

Response to HoustonKemp Report

A note for the New Zealand Commerce Commission

As part of its market study in the grocery sector of New Zealand, the Commerce Commission commissioned Frontier Economics to undertake some econometric analysis to examine how the structure of local grocery markets affects prices and margins in New Zealand. The results of this analysis were presented in our report – *Econometric Analysis of the New Zealand Retail Grocery Sector: Report for the Commerce Commission*, dated 15 July 2021.

In a report for Foodstuffs, HoustonKemp prepared a report¹ that raises a number of issues in our report. The Commerce Commission has asked us to respond to two of these issues.

1. In paragraph 159 of their report HoustonKemp state:

Frontier Economics excludes unbranded and unpackaged fruit, vegetables and meat from its analysis to ensure they are comparing products with the same physical characteristics. In our opinion, this decision is likely to exclude many items over which price competition between major grocery retailers takes place, and so limits the reliability of the results.

We disagree that excluding unbranded and unpackaged fruit, vegetables and meat from our analysis limits the reliability of the results. The results apply to all grocery items not excluded from the analysis, and the reliability of those results is not affected by the exclusion of unbranded and unpackaged fruit, vegetables and meat.

We have not drawn any conclusions about relative prices between stores or brands for products not included in the analysis. However, we note that our analysis does not exclude all fruit, vegetables and meat. Packaged and branded products in these categories are included in the analysis.

The reason for excluding unbranded and unpackaged fruit, vegetables and meat from our analysis is that it is almost impossible to make like-with-like price comparisons for these products, since we have no information on the freshness or quality of these products. For some fruits, size may also affect the price. We do not have any information on the size of such fruit.

We were also made aware by the Commerce Commission of the authorised PLU codes used in New Zealand for fresh produce.² We investigated these codes and concluded that they were not suitable for our analysis for the following reasons:

- The PLU categories are fairly broad. For example, for most apple varieties the category includes all sizes. There is also no distinction between different qualities of the products
- The categories do not align well with the categories in the SKU pricing data provided to us by the Commerce Commission. For example, for 'potatoes', there is almost no overlap between the PLU categories and the descriptions provided in the SKU data. The only potato variety

¹ HoustonKemp, *Empirical evidence of grocery sector competition: A report for Foodstuffs*, 21 September 2021

² Available at: <https://www.ifpsglobal.com/PLU-Codes/PLU-codes-Search>



named in the PLU codes is Russet. The other descriptors are more general, e.g. white, red or 'baking – white'. By contrast, the SKU data includes varieties such as Agria, Desiree, Jersey Benne, Maris, Nadine, etc.

2. In paragraphs 160-161 of their report HoustonKemp state:

Frontier Economics notes that whilst its two measures of market concentration may affect prices, price may also affect local market conditions, ie, the measures of market concentration are endogenous. For example, a firm may expand into a local area because it observes high prices in that area, suggesting high profits. Frontier Economics attempts to control for this when it uses the distance weighted share measure of local concentration.

Frontier Economics was unable to find a suitable way to control for endogeneity of the proximity measure of local market concentration. In our opinion, this inability to control for endogeneity of competition renders the proximity measure of local market competition unreliable.

In our report we do not say that the measures of concentration are endogenous, but only that they may be endogenous. In order for a measure of concentration to be endogenous, prices in a local market have to affect the values of the concentration measure. That is undoubtedly likely in the medium to long term, since a disequilibrium with respect to the types and locations of supermarkets in a local market that leads to abnormally high or low prices is likely to induce entry into or exit from that market.

However, our analysis uses cross-sectional data for a single year. For endogeneity to be an econometric issue in our analysis, prices in the year of the analysis would have to have had an impact, in the same year, on the concentration measures, i.e. on entry or exit in that year. It seems highly unlikely to us that an entry or exit of a store in response to a disequilibrium in a local market occurs within a single year. Moreover, in any one year, very few local markets are affected by entry or exit. Hence, even if the response to a market disequilibrium did occur within the same year, only a very small proportion of the observations would be affected. In view of this, we do not think that endogeneity is a major issue in our analysis, and hence we do not agree that our inability to find suitable instruments for the proximity measure of concentration makes the results from the proximity analysis unreliable.

Response to HoustonKemp Report



Frontier Economics Pty Ltd is a member of the Frontier Economics network, and is headquartered in Australia with a subsidiary company, Frontier Economics Pte Ltd in Singapore. Our fellow network member, Frontier Economics Ltd, is headquartered in the United Kingdom. The companies are independently owned, and legal commitments entered into by any one company do not impose any obligations on other companies in the network. All views expressed in this document are the views of Frontier Economics Pty Ltd.

Disclaimer

None of Frontier Economics Pty Ltd (including the directors and employees) make any representation or warranty as to the accuracy or completeness of this report. Nor shall they have any liability (whether arising from negligence or otherwise) for any representations (express or implied) or information contained in, or for any omissions from, the report or any written or oral communications transmitted in the course of the project.

Frontier Economics

Brisbane | Melbourne | Singapore | Sydney

Frontier Economics Pty Ltd
395 Collins Street Melbourne Victoria 3000

Tel: +61 (0)3 9620 4488

<https://www.frontier-economics.com.au>

ACN: 087 553 124 ABN: 13 087 553 124