qantas* case.[9] We regard this approach as being purposefully simple and generic, to capture the broader, difficult to predict effects. Indeed, in *Decision 725* the Commission stated, "we consider it the most pragmatic approach as all case specific factors are able to be taken account of …" (paragraph 309).

An alternative approach would be to attempt to anticipate and then model each potentially sub-optimal decision. In some cases, this might be appropriate, particularly if there are obvious, dominant decisions (for example, in an industry where research and development are critical,[10] we might worry that a merger would reduce the number of new innovations, and we could model the impact of this). But if such an approach were to be taken, it would be inappropriate to also use the generic, revenue approach, as this would risk double-counting.

Moreover, we emphasise the view we expressed in our 22 October 2014 report that the most material of the pressures to be (productively and) dynamically efficient would remain post-merger, being:

- The threat of increased exports of greasy wool to China and Malaysia;[11]

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7 Hausman, Jerry (1997), "Valuing the Effect of Regulation on New Services in Telecommunications", *Brookings Papers on Economic Activity: Microeconomics*, 1-38.

8 Commerce Commission, *Decision 410*, 14 November 2000.

9 Commerce Commission, *ISSN NO. 0114-2720*, 23 October 2003.

10 Such as seeds. Of course, a merger in such an industry might also increase innovation, due to scale advantages.

11 This threat is discussed at pages 56 to 58 of the 22 October 2014 authorisation application, and the transfer of New Zealand (ANDAR) know-how is discussed at paragraph 19.10. We also understand that CWH executives regularly make intelligence gathering trips to China, illustrating the importance of the Chinese threat.

- The continued threat of entry; and
- The declining supply of wool grown in New Zealand (meaning that the merged entity's demand curve will be shifting inwards).

We agree with the Commission's conclusion in *Decision 725* that "any loss of dynamic efficiency in this instance is likely to be small" (paragraph 310).

4. Entry deterrence

Commission staff have asked for our views on the proposition that the merged entity could deter entry by locking in customers under long-term contracts.

As set out in Appendix A to our 22 October 2014 report, the entry we model is likely to be underwritten (either by ownership or contract) by a combination of large merchants. Therefore we assume the proposition the Commission is testing is whether the merged entity could contract that group of customers, or more generally a sufficient group of customers such that those left could not underwrite entry.

We note that in order to attract customers into long-term contracts, the merged entity would need to offer a discount to the "market" price. In effect the merged entity would be competing against the potential entrant for those customers. Once the contracts expire, those merchants would still have option of underwriting entry, and so the pressure on the merged entity would remain.

This is in fact the threat of entry at work.

Presumably the real concern then is for those customers without price discounted contracts with the merged entity ("non-contracted merchants"). This segues into the follow-up question from Commission staff, which is whether the merged entity could price discriminate against the non-contracted customers.

A firm can only successfully price discriminate if it can prevent arbitrage or more generally undermining of the price discrimination.[12] For the following reasons we think that is unlikely in the present case (**[REDACTED]**):

- In *Decision 725*, the Commission found that merchants operate in "an extremely competitive environment and within tight margins" (paragraph 233). Any material degree of price discrimination between merchants would skew the playing field in favour of those with long-term contracts with the merged entity, making it harder for non-contracted merchants to secure wool from growers. Therefore we would expect to see volumes switch from non-contracted to contracted merchants, and therefore scoured at the discounted rate. The declining demand curve is likely to emphasise this dynamic;

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[12] See, e.g., page 134 of Tirole, Jean, *The Theory of Industrial Organization*, The MIT Press, 1988.

- The non-contracted merchants could enter into side deals with the contracted merchants, sharing the benefits of the discounted scouring price. We are advised by CWH that this would be difficult to detect, and does occur in practice;
- The non-contracted merchants could sell their wool greasy, or scour it overseas; and
- The non-contracted merchant could buy clean wool from the Abraham's wool exchange.