



COMMERCE COMMISSION

Decision No. 390

Determination pursuant to the Commerce Act 1986 in the matter of an application for clearance of a business acquisition involving:

PolarCup (NZ) Limited

and

Carter Holt Harvey Plastic Products Division

The Commission: M J Belgrave (Chair)
P R Rebstock

Summary of Proposed Acquisition: The acquisition by Polarcup (NZ) Limited of the plastic packaging business of Carter Holt Harvey Limited.

Determination: Pursuant to s 66(3)(b) of the Commerce Act 1986, the Commission declines to give clearance for the proposed acquisition.

Date of Determination: 20 April 2000

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CONTAINED IN SQUARE BRACKETS []**

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THE PROPOSAL

1. Pursuant to section 66(1) of the Commerce Act 1986 (“the Act”), Polarcup (NZ) Limited (“Polarcup”) gave notice to the Commission dated 3 April 2000 (“the application”), seeking clearance for it to acquire “Plastic Products”, the New Zealand rigid plastic packaging business of Carter Holt Harvey (“CHH Plastics”).

THE PROCEDURES

2. Section 66(3) of the Act requires the Commission either to clear, or to decline to clear, a notice given under section 66(1) within 10 working days, unless the Commission and the person who gave the notice agree to a longer period. An extension of 3 working days was agreed to by both parties. Accordingly, a decision on the application was required by Thursday 20 April 2000.
3. In the application, Polarcup did not seek confidentiality for the fact of the application, or for any information within the application. However, the provisions of the Official Information Act 1982 will apply to commercially sensitive market share information contained within the application.
4. The Commission’s determination is based on an investigation conducted by its staff and their subsequent advice to the Commission.

THE PARTIES

Polarcup

5. Polarcup is owned by Huhtamaki New Zealand Limited, which in turn is owned by Huhtamaki Finance B.V. Huhtamaki Finance B.V. is owned by Huhtamaki Van Leer Oyj (“Huhtamaki”), which is a newly created multinational packaging company. It is incorporated in Finland and was created through merging the operations of two worldwide packaging companies, Huhtamaki Oyj (Finland) and Royal Packaging Industries Van Leer N.V. (The Netherlands). Huhtamaki Van Leer Oyj employs 24,000 persons in 54 countries and in the 1999 fiscal year had sales of approximately Euro 3 billion. Its core business is in the value added segments of consumer and industrial packaging.
6. Huhtamaki has two subsidiaries in New Zealand; Polarcup, and Van Leer New Zealand Limited. Polarcup is situated in Henderson, Auckland and is involved in the manufacture of disposable thin walled rigid and semi rigid plastic and paper products. It supplies the food packaging and food service industries and has annual sales revenue of around []. Van Leer New Zealand limited is situated at two sites in Auckland, Otahuhu and East Tamaki, and is involved in the manufacture of consumer flexibles, intermediate bulk containers and moulded fibre packaging.
7. In Australia, Huhtamaki has two operating companies, Polarcup (Australia) Ltd and Van Leer (Australia) Pty Ltd. Polarcup (Australia) Pty Ltd produces a range of thin walled rigid and semi-rigid plastics and paper products for the food packaging and food service

industries. Van Leer (Australia) Pty Ltd manufactures a range of industrial plastic and non-plastic packaging. It also produces food packaging, including moulded fibre containers, meat trays and flexible plastic packaging.

CHH Plastics

8. CHH Plastics is a division of Carter Holt Harvey Limited, which is one of the largest forest products companies in the southern hemisphere with operations in New Zealand, Australia, and Asia. In terms of sales revenue, Carter Holt Harvey was the 5th largest New Zealand company with revenue of \$2.9bn in the 1999 financial year.¹
9. CHH Plastics is a leading Australasian manufacturer of rigid plastic packaging for the industrial, food processing, and food service industries. It has four manufacturing facilities in New Zealand. The Auckland facility produces foam trays and food containers by extrusion and thermo-forming and by injection moulding. The Hamilton facility produces industrial containers and food containers for the dairy industry by blow moulding, extrusion and thermo-forming and injection moulding. The facility at Hastings produces food containers and fruit trays by extrusion and thermo-forming. The Wellington facility produces household and industrial containers by blow moulding. The division has annual sales revenue of around [].

THE BACKGROUND

Plastics Industry

10. There are two main groups of plastics; thermosets and thermoplastics. Thermosets are concrete-like and can only be shaped once. In contrast, thermoplastics are wax-like and can be heated, melted and reshaped many times. Both Polarcup and CHH Plastics are involved in the processing of thermoplastics. The basic steps to processing a thermoplastic involve heating and softening, then shaping the plastic by putting it under pressure so it flows into a mould or through a die. The plastic then cools and sets into shape.²
11. Plastic can be processed by a number of different techniques. The main processes that are relevant to this application include extrusion, thermo-forming, and injection moulding. The extrusion process involves heating plastic resins and then extruding them through a sheet diehead. The continuous sheet is then fed into thermo-forming machines to mould containers and lids, and sheet for food processors' "form, fill and seal equipment".
12. The thermo-forming process is supplied by "rollstock" or by an in-line extruder. The sheet is preheated and then introduced over a vacuum or press forming tool. The particular product is formed by pulling the heated sheet into the die cavity by vacuum

¹ "1999 Top 200 New Zealand Companies", Management, December 1999, 60

² <<http://www.plastics.org.nz/industry/index.htm>>

pressure. The product is then separated and packed, whilst the waste sheet is granulated and returned to the extruder.

13. Injection moulding involves the plasticising of plastic resin, which is then injected into a die cavity. After the product is cooled, the die is opened and the product is ejected and packed.
14. Plastic resins, the raw material for plastic product production, are not produced in New Zealand, but are imported from a variety of countries. The various types of plastics all have different physical properties and different end-use characteristics. Some of the more common resins used in processing in New Zealand include:
 - Low Density Polyethylene (“LDPE”) is used as pallet wrap and shrink wrapping in flexible packaging.
 - High Density Polyethylene (“HDPE”) is used for food containers, industrial bins, and drainage pipes.
 - Polyethylene Terephthalate (“PET”) is used in the production of carbonated soft drink bottles.
 - Polyvinyl Chloride (“PVC”) is used for pipes and household chemical and food containers.
 - Polystyrene (“EPS” and “PS”) is used for foamed meat trays, cups, containers and lids.
 - Polypropylene (“PP”) is used for household chemical bottles and food bottles, cups and other uses.

15. [

]

16. In 1997 there were 198,350 tonnes of plastic resins imported into New Zealand, with 57% of this being used in the production of plastic packaging. About 49,707 tonnes of all resin types imported were used for rigid food packaging. This type of end use amounted to approximately 25% of all resin uses in 1997. About 84% of this rigid plastic food packaging was consumed domestically, whilst the remaining 16% was exported either directly or indirectly.³
17. Other uses of plastic resin are in the construction and agriculture industries.⁴ The proportion of each resin type imported in 1997 and its use in the production of rigid plastic food packaging is outlined below in Table 1:

³ Ibid

⁴ Plastics Institute of New Zealand, “Plastics Mass Balance Survey 1997 Production”, October 1997

Table 1
Plastic Resin

Resin Type	Quantity Imported (tonnes)	Quantity used in Rigid Food Plastic Packaging
LDPE	66,400	2,766
HDPE	36,200	10,095
PVC	33,100	490
PP	19,400	8,097
PET	13,000	12,327
PS	12,800	9,841
EPS	4,650	1,036

Source: Plastics Institute of New Zealand 1997

18. Plastic resin prices are sensitive to the price of an important input, crude oil. In the year to March 2000, resin prices have all increased significantly between 20% and 40%, which has increased the price of plastic packaging. Generally, the plastic packaging industry is a mature industry, which is growing at the rate of population growth. The demand for plastic packaging is cyclical, with increased demand through periods of economic growth.

MARKET DEFINITION

Introduction

19. The purpose of defining a market is to provide a framework within which the competition implications of a business acquisition can be analysed. The relevant markets are those in which competition may be affected by the acquisition being considered. Identification of the relevant markets enables the Commission to examine whether the acquisition would result, or would be likely to result, in the acquisition or strengthening of a dominant position in any market in terms of section 47(1) of the Act.

20. Section 3(1A) of the Act provides that:

“... the term ‘market’ is a reference to a market in New Zealand for goods and services as well as other goods and services that, as a matter of fact and commercial common sense, are substitutable for them.”

21. Relevant principles relating to market definition are set out in *Telecom Corporation of New Zealand Ltd v Commerce Commission*,⁵ and in the Commission’s *Business Acquisition Guidelines* (“the Guidelines”).⁶ A brief outline of the principles follows.

22. Markets are defined in relation to three dimensions, namely product type, geographical extent and functional level. A market encompasses products that are close substitutes in the eyes of buyers, and excludes all other products. The boundaries of the product and geographical markets are identified by considering the extent to which buyers are able to

⁵ (1991)4 TCLR 473.

⁶ Commerce Commission, *Business Acquisition Guidelines*, 1999, pp. 11-16.

substitute other products, or across geographical regions, when they are given the incentive to do so by a change in the relative prices of the products concerned. A market is the smallest area of product and geographic space in which all such substitution possibilities are encompassed. It is in this space that a hypothetical, profit-maximising, monopoly supplier of the defined product could exert market power, because buyers, facing a rise in price, would have no close substitutes to which to turn.

23. A properly defined market includes products which are regarded by buyers or sellers as being not too different ('product' dimension), and not too far away ('geographical' dimension), and are therefore products over which the hypothetical monopolist would need to exercise control in order for it to be able to exert market power. A market defined in these terms is one within which a hypothetical monopolist would be in a position to impose, at the least, a "small yet significant and non-transitory increase in price" (the "*ssnip*" test), assuming that other terms of sale remain unchanged.
24. Markets are also defined in relation to functional level. Typically, the production, distribution, and sale of products takes place through a series of stages, which may be visualised as being arranged vertically, with markets intervening between suppliers at one vertical stage and buyers at the next. Hence, the functional market level affected by the application has to be determined as part of the market definition. For example, that between manufacturers and wholesalers might be called the "manufacturing market", while that between wholesalers and retailers is usually known as the "wholesaling market".

The Relevant Markets

25. The applicant has claimed, on the basis of the common business activities of Polarcup and CHH Plastics, that there is one market where aggregation would occur as a result of the proposed acquisition. This market was defined as the market for the manufacture of rigid plastic packaging.
26. The applicant claimed that this rigid plastic packaging market, was simply one part of a wider plastic packaging market, the other part being the flexible packaging market.
27. As discussed below, the Commission considers that the applicant's proposed definition is too aggregated in relation to the product market, and believes that the relevant product market should be more narrowly defined.

Product Markets

28. The applicant, in its market definitions, has proposed one product market, the market for rigid plastic packaging. However, in the view of the Commission, this market definition is too broad considering the nature of the products produced under this classification.
29. Plastic packaging accounts for about 57% of all plastic resin imported into New Zealand. Rigid plastic packaging accounts for about 53% of plastic packaging, whilst flexible packaging accounts for the rest. Rigid plastic packaging has many applications; it is used

as industrial packaging, and as packaging by the food processing and food service industries.

30. Rigid plastic packaging has many industrial type applications. These include use as crates, pails and containers in varying sizes for the storage and packaging of chemicals, paints, oil and other compounds. This type of use accounts for about 20% of all rigid plastic packaging.
31. Rigid plastic packaging is also used as a packaging by food processors and by the food service industry. Its main use by food processors in New Zealand is for ice cream packaging, dairy packaging and 'spread' packaging. It is used by ice cream manufacturers to package predominantly 2 litre containers of their product; however it is also used in the 1 litre and 4 litre form. This type of packaging is used by the dairy industry in preformed, printed yoghurt and cultured food containers, or in extruded plastic sheeting used in "form, fill and seal" machinery. Rigid plastic food packaging is used by the manufacturers of margarine and butter in sizes ranging from 250 grams to 4 kg containers.
32. A wide product range of rigid plastic packaging is used by the food service industry. The applications include plastic and foam trays used by supermarkets to package meat, chicken, and fresh produce. Rigid plastic containers are also used by supermarkets to package bakery and delicatessen products. Food service businesses and institutions are other large users of rigid plastic packaging products. The types of products where aggregation will occur include food containers, fast food packaging, plates and cups.
33. From a demand-side perspective, some types of products within this broad range do not compete closely with each other and are not substitutable for each other. For example, containers used for industrial applications are generally not substitutable for containers used in food applications. The different characteristics of food packaging differentiates them from those of industrial packaging.
34. From a supply side perspective, the manufacture of food packaging also requires a 'food standard' manufacturing facility to ensure regulatory compliance. To upgrade a facility to such a standard requires a reasonable level of capital investment. This requirement differentiates food packaging manufacturing from industrial packaging manufacturing.
35. Within the rigid plastic food packaging product range, different products perform different functions. For example, food *trays* that are used in the presentation of meat, chicken, fish, and other types of food products by supermarkets generally do not closely compete with and are not substitutable for food *containers*, which perform a different function.
36. In addition, from a supply-side perspective, the processes used to produce some of these products are also not substitutable. For example, a manufacturer of plastic food trays, the predominant form being foam, could not switch to producing some forms of food containers in a timely manner without new capital investment in plant and equipment. Different raw materials are used and also different processes are used. Extrusion and thermo-forming is used to produce food trays, whilst injection moulding is typically used to produce the different food containers.

37. Within the food container product range, products could be further differentiated by the functions they perform. Technically, one item could be substituted for another but in terms of functionality it would not be a close substitute. If this approach was adopted, product markets could be more narrowly defined. However, a pragmatic approach needs to be adopted in respect to market definition, and the markets defined in a way that best analyses the effects on competition in areas where there will be common business activity between the merger parties.
38. For some rigid plastic food packaging products there would be some close substitutes that would perform the same functions as rigid plastic; coated cardboard type packaging is one type of close substitute. For example, cardboard is widely used in the packaging of 1 litre blocks of ice cream. It is also used in the packaging of some bakery products, 'fast food' products, and for the presentation of some food items.
39. For a significant number of rigid food packaging products, there is no close substitute in terms of functionality. The 2 litre ice cream container is a high volume item that is widely used by ice cream manufacturers. It is effective in storing ice cream and it has reusable qualities. It is capable of high quality decoration and is accepted by consumers of ice cream. Technically, a 2 litre cardboard package could be used as a substitute, but evidence from manufacturers of ice cream suggests that such packaging would not be a close substitute. The same analysis applies to plastic containers used for the packaging of dairy foods and spreads. There are no close substitutes for a significant number of high volume uses of rigid plastic food packaging. As a result, this type of packaging is the subject to a separate product market.
40. Therefore, it is the Commission's view that food tray packaging and food container packaging are two separate product markets.

Functional Market

41. Rigid plastic food tray packaging and food container packaging pass through various functional levels from the production process to the consumer.
42. The manufacturers of rigid plastic food tray packaging convert raw materials into packaging products by the use of extrusion and thermo-forming processes. The completed product is sold direct to supermarkets, which use them for food presentation.
43. The manufacture of rigid plastic food container packaging also involves the conversion of raw materials into packaging products by the use of injection moulding and thermo-forming processes. These completed products are then sold at the wholesale level to food processing businesses or to distributors to the food service industry.
44. The functional level of the relevant product markets are as follows:
 - The market for the manufacture and supply of rigid plastic food trays; and
 - The market for the manufacture and supply of rigid plastic food containers.

Geographical Market

45. Generally rigid plastic packaging is a low value, bulky product which is expensive to transport. This is one of the main reasons why only a small amount of the product is imported.
46. Manufacturing facilities tend to be near large purchasers of the product to reduce transport and handling costs. However, the product is distributed nationwide from different manufacturing locations. Some products have ‘nesting’ characteristics, which make them more transportable than others.
47. The Commission has concluded that the geographic extent of the relevant rigid plastic food packaging markets is New Zealand wide.

Conclusion on Rigid Plastic Food Packaging Markets

48. The Commission considers that the following rigid plastic food packaging markets are relevant for the consideration of the present proposal:
 - The market for the manufacture and supply of rigid plastic food trays in New Zealand; and
 - The market for the manufacture and supply of rigid plastic food containers in New Zealand.

COMPETITION ANALYSIS

Introduction

49. The competition analysis assesses competition in the relevant markets in order to determine whether the proposed acquisition would not result, or would not be likely to result, in an acquisition or strengthening of dominance.
50. Competition in a market is a broad concept. It is defined in section 3(1) of the Commerce Act as meaning “workable or effective competition”. In referring to this definition the Court of Appeal said:⁷

“That encompasses a market framework which participants may enter and in which they may engage in rivalrous behaviour with the expectation of deriving advantage from greater efficiency.”

51. Section 3(9) of the Commerce Act states:

“For the purposes of sections 47 and 48 of this Act, a person has ... a dominant position in a market if that person as a supplier ... of goods and services, is or are in a position to exercise a dominant influence over the production, acquisition, supply, or price of goods or services in that market and for the purposes of determining whether a person is ... in a position to exercise a dominant influence over the production, acquisition, supply, or price of goods or services in a market regard shall be had to-

⁷ *Port Nelson Limited v Commerce Commission* (1996) 3 NZLR 554, 564-565

- (a) The share of the market, the technical knowledge, the access to materials or capital of that person or those persons;
- (b) The extent to which that person is ... constrained by the conduct of competitors or potential competitors in that market; and
- (c) The extent to which that person is ... constrained by the conduct of suppliers or acquirers of goods or services in that market.”

The Dominance Test

52. Section 47(1) of the Commerce Act prohibits certain business acquisitions:

“No person shall acquire assets of a business or shares if, as a result of the acquisition, -

- (a) That person or another person would be, or would be likely to be, in a dominant position in a market; or
- (b) That person’s or another person’s dominant position in a market would be, or would be likely to be, strengthened.”

53. The test for dominance has been considered by the High Court. McGechan J stated:⁸

“The test for ‘dominance’ is not a matter of prevailing economic theory, to be identified outside the statute.”

...

“Dominance includes a qualitative assessment of market power. It involves more than ‘high’ market power; more than mere ability to behave ‘largely’ independently of competitors; and more than power to effect ‘appreciable’ changes in terms of trading. It involves a *high degree of market control*.”

54. Both McGechan J and the Court of Appeal, which approved this test,⁹ stated that a lower standard than “a high degree of market control” was unacceptable.¹⁰ The Commission has acknowledged this test:¹¹

“A person is in a dominant position in a market when it is in a position to exercise a high degree of market control. A person in a dominant position will be able to set prices or conditions without significant constraint by competitor or customer reaction.”

55. The Commission’s *Business Acquisitions Guidelines* state:

“A person is in a dominant position in a market when it is in a position to exercise a high degree of market control. A person in a dominant position will be able to set prices or conditions without significant constraint by competitor {or} customer reaction.”

...

“A person in a dominant position will be able to initiate and maintain an appreciable increase in price or reduction in supply, quality or degree of innovation, without suffering an adverse impact on profitability in the short term or long term. The Commission notes that it is not necessary to believe that a person will act in such a manner to establish that it is in a dominant position, it is sufficient for it to have that ability.” (p21)

56. The role of the Commission in respect of an application for clearance of a business acquisition is prescribed by the Commerce Act. Where the Commission is satisfied that the proposed acquisition would not result, or would not be likely to result, in an

⁸ *Commerce Commission v Port Nelson Ltd* (1995) 5 NZBLC 103,762 103,787 (HC)

⁹ *Commerce Commission v Port Nelson Ltd* (1996) 5 NZBLC 104,142 104,161 (CA)

¹⁰ *Commerce Commission v Port Nelson Ltd* (1995) 5 NZBLC 103,762 103,787 (HC) and *Commerce Commission v Port Nelson Ltd* (1996) 5 NZBLC 104,142 104,161 (CA)

¹¹ *Business Acquisition Guidelines*, Section 7

acquisition or strengthening of a dominant position in a market, the Commission must give a clearance. Where the Commission is not satisfied, clearance is declined.

57. In deciding whether the acquisition will result in, or is likely to result in, an acquiring or strengthening of a dominant position, the Commission takes into consideration the extent of rivalry currently in the market, the constraint provided by the threat of new entrants, and the countervailing power of other parties.
58. Competition analysis is completed for both markets defined in the section above.

The Market for Rigid Plastic Food Containers

59. Both Polarcup and CHH Plastics produce rigid plastic food containers, therefore aggregation will occur in this market should the acquisition go ahead. This market includes injection moulded or thermo-formed containers for the packaging of ice cream, dairy products, spreads, and other food items.

Market Concentration

60. An examination of concentration in a market often provides a useful first indication of whether a merged firm may or may not be constrained by others participating in the market, and thus the extent to which it may be able to exercise market power.
61. The *Business Acquisitions Guidelines* specify certain “safe harbours” which can be used to assess the likely impact of a merger in terms of s 47 of the Act :

“In the Commission’s view, a dominant position in a market is generally unlikely to be created or strengthened where, after the proposed acquisition, either of the following situations exist:

the merged entity (including any interconnected or associated persons) has less than in the order of a 40% share of the relevant market;

the merged entity (including any interconnected or associated persons) has less than in the order of a 60% share of the relevant market and faces competition from at least one other market participant having no less than in the order of a 15% market share.” (p 17)

62. These safe harbours recognise that both absolute levels of market share and the distribution of market shares between the merged firm and its rivals is relevant in considering the extent to which the rivals are able to provide a constraint over the merged firm. The Commission goes on to state that:

“Except in unusual circumstances, the Commission will not seek to intervene in business acquisitions which, given appropriate delineation of the relevant market and measurement of shares, fall within these safe harbours.”

63. Although, in general, the higher the market share held by the merged firm, the greater the probability that dominance will be acquired or strengthened (as proscribed by s 47 of the Act), market share alone is not sufficient to establish a dominant position in a market. Other factors intrinsic to the market structure, such as the extent of rivalry within the market and constraints provided through market entry, also typically need to be considered and assessed.

64. Plastic packaging can be separated into rigid packaging and flexible packaging, the difference being in the nature and function each packaging product performs. By way of introduction, outlined below in Table 2 are the estimated industry shares for the total plastic packaging industry in New Zealand. The information provides an indication as to who are currently suppliers of plastic packaging.

Table 2
Estimate Industry Shares for Plastic Packaging

Supplier	Estimated market share by value (%)
HVL (Polarcup)	[]
CHH (Plastic Products)	[]
Sub-total	[]
AEP	[]
Cryovac	[]
Nuon	[]
Nexus	[]
Acepel	[]
Southcorp	[]
Reese	[]
Others	[]
<u>Total</u>	100

65. The Commission has obtained estimates of market shares for the rigid plastic food containers market. These figures were obtained by the Commission and relate to the sales revenue from each market participant. They are set out in Table 3 below.

Table 3
Estimated Market Shares for Rigid Plastic Food Containers¹²

Firm	Sales Revenue (\$ million)	Market Share (%)
Polarcup	[]	[]
CHH Plastics	[]	[]
Sub-total	[]	[]
Tecpak	[]	[]
Reese Viscount	[]	[]
Custom-Pak	[]	[]
Acepet	[]	[]
Detpak	[]	[]
Flight	[]	[]
Total	[]	[]

66. The combined market share of the two relevant entities is []. This places it well outside the Commission's safe harbours; however, as mentioned, other factors must be considered before conclusions on dominance can be drawn. These are discussed in the paragraphs below.

Existing Competition

67. The market for rigid plastic food packaging is essentially split between the two entities, Polarcup and CHH Plastics. There are several firms around the country producing similar products that make up the balance. These smaller competitors, however, are at a disadvantage when competing with Polarcup and CHH Plastics; most do not have sufficient capacity to supply a large user of ice cream tubs such as Tip Top, or do not have the equipment to produce the high quality of product demanded by such purchasers. Many of these firms have established themselves in niche markets to avoid competing directly with either Polarcup or CHH Plastics.

68. [

¹² This table does not include imports. The Commission was unable to obtain data that provided an accurate estimate of imports of rigid plastic food containers. The Commission also acknowledges that there may be other small manufacturers that contribute to this market. The Commission considers these sources of food containers as immaterial and unlikely to substantially change the market share figures.

].

69. [] also felt that the quality of its product was not up to the standard of Polarcup or CHH Plastics. To get to that level would require significant investment in new machinery. [] felt there would have to be an increase in price of [] before it would consider upgrading its equipment to compete directly against the merged entity with an identical product. To produce ice cream containers to the standard of Polarcup or CHH Plastics it would have to spend approximately [] upgrading its equipment. It would also have to purchase new moulds [], plus extend the area it devotes to producing food packaging. []

]

70. [] is another producer of ice cream containers. [] []

]

]

71. []

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72. Custom Pak is an Auckland based producer of food containers. They are a sister company of Sullivans, and produce similar types of products. []

]

73. Aceptet is an Auckland-based producer of food containers supplying the food service area of the market. []

74. Buyers of rigid containers have noted there are really only two large scale producers of packaging (Polarcup and CHH Plastics). Both []. When they went through the process of tendering and bidding, Polarcup and CHH Plastics were the only two firms that could supply in sufficient quantity. []

[] To meet the requirements of the contract it would have to increase its level of capital investment.

75. []

]

Imports

76. There is only a small amount of imports of rigid plastic packaging in New Zealand. The reason is that plastic containers tend to be light and bulky relative to their selling value. This is especially true for items such as plastic milk bottles which cannot be “nested” inside each other. For items like these a lot of air is being transported. Even for nestable items like plastic cups it is difficult to transport them cost effectively. It has been estimated that for the cost of \$2000, a freight container with product worth approximately \$10,000 can be transported from Australia.

77. Local supply is the preferred option for purchasers of food packaging. [] noted that if it were to import, it would have to store roughly 5 times as many ice cream tubs. This is because it has to bring tubs over in container loads, rather than order in smaller amounts like it does in New Zealand. It would also want to keep a large stock on hand in case of problems with supply. This would also imply purchasing additional storage areas. [] also felt they would be disadvantaged with having a supplier overseas when innovating their packaging.
78. [] also expressed a concern that a purchaser such as themselves, with relatively small container needs compared to Australian firms, would be treated with a “lack of enthusiasm”. In contrast, a New Zealand manufacturer is more likely to be committed to the local market and prepared to change production lines as required. Local manufacturers are also more likely to be prepared to do small runs.
79. Appendix A illustrates the trends in imports for small plastic containers. The product could not be disaggregated any further so it is unclear what products this includes. As can be seen imports are very low.

Potential Competitors

80. A business acquisition is unlikely to result in the acquisition or strengthening of dominance if there is a credible threat of market entry. Potential competition can act as a constraint on market power, and so an examination of the nature and extent of this constraint is part of the Commission’s assessment of competition.
81. There are several potential businesses that could enter the market. These are firms which currently produce rigid plastic industrial products by injection moulding or thermo-forming techniques.
82. Evidence suggests that entering the market for food containers would require investing in new plant and equipment to produce a better quality product. There is a significant difference in the quality of product demanded by food processing users compared to industrial users of plastic packaging.
83. Although there exists a market for second-hand equipment, the Commission understands that to make a product of the standard produced by CHH Plastics and Polarcup, new entrants would have to purchase new machinery. This involves a good quality extruder that makes light yet durable plastics and as well, a well designed mould. The injection moulder would also have to have compatibilities to print onto the container.
84. In some cases, prospective entrants may have to modify their factory to create a non-static environment. This is for hygiene reasons. Static causes hair and threads from clothing to get into the air and ultimately these could end up within the plastic itself. Modifying the factory to rid it of static is costly.
85. The most likely potential entrants are multi-national firms already based in Australia who have the competencies and resources to effect a successful entry into the market. This includes firms such as []. The options available to them are to either import product directly, establish a manufacturing base in New Zealand by shifting some of their plant and equipment to New Zealand, or by investing in new capacity.
86. Entry, however, would require a significant commitment. It is not enough to simply build a factory and start producing. New entrants must be prepared to commit key personnel to

strategic positions to be able to service their clients appropriately. They must be able to offer the complete service, to be able to work with the customer to innovate, and produce products that suit its clients' needs. This represents a significant commitment and a decision to enter the New Zealand market would be based on many more factors than simply price.

Barriers to Entry

Cost of Capital

87. [] has estimated that to purchase one injection moulder, have it installed, and design and make a suitable mould would cost at least \$1m. [] gave an estimate similar to this. Once it has been purchased marginal costs are relatively low. [] has argued that one machine could theoretically be sufficient to satisfy one major user if it were operated 24 hrs a day, 5 days per week, 50 weeks of the year. In practice, however, a firm hoping to secure a major contract would have to own several injection moulders. This is to ensure it has a back-up should one go down, to be able to cover peak demand periods, and generally to have flexibility in its production runs. This implies an investment of at least several million dollars.

Economies of Scale

88. The market for the supply of rigid plastic food containers is characterised by high fixed costs and low marginal costs. Because the product is produced en masse and is low value, there are large economies of scale. Any firm considering entry would have to be confident of obtaining a reasonable sized contract in order to be economically sustainable.

Response by the Incumbent

89. Some firms expressed a reluctance to enter the market because they feared an aggressive response by the merged entity. Such a fear is particularly valid when the new entrant is relying on winning a major contract to make entry viable. The incumbent would know the entrant is likely to concentrate on winning one of the larger contracts, so could respond by bidding competitively for those contracts while maintaining higher prices for smaller contracts that would not be of interest to the new entrant.

90. [

]

Technical Expertise

91. New entrants must have technical expertise. [

] Competitors must be able to design new "tools" (moulds) to make these new products. A number of firms which at first glance may appear to be potential entrants have stated that they are ultimately unlikely to enter the market even with price increases because it is not their area of expertise. To enter the market would require a major shift

in focus and they would have to obtain new competencies. It is not sufficient to simply be able to emulate a product; the new entrant must have the expertise to innovate and change to suit the needs of the customer.

Cost of Obtaining and Complying with Regulatory Approvals

92. Fringe competitors who wish to enter the market for food packaging may have to upgrade their factory to satisfy food hygiene regulations. This requires creating a static-free atmosphere, and so forth. These upgrading measures are effectively sunk costs. The Commission recognises, however, that these sunk costs are not prohibitively high.

Countervailing Power of Buyers

93. The Commission recognises that the activities of a firm can be constrained by countervailing power in the hands of its customers, or when considering monopsony power (single buyer), countervailing power of its supplier. Countervailing power is a factor when market concentration is similar in the respective markets for buyers and sellers following the acquisition.
94. The merged entity would have considerable market share. The large users of plastic packaging in New Zealand currently only have the choice of two firms and following the merger they will have only one. Normally this would suggest that the merged entity could exercise market power.
95. Buyers of plastic packaging, however, have power themselves. [] for example, is the largest purchaser of ice cream containers in New Zealand, accounting for approximately [] 2L ice cream containers . The sheer size of the contract to supply [] with containers gives it considerable countervailing power. [], for example, could encourage another firm to install injection moulders to produce ice cream containers for it.
96. []
-]
97. []
-]

Constraints from market entry

98. In assessing the constraint available from market entry, the Commission’s approach is to consider whether the entry of new participants in response to the exercise of market power is likely, sufficient in extent, timely, and sustainable. This is referred to as the “lets” test.

Likelihood and Sustainability of Entry

99. In order to be an effective constraint on incumbent market participants, entry into the rigid plastic food packaging market must be considered likely on commercial grounds. In addition, entry is likely only if there is likely to be a lasting economic incentive.

100. One major recent entry was Huhtamaki Van Leer. It entered the market in 1988 through its purchase of Polarcup. Polarcup is now one of the two major competitors in the market, due mainly to the significant investment its parent company has made in it. For example, [] is understood to have significant investments in new plant to satisfy its [] contract. It successfully won this contract away from CHH Plastics by producing a better product; a tub that was thin-walled, but had a high strength polymer substance, meaning it was as strong as before. There is no reason why a innovative new firm could not emulate [] success, as long as it was financially supported.

101. Due to the high costs involved in starting up a plant, the mostly likely origin for a new entrant is a multi-national already with an Australasian presence. Companies such as [] who currently supply the New Zealand market with other plastic products could enter the food container market.

102. [

]

103. The Commission considers capturing a major contract is possible given most large users have flexible contracts, are price sensitive, and seem fairly receptive to new products. In addition, the Commission has been advised that two purchasers, []. The main prohibiting factor of the strategy, however, would be the transportation costs of importing the product from Australia. Relatively high transportation costs place imports at a significant cost disadvantage, and would make it very difficult to compete effectively at current prices. [

]

104. [

]

105. The Commission has been advised that a another strategy by a potential entrant might be to immediately establish a small manufacturing presence in New Zealand. It has been estimated by industry sources, that to service a large New Zealand contract, would require a capital investment of around []. Clearly, there would be risks associated with this. The entrant would be at risk of the incumbent utilising their economies of scale to undercut its prices. The merged entity would also have [

Such behaviour would leave the new entrant very exposed.]

106. The Commission has been advised that the most likely response by the merged entity would be to behave in such a way; raise prices, wait until a new entrant had entered the market, and then reduce the price by increasing output.

Extent

107. If it is to constrain market participants, the threat of entry must be to such an extent as to cause the market participants to react in a significant manner.
108. Since the merged entity is likely to have approximately [] of the market, the new entrant would have to enter at a high level to constraint the incumbent. The new entrant would have to obtain a major contract in order to offer effective constraint to the merged entity. [

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Timeliness

109. To effectively constrain the exercise of market power to the extent necessary to alleviate concerns about market dominance, entry must be likely to occur before consumers or users in the relevant market are detrimentally affected to a significant extent. As a guide, the Commission considers that, for most markets, entry which cannot be achieved within two years from initial planning is unlikely to be satisfy the timeliness requirement of the lets test. The Commission has noted, however, that the relevant time period has to be considered on a case-by-case basis.
110. The Commission understands that entry to the market could be done in a reasonably timely manner for fringe competitors. They would have to design and build a mould (or purchase one). This could take around 3 months.
111. Setting up a greenfield operation or setting up new machinery would take considerably longer but could still be done within two years.
112. The Commission considers the timeliness requirement for the “lets” test is satisfied.

Conclusion on “lets” test

113. The most likely strategy for any new entrant into this market would be to establish a sales base through importing the product from Australia. However, the analysis above indicates that this strategy would not be economically viable until the merged entity raised its prices to import parity prices. It is the Commission’s view that such price increases could be as high as 10-15% before entry is induced.
114. Another strategy would be to obtain a large supply contract and immediately invest in manufacturing capacity in New Zealand. [] In the Commission’s view, this ability makes entry in this fashion unlikely.
115. The Commission concludes that the “lets” test is not satisfied.

Conclusion on the Market for the Manufacture and Supply of Rigid Plastic Food Containers.

116. Based on the information available, the estimated market share falls outside the Commission's safe harbours. It is the Commission's view that the merged entity would not be effectively constrained by existing competitors if it attempted to exercise market power.
117. The capital costs of entry are not high. However, the product is a relatively low margin product which requires reasonable economies of scale. An entrant would have to secure a large contract for supply to operate efficiently and compete effectively if supplying the market through local production. []
118. As indicated above, the merged entity would have a significant discretion in pricing before it would be constrained by imported goods entering the market.
119. Based on the information provided, the Commission is not satisfied that the acquisition would not result, or would not be likely to result, in any person acquiring or strengthening a dominant position in the market for the manufacture and supply of rigid plastic food containers.

Market for Rigid Plastic Food Trays

120. Much of the analysis discussed above for the market for rigid plastic food containers applies to the market for rigid plastic food trays. The major difference for the tray market is that []

Market Concentration

121. The Commission has obtained estimates of market shares, outlined in Table 4 below. These estimates are based on turnover figures provided by the market participants for rigid plastic food trays.
122. CHH Plastics has around [] of the market for rigid plastic food trays. It produces its food trays in a factory in Auckland. Polarcup's market share of rigid plastic food trays is []. Currently, Polarcup (NZ) Ltd does not directly supply the New Zealand market with rigid plastic food trays. However, an associated company, Van Leer (Australia) Pty Ltd, supplies the New Zealand market via a number of wholesale suppliers.

Table 4
Estimated Market Shares for Rigid Plastic Food Trays

Firm	Revenue	Market share (%)
Polarcup (Van Leer)	[]	[]
CHH Plastic Products	[]	[]
Sub-total	[]	[]
Flight	[]	[]
Custom-Pak	[]	[]
Total	[]	[]

123. According to Table 4, the merged entity would have approximately [] of the total market. With the next largest competitor, Flight, having a market share of approximately [], these levels and distributions of market share fall outside the Commission's safe harbours. As mentioned earlier, however, market concentration provides only an initial indication of the extent to which the merged entity may be able to exercise market power. Other factors that must be considered before a conclusion may be drawn are discussed below.

Existing Competitors

124. Currently, CHH Plastics operates the only foam tray manufacturing plant in New Zealand, situated in North Harbour. The only other source of foam trays is imports of the product from Australia. A merger acquisition of CHH Plastics by Polarcup would effectively create a monopoly of the supply of foam trays. The Commission, however, has carefully considered the demand substitutability of plastic and foam trays and believes, given the current evidence, that it is appropriate to include them within the same market. Despite this broader market definition, CHH Plastics still holds [] of the market, reflecting the strong preference supermarkets have for foam trays.

125. Producers of plastic trays include []. It has extrusion facilities to process its own plastics for use in manufacturing. It operates only two vacuum forming moulders plus two smaller moulders, so has limited capacity. It spreads this capacity over a number of items, concentrating mainly on trays for horticultural, agricultural, and industrial uses. This production, however, could easily be switched to produce more meat trays if required. [

]

126. Custom-Pak is based in Auckland and is a producer of plastic trays. []

Imports

127. As with rigid plastic food containers, trays are light and bulky and therefore expensive to import relative to their total delivered value. Foam trays are particularly expensive to transport because they are a low value, bulky product. Evidence from industry sources suggests that the delivery cost to transport product from Australia to New Zealand is approximately [] of the total delivered price.
128. Market participants have also raised concerns as to the reliability of overseas supply, with increased lead times and requirements for increased inventory.

Potential Competitors

129. Sealed Air Corporation is a multi-national company whose main business in New Zealand is flexible packaging. However, []
130. ACI is another likely entrant to this market. It currently produces foam trays in Australia, where Polarcup is its main competitor. []

Barriers to Entry

131. The barriers to entry to this market are similar to those for plastic containers.

Cost of Obtaining and Complying with Regulatory Approvals

132. To produce foam trays butane is used in the process. Butane is stored in large tanks on-site and resource consents must be obtained for these. Generally speaking, if they are to be put in a industrial area they will be allowed, but the consent process must still take its course. This can cause delays of up to a year.
133. As with rigid plastic food containers, food tray factories must have a static free atmosphere to comply with hygiene regulations. The cost of upgrading a factory is quite high and is likely to be a sunk cost. The Commission, however, does not consider it to be prohibitively expensive.
134. Producing foam requires the use of butane and hydrocarbons, which require a special facility. Factories need to be designed to allow for venting and safety when dealing with such chemicals.

Economies of Scale

135. [] The product is low value, and hence would require a high throughput to make the plant economical. Any firm

considering entry would have to be confident of obtaining and holding a reasonable sized contract in order to be economically sustainable.

Expected Incumbent Response

136. As with plastic containers, this represents a deterrent to entry. Due to the economies of scale, a new entrant of reasonable size would most likely base its entry on the procurement of a major contract. The incumbent could respond by bidding competitively for those contracts while maintaining higher prices for smaller contracts, which would not be of interest to the new entrant.
137. Even if the entrant was successful in winning a contract, there is no guarantee that it would hold onto it for a significant period of time. The merged entity would have excess capacity, which it could use to depress prices. The result is that the prospective entrant cannot be guaranteed price will be maintained following its entry.

Countervailing power of the buyer

138. The main buyers of the foam trays are the supermarket chains, which include those operated by Progressive Enterprises, Woolworths Ltd, and the Foodstuffs Group. These purchasers account for between 80% and 90% of all purchases of food trays. By virtue of their size, these supermarket chains would have countervailing power and could provide some constraint on the behaviour of the merged entity if it attempted to exercise market power.
139. It has been noted that supermarkets operate in a very competitive low margin, high volume environment, so are not necessarily loyal to suppliers. As such, their profitability is sensitive to their input costs. Price is an important factor in their decision to purchase. They are apparently prone to shifting with any changes in price, assuming they have a suitable product to change to.

Constraints from Market Entry

140. A business acquisition is unlikely to result in any person acquiring or strengthening a dominant position in a market if behaviour in that market continues to be subject to significant constraints from the threat of market entry. In order to assess this, the “lets” test will again be used.

Likelihood and sustainability

141. In order to be an effective constraint on incumbent market participants, entry into the rigid plastic food tray packaging market must be considered likely on commercial grounds. In addition, entry is likely only if there is likely to be a lasting economic incentive.
142. The New Zealand market is a small market with an estimated size of []. This market is growing through packaging substitution to food trays. The supermarkets are the main drivers of this growth.

143. A rigid plastic food tray is a low value product which requires high volume sales to recover the fixed costs. Industry sources have suggested that the minimum efficient scale would be approximately []. A potential entrant would thus have to secure a supply contract with a large purchaser, before it could economically enter the market with a new plant.
144. If CHH Plastics raised prices, this could induce new entry provided a large supply contract was secured. If a new entrant were to secure a large contract, the incumbent could respond to such entry by utilising existing excess capacity, expanding production, and reducing prices in the market. This would result in the entrant having to match the price reduction or lose the business. With different capacity capabilities and cost structure the new entrant would be under threat.
145. Another strategy for a new entrant would be to import product from Australia. However, domestic prices would have to rise to a level whereby the entrant could recover transport costs and still compete effectively. Industry sources suggest that the incumbent could raise prices by [] before it would be constrained by entry.
146. It is the view of the Commission that the “likelihood” and “sustainability” elements of the “lets” test are not satisfied.

Extent of Entry

147. To affectively compete against the merged entity would require significant investment to reach a suitable level. Investment in thermo-forming machines, and moulds, would be required, and to be price competitive, investment in extrusion capacity would also be required.
148. []

Timeliness of Entry

149. There is suggestion that there could be considerable delay in entry to the market. [] felt there could be a delay of about one year before a potential entrant reacted. This is mainly due to the environmental consent required for butane cylinders. This can be a rather drawn out affair while they give parties time to make submissions on the proposal. [] estimated this could take as long as 9 months. From there a factory still has to built which could take another 6 months. Despite these delays it is likely a greenfield operation could be operational within the two year time limit normally reserved to satisfy this requirement of the “lets” test. Despite the possibility of taking over a year to become operational the Commission considers the timeliness of entry requirement of the “lets” test to be satisfied.

Conclusion of the “lets” test

150. The above analysis suggests that entry into this market would not be likely or sustainable because of the economic characteristics of the market. To compete effectively, economies of scale are required to ensure low unit costs, while purchasers of the product, supermarkets, are price sensitive and supply contracts are flexible.

Competitive response by the incumbent results in entry being both unlikely and unsustainable.

151. At current prices only a small amount of product is imported from Australia, because of transport costs. The incumbent would have significant price discretion before it would be constrained by the increased supply of imported product.
152. The Commission, therefore, concludes the “lets” test is not satisfied.

Conclusion on the Market in New Zealand for the Manufacture and Supply of Rigid Plastic Food Trays

153. The level and distribution of market shares in this market fall outside the Commission’s safe harbour guidelines. It is the view of the Commission that CHH Plastics is not currently facing effective constraint from existing competitors, nor is entry into the market likely on a scale which would offer competitive constraint.
154. While the purchasers of the food trays, principally the supermarkets, may have some countervailing power, the Commission considers it insufficient to constrain the merged entity from exercising market power.
155. The Commission concludes, therefore, that CHH Plastics is currently in a dominant position in that market, and Polarcup’s acquisition of CHH Plastic would be likely to result in a strengthening of that dominant position in the rigid plastic food tray market in New Zealand.

OVERALL CONCLUSION

156. The Commission has considered the likely impact of the proposal in the following markets:
- The market for the manufacture and supply of rigid plastic food containers in New Zealand; and
 - The market for the manufacture and supply of rigid plastic food trays in New Zealand.
157. Having regard to the various elements of section 3(9) of the Act, and all other relevant factors, the Commission is not satisfied that the proposal would not result, or would not be likely to result, in any person acquiring or strengthening a dominant position in any of the following markets:
- The market for the manufacture and supply of rigid plastic food containers in New Zealand; and
 - The market for the manufacture and supply of rigid plastic food trays in New Zealand.

DETERMINATION ON NOTICE OF CLEARANCE

158. Accordingly, pursuant to section 66(3)(b) of the Act, the Commission determines to decline to give clearance for the acquisition by Polarcup of the business of CHH Plastics.

Dated this 20th day of April 2000

MJ Belgrave
Chairman