Independent Consumer & Competition Commission

FINAL REPORT

SUNDRY DECLARED GOODS PRICING REVIEW

- **Coffee Beans (ground & instant)**
- **Tea**
- **Sugar (brown & white)**
- **Batteries (torch & radio)**
- **Soap (laundry, cakes & powdered)**
- **Poultry**
- **Butter**
- **Margarine**
- **Milk (powdered & concentrated)**

16th August 2007

FOREWORD

The Independent Consumer & Competition Commission ("Commission") is a statutory body, established under the provisions of the *Independent Consumer and Competition Commission Act 2002* ("ICCC Act"), which has been given responsibility for the promotion of competition and fair trading, the regulation of prices for certain goods and services, and the protection of consumers' interests and other related purposes.

Initially, a number of goods were declared under Section 10 of the *Prices Regulation Act* to protect the welfare of the consumers from potential price exploitation by suppliers who were perceived to hold substantial market power in the supply of these goods. Circumstances pertaining to the suppliers' behaviour have changed for some of the products and services declared and the continuity of price regulation on some of these goods has not been periodically reviewed. Thus with the changed legislation, there have been a series of reviews conducted into the status of these declared goods which include flour, rice (brown and white), meat (canned corned beef) and fish (canned mackerel and tuna).

The original list of declared goods included a number of goods for which price regulation has not been reviewed since they were declared. These sundry goods are; Batteries (torch & radio), Butter, Coffee beans (ground and instant), Margarine, Milk (powdered and concentrated), Poultry (except duck, goose and turkey), Soap (laundry, cakes & powdered), Sugar (brown and white) and Tea.

In its role of regulating prices of these goods and services, the Commission is undertaking a review to ascertain whether or not continuing regulation is needed. The lists of the declared goods to be covered in the pricing review are: Batteries (torch & radio), Butter, Coffee Beans (ground and instant), Margarine, Milk (powdered and concentrated), Poultry (except duck, goose and turkey), Soap (laundry cakes and powdered), Sugar (brown & white) and Tea.

These goods were originally declared for price regulation purposes over 30 years ago. Since that time, while the goods in question have remained declared under the *Prices Regulation Act*, the actual determination and setting of a regulated price for many of the products concerned has been at the best spasmodic. As a consequence, it is appropriate to consider the circumstances that currently apply in the market for each of the goods identified above, and form a view as to whether the current declaration under the Act should continue.

To assist the Commission in making informed decisions, the Commission called for submissions from all interested parties including the local producers, wholesalers, retailers, consumers and other interested parties involve directly or indirectly in the supply or consumption of these declared goods. This Final Report is the outcome of a comprehensive review undertaken by the Commission, which concludes the public review process and provides the Commission's decisions on the future of price regulation for the relevant sundry declared goods.

In summary, the Commission has concluded that with the exception of sugar, all other sundry declared goods namely; Batteries (torch & radio), Butter, Coffee Beans (ground and instant), Margarine, Milk (powdered and concentrated), Poultry (except duck, goose and turkey), Soap (laundry cakes and powdered) and Tea are to be de-regulated while a price monitoring arrangement will apply to sugar products.

The review was undertaken within the timetable outlined below;

Table 1: Timetable for the review of the sundry declared goods

Events	Timeframe
Release of the Issues Paper	5th October 2006
Close of submissions on the Issues Paper	2nd November 2006
Release of Draft Report	15th February 2007
Close of submissions on Draft Report	15th March 2007
Release of Final Report	16th August 2007

Submissions to the Commission are available for public inspection unless the Commission agrees that all or part of the submission should remain confidential. However, in accordance with the provisions of the ICCC Act, it is the Commission's view that the Review process should be as transparent as possible and to this end, submissions would normally be available for public inspection unless there are exceptional commercial-in-confidence reasons why submissions or extracts thereof are held in confidence.

The Commission wishes to acknowledge the contributions of all industry stakeholders and other interested parties who have participated throughout the course of this Review. The Commission will now proceed to implement its recommendations where appropriate.

Thomas Abe
Commissioner & CEO
Independent Consumer & Competition Commission

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CHAPTER 1 INTRODUCTION

1.1 Background to the Review

During the 1970s and 1980s, there were a large number of products declared for price regulation purposes. These declarations occurred at a time when there were different supply and retailing options in the PNG market than those that apply in the first decade of the 21st Century. Under the original *Prices Regulation Act*, once a good or service had been declared for price regulation purposes, there was no process whereby such goods or services could be readily removed from the list of declared items. Thus, once a good or service was declared, effectively its declaration remained almost in perpetuity unless direct lobbying by interested parties caused the relevant Minister to remove the good or service from the list of declared items.

Subsequently, amendments to certain provisions of the *Prices Regulation Act* in 2002 saw the inclusion of legislative provisions that effectively allowed for the review of the continuing need for the regulation of particular goods or services that were then declared for price regulation purposes. Such a review, which is to be undertaken in a public and transparent manner by the ICCC, could be initiated by the Minister responsible for the Act, the regulated parties, or the Commission itself. To date, the Commission since its inception in 2002 has undertaken a series of reviews of declared goods and services so as to determine whether such goods or services should continue to be regulated and or be withdrawn from the list of regulated goods and services. This review process has consequently resulted in the continuation of price regulation for some goods, the modification of the form of regulation to apply for others, and the removal of regulation for others such as canned fish (mackerel and tuna) and canned corned beef.

Much of the work under the former price control regime was administered through the Price Controller's Office and was less transparent than is envisaged under the ICCC Act. Notwithstanding agreed procedures for price evaluations, reviews were more focused on current costs and not other factors such as new investment requirements, service standards, and a balancing of the interests of the regulated business and consumers as is now required under Section 21(2A) of the *Prices Regulation Act* Chapter 320.

Hence, in light of the changed legislation relating to price regulation, there is the need for a review to decide whether to continue, amend or terminate the current regulatory arrangements that apply for goods and services declared under the Act. Upon concluding the review process and on the basis of comments and submissions from interested parties and the various stakeholders, should it be found that some form of price regulation is still required, the Commission as the regulator is required to develop a transparent, accountable and consistent pricing methodology with the interests in mind of both consumers and the suppliers of the declared goods or services.

1.2 Legislative requirements

The Commission is undertaking this Review in accordance with the amended provisions of the *Prices Regulation Act* (Ch. 320). In undertaking this Review, the Commission is to have regard to the following:

- Sections 10, 20 (A & B), 21, 25 and 32A of the amended *Prices Regulation Act*;
- Confidentiality and public disclosure provisions of the Act on information received from submissions; and
- The current and prospective outlook for the respective declared goods in PNG.

Under Section 10 of the *Prices Regulation Act* (Chapter 320), the Government through the Minister for Treasury has declared the prices for these goods [Coffee beans (ground and instant), tea, sugar (brown and white), batteries (torch and radio), soap (laundry, cakes and powdered), Poultry (except duck, goose and turkey), butter, margarine and milk (powdered and concentrated)] for price control purposes.

The *Independent Consumer & Competition Act 2002* made a number of changes to the *Prices Regulation Act* under which the prices for these products are controlled. In particular, the Prices Regulation Act was amended in the following ways:

- A new section, Section 20A was included which requires the ICCC to publicly notify its intention to undertake a review of a Pricing Order under Section 21 of the Prices Regulation Act.
- Section 21 (2A) (see Appendix 1) was added which introduces specific requirements on the Commission in terms of the matters that it must consider when making a Pricing Order including encouraging greater efficiency, ensuring an appropriate rate of return and appropriate safeguards for quality, reliability and safety for the supplying industry, and protecting consumers from the misuse of market power by suppliers of declared goods and services.
- Sections 25A, 25B and 25C were introduced which specify the process by which a review of a Pricing Order can be undertaken including the deadlines that must be met, the requirement for the Commission to publish details of its decisions, and the form of a decision that can be taken by the Commission as a consequence of such a review.
- Section 25A (6) allows the Commission of its own accord to initiate a review.
- Section 25C (3) specifies that in response to a review, the Commission may determine to:
    - Continue to operate the existing price control arrangements in their present form,
    - Vary the existing price control arrangements, or
    - Terminate the present price control arrangements.

- Section 32(A) provides for the declaration of goods or services for price monitoring purposes as an alternative to price control. This is a less stringent form of regulation, which effectively allows the Commission to oversee the prices being charged for the declared goods or services, without requiring the industry to incur the cost of more heavy-handed direct price control.

Under a price monitoring arrangement, if it is evident that price movements are not reflective of appropriate competitive market benchmarks, the Commission can recommend to the Minister for Treasury that the relevant goods or services be declared under Section 10 of the *Prices Regulation Act* (Chap.320) for full price control purposes.

These amendments to the *Prices Regulation Act* increase the flexibility of the Commission in terms of its overall price control activities, and allow for appropriate mechanisms to be developed and implemented that meet the objectives of the Government in terms of price control while minimising the cost of undertaking the price control tasks, thereby ensuring that price control does not of itself create other unintended adverse economic consequences.

1.3 Format of the Review process

This Review is initiated under the provisions of Section 25A (6) of the *Prices Regulation Act.* The process of the Review is public and transparent and in addition to the suppliers and manufacturers of these declared goods, other interested parties and the public are invited to make submissions to the Review.

The process involves the following broad stages:

- Public announcement of inquiry and invitation for submissions to be made to the Commission;
- Release of an Issues Paper discussing aspects of the inquiry and the major issues that the Commission believes need to be considered;
- Release of a Draft Report and the inviting of submissions on that Draft Report;
- The possible holding of Public Hearings on the Draft Report; and
- Release of the Final Report and Determinations.

The timetable for the whole Review is provided in the Foreword to this Final Report. Copies of submissions received by the Commission (unless treated as being confidential) are available for public viewing at the Commission's office on a 'Public File' or copies can be obtained from the Commission at a nominal cost for photocopying. The Final Report of the Commission is a public document and can be obtained from the Commission's office or downloaded from the Commission's website: www.iccc.gov.pg.

CHAPTER 2 STRUCTURE OF THE SUNDRY GOODS INDUSTRIES IN PNG

This section details the existing structure of the sundry goods (coffee, tea, sugar, battery, soap, poultry, butter, margarine and milk) industries in PNG. Coffee, tea, sugar, soap and poultry are produced locally as well as being imported whilst batteries, butter, margarine and milk are mainly imported from overseas suppliers and supplied into the domestic market.

2.1 Coffee (ground and instant) products

Papua New Guinea has developed a strong, export oriented and commercial coffee production industry, involving the growing, harvesting and milling of Arabica and Robusta coffee as well as the grinding and roasting of coffee beans. PNG also packages and distributes instant coffee after the process of filling is undertaken at the Factory in Lae by Nestle (PNG) Ltd.

Coffee production accounts for significant portion of the national income of PNG, and is an important contributor to national wealth in certain rural areas. In recent years there has been a move beyond the simple growing and exporting of green beans to additional value added activities such as roasting and grinding coffee.

The industry is moving increasingly into the production of finished products while still continuing its traditional export of green beans. The market for coffee products in PNG is comprised of locally produced ground and instant as well as imported ground and instant coffee products. The bulk of the domestic supply of roasted bean and ground bean is undertaken through the mills located in Goroka, Kundiawa, Mt Hagen and Lae.

There are four main participants in the supply of ground and instant coffee products in the domestic market. While three are involved with the supply of ground coffee, Nestle (PNG) Ltd is a supplier of instant coffee as well as coffee in other forms. In addition there are a number of other smaller importers of coffee products. The main participants in the market are:

- Goroka Coffee Roasters Ltd;
- WR Carpenters & Estates Ltd;
- Kongo Coffee Ltd; and
- Nestle (PNG) Ltd.

2.1.1 Goroka Coffee Roasters Ltd (GCR)

Goroka Coffee Roasters Ltd was establish in 1965 starting with one small roaster and now has the capacity to produce several hundred tonnes of roasted coffee per year. With eight full-time employees, the factory is engaged in supplying the domestic market as well as being poised to launch into new export markets.

Its products come under the brand names ‘Highlands Blue’, ‘Paradise Gold Organic Coffee’, ‘Premium Estate Coffee’ and ‘Espresso Coffee’. These products are supplied through supermarkets and other retail outlets, and have markets in hotels and lodges, coffee shops, and the airline industry.

The main input into the production, namely green coffee beans, is sourced from local plantations while the packaging materials are imported.

2.1.2 WR Carpenters & Estates Ltd

WR Carpenters & Estates is involved both in coffee and tea production. While tea production is its main focus, Carpenters still maintains some coffee production capacity with its coffee roasting mill being located in the Western Highlands Province. Its coffee products come under brand names such as 'Sigri' and 'Bunum Wo' coffee.

Most of the raw materials are sourced locally from the coffee farmers while few ingredients and other flavourings plus packaging materials are imported.

2.1.3 Kongo Coffee Ltd

Kongo Coffee has its processing mill in Simbu with its established coffee plantations scattered in the Highlands region. Kongo Coffee specialises in producing premium quality roast and ground coffee products. In addition to the standard 250 grams roast and ground coffees, Kongo also supplies whole roasted beans, gift packs and hot cups. The ground coffee products are sold under the brand names 'Elimbari', 'Mt Wilhelm', 'Karimui' and 'Simbu'[1].

All the raw materials are sourced locally from coffee plantations except for the plastic bags for packing which are imported.

2.1.4 Nestle (PNG) Ltd

Nestle (PNG) Ltd is a supplier of instant coffee products in PNG as well as being a purchaser and exporter of coffee beans, Nestle did have its own instant coffee operation in PNG. However, this is no longer operational and Nestle currently exports beans to Australia for conversion into instant coffee which are then reimported to PNG for filling and packaging as Nescafe Niugini Blend instant coffee. The company's production facilities are located in Lae where it is involved in the packaging, labelling and distribution of its products into the domestic market.

In the last five years the supply of coffee volumes by the Nestle Group into the domestic market has doubled. The Nestle Group is also involved in importing and supplying the domestic market with Nescafe Blend 43 and Nescafe Gold brands which are packed in various sizes using tins, jars and soft packs. Their products are distributed through their customer network via wholesalers and retailers.

Most of the coffee beans used in the production of its coffee products are sourced locally, sent to Australia for further refining and processing, and then re-imported, packed and distributed to the domestic market.

2.1.5 Other Importers

Most other suppliers of coffee products import pre-packed coffee in instant form from overseas suppliers. The bulk of the domestic supply of coffee appears to be met by the local producers/manufacturers (eg Nestle) with access to PNG coffee plantations. However, imported

[1] Post Courier Thursday July 27, 2006 Page 20

coffee products hold a small portion of the domestic market. The imported brands that compete with the domestic coffee products are:

- Riva, a brand imported from Australia;
- Indocafe, a brand imported from Indonesia;
- Koffina, a brand imported from Thailand;
- Great Taste Coffee imported from Philippines; and
- Blend 45 coffee imported from Philippines.

The imported coffee brands come in sizes ranging between 50 and 200 grams. Distribution of the imported products is done through the wholesaling networks of the importers. For example, BNG Trading Ltd is an importer of Koffina which is widely distributed to retail outlets in PNG, while imported coffee from the Philippines is undertaken by Seeto Kui (Holdings) Ltd.

Imported coffee products are required to meet a 25% tariff which was originally established to protect the local industry.

2.2 Tea products

The establishment of a Tea Industry in PNG began in the Waghi valley in the Western Highlands Province in the mid 1960's with the planting of tea estates and the construction of tea factories on these estates. The rich soil and ideal climate conditions of the Highlands contribute to the success of these tea plantations in promoting PNG's reputation as a leading producer and supplier of quality tea to meet the growing demand both in the domestic and the foreign markets.

The domestic production of processed tea is limited to one major player. However, there are a number of importers of tea products for general consumption and these imported products are widely available in the domestic market.

2.2.1 WR Carpenters & Estates Limited

WR Carpenters is one of the main players in the tea industry, owning and operating four tea plantations and a tea processing factory. The entire tea manufacturing process is mechanized and fully automated using the CTC (or Cut, Tear and Curl) process. The tea produced and processed in PNG is highly suitable for use in tea bags, which is popular particularly in developed countries[2]. WR Carpenters and Estates Ltd is renown for its flagship brand 'National No.1 Tea' and the 'Tea Pot Tea' for tea packets and tea bags. The tea is also exported under the 'Mt Angalim' brand.

Around 10 percent of the tea manufactured by WR Carpenters is packed in 'Value added' form for sale in PNG. A major portion of the Carpenter's production is exported while the remainder is sold into the domestic market. Most of the raw materials used in the production of black tea and tea bags are sourced locally from the tea plantations but some ingredients are imported. Though WR Carpenter is the dominant domestic manufacturer and supplier of tea products in PNG, its overall market share in the domestic market is impacted by the high level of imported tea consumed in PNG.

[2] http://www.wrcarpenters.com.pg

BNG Trading Co Ltd has the exclusive rights for the distribution of Bushells brand tea in PNG. BNG Trading Ltd Co imports packaging materials and sundry ingredients for the supply of this brand of tea and WR Carpenters undertakes the manufacturing of the Bushells brand product using PNG grown leaf. Distribution is undertaken wholly by BNG Trading. This arrangement has been in existence for three years following the withdrawal of Unilever Australia, the original supplier of the Bushells brand. The estimated volume sold annually to the local market by BNG Trading is 175 tonnes.

2.2.2 Importers

Currently the main importer of tea products in the domestic market is Boroko Food World Supermarket. There are other importers into PNG and the following imported brands are available on the domestic market:

- Tetley Tea Cup Bags imported from Australia in 250 grams form;
- China Filian Oolong Tea imported from China in 250 grams form;
- Lipton Plunger imported by BNG Trading from Australia in 38 grams form;
- Twining Tea imported from England; and
- Gemi Tea imported from Sri Lanka

A tariff of up to 40% has applied in this industry, although this rate has now reduced to 25% and further reductions are anticipated over the next few years (although the date for the removal of this cost impost has not been specified by the government).

2.3 Sugar (brown and white) products

2.3.1 Ramu Sugar Ltd (RSL)

Sugar being an indigenous plant to PNG is part of the indigenous lifestyle and is widely consumed in its raw form. In the last two decades the government has supported the downstream processing of sugar to generate social and economic benefits within PNG. It established the domestic manufacturing of sugar in Ramu outside Lae with the State controlling the shareholding in the sugar mill. In 2003, the State sold its shares to the general public and institutions which now hold 99 percent of the shares. Ramu Sugar Ltd (RSL) is publicly listed on the local stock exchange.

The domestic commercial production (growing and milling) of sugar by RSL began in 1982 initially with a production of 10,000 tonnes. It has now grown to a current level of output of over 45,000 tonnes production. Ramu Sugar Ltd produces both white and brown sugar and output has increased steadily using locally grown sugar from Ramu estates and supplemented by out-growers who are usually local farmers. However, pests and drought have threatened the growth in output. The company has managed to overcome these challenges by employing better pest and disease management strategies and control mechanisms to deter further outbreak of pest. In the last twelve months, Ramu has been unable to meet domestic demand because of loss of production as a result of drought and pests. In response, the Government has had to take short-term action to ensure available supplies of sugar for the domestic market. This short term action has been by way of allowing imports of sugar to make up the shortfall in domestic production.

RSL employs over 2000 PNG citizens and supports a community of 12,000 people with key infrastructure in health, education, police stations, shops, roads and also local participation in other spin-off activities generated by the business.

RSL produces sugar mainly for domestic consumption and in accord with domestic consumers' needs and requirements. RSL supplies its products to the retail/wholesale sector and its industrial customers direct from the Ramu plant or warehouse outlets located across PNG. Sugar is packed and distributed in sizes ranging from 7g to 50Kg and is also sold in bulk form to meet the specific needs and purpose of customers. RSL supplies its product direct from the factory to major retail distributors and through its distribution depots based in Lae, Port Moresby and Mt Hagen.

Most of the raw materials used in the production of sugar (namely sugar-cane) are sourced locally from the company's sugar estate and from the outgrowers. Other ingredients in addition to plastic and paper bags are imported from overseas suppliers.

In 2005, the market share for sugar held by Ramu Sugar in PNG was estimated to be 96.5 percent which is an increase of 9 percentage points over the preceding years of 2003 and 2004. The PNG sugar market is small by global standard reflecting both the small population and low consumption rate of 6kg per head per annum compared to the world's average of 20kg per head per annum.

2.3.2 Imported Sugar Products

Currently a 70 percent tariff is applied to imported sugar. Under the Government's Tariff Reduction Program (TRP), the tariff was reduced from 82 percent in 1999 and was expected to be further reduced to 40 percent in 2006. However, in 2006 the tariff remained unchanged at 70 percent as part of an agreement between the State and RSL, although the tariff will reduce to 40 percent in 2010. A tariff at this level severely restricts the opportunity for import competition in the domestic market.

Notwithstanding this high tariff, there are still some small volumes of imported sugar available in PNG. These are primarily imports of special pack sizes, and account for less than 4 percent of the total market. These imported products are primarily:

- Bundaberg Sugar (Black and Gold) as supplied by Bundaberg from Australia and available in sizes of 1Kg and 2Kg;
- CSR Aus Favourite is also imported from Australia and comes in 500 grams size;
- Fabulous Brand imported by BNG Trading Ltd;
- Greens Foods imported from Australia; and
- Fiji sugar imported from Fiji.

Importation of sugar products to the domestic markets is undertaken mainly by large supermarkets and wholesalers. The imported sugar is mainly brought into the country by these importers for sale to domestic household customers as distinct to supply of industrial consumers.

2.4 Battery (torch and radio) products

The importation and distribution of batteries[3] (torch & radio) products in PNG is undertaken in a tariff free and open market in which most major wholesalers and retail outlets source their battery supplies either directly or indirectly from overseas suppliers. There is no domestic manufacturer of batteries for torch or radio use.

2.4.1 Major Suppliers

Chin H Meen and Sons Limited (CHM) is one of the major suppliers involved in the importation of battery products. CHM primarily imports and distributes the Panasonic battery brand in the domestic market. CHM imports between 20 and 35 million Panasonic battery products annually and holds an estimated market share of 55% of the total battery market. The battery products mainly come in four different sizes namely D, C, AA, and AAA.

Other importers of battery products include Seeto Kui Limited, Pactrade Limited, Brian Bell, SVS/Papindo, BNBM Limited, Sengco Niumec Limited and a number of the larger wholesaler/retailer groups. These companies import brand names such as Dura2, Duracell, Energizer, Eveready, ABC, Suki, and Trident. These batteries are for the domestic market and are distributed via wholesalers and retail outlets. The batteries come in varying pack sizes and include D, C, AA, and AAA sized batteries to meet differing consumer requirements.

In terms of opportunity for new entrants to enter into the market, at present there are no tariff barriers[4] on batteries being imported and distributed throughout PNG. Thus there is currently active existing competition from overseas supplies and the potential for new entrants to enter the market without any additional cost barriers.

2.5 Soap[5]-laundry, cake and powdered products

The Soap industry in PNG comprises companies engaged in production, importation, packaging and distribution of soap products. The definition of soap products includes laundry soap as well as soap used for personal use and soap for clothes washing.

The production, importation, packaging and distribution of soap products is an unrestricted, open market activity where distributors, wholesalers and retailers source their supplies directly from overseas and local manufacturers and sell as appropriate into the domestic market. The following companies are actively involved in the supply and distribution of soap products in PNG.

2.5.1 Panamex Pacific Limited (PPL)

PPL is a subsidiary company of Campbell Brothers Limited. Panamex Pacific manufactures and distributes consumer products and cleaning agents in PNG. Products are also supplied throughout the Pacific Islands region. PPL has ten different brands of soap products and is mainly supplying the following products of laundry soap: Sudso, B29, Cyclone, Was Was, Han Was and Supa Was which

[3] Batteries under the Prices Regulation Act refers to batteries for torch and radio
[4] Chapter 85.06 of the PNG Import & Export Customs Tariffs
[5] Soap under the *Prices Regulations Act* refer to laundry, cake and powdered soap

are available in different retail packet sizes and carton configurations.

2.5.2 Colgate Palmolive Company

Colgate Palmolive Company is involved in the manufacture and marketing of consumer personal health care products worldwide. In terms of soap, the company manufactures and supplies bar and liquid hand soaps, shower gels, shampoos, conditioners, shave products, laundry and dishwashing detergents, and other similar items. Colgate Palmolive has a total of 9 different brands of soap products in PNG and is mainly involved in the supply of the following laundry soap products: Cold Power, Hurricane, Klina, Isiwas and Tartan.

2.5.3 K.K Kingston

K.K Kingston is one of the domestic manufacturers and suppliers of soap products. K.K Kingston has two brands of soap products namely Dazzle and Supa Klin which are available in different retail packs sizes. Most of the raw materials and other ingredients used in the production of soap are imported from overseas suppliers.

2.5.4 Other Importers/Wholesalers/Retailers/Distributors

Soap products consumed in PNG are imported mainly from Australia and Asian countries. For some of these products, importation is undertaken by major wholesalers and retailers. Bulk supplies of soap and associated products are also imported and packed locally in Lae and Port Moresby. Whilst most soap products are imported in bulk and packed locally, Panamex Limited, K.K Kingston, Pacific Industries, and Colgate Palmolive import some powder/detergents for processing and packaging in PNG using their production facilities located in Lae. The imported powdered detergents are processed and packed into various soap products for distribution via the respective distribution networks of the producers/suppliers involved. These packs come in various sizes and combination of products to meet consumer requirements.

Currently there is a 25% tariff barrier on soap imported into PNG. This import barrier was introduced as an incentive for local manufacture of the products concerned. Though there appears to be strong brand loyalty, particularly for the established brands, consumers have the option of a wide range of choice both in terms of the type of product (example its particular attributes, purposes, scents etc) and the price to be paid. In addition to the more widely recognised corporate brands of soap products available through the supermarkets and trade stores, there are domestic suppliers of herbal and organic soaps in cake form. These products are supplied from small-scale producers in local villages who have acquired the knowledge and skills of producing soap from church groups and other NGOs. However the output from these producers at this stage is very small, although it does provide further competition for the locally manufactured and imported soaps.

2.6 Poultry products

The poultry[6] industry in PNG has grown since the early 1980's under the protection of an import ban and more recently, a high import tariff on frozen chicken. The industry provides frozen and fresh chicken meat, mainly to urban and semi-urban markets. Although small by international standards, it

[6] Except for ducks, goose, and turkey

plays a significant role in the economy through providing direct and indirect employment, contributing towards government revenue and providing potentially a more balanced healthy diet for Papua New Guineans.

The poultry industry in PNG is serviced primarily by the domestic producers Niugini Tablebirds Limited and Zenag Chicken Limited. Other suppliers to the industry import frozen chicken products however, they hold a relatively small proportion of the domestic market.

Niugini Tablebirds and Zenag Highlands Chicken Limited are fully integrated poultry operators and include hatchery, breeder farms, broiler farms, processing plant and feed mill located in Lae. Niugini Tablebirds is the largest supplier of fresh and frozen chicken. Their products can be classified into two main categories namely, pieces and whole, and come in a range of different sizes. The company is also involved in selling day old chicks and stock feed for people to raise their own chickens as a protein source. Apart from poultry, Niugini Tablebirds also operates a flour mill, supplying the local market and consumers with various types of flours and bread pre-mixes.

Zenag Highlands Chicken also offers a similar range of products and sizes to that offered by Tablebirds. Both Zenag and Tablebirds have their own distribution arrangements, and together account for the majority of the domestic market for the supply of poultry.

Tablebirds and Zenag source their supplies from their own chicken farms and abattoirs. Occasionally when domestic supplies for both companies are insufficient to meet production requirements they buy from local farmers.

In addition to the larger commercial activities of Tablebirds and Zenag, there is a strong domestic market for the supply of chickens and poultry from small-scale farmers who have acquired the knowledge and skills of breeding chickens and operating chicken farms. The output from these small-scale farmers is insufficient to meet a significant proportion of domestic demand for chicken, but they do represent an alternate source of supply, especially for consumers who are willing to buy live birds for self-slaughter and preparation.

There are other companies who are also engaged in the poultry industry but hold a minor portion of the fresh chicken market. These include:

- Highlands Products Limited
- Christian Leaders Training College
- Poultry Products Limited

2.7 Butter products

There is no domestic manufacture of butter in PNG. However, there are a number of suppliers that are involved in the importation and supply of butter products in the country. Under the existing arrangement, most suppliers import butter in “end-product” forms and supply the domestic market in this form. In most cases, a supplier that has an agreement to sell a particular brand of butter product will act as an agent to import products and sell this brand of butter products to wholesalers and retailers.

The main brands of butter products that are available in the domestic market are:

- Anchor
- Friendship

Anchor butter is imported directly from New Zealand by local companies like Port Moresby Freezers, Lings Freezers, RH Trading Limited and Starland Freezers, while Friendship butter is solely distributed by Port Moresby Freezers and is imported from France. Other potential supplies of butter are also available from these sources, although for the moment Anchor and Friendship are the primary brands sold in the retail market.

2.8 Margarine products

Margarine is not manufactured in PNG. The importation and supply of margarine products is undertaken by licensed agents or distributors of the particular branded products available in the PNG market. Similar to the supply of butter products, the distributors import margarine products and supply to domestic wholesalers and retailers. The following brands of margarine products are available in the PNG market:

- Blue Band
- Meadow Lea
- Sunrise
- Tableland
- Flora
- Planta
- Majesty
- Olive Grove
- Simas

There are possibly other brands available in the market. The proliferation of brands is not surprising given the growth in the market share that this form of spread enjoys over butter which it has largely replaced in terms of retail sales. These products come in different size packs to meet the needs of consumers and the storage capabilities of households who may have limited refrigeration space.

2.9 Milk products

Milk in PNG is supplied primarily in powdered or UHT form. Under the existing arrangements, the licensed distributor or agents of a particular brand of milk or milk product, imports the product from overseas and sells to the wholesalers and retailers across the country. However, not all milk products are imported in their "end-product" form. In some instances, domestic suppliers import various milk components and produce the 'finished goods' at manufacturing facilities in the country. The process of final manufacture in PNG is primarily one of repackaging from bulk to standard retail sizes.

The brands of milk products that are available in the market are; Ausfresh, Everyday Filled Milk Powdered, Sunshine Powdered Full Cream, Sunshine UHT, Carnation Sweetened Condensed, Ideal Evaporated, King, Devondale, Indo, Fabulous, Anchor, Soy Life, Pauls, Lactogen and S26.

Nestle (PNG) Limited imports Sunshine Full Cream Milk, Everyday Filled Milk Powdered, Sunshine UHT, Carnation Sweetened Condensed, and Ideal Condensed Milk either in finished good or bulk form. Those products that are imported in bulk are filled and packed locally in its factory in Lae.

Other types of products such as Ausfresh and Fabulous Milk are imported and supplied by BNG Trading. Seeto Kui imports and supplies the King brand, and Pacific Industries (PNG) Ltd imports and supplies Anchor brands. City Pharmacy and Supervalue Store import and supply Devondale and Indo Milk respectively. Baby formula milk such as Lactogen and S26 are imported and supplied by various supermarkets and retailing outlets.

Domestic production of milk from a domestic dairy herd is no longer available in commercial quantities. There are no import duties on the supply of milk products into PNG.

CHAPTER 3 CONTINUATION OF REGULATION

Under the provisions of Section 25C(3) of the *Prices Regulation Act*, the Commission is required when undertaking a review of this nature to consider whether to:

- Continue to operate price control arrangements in their present form, or

- Vary the existing price control arrangements, or

- Terminate the existing price control arrangements.

The first step in this review process therefore is to consider whether or not some form of price regulation should be retained for some or all of these sundry products. For the Commission to form a view on this matter it must address issues surrounding the extent to which competition exists in the market, the degree of countervailing power consumers hold, and the opportunity for new entrants to enter the market or substitute products to compete against these various goods.

In response to the Issues Paper and the Draft Report released by the Commission, submissions were received mainly from industry participants directly involved in the manufacture, importation and supply of these goods under review with a few submissions from key government agencies. In response to the Draft Report, the Commission received two submissions, one from the Department of Treasury and one from Ramu Sugar Limited.

The following were the submissions received:

SUBMISSIONS Issues Paper	
Manufacturer/Importers/Suppliers	**Sundry Goods**
Nestle (PNG) Ltd	Coffee
Kongo Coffee Ltd	Coffee
WR Carpenters and Estates	Tea
Ramu Sugar Ltd	Sugar
Chin H Meen & Sons Ltd	Batteries
Colgate Palmolive (PNG) Ltd, K. K. Kingston Ltd, Panamex Ltd	Soap Products
Poultry Industry Association	Poultry products only chickens
Port Moresby Freezers	Butter and Margarine
Papindo	Sundry Goods
BNG Trading Company Ltd	Sundry Goods
Draft Report	
Department of Treasury	Sundry Goods
Ramu Sugar Ltd	Sugar

The submissions received from the industry have differed in their views with most arguing for the complete discontinuation of price control. A few submissions however, suggested some form of regulation to continue although the preferred form of regulation is some form of price monitoring, reflecting the market reform that has occurred since regulation was first introduced and the level of competition in the relevant market.

In response to the Draft Report which found in favour of discontinuing price regulation on all products with the exception of sugar, the submission from the Department of Treasury supported the Commission's draft determination. The submission from RSL noted the Commission's findings regarding the proposal to continue some form of regulation for sugar, and made a number of suggestions and proposals concerning aspects of the form of regulation and the consideration of the starting level for prices that were to be subject to this regulation. The Commission has noted the various submissions and will elaborate on each submission under the relevant industry.

3.1 Coffee Products

3.1.1 Domestic Competition for Coffee Products

Coffee products in both instant and ground form are being produced or packed and distributed locally. The Commission treats ground and instant coffee as being one market. Most of the supply of instant coffee products into the domestic market is undertaken by Nestle (PNG) Ltd which domestically purchases the coffee beans used in the manufacture of instant coffee. A portion of this purchased coffee bean is brought back to PNG in the form of Nescafe Niugini Blend instant coffee which is packaged in PNG. Over the last five (5) years, domestic sales of instant coffee in this form have increased from 120 tonnes to 200 tonnes. Apart from instant coffee, there are domestic manufacturers of ground coffee products including WR Carpenters, Goroka Coffee Roasters and Kongo Coffee.

WR Carpenters production and supply of coffee has mainly targeted the export market where its volume has increased over the last five years. Its supply for domestic consumption has remained constant at under 10 tonnes per annum.

Kongo Coffee is a nationally owned coffee producer of ground coffee located in Chimbu Province. The estimated volume of sales in 2005 was around 10-12 tonnes. In its submission to the review, Kongo claims that there are well over 10 competitors in the market for coffee products and the number of new entrants into the industry has been greater than expected with relative freedom of entry into the market. Kongo estimates that it has about 4 percent of the entire domestic coffee market.

Nestle (PNG) Ltd in its submission to the inquiry argued that price control when established was intended to protect the interest of consumers in terms of unreasonable margins being applied in a market with little competition existing in the market place. It is argued that the current market conditions ensure that competitive pressure removes the need for direct price control.

The Commission notes that there has been a growth in the number of suppliers of coffee products over recent years and the extent of competition has changed. Apart from domestic competition between manufacturers of coffee, there are a number of importers of coffee who also compete to secure a share of the market held by the domestic producers. There are numerous imported coffee products available in the retail shops and the most visible brands include Riva, Indocafe and Koffina. These imported coffee brands come in sizes ranging between 50 and 200 grams and most of the imports are undertaken by major wholesalers such as BNG Trading.

In terms of the availability of substitutes, coffee does not have a direct substitute although there are a number of high caffeine based products available in the market. As a social, non-alcoholic drink, coffee is often seen as a substitute for tea. For most of these goods consumers generally differ in their taste and preferences. Thus some consumers prefer coffee on an occasional basis while coffee lovers would use it more regularly. Thus some substitutes exist for coffee and consumers do have preferences for the social non alcoholic drink they might consume.

As regards the opportunity for new entry into the industry, there is unrestricted potential to participate in the processing of coffee locally as PNG coffee is of high quality and regarded as one of the best in the world. Most of PNG's raw coffee is exported. The volume of coffee exported in unprocessed form is six times greater than the coffee produced for local consumption. The Commission notes that should the demand for the domestic consumption of coffee change there are ample opportunities for the current suppliers to increase their domestic supply or for new suppliers to enter the market.

3.1.2 Import Competition for Coffee Products

Currently, there are several different brands of imported coffee in the domestic market and these coffee products have entered and compete in the domestic market despite the 25 percent tariff.

There are numerous brands of imported coffee products available in the retail shops and the common ones include Riva, Indocafe, Koffina, Great Taste Coffee and Blend 45. These imported coffee brands come in sizes ranging between 50 and 200 grams and most of the imports are undertaken by major wholesalers such as BNG Trading, Seeto Kui (Holdings) Ltd and Boroko Foodworld.

Exhibit 1: Coffee displays in a Port Moresby supermarket

3.1.3 Countervailing Power of the Consumer

Countervailing power refers to the "power" a consumer or purchaser of a service or good has over the supplier by being able to take his/her business elsewhere if the purchaser is unhappy with the prices or services offered by the service provider.

In PNG there are a significant number of producers and importers of coffee giving consumers a range of choice. Consumers of coffee are primarily households who as individuals hold little or no countervailing power. In the urban centres however, where there are competing wholesalers and retailers in the supply of various coffee products, consumers have choices of the coffee products they purchase and from which store or wholesalers to purchase their coffee requirements. When doing so they can exercise their powers in influencing the pricing of these goods as reflected in the extensive advertising undertaken by large retail outlets to attract consumers to their stores. This power is not as great in the rural areas where consumers do not have the same range of choice in the wholesalers and retailers of these goods.

An examination of any supermarket in the main urban centres highlights the format of layout and display of goods in these stores, particularly the display of goods according to brand and sizes and their closed substitutes. Thus coffee products are positioned next to tea, milo, milk and sugar. Consumers' buying pattern therefore has some impact on the display of product arrangement and pricing behaviour by supermarkets and retailers.

With the growing supply of competing coffee products or substitutes, consumers have gained some countervailing power in this market. However, this countervailing power is limited to the larger urban areas and is not as strong in rural areas.

3.1.4 Commission's Draft Findings

In making its Draft determination, the Commission assessed the coffee market in PNG from the data it collected directly from the industry as well as from its own independent data collections on the coffee market. The coffee market is viewed as having the following characteristics:

- The market in PNG is growing with greater acceptance and consumption of this form of beverages in both the ground and instant coffee forms. Ground Coffee suppliers consist of primarily three players who are domestic manufacturers, while instant coffee is supplied by several importers, and is being locally packed;
- Opportunities to enter the market exist for both producers and importers although a 25 percent tariff has to be met by importers and this tariff will not be completely removed in the short term;
- There is an increasing range of substitutes in the market which are competing with coffee;
- Consumers in the urban centres have some degree of countervailing power in the coffee market with broad range of substitutes as well as large number of retailers and wholesalers but this level of countervailing power is not as evident in rural locations where there is only one or a few retailers in the areas concerned. This gives consumers limited choice on the range of goods they can purchase; and
- Competition is strong between the various coffee products particularly in the urban areas.

The Commission notes that coffee products over recent years have seen a growth in competition with the entry into the market of a number of new suppliers, importers and manufacturers. In addition, there has been the availability of substitute products in the market. Unlike staple foodstuff such as rice and tinned fish, coffee is not widely consumed by Papua New Guineans but is popular among certain consumers mainly in the larger urban areas. It is in these areas where competition between suppliers is greatest and the market appears to be functioning such as to alleviate the need for price regulation.

On the basis of the above characteristics that define the local coffee market, the Commission came to a view in its Draft Report recommending the deregulation of coffee.

3.1.5 Commission's Final Determination

No further comments or submissions directly on this product were received in response to the Draft Report. The Commission, having reviewed its draft findings, does not believe that it needs to change its draft determination. Therefore, the Commission will recommend to the Treasurer that the current price control arrangements that apply to coffee as a declared good and the declaration of allowable wholesale and retail margins on this product will cease to apply forthwith.

Final Determination 1

The Commission's final determination is to recommend to the Minister for Treasury that coffee products be deregulated for price setting purposes. The current regulated wholesale and retail margins will also cease to apply.

3.2 Tea Products

3.2.1 Domestic Competition for Tea Products

The Tea Industry in PNG is comprised of two domestic producers/manufacturers and several importers. Manufacturing of tea is undertaken by WR Carpenters which is the sole domestic manufacturer of tea (producing tea on its own behalf and under contract for BNG Trading) while imported tea is sourced from Australia and Asia by various wholesalers and authorised importing agents. Over the last five years the volume of tea supplied to the domestic market by WR Carpenters has increased by almost 50% from 429 tonnes to 641 tonnes. This accounts for around 10 percent of the total domestic tea production, the remainder being exported. Packed tea products are distributed through warehouses in Lae and Port Moresby while shipments to the Islands regions are made through Lae. Customers in the Highlands make their purchase direct from the WR Carpenter factory.

Against what was a single domestic supplier of locally produced tea, namely Carpenters, three years ago BNG Trading entered the domestic market as a local 'producer and supplier' and has captured a portion of the market held by WR Carpenters. BNG Trading which is also one of the wholesalers and importers of tea (amongst other consumer products in PNG) entered into an agreement with WR Carpenters whereby Carpenters processes and packages tea on behalf of BNG Trading. BNG Trading has exclusive rights for the distribution of the Bushells tea brand in PNG. Under the agreement with WR Carpenters, BNG Trading provides the packaging materials while the tea is sourced from PNG tea estates. In 2005, BNG Trading is estimated to have supplied an annual volume of 175 tonnes of Bushells tea into the domestic market. This volume of tea has provided direct competition to the supply of WR Carpenters' own domestic brands and those of importers of tea.

As noted above, Carpenters primarily exports its tea with about 10 percent of its total production being sold on the domestic market. The large proportion of its output which is exported is an indication of the product meeting internationally acceptable standards. That was confirmed by WR Carpenters in its submission in which it was noted that the company is working towards modernising its factories in an effort to increase exports. This indicates an efficient domestic industry and one which can offer product at prices commensurate with international prices. Tea products from WR Carpenters and BNG Trading are widely distributed in PNG. WR Carpenters flagship brand of National No.1 and Tea Pot Tea which comes in tea bag and loose leaf tea form, is popular across the country and the WR Carpenters' established distribution network ensures its products are available widely across PNG.

The significant role of WR Carpenters has not prevented the entry of new participants to the industry. Notwithstanding the 25% import tariff, new entrants have still found the domestic market sufficiently attractive to seek entry to capture some portion of the tea market. In addition, and more significant in terms of competitive behaviour, has been the entry of BNG Trading as a domestic manufacturer albeit using WR Carpenters' facilities. BNG Trading has managed to capture a 21 percent share of the domestic market for tea.

The change in the domestic competitive environment in tea products in recent years has been demonstrated by the availability of a wide range of brands of tea supplied by competing suppliers. The ready availability of these competing brands acts as a constraint on the market power of the dominant player in the market. Consumers have a choice of different brands of tea from which to make a selection than was the experience several years ago. Thus the emergence of new brands in the market signifies contestability in the market and also, to the extent that consumers have a choice of retail outlets, there is the potential for some degree of countervailing power by consumers as a group.

3.2.2 Import Competition

Imported tea is sourced primarily from Australia and Asia and includes Tetley Tea Cup Bags, Twining, China Filian Oolong Tea, Gemi Tea and Lipton Plunger. Some of these teas come in different form and mixtures such as Early Grey, Lemon, Black Currant Tea and Rasberry and are imported to meet demand for different flavoured teas. Black tea is by far the preferred form of tea, but the sophistication of the tea market creates a wide range of choice for consumers.

Despite a 25 percent tariff on imported tea products, tea importers are able to meet this additional cost and still supply product into PNG at competitive prices. The volume of imported tea did not exceed 10 tonnes in 2005. By comparison, WR Carpenters as the major domestic supplier holds 77 percent of the market and BNG Trading holding 21 percent.

3.2.3 Countervailing powers of consumers

Countervailing power refers to the "power" a consumer or purchaser of a service or good has over the supplier by being able to take its business elsewhere if the purchaser is unhappy with the prices or services offered by the supplier.

In PNG where there are two domestic producers (albeit one manufacturing plant) and several importers of tea products, there are some choices for tea consumers. In the larger urban area there is greater opportunity to access imported teas and therefore a greater opportunity for consumers to consider other tea options when making a purchase. In the rural areas there is less opportunity for choice as the imported products are not as widely distributed outside of major urban areas.. On this basis consumer in towns have some countervailing power, albeit small.

Government institutions such as educational institutions, hospitals, and Correctional Institutional Services which buy in bulk may have some countervailing powers. These consumers can switch to another brand if they are not satisfied with their present brand and have some influence on the behaviour of the tea supplier.

In terms of availability of substitutes, tea being used as a daily beverage has readily available close substitutes such as coffee, milo, milk and various soft drinks (including iced teas). Apart from these there are imported herbal and speciality tea in the market. Tea unlike rice and other staple foods is not widely consumed in the remoter areas of the country. With the availability of these various tea products and their substitutes, consumers in the urban areas in particular are given a choice in the selection of the products they wish to purchase with their limited spending powers.

The observed retail marketing strategies of supermarkets in advertising special prices and other forms of sales promotions are an indication of the competition between tea brands and the influence of consumers' buying patterns on pricing behaviour.

Tea suppliers are sensitive to consumers buying pattern and package tea in different sizes to suit the various income levels of consumers. Consumers with limited finances have to make a choice between more basic food and goods such as tea that are regarded as discretionary. In order to meet income differentials among consumers, tea comes in a range of sizes and prices in an attempt to attract purchasers.

In its submission to the inquiry WR Carpenters noted that the market for tea has been growing steadily in recent years. This has been fostered by providing a pack size at a price that is less than the price of a can of Coca Cola. At the same time, the imported tea market tends to join at the upper end of the quality spectrum (recognizing that a 25 percent tariff is applied to imported teas). Thus, National No.1 and Tea Pot tea sell for around K2.50-K3.50 for a 50 tea bag packet while a similar number of fully imported tea bags can sell for up to K16.00. Thus, there is a focus upon particular segments of the market, with the domestic producer recognizing the limited financial resources of much of the domestic consumers and pricing their product accordingly.

Exhibit 2: National No.1 Tea, Bushells, Lipton and other brands including Twining Tea, Punjas Ceylon and Gemi Tea brand on display in a Port Moresby supermarket.

3.2.4 Commission's Draft Findings

The Commission assessed the tea market in PNG and in its Draft Report noted a number of characteristics relating to competition and pricing behaviour within the industry:

- The tea market in PNG is a growing market with two domestic producers and several importers of tea in the market. The tea market is mainly supplied by WR Carpenters (77 percent) while the remaining portion of the market is held by BNG Trading with importers holding a small percent of the market;

- Entry to the market is open for domestic products although there would be a high start up cost for a new domestic manufacturer. BNG Trading has avoided these costs by contracting WR Carpenters to process and package its Bushells brand tea;
- Importers of tea represent a small part of the market (albeit special types of tea) and face a 25 percent tariff;
- In the major urban centres there is a wide variety of domestic and imported tea available together with various substitutes;
- The opportunity for countervailing power is limited by limited retail competition in areas outside of main centres. However, there is evidence of price discounting and the use of price to attract customers in the main urban areas;
- Tea is not a staple product or basic necessity like rice and tinned fish where consumers have no choice but allocate their limited income to buy these products for survival. Hence, tea is considered secondary or complementary goods by households who can decide not to purchase the product. There is also evidence of pricing behaviour being influenced by the pricing of other substitute discretionary goods. This is particularly relevant to the remoter locations where there is less retail competition; and
- Consumers of tea are predominantly households who individually hold very little countervailing power. As individuals they are effectively price takers. However, they may have some degree of countervailing power at the retail end of the market when as a group they respond to opportunities to purchase their tea at competing retail outlets. There are certain larger purchasers who source their tea direct from the manufacturer. These groups have some countervailing power if they can take their business elsewhere.

The Commission notes the high proportion of the domestic market that is held by WR Carpenters and the role that this company has in the manufacture and packaging of tea for its main competitor BNG Trading. In its submission to the inquiry, BNG Trading argued for the continuation of some form of price regulation. Presumably, this reflects to some extent the position that BNG Trading finds itself in that it is reliant on its main competitor for the contract manufacture and packaging of its tea.

The Commission has considered the proposal in the context of the operation of the industry domestically. In its considerations, the Commission notes that although tea has been a declared product now for many years, in reality there has been no officially declared prices under the *Prices Regulation Act*. Thus, participants in the market have set their prices in response to existing or potential competition and in response to market demand and the relative importance of tea as a consumer good. In this period, BNG Trading has successfully negotiated a contract manufacturing arrangement with WR Carpenters and has successfully entered the market as a domestic supplier and now holds around 21 percent of the market.

Other potential domestic manufacturing entrants would find the initial set-up costs a barrier to entry (unless they also contract with WR Carpenters) and the 25 percent tariff barrier discourages the importation of tea to meet the 'general consumer' market (as distinct from the specialist tea market). However, market conditions and in particular the discretionary nature of expenditure on tea, has resulted in a market where there are defined limits on the pricing behaviour of the incumbent suppliers. It is unclear to the Commission that the application of the price control regulation (and its associated cost) would effectively result in a better pricing outcome for consumers. Furthermore, the Commission has the power to seek the reintroduction of price regulation for this industry should there be evidence of monopoly pricing behaviour by the main suppliers to the market.

From the above analysis and findings, the Commission therefore considered that there is justification for the removal of tea from price regulation.

3.2.5 Commission's Final Determination

There were no further comments or submissions received to the Draft Report which indicates that there is agreement to the Commission's recommended view in favour of de-regulating tea. Therefore, the Commission will recommend to the Treasurer that the current price control arrangements that apply to tea as a declared good and the declaration of allowable wholesale and retail margins on this product will cease to apply forthwith.

Final Determination 2

The Commission's final determination is to recommend to the Minister for Treasury that price regulation of tea products be discontinued. The current regulated wholesale and retail margins will also cease to apply.

3.3 Sugar Products

3.3.1 Domestic Competition for Sugar Products

The supply of sugar in the domestic market is primarily undertaken by one domestic manufacturer. In addition there are some small quantities of imported sugar supplied to the domestic market.

Ramu Sugar Limited is the sole domestic producer and supplies Ramu Brand sugar in the domestic market. Effectively RSL has been given monopoly supplier status for sugar in PNG. It supplies from its own cane field where possible, but when supplies are inadequate (such as in 2000 and 2007) additional sugar is sought from overseas suppliers to meet the domestic demand. Initially, there was a complete ban on imported sugar entering PNG, but from 1996 imported sugar was allowed to enter the market albeit under a high tariff. Over the last decade the trend in imported sugar supplies has been determined by the production of the domestic crop. Table 3.1 summarises domestic production and imported supplies over recent years.

Table 3.1 Imported and Domestically Produced Sugar for domestic consumption (2002 – 2005)

	2002	2003	2004	2005
Import Vol (Tonnes)	2286	4010	4424 (Est)	1343
Ramu Vol	34320	32064	32576	36657
Total Market	36606	36074	37000	38000
Domestic Supply Share of the market	93.8%	88.9%	88.0%	96.5%

Source: RSL submission November 2006

The importation of sugar by RSL is primarily to supplement its own domestic production. RSL has access to cane sugar grown in PNG and operates its own milling and packaging facilities in the Ramu Valley.

Sugar being a carbohydrate has several important roles in the foods chain. For example it gives foods sweetness and besides improving the flavour of the foods, it improves the texture and colour of baked goods. Sugar also helps to thicken, firm, or preserve foods such as pudding, jams and jellies. The main function of sugars (and all carbohydrates) in the body is to provide energy. Sugar in some form plays an important role in ensuring good health. Sugar by itself and in other foods high in sugar, supply calories as part of a balanced diet.

The Government has granted RSL a monopoly supplier status for sugar in PNG. A tariff of 70 percent currently effectively discourages competitive imports of sugar. The Government recently gave temporary relief to the imposition of this tariff when RSL was unable to meet domestic demand requirements.

In its submission to this inquiry, RSL acknowledged the special market position it holds but argued for the retention of the current effective level of price regulation (that is 'no formal price control of sugar'). In effect, sugar is currently declared for price regulation but there has been no declared ex-factory price. Only the wholesale and retail margins have been subject to periodic price inspection. The argument put forward by RSL is that there exists sufficient competition in the supply of sugar in the domestic market to prevent any misuse of market power by RSL and the pricing of sugar in PNG is very competitive with sugar prices in the sugar producing world. The submission argues that:

- Sugar is a commodity produced globally;
- Sugar manufacture and supply is relatively undifferentiated and sugar produced in PNG is similar if not the same as sugar manufactured in other countries;
- Sufficient capacity exists amongst other sugar producers to supply the entire PNG market;
- Retailer/Wholesaler and Industrial customers have access to sugar importers that have the capacity to supply sugar to PNG; and
- Locally produced substitutes are also available.

RSL further argues that its monopoly position in PNG brings other social and economic benefits to the country. These include:

1) Ramu Sugar has a positive impact on the available foreign exchange and the economy through import reduction and its export sales;
2) Ramu Sugar provides direct and indirect taxation benefits to the government;
3) Dividends payment are largely kept within the country;
4) Over 2000 PNG citizens are employed by Ramu Sugar in roles ranging from management, agriculture development, production, operational support, sales and marketing;
5) The Ramu sugar training and apprenticeship system not only provides for Ramu's requirements for employee development but also contributes to the skill base for other industries as from time to time employees transfer to other companies that do not have training infrastructure;
6) Ramu Sugar supports 12,000 people in the vicinity of its operation with key infrastructure support to schools, medical clinics, police, shops and roads; and
7) Ramu has undertaken considerable expenditure supporting and developing its operation which has a multiplier effect that sustains business houses in Lae and Madang as well as local entrepreneurs.

RSL in its submission on the Draft Report argued that the above attributes were made possible by a responsible tariff regime that had allowed the sugar industry to negotiate the difficult start up period and dysfunctional world market fluctuations. RSL also argued that the current arrangement concerning the supply of sugar in PNG and the prices paid by consumers represented an equitable position between the protection received by the company and the price the consumer pays for the product supplied.

Similar to the rice industry in PNG, RSL operates a single National Price List and a national distribution network. Sugar is distributed on a Free Into Store (FIS) basis into Lae, Port Moresby, Goroka and Mt Hagen and Free Into Port basis into Madang, Wewak, Vanimo, Alotau, Kimbe, Kavieng and Kokopo. Buka and Tabubil are supplied FOB Lae. To ensure availability of regular supplies, RSL also operates a major warehouse in Lae and two selling depots in Port Moresby and Mt Hagen. These distribution points maintain supply to the major towns in the event of shipping delays, bad weather and road closure. RSL sells its products to recognised distributors and retailers in PNG subject to minimum handling requirements. The main requirement is the ability to accept products in Full Container Load (FCL)(21.5 tonne) lots. Industrial sugar sold under contract price arrangements may or may not include freight in the contract price depending on the negotiated terms of sale.

Table 3.2 identifies the main markets for RSL sugar output. Retailers are mainly wholesalers and supermarkets for resale to household consumers while the industries are firms which buy for their own consumption and use sugar in the production of other goods such as soft drinks, baked products, ice cream, etc. Industrial customers in PNG mainly consist of soft drink and baking companies such as Coca Cola Amatil (PNG), Pacific Industries (Port Moresby and Rabaul), Laga Industries, Paradise Foods, Lae Biscuit Company and New Guinea Fruit Company. In 2006, more than one-third of sugar was consumed by the industrial customers which is an increase over the preceding years.

Table 3.2 Sale of sugar products by Ramu Sugar Limited

Sales Data in Tonnage	2001	2002	2003	2004	2005	2006
Retail	20,830	20,900	21,942	22,190	25,299	21,129
Industrial	11760	13420	10122	10386	11359	12, 566
Total Domestic	32590	34320	32064	32576	36658	33, 695
Export	8222	8329	10350	19693	8982	8, 279
Total	40812	42649	42414	52269	45640	41, 974

Source: RSL submissions June 2007

Ramu Sugar is also an exporter of sugar from PNG. RSL's export of sugar to the overseas market is an indication that the investment in the plant and equipment in the production of the sugar is compatible with meeting domestic and international standards for sugar.

3.3.2 Import Competition

The existence of a very high tariff level has not become a barrier for smaller quantities of sugar being imported into PNG, primarily from Australia, Fiji, Thailand and Indonesia.

Imported sugar (other than by RSL to meet its own requirements) accounts for around 4 percent of the total domestic market. Sugar that is imported is primarily to meet special market requirements such as special packaging or types of sugar. Overall the level of imports is negligible.

The potential for new entry into the market by imports is very limited. With a 70 percent tariff, and although this represents a more 'open' market to that which primarily existed when imports were banned, effectively there is little opportunity for importers to capture a significant market share in PNG. The incumbent, RSL has the advantage of a strong distribution network and a national pricing arrangement which effectively gives RSL a strong position in the regional market throughout the country.

Exhibit 3: Sugar products on Display in a Port Moresby Supermarket

3.3.3 *Countervailing Power of Consumers*

Countervailing power refers to the "power" a consumer or purchaser of a service or good has over the supplier by being able to take its business elsewhere if the purchaser is unhappy with the prices or services offered by the supplier.

In PNG where there is only one sugar producer and limited imports of speciality sugar products, a shift in consumer preference towards imported sugar over the domestic brands of sugar is highly unlikely. In effect RSL, has a monopoly in the domestic market.

To the extent that they purchase large quantities of sugar, some industrial customers may have some countervailing power. However, given the 70 percent tariff that applies to imported sugar, this power is very limited. Some purchasers of imported sugar are prepared to pay the import duty. However, this reflects a very limited market for sugar of a type or in a package form that is not supplied by RSL. Effectively, this represents negligible countervailing power.

3.3.4 *Commission's Draft Finding*

The Commission analysed the market for sugar and has come to a view on the overall characteristics of the market thus enabling it to form a draft decision on the level of competition in that market. In undertaking the review, the Commission found the sugar industry to be characterised by the following:

- A market consisting of one domestic manufacturer who dominates the supply of sugar;
- Entry to the market is made difficult by the imposition of a 70 percent import tariff and that tariff rate will not be reduced until 2010 at the earliest;
- The possibility of a new entrant in terms of another manufacturer is unlikely because of the high establishment cost involved;
- Ramu Sugar's adoption of a Single National Price List also limits the ability of a new entrant to compete across the whole country (although theoretically, if a new entrant did emerge it could focus upon the main urban areas because of the inherent cross subsidisation of prices that is implied by the RSL Single National Price Policy);

- Ramu Sugar has an existing wide distribution network for its products, and thus a new entrant to compete it has to achieve a strong national presence quickly;
- There are other forms of sweeteners available but they provide little competition to RSL;
- Consumers of sugar are predominantly households who individually hold very little countervailing power in the sugar market. Industrial purchasers also have little countervailing power in a market with such high tariff protection; and
- The market for sugar in PNG is not very large and thus the opportunity for more than one domestic producer to compete successfully is very limited.

The Commission has noted the argument presented by RSL in its submission. Effectively RSL has argued for a continuation of the present arrangement namely the regulation of retail and wholesale margins but no formal price regulation of the ex-factory price of sugar. RSL has argued that this arrangement should continue on the grounds of 'national benefits' that the existence of the Ramu business brings to PNG.

Implicit in the proposal from RSL is the acknowledgement that Ramu Sugar holds a dominant monopoly position in terms of the supply of sugar in PNG. The Commission's examination of the market confirms this position and the fact that there is little likelihood of the emergence of competition in this market over the next five to six years when the import tariff is to be reviewed. In these circumstances the role of the independent pricing regulator becomes the only means by which the wider community can have any confidence that the prices being charged by the incumbent monopoly supplier do not contain monopoly rents (that is, RSL is not making monopoly profits at the expense of the PNG economy).

The Commission notes that sugar is a major raw material input into a number of other food and beverage products produced in PNG. These producers, to the extent that they may be forced to pay prices for their inputs at levels higher than world competitive prices, can find themselves at a competitive disadvantage to imports of the finished downstream products that they produce. In 2006, for example, there was extensive public debate concerning the importation of a certain brand of soft drinks which was competing with the locally manufactured version of the same brand of soft drink. Although, sugar comprises a large part of the cost of soft drink manufacture it is not suggested that the cheaper imports of this internationally known brand of soft drink could be attributed to the domestic sugar price in PNG. It does highlight however, the fact that inflated prices for raw materials sold to downstream manufacturers in PNG can have significant impact on the competitiveness of the down stream product producer when imports of the downstream product are readily available at a price that does not include the higher domestic input prices.

It is not the role of the Commission to debate the government's industry protection policy as is reflected in the arrangements put in place to attract RSL to establish manufacturing operations in PNG. However, it is the Commission's legislated responsibility to ensure that consumers in PNG are not forced to pay prices which incorporate a monopoly profit above the normal profit (and recovery of efficient operating costs of the supplier). These responsibilities are clearly contained in the ICCC Act as well as in Section 21 (2A) of the *Prices Regulation Act*.

Thus, the Commission in its Draft Report, took the view that it could not simply continue the present 'arrangement' under which no form of price control is effectively applied to RSL's ex-factory prices despite its monopoly position. While acknowledging the impact of retail and wholesale margins on the final price of sugar paid by household and industrial consumers alike, the Commission must also address the issue of the potential for RSL to exercise monopoly pricing in its ex-factory pricing of sugar.

RSL has argued that under its present ‘arrangement’ it effectively keeps any change in sugar prices within the limits of changes in the CPI, despite the wide fluctuations that can occur in international sugar prices. The Commission needs to consider this argument and the evidence when it considers the terms of any price regulation that should be applied to sugar prices ex-factory.

Thus, in its Draft Report, the Commission considered that there was justification on competitive market grounds to continue some form of price regulation for sugar products.

3.3.5 Commission’s Final Determination

In response to the Draft Report, RSL made a number of submissions to the Commission, and meetings were held to discuss aspects of the Commission’s draft conclusions. Much of this discussion and exchange of information related to the question of the level of prices that RSL is currently charging, and to what extent any adjustment should be made to those prices as a ‘starting point’ for the proposed regulatory arrangements. These matters are discussed further in the following chapter.

For purposes of the Draft Decision that some form of price regulation should continue to apply to sugar, the Commission did not receive any strong argument against this proposal, and thus, having reviewed its draft findings, the Commission does not believe that it needs to change its draft determination. Therefore, the Commission will recommend to the Treasurer that price control arrangements apply to sugar as a declared good.

Final Determination 3

The Commission’s final determination is to recommend to the Minister for Treasury that price regulation for sugar be continued.

3.4 Batteries (Torch and Radio)

3.4.1 Import Competition

In assessing the need for price regulation, the Commission must consider the current contestable state of the market and the opportunity for new entry into (and also freedom to exit from) the market.

Papua New Guinea at the moment does not produce its own torch and similar batteries. Rather it imports all its torch and radio batteries needs either directly or indirectly from overseas suppliers. As a consequence, access to the international markets for the supply of torch and radio batteries products determines the prices for these products in the domestic market.

Currently there is no import tariff on imported torch and radio batteries. Thus there are opportunities for new entry and increased contestability in the domestic market as suppliers and importers seek out various supply opportunities and cheaper prices in the world market for these products.

The Commission notes that in its submission, CHM has sought government intervention to counter price dumping of battery products in PNG. This is a strong indication of extensive competition between importers of these products. While the Commission does not condone price dumping practices (as they represent a form of price discrimination designed to drive out competition leaving the perpetrator in a position to possible exercise inappropriate market power), the submission highlights the nature and trends in the worldwide battery market, and in particular the fact that large scale processing plants around the world are constantly looking for opportunities to sell battery products into new markets throughout the world.

3.4.2 Competition between Suppliers

Chin H Meen and Sons Limited (CHM) holds 55% of the torch and radio battery market in PNG and is the exclusive supplier of Panasonic battery products in PNG. The other suppliers of torch and radio batteries in PNG include Seeto Kui Limited, Pactrade Limited, Brain Bell, SVS/Papindo, BNBM Limited and Sengco Niumec Limited. These importers distribute brands such as Energizer, Eveready, ABC, Suki and Trident.

In their submission to the inquiry, CHM has argued that there is strong domestic competition in battery products. CHM believes that there is no need for the current pricing control of battery products because of the ready availability of a wide range of battery products in the domestic market.

The Commission also notes the same sentiments being expressed by BNG Trading who have argued for the deregulation of the current price control arrangements.

The Commission notes that new suppliers can readily enter the domestic market and that there are no tariff barriers to new entry. This suggests that there are potential opportunities for further new entry and increased contestability in the domestic market.

3.4.3 Countervailing Powers of Consumers

Household consumers who are the main consumers of torch and radio batteries and the like do not individually have strong countervailing power. However, as a group they have strong powers. This is demonstrated by the wide range of different brands of batteries products supplied in the domestic market and the wide price range for different types and quality of batteries on offer. This gives consumers bargaining power in terms of choices and the prices being charged by the different retailers and wholesalers. This is reflected in the strong competition at the retail level allowing consumers to exercise a high degree of choice in the products that they will purchase.

3.4.4 Commission's Draft Findings

The Commission is required to come to a view as to whether some form of price regulation is still required for torch and radio batteries products. From its examination of the market and the developments over recent years, the Commission has found that:

- The market for torch and radio batteries has undergone significant change in terms of the level of competition and contestability, and there is a strong evidence of new entrants in the market with no barriers to entry by new suppliers and brands of product.

- Consumers, mainly households, have access to a wide range of alternative products. They are also able to exercise a degree of countervailing power in their negotiations on price, quantity and quality, effectively negating any market power of the suppliers.

The Commission believes that there is active competition and contestability in the market for torch and similar batteries giving strong countervailing powers to consumers. These are grounds to deregulate price regulation for torch and radio battery products.

3.4.5 Final Determination

No further comments or submissions were received in response to the Draft Report and the draft determinations contained therein pertaining to Batteries. The Commission, having reviewed its draft findings, does not believe that it needs to change its draft determination. Therefore, the Commission will recommend to the Treasurer that the current price control arrangements that apply to torch and radio batteries as a declared good and the declaration of allowable wholesale and retail margins on this product will cease to apply forthwith.

Final Determination 4

The Commission's final determination is to recommend to the Minister for Treasury that price regulation of torch, radio batteries and the like is discontinued. The current regulated wholesale and retail margins will also cease to apply.

3.5 Laundry Soap

In assessing the need for price regulation, the Commission must consider the current contestable state of the market, the opportunity for new entry into (and also freedom to exit from) the market.

3.5.1 Domestic Competition for Soap Products

Colgate Palmolive (PNG) Limited, K. K. Kingston Limited, and Panamex Pacific (PNG) Limited are the three local soap manufacturers. Table 3.4 summarises the different products these manufacturers produce.

Table 3.4 Summary of Soap Products manufactured in PNG

Colgate Palmolive (PNG)	K.K.Kingston Limited	Panamex Pacific (PNG)
Laundry Soap	*Laundry Soap*	*Laundry Soap*
Cold Power	Dazzle	B29
Hurricane	Supa Klin	Cyclone
		Sudso
Beauty Soap Bars	*Beauty Soap Bars*	*Beauty Soap Bars*
Lime Fresh	N/A	Max Beauty Soap
Love Soap (3 Varients)		Flora Beauty Soap
Palmolive Soap		
Medicated Soap	*Medicated Soap*	*Medicated Soap*
Protex Soap	N/A	Mediplus
		Brust Med Soap

Table 3.4 (Cont'd)

Colgate Palmolive (PNG)	K.K.Kingston Limited	Panamex Pacific (PNG)
Laundry Bars	***Laundry Bars***	***Laundry Bars***
Klina	Dazzle	Was Was
Isiwas		Han Was
Tartan		Sudso
		Supa Was
Total 9 brands	Total 2 Brands	Total 10 Brands

Source: Joint submission by Colgate Palmolive (PNG) Limited, K.K Kingston and Panamex Pacific (PNG) Limited to the Inquiry dated November 2006.

In a joint submission by Colgate Palmolive, K.K Kingston and Panamex Pacific, the domestic manufactures have argued that there is significant competition in the PNG market for soap (laundry, cakes & powdered) products. They have argued that consumers have a variety of choices for these products and there is a strong evidence of competition between the soap producers. The industry believes that it is constrained in its pricing behaviour by the availability of the competing soap products in the market place.

The Commission notes from the submission by BNG Trading that it has also argued that the soap market in PNG is highly competitive. BNG Trading also believes that the current price control arrangement should be removed.

The Commission notes that to be competitive, the three local producers have to deliver products of high quality and ensure that their prices are fair and competitive. The industry argues that the influx of imported soap products has caused the domestic manufacturers changes to their activities to deliver better quality products, while at the same time improving manufacturing efficiency and lowering costs to achieve prices that meet market demands and respond to consumer expectations.

The Commission notes that the experience from the entry of imported products into the domestic market suggests that there are potential opportunities for further new entry and increased contestability in the domestic market if prices (and returns) generated by the domestic industry reach 'monopoly profit' levels. Strong competition between retailers in the main urban centres will ensure that the benefit of competition at the producers' level is passed through to consumers. In more remote regions, there may not be strong competition at the retail level which may impact on the final price paid by consumers.

Competition between retail outlets in urban areas (supported by advertising in daily news papers, on radio or on TV) serves to place a cap on the margin that can be applied at the retail level on soap products. At the wholesale level also, there is evidence to support the view that in the larger centres there is competition between wholesalers in the supply of product to retail outlets. With wide coverage of radio and television advertisement, increased pressure is placed on retailers to stock a full range of competing goods which helps to pass competition benefits through to consumers.

3.5.2 Import Competition

Papua New Guinea imports many of the raw materials used in the domestic production of soap products. In addition, PNG has significant imports of soap products in their final form. Access to international markets for the supply of soap ingredients for soap processing and soap products in their final form is therefore an important part of the supply of the needs of the domestic market. Barriers to entry for soap will influence the degree to which competition and contestable market behaviour can operate in PNG.

Previously, a 40% tariff was imposed on imported laundry soap to support the local industry. However the tariff was reduced in 2003 from 40% to 35% and from 30% to 25% in 2005. As a consequence of the reduction in the tariff there has been growing import competition for the supply of laundry products in the domestic market.

In a joint submission by Panamex Pacific, K.K.Kingston and Colgate Palmolive Limited, it is argued that for this part of the market there has been a significant change in the competitive situation since price regulation was first introduced. According to the arguments raised in this joint submission it is noted that:

> *"The most significant transformation has been the influx of an estimated 100+ additional suppliers/importers of these products into the PNG markets. This represents a sizable 5000% increase in supplier's numbers since the Act's introduction"*

The industry submission further argues that despite the 25% tariff placed on imported laundry soap products, it is not sufficient to limit the significant increase in supply of laundry soap that has created a competitive domestic marketplace in terms of pricing and the range of products available.

From its own market observations, the Commission notes that there are a large number of different brands of soap and laundry powder products plus their variants now available in PNG. The increased presence of imports, the relative freedom of market entry, and the apparent wide range of product types available in retail outlets contribute to the overall contestability of the market. The reduction in tariff levels, the availability of production capacity in world markets able to readily supply the PNG market, and the relative ease of access to the PNG market ensures that local manufacturers adopt efficient production technologies in order to compete in a dynamic and contestable market.

3.5.3 Countervailing Powers of Consumers

In reviewing the need for price regulation, countervailing power of consumers is an important aspect to consider.

The main users of soap products in PNG are domestic household consumers. As individual households they hold little countervailing power. However, their purchasing preferences when 'grouped' through the activities of larger retailers can have significant impact on the behaviour of soap suppliers.

This is demonstrated by the strong price competition that is visible in retail outlets mainly in the larger urban areas and the extent of print and electronic media advertising of various soap products. It is also evident in the range of different brands of soap products supplied by the three local manufacturers as well as the wide range of products that are imported.

The behaviour of the market reflects a contestable environment where the ability of individual suppliers to extract monopoly profits is constrained by competition and the ability of consumers to exercise their freedom to make a choice from the wide range of products available.

3.5.4 Commission's Draft Findings

The Commission is required to come to a view as to whether some form of price regulation is still required for soap products. From its examination of the market and the developments over recent years, the Commission has found that:

- The market for soap products has undergone significant change in recent years in terms of the level of competition particularly in response to tariff reductions;
- Although the tariff barrier to imports of soap products is expected to fall further from its current 25 percent level, it is not expected to be removed completely over the next five years;
- Despite the continuing tariff, there has been strong new entry of imported soap products placing competitive pressure on existing soap products and the domestic manufacturers;
- Households have access to a wide range of alternative product choices. They are also able to exercise a degree of countervailing power in their negotiations on price, quantity and quality, effectively negating any monopoly market power in the industry; and
- The extent of this countervailing power and resultant market competition is enhanced by the widespread print and electronic media advertising used by the industry to attract customers, which reaches out to more remote areas and helps to inform consumers of the range of choices available.

The Commission believes that there is active competition and contestable activity between suppliers and the existence of countervailing power in the industry. The Commission in its Draft Report therefore considered that there was justification on competitive market grounds to deregulate price regulation for soap products.

3.5.5 Final Determination

The Commission, having reviewed its draft findings, does not believe that it needs to change its draft determination. Therefore, the Commission will recommend to the Treasurer that the current price control arrangements that apply to soap and other related soap products as a declared good and the declaration of allowable wholesale and retail margins on this product will cease to apply forthwith.

Final Determination 5

The Commission's final determination is to recommend to the Minister for Treasury that price regulation for soap products be discontinued. The current regulated wholesale and retail margins will also cease to apply.

3.6 Poultry Products

In considering the market for poultry products (excluding duck, goose and turkey) in PNG, the Commission also has considered the availability of substitute products. Poultry products are a source of protein. But as the Commission has noted in its Pricing Review into the Tinned Fish/Tinned Meat industry, there are other sources of protein available in the market. More specifically the protein requirement of the population is met by a combination of other foodstuffs including various forms of meat, fish, lamb flaps, pork and beef plus vegetables, dairy products, eggs and similar foodstuffs. Further there are a variety of protein supplements available which have proved to be a popular in a number of developed countries (although may not be as relevant in PNG).

Papua New Guinea protein intakes come from variety of sources. At the village level, protein is primarily provided by the access to bush meat, fresh fish and other seafood, pork and poultry. In urban centres, the main sources of protein are poultry, tinned fish/meat, lamp flaps, beef, pork, fish and bush meat available in local markets. Urban dwellers have greater potential choice between the various main sources of protein whereas those in the village have limited choices depending on their location. The main advantage urban centres have over the village level is the storage convenience and the ready availability of the protein products.

3.6.1 Domestic Competition from Poultry Products

There are currently two main domestic producers of poultry products, Tablebirds and Zenag. In addition, there are other smaller producers although their contribution to the total market supply is limited.

Under the current industry policy, poultry products are afforded import protection which has allowed the domestic industry to grow. The industry argued that in considering the level of competition in the domestic market, the Commission should examine the issue of sources of protein.

In its submission the Poultry Industry Association has argued that there is competition in the PNG market for protein products of which poultry products are but one part. They have argued that consumers have a variety of choices for protein foodstuff and poultry products effectively compete with other protein such as fish, lamb flaps, pork and beef. The industry believes therefore that it is constrained in its pricing behaviour by the availability of alternative protein products that consumers can purchase. The industry further argued that such competition has rendered price control effectively unnecessary.

It is argued by the industry that to be competitive, local producers have to deliver products of high quality and ensure that the price is fair and competitive. The industry has argued that the likelihood of further tariff reduction will erode their market share. In addition, there has been the gradual growth in the live bird market whereby consumers can grow their own poultry for their own use or for sale via local markets.

The Commission notes the change in the structure of domestic industry, since the introduction of import protection, and more recently the reduction in tariffs on poultry products and the operation of the PNG live birds market. While there has been gradual change in the domestic poultry market, the overall market is still held predominately by the two domestic producers, Tablebirds and Zenag who continue to benefit from import protection. The existing competition between the two local producers and the domestic live bird market benefits consumers in terms of the costs charged for the final product.

The poultry industry has some potential for further new entry and increased contestability in the domestic market if prices and returns generated by the domestic industry reach monopoly profit levels. New entry opportunities mainly exist from amongst small poultry producers who do not need to meet the large capital investment requirements of the larger operators such as Tablebirds and Zenag.

Competition between retail outlets in the main centres where frozen poultry is mainly sold provides the opportunity for cost savings to be passed through to consumers. In more remote areas there is less opportunity for this level of retail competition but also there is less demand for frozen poultry as there is no refrigerator available. Rather in these remoter locations there is more likely to be strong competition between smallholder producers of live birds which are sold in local markets.

Competition between retail outlets in main urban centres (supported by advertising in daily newspaper, on radio or on TV) serves to place a cap on the margin that can be applied at the retail level on poultry products. At the wholesale level also, there is evidence to support the view that in these larger centres there is competition between wholesalers in the supply of product to various retail outlets.

The anecdotal evidence is that retail outlets in remoter areas, particularly small roadside stores and remoter trade stores will charge what the market will bear. To the extent that alternative sources of supply are available (for example, villages arranging their own village birds or self raise birds for consumption) there is a limit to which a smaller retailer can charge.

3.6.2 Import Competition

To protect and encourage the development of the local poultry industry at its infant stages the Government has placed a tariff on the importation of overseas poultry products. The Government policy of encouraging domestic production has resulted in the local manufacturers holding a strong domestic market position. Thus, there is a strong presence of Tablebirds and Zenag poultry products in the poultry market. However, there is also a presence of some imported poultry products in the domestic market, imported by wholesalers such as BNG Trading.

A fix Kina based tariff was imposed on imported poultry products and the rate was K3.13 per kilogram in 1999. However, that tariff has been reduced gradually since the release of the Government Tariff Reduction Review Report. The tariff rate is currently K2.20 per kilogram.

The current tariff rate on poultry remains a significant barrier to all but the more expensive forms of poultry, and effectively acts as a barrier to new entry into the market from imports. Given the relative lack of import competition for poultry products, BNG Trading has argued that the Commission should maintain some form of price control for poultry products.

The domestic industry has argued for the continuation of tariff protection. This is a matter to be taken up with the Department of Treasury and Internal Revenue Commission. It is not the role of the Commission to set tariff levels.

3.6.3 Countervailing Power of Consumers

The countervailing power of consumers is an important aspect to consider in reviewing the need for price regulation.

The largest single consumer group for poultry in PNG is local businesses involved in the food and accommodation industry including restaurants, fast food bars and hotels. Potentially these consumers hold some countervailing power that could counter any power that might be held by the local poultry producers or suppliers. Thus prices for poultry products sold to these consumers could be kept in check by competition between the two domestic manufacturers to attract and hold these larger customer groups.

For the household sector, there is little countervailing power that individual households hold in the market. However, through the grouping effect of their purchases via the larger supermarkets in the main urban centres, these consumers do have some degree of countervailing power. This is evident from the advertising programs adopted by the producers themselves and by the supermarkets. As noted above, there are limits in this power in areas beyond the main urban areas, and also in locations where there is limited access to refrigeration. However, in this part of the market, smallholders are more active in the supply of poultry and the ability to grow and slaughter one's own poultry gives the consumer some degree of countervailing power.

The Commission also notes that the availability of other protein based products contributes to the expanded range of choice household consumers have across the total market. The competition between readily available substitutes gives household consumers greater power to counter any action by the principal suppliers to extract monopoly profits in terms of the prices they charge for poultry.

3.6.4 Commission's Draft Findings

The Commission is required to come to a view as to whether some form of price regulation is still required for poultry products. The Commission has noted that poultry products compete with other protein sources and that as such, the price of these competing protein products places a market cap on the price that can be charged for chicken produced domestically by the two main players. To the extent that consumers must make a choice between whether to spend their limited cash on say pork or beef, or whether they can afford to buy poultry products or alternatively rely on self raised live birds, there is a limit to the price the two main domestic poultry producers, wholesalers or retailers can charge for domestically produced poultry. This does not deny that prices will be set at levels that seek to maximise the returns to the producers. However, in the absence of strong import competition, domestic poultry producers do need to have regard for the other protein options available to consumers.

From its examination of the market and the developments over recent years, the Commission has found that:

- The market for poultry has undergone some changes in recent years in terms of the level of domestic competition between local producers, but it is still predominantly supplied by the two local producers;

- Although the tariff barrier to imports of poultry products has fallen, it is still at a relatively high level and is not expected to be removed completely over the next five years;

- As a result of the high tariff, there is limited competition from imported poultry;

- There is a market for live birds which is growing and provides some competitive pressure on the domestic processed poultry producers;

- Poultry competes with other forms of protein (for example pork, beef, fish, tinned fish and tinned meat) and as a consequence has readily available substitutes in the domestic market;

- Household consumers have access to a range of substitutes in terms of the protein sources. They are therefore able to exercise a degree of countervailing power in their negotiations on price, quantity and quality, effectively negating some of the market power of the two main domestic producers; and

- Retail competition in the main centres is strong for frozen and refrigerated poultry. In outer areas, the market is more dependent on farming of poultry (eg live birds) which do not require refrigeration.

3.6.5 Final Determination

The Commission believes that there is sufficient competition and contestable activity between suppliers and existence of countervailing power in the poultry market to warrant the removal of price regulation. The Commission also notes that in effect there has been no direct price control in place as an ex factory price for poultry has not been gazetted for many years. The current allowable wholesale and retail margins for poultry will also be removed.

The Commission, having reviewed its draft findings, does not believe that it needs to change its draft determination. Therefore, the Commission will recommend to the Treasurer that the current price control arrangements that apply to poultry products as a declared good and the declaration of allowable wholesale and retail margins on this product will cease to apply forthwith.

Final Determination 6

The Commission's final determination is to recommend to the Minister for Treasury that price regulation for poultry products be discontinued. The current regulated wholesale and retail margins will also cease to apply.

3.7 Butter Products

3.7.1 Import Competition

All butter products are sourced from international suppliers and distributed to the domestic markets through wholesalers and retailers. There is no domestic production of butter in the PNG economy. All butter is supplied from imports.

Anchor butter has been the main brand in the local market. However, other brands are also available of which Friendship Butter is a high profile product. Suppliers of butter enjoy a degree of brand loyalty. However, household consumers are not indifferent to price and quality and the availability of alternative imported brands provides a degree of choice to consumers. The Commission has also noted a degree of competitive pricing between the different brands that are available with Friendship Butter being attractively priced against Anchor as a means of encouraging a switch in brand loyalty.

Butter is tariff free and so is open to importation without any additional cost. With the relative free entry of imported butter into the PNG market, it is effectively an open market for new entry. Brand loyalty might provide some degree of protection to the incumbent but as is apparent from the current marketing of Friendship Butter, this can be overcome by aggressive marketing and pricing. PNG also has close trade ties with two large dairy food exporters, namely Australia and New Zealand, and this has the potential for facilitating new entry by competitors.

3.7.2 Countervailing power

Countervailing power exists where a consumer exercises some degree of influence or market power over the supplier. It is usually evident when there is a small number of buyers and/or there are available a wide range of competing products or substitutes. In terms of substitutes, there are limited substitutes for butter. Margarine provides the main substitute with limited substitute qualities also available in cooking oil and olive oil. In the use of butter in manufacturing of other foodstuffs, there are a wider variety of substitutes which are usually cheaper than using butter and these are favoured by food processors.

At the wholesale and retail level, certain supermarkets in the main urban centres, especially in Port Moresby have the buying power to influence the importers' pricing of butter. To the extent that savings are made, the level of competition in these markets usually ensures that the savings are passed on to household consumers. Wholesalers/importers may hold an exclusive licence for the distribution of a certain brand of butter. However, in a world market where butter is a highly traded good, the ability of the wholesalers/importers to extract monopoly profits is limited.

Household consumers have some degree of countervailing power in a market where there is more than one brand of butter available. This countervailing power is evident in the main urban centres where there is strong competition between competing brands. In more remote areas, there is less countervailing power held by consumers although there will also be less butter sold because of limited refrigeration facilities.

3.7.3 Commission's Draft Determination

The Commission is required to determine whether some form of regulation should still apply for butter products. Based on its assessment of the butter market, the Commission has concluded that:

- The domestic market is wholly supplied from imports and these are freely able to enter the market;
- There is evidence of recent new entry by competing brands of butter and the opportunity for further new entrants; and
- At the wholesale level, the buyers have some countervailing power and may negotiate prices directly with importers (or exporters in the country of origin). Household consumers in the main urban areas also have some countervailing power by exercising the power indirectly through their preference for substitutes and decisions based on price. The ability of sellers at both levels to increase prices is constrained by the availability of competing suppliers or the potential entry of new suppliers or the availability of substitutes.

In light of the above, the Commission formed a view that there was sufficient competition in the market for butter to remove the need for price regulation.

3.7.4 Final Determination

The Commission, having reviewed its draft findings, does not believe that it needs to change its draft determination. Therefore, the Commission will recommend to the Treasurer that the current price control arrangements that apply to butter as a declared good and the declaration of allowable wholesale and retail margins on this product will cease to apply forthwith.

> Final Determination 7
>
> **The Commission's final determination is to recommend to the Minister for Treasury that price regulation for butter be discontinued. The current regulated wholesale and retail margins will also cease to apply.**

3.8 Margarine Products

3.8.1 Import Competition

Similar to butter products, all margarine products are fully imported from overseas suppliers and therefore have no competition from locally produced margarine products.

3.8.2 Barrier to entry into the market

Import tariffs may be seen as a barrier to entry into the market. However, for margarine products, tariff rates since the end of 2000 have been zero. Thus there are no barriers to entry into the market for a new firms or suppliers of margarine. Furthermore, the available evidence suggests that new margarine products have become available on the domestic market in recent years.

Margarine has some alternative substitutes. These are primarily butter, cooking and vegetable oil, and olive oil. Some users require specific types of dairy or non-diary products for their cooking or food preparation purposes. However, for general household use, butter is almost fully interchangeable with margarine depending on taste and preference.

For large commercial consumers such as food processing firms and catering service providers who uses margarine in their 'production' process, there may be little choice between substitutes. However, these consumers are also likely to have greater countervailing power through their quantum of demand.

3.8.3 Countervailing power

Household consumers have some degree of countervailing power to influence sellers' prices depending on the availability of substitutes or directly competing products. Within a free open market, with a range of choice in terms of margarine products themselves and the availability of some substitute products, consumers as a group can exercise a degree of countervailing power for this product. The extent of advertising of margarine is an indication of the existence of countervailing power.

3.8.4 Commission's Draft Determination

The Commission is required to determine whether some form of regulation should still apply for margarine products. Based on its assessment of the margarine market, the Commission concluded that:

- With zero import tariffs, there are a number of different brands of margarine products available in the market and the opportunity for the entry of additional products should existing suppliers set prices at levels which generate monopoly profits; and

- Household consumers have access to a range of substitute products and alternative brands to choose from when purchasing margarine. Consumers are able to exercise their buying power in a market with competition between multiple sellers.

Based on the above assessment, the Commission concluded that there was sufficient competition in the market to warrant the removal of price regulation.

3.8.5 Final Determination

The Commission, having reviewed its draft findings, does not believe that it needs to change its draft determination. Therefore, the Commission will recommend to the Treasurer that the current price control arrangements that apply to margarine as a declared good and the declaration of allowable wholesale and retail margins on this product will cease to apply forthwith.

Final Determination 8

The Commission's final determination is to recommend to the Minister for Treasury that price regulation for margarine be discontinued. The current regulated wholesale and retail margins will also cease to apply.

3.9 Milk Products

3.9.1 Import Competition

Unlike butter and margarine products where the products are imported in their finished "product" forms, some milk products are imported in bulk and then filled and packed locally. In this case, the locally packed milk products provide competition to the imported brands. However, the domestic market is essentially serviced by imported product in one form or another.

Milk products do not attract a tariff and thus the market is open to free entry by competitors from overseas producing nations. There has been an increasing variety of milk products available in the PNG market in recent years especially as new technology has allowed the long term storage of milk in liquid form rather than being solely reliant upon milk in powdered form for household storage purposes.

There are some ready substitutes for milk (for example, Soy milk), and there is also a wide range of substitute forms of milk. Thus, consumers can elect to purchase their milk requirements in a variety of forms and at competitive prices.

For large consumers such as manufacturing companies which use milk products to produce other goods, they may have limited choice given their proposed use of 'milk', but again they have a wide choice in terms of the form in which milk is obtained.

3.9.2 Countervailing power

Given the wide availability of different brands and forms of milk products in the market, household consumers have a degree of countervailing power to influence the supplier of one brand with options to purchase an alternate brand or milk in a different form. Individual consumers do not have significant power to influence the seller's price, but in groups (through large retail outlets) they can influence suppliers' prices.

In remote locations there may be less opportunity for consumers to exercise any countervailing power. For example, these remoter locations are more dependent on powdered milk and do not have access to 'long life' milk and other forms of liquid milks. However, milk is also not as widely used in these remoter locations.

The level of advertising of powdered milk in particular, highlights the degree of competition that is occurring in this market.

3.9.3 Commission's Draft Determination

The Commission is required to determine whether some form of regulation should still apply for milk. Based on its assessment of the market, the Commission has concluded that:

- With zero import tariffs, there is freedom of entry for new imports of milk in its various forms. As such, there is potential for new players to enter the market and to bid down prices if existing suppliers seek to extract monopoly profits; and

- Although there are few direct substitutes readily available in the market, consumers have a wide range of different brands and forms of milk to choose from and therefore hold a degree of countervailing power, particularly in a market with a number of existing suppliers.

Based on the above assessment, the Commission decided that there is evidence of sufficient competition in the market to remove the need for the continuation of price regulation for milk.

3.9.4 Final Determination

The Commission, having reviewed its draft findings, does not believe that it needs to change its draft determination. Therefore, the Commission will recommend to the Treasurer that the current price control arrangements that apply to milk as a declared good and the declaration of allowable wholesale and retail margins on this product will cease to apply forthwith.

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The Commission's final determination is to recommend to the Minister for Treasury that price regulation for milk be discontinued. The current regulated wholesale and retail margins will also cease to apply.

CHAPTER 4 FORM OF REGULATION

The Commission has concluded in its final determination to continue price regulation of Sugar products while all other sundry products namely, Coffee, Tea, Batteries, Soap, Poultry, Butter, Margarine and Milk be removed from price regulation. As part of the review process the Commission has considered all submissions on the Draft Report prior to making its final decision.

For sugar, the Commission must consider what form of price regulation should apply into the future. The purpose of this section is to discuss the options available to the Commission and to give a final determination of the form of price regulation that the Commission will adopt.

4.1 Existing Form of Regulation

The methodology used to set the price for these Sundry products has undergone change since it was first introduced. Initially the price control mechanism made use of an "import parity" approach to price determination. Under this methodology prices in PNG were determined on the basis of the cost of importing the same or similar products from overseas after allowing for freight, insurance and handling cost to deliver these products to PNG plus any relevant government levy, import tariff and other statutory imposts plus freight and cartage to main ports within PNG. Provision was also made in the calculation for a 'profit margin' made by the domestic importer and distributor. Thus in effect, prices in PNG for these products were capped at a level that reflected competitive import prices plus any allowances for tariffs that may have been applied at the time.

In more recent years and up to the time of this review, prices were adjusted on the basis of a 'cost plus' approach. That is, the regulated businesses advised the Commission of movements in their major costs drivers, being the cost of domestic inputs, the cost of the imported packaging material, the energy cost, the labour cost, the cost of international freight and handling, the cost of domestic freight and handling, and a 'margin' of up to 11%. Subject to a materiality test of the overall price change against the last price change, prices are adjusted to reflect the movement in these costs.

A main port price for these products were determined using this formula, and retail prices for individual product type were determined from the movement in main port prices plus wholesale margins (that is 10% and 11% for related and unrelated entity respectively) and retail margins (that is 8% and 10% for related and unrelated entity respectively). These retail and wholesale margins have not been subject to any form of periodic review and essentially have been adopted as a 'rule of thumb' without any form of detailed cost investigation.

It is important to note that for many of these Sundry goods and for Sugar in particular, there had not been a gazetted ex factory or ex warehouse price issued for a number of years. Thus, although these products were subject to price control under the PRA in effect no regulated price had been determined and the market had effectively set the price.

4.2 Issues with the Previous Price Control Mechanism

There are a number of issues that are raised by the previous price control mechanism, particularly in the context of the requirements of Section 21(2A) of the *Prices Regulations Act*.

Under the provisions of this section of the *Prices Regulation Act*, where some form of price control is retained, the Commission is required to have regard *inter alia* to the following:

- The need to protect consumers of declared goods from the misuse of market power;
- The cost of producing the declared good;
- The desirability of encouraging greater efficiency in the production and supply of the declared good;
- The need to ensure an appropriate rate of return on any investment in the production or supply of the declared good;
- Quality standards;
- The impact on inflation of a price control order; and
- The economic and social impact of a price control order.

The need to achieve a balance between the interest of the suppliers/manufacturers and consumers is embodied in these legislative requirements. The Commission must therefore consider what is the best mechanism to achieve these particular objectives.

A 'cost plus' approach of the type that has been used for price setting in the past relies upon historical actual costs of the businesses concerned. No attempt is made under this approach to consider the appropriate efficient costs, and to make allowances for the pass-through of efficiency savings to consumers while at the same time providing an incentive to the producer to recover the cost of these efficiency enhancing investments and share in the benefit over time. Thus, there is no incentive in a 'cost plus' approach to encourage improvements in overall operating efficiency to the betterment of the business, consumers, and the economy as a whole.

The current legislation also requires suppliers/manufacturers to seek approval from the Commission each time they want to make a price adjustment. The Commission notes that this has not occurred for many of these products for a number of years and thus in effect, the existing arrangements were ineffective. The need to undertake a transparent review process is intended to ensure that there is transparency in the decisions taken by the Commission plus full public consultation on these matters. Under the current legislation, the Commission would be required to undertake a full public inquiry each time that such a request is made. This is a costly and time consuming process which adds to the cost of regulation both for the industry and for the regulator. Effectively consumers meet these additional costs. It must be questioned therefore whether in some circumstances there is a net benefit to the economy from having regular public price inquiries, or whether the 'benefits' of regulation in these circumstances are outweighed by the cost.

The current price setting arrangement also uses broad cost approximations in deriving final prices. Thus, for example, there has been a continued reliance on a standard manufacturer mark up of 11% on the cost of producing the product concerned. Whether this 11% on the cost of manufacture represents an appropriate mark up has never been tested. Also, it is not clear as to why the margin has not changed over time as the cost of capital (interest rates) has risen and fallen over time. Finally, it is unclear why the quantum of the margin (that is the kina value) should increase (or decrease) with the cost of other items of production with which it is linked in the calculation of manufacturing cost. Generally this is an unsatisfactory way of determining the margin that should apply on the manufacturing or supply functions in the industry.

The use of standard margins for the wholesale and retail activities also has some serious limitations. The use of standardised margins with different rates applying in different circumstances creates administrative problems and inevitably does not recognise all the combination of trading transactions that occur in the market. Thus, where anomalies of this type occur, they leave retailers and wholesalers in positions where they are not sure whether to follow the declared rules, or simply break those rules in order to operate effectively in the market place.

From the submissions received from the industry regarding the supply of sundry goods, it was noted in general that there exists a reasonable level of competition in the main centres between wholesalers and retailers even where the margins remained controlled. In these areas, wholesalers and retailers responding to the market often do not charge the declared wholesale or retail margin as competition varies them to adopt more realistic profit margins. However, outside of these main urban centres the level of competition is not as great and the declared margin theoretically becomes the upper limit that can be charged.

The Commission also notes that these wholesale and retail margins give no attention to the issue of the number of 'turns' that a wholesaler or retailer may achieve on a particular product. The wholesale and retail trade does not calculate its preferred margins simply on a standard percentage on the product and apply this percentage across all products as has been the practice adopted by the pricing regulatory arrangements in PNG. Rather, the wholesaler or retailer is conscious of the number of turns or product sales that can be achieved over a year when setting their preferred margin for a particular product. A product that may only sell one item per year would presumably command a higher percentage margin than a product that has considerably larger turnover volumes. This issue was discussed in the Commission's report on rice where it was noted that wholesalers and retailers do not price up to the regulated margins set by the Commission, but rather base their margin on a lower rate reflecting the high turnover of this particular product. Similar circumstances exist for most of the Sundry products (although the actual turnover volume may be lower than that for rice).

Given these limitations, the Commission is not inclined to continue to use the existing regulatory arrangements for setting the price for sugar products.

4.3 Regulatory Options

The Commission has in other pricing decision sought to achieve its legislative objectives by linking the determination of regulated prices with the efficient costs of producing or supplying the regulated goods or services. This allows the Commission to differentiate between the actual costs that a manufacturer/supplier may incur, and the 'efficient/best practice' costs that apply to the provision of that good or service. The prices that consumers are required to pay therefore do not include inefficiencies or inappropriate cost pass through that might otherwise occur in a market where there is no regulation and the supplier has a degree of monopoly market power.

Under the provisions of Section 25C (3), the Commission must decide what form of regulation it should apply. The Commission essentially has two options that it must consider. These are:

- some form of direct price control (Section 21), or
- some form of monitoring of prices, (Section 32A)

These options are discussed in more detail below.

4.4 Price Control

One option for the Commission is the use of a direct price control mechanism. Such a mechanism would necessitate the Commission setting the price for individual declared products or at least for a selection of products. Essentially this is the process that is currently operating although the formula that is currently in use relates to movements in only some costs and is an historical cost adjustment model. Rather than a 'cost plus' approach, the Commission would prefer to adopt a mechanism which provides an incentive to businesses to adopt best practice operating arrangements and determine prices which reflect efficient costs for the supply of the goods concerned. This would imply that a forward looking costs model should be used which includes projections of future efficient costs.

In terms of price regulation, the Commission has favoured the use of an incentive form of regulation when it has used price regulation in other industries (for example, the electricity sector, the pricing of wholesale and retail services in the petroleum industry, and the telecommunications industry). An incentive form of regulation is based upon projections of efficient costs and than a price required to allow recovery of the efficient cost which links movements in the price of the regulated goods or services to an independent cost indicator (for example the Consumer Price Index) and possibly has some adjustment to this indicator, which when combined with the underlying inflation/cost indicator provides the calculation for the price changes that are to be allowed. This form of regulation is often referred to as CPI+/-X regulation where X might reflect a number of factors, but often is used to represent improvements in efficiency over time.

An incentive form of regulation can be used to establish a 'price path' for regulated products. Effectively a price path is a formula which allows semi automatic adjustments of prices over time (usually annually for period of no longer than a five years period), and which builds into the calculation of the price adjustment, the underlying cost adjustments that the suppliers and manufacturers face while also allowing for efficiency improvements resulting in cost savings to be shared between consumers and producers. The CPI+/-X formula is the standard form of a price path derived in this way.

For a price path to be developed and applied, the Commission would need to develop a financial model which would project the likely changes in the market and costs over a period of time. The model would be developed in constant price terms, and would seek to establish a cost efficient price for the regulated products, incorporating not only the direct costs of wages, raw material inputs and packaging for example, but also the indirect costs such as recovery of investment in capital equipment, a return on the investment in the business, overhead costs for administration and similar expenses. This type of modelling would also seek to assess what might be the additional capital expenditure required in the price path period, the likely development in overall demand, and any other factor (such as underlying efficiency improvements) that could be expected over the price path period.

This form of regulation is data intensive, but if applied in an appropriate way, can give manufacturers and suppliers a degree of certainty regarding the likely future direction of prices, what efficiencies they have to target to keep within the price path, and the opportunity to make and keep any additional profits that they can achieve by being more efficient in their operations than the assumptions that have been included in the price path modelling. Thus, this form of regulation is seen as being 'incentive regulation', in that the manufacturers and suppliers are given a strong incentive to keep their costs within the parameters of the regulatory model and as a consequence achieve at least the rate of return that is factored into the model, or potentially an even better result over time.

While initially data intensive, once the regulatory model and price path is determined, the process of price adjustments can occur automatically. These price adjustments are usually set to occur annually (for example, note the arrangements that currently apply to electricity and water pricing in PNG), and take a minimal administrative input as the Commission would normally confirm the price changes that the industry would seek to make provided these changes occur consistently with the declared price path. At the end of the five year period, should the Commission consider that a further period of price regulation using incentive regulation was required, the process of building the financial models and setting the new price path would again be undertaken.

The data intensive nature of this form of regulation, particularly at the commencement of each price path period is further complicated by the existence of more than one supplier. The Commission would need to resolve just which supplier to regulate or whether to regulate the prices of all suppliers. The Commission might only regulate the price of one supplier if it was felt that this supplier effectively 'set' the price for the industry as a whole and that the other suppliers followed this lead (for example, see the Commission's decision on rice products). However, if just one supplier or manufacturer was regulated, this would mean that only this supplier/manufacturer would be required to meet all the costs associated with meeting the Commission's data and cost review requests. The other suppliers and manufacturers would effectively become free riders on the costs being incurred by only one of their competitors. Fortunately in terms of the supply of sugar products, there is only one supplier and thus this problem does not emerge at this time.

The Commission would also have to decide whether to regulate all the individual products produced by this supplier, or whether to take just a sample of these products for price regulatory purposes. By taking all of the products, the pricing arrangements become more complex in the sense that prices have to be determined for a much larger number of products. However, by taking just a few products, the Commission would face the difficulty of allocating fixed and common costs incurred by the manufacturers and suppliers in the supply of all the products that they produce or supply. This would further complicate the modelling and the data requirements.

RSL supplies Sugar in a number of different package sizes and also supplies different grades and types of sugar. These individual types of Sugar 'products' would potentially need to be modelled individually as part of setting a price path for each product type, with associated additional regulatory costs for RSL and for the Commission.

In its Draft Report, the Commission concluded that it does not believe that the use of some form of direct price setting using incentive CPI+/-X type price models would be appropriate for the sugar industry in PNG. Desirably regulation should be as cost effective as possible while at the same time achieving the desirable outcome of ensuring that the industry concern cannot exploit market power that it may have in terms of generating monopoly profits. Nothing has been raised in submissions to the Commission on the Draft Report which would cause the Commission to change its view on this matter, and thus the Commission is more inclined to consider the use of price monitoring rather than direct price control.

4.5 Price Monitoring

Price monitoring is a less intrusive form of price regulation. Essentially, it relies upon the ability of the Commission to assess movements in the price of the declared good or service against the movement in some independent price (or cost) indicator. If the Commission determines over a period of time that the prices of these goods or services are increasing at a faster rate than the indicator used (or declining at a slower rate than the indicator if prices are declining), then the Commission can request an explanation from the regulated entity or industry, and if not satisfied with the explanation given, can recommend to the relevant Minister that prices be declared for more information intensive and intrusive direct price control form of regulation.

The Commission has previously used price monitoring for its regulation of ice cream prices, rice prices, flour prices, petroleum products prices ex the Napa Napa refinery, and the transportation charge for petroleum products ex the main port and outport fuel terminals. To date this has proved to be a satisfactory form of regulation for these industries.

Price monitoring has some attractions to the Commission. In particular, the price monitoring process maintains a degree of prices regulation while minimising the cost and intervention in the market. However, there are costs associated with price monitoring, and these need to be considered.

The costs associated with the operation of a price monitoring process effectively arise from the need to establish what are the cost efficient prices at the commencement of the regulatory period. It is not simply a matter of the Commission accepting the prices that are currently charged by the industry as necessarily being the cost efficient prices. As noted previously, while there has been a process of price control in place for a number of years, the process whereby prices are determined has not met with the current requirements of the *Prices Regulation Act*. Thus, it would be a requirement on the Commission to establish what are the appropriate prices that meet the requirements of Section 21A of that Act before applying the price monitoring arrangements.

To meet this requirement, the Commission would need to undertake a financial analysis of the pricing of all the regulated products, and in particular those that are to be subject to price monitoring as such. The Commission could for example use a limited number of products for price monitoring purposes. As with the rice inquiry, the Commission could opt to select a smaller number of products than all those that are available under the generic heading of 'Sugar', and then investigate and set the efficient cost based price for each of these products. However, this would still require the Commission to deal with issues such as the allocation of fixed and common costs, and to separate the accounting of costs within the accounts of the businesses concerned. This would be a complex process and would need the full cooperation of RSL in order to arrive at a fair allocation of costs and setting of the starting price. It should be noted that the Commission has the power to require the provision of information but prefers to adopt a cooperative approach when undertaking these types of financial analysis.

The Commission would also have to consider issues such as the appropriate rate of return on the investment in the business, and if a selection of products is taken, how this rate of return can be allocated across different products. For example, RSL is involved in the manufacturing and supplying of sugar for both the domestic and export market. The forensic accounting work required to allocate costs across the various activities of this business would be complex.

An alternate approach that the Commission could take would be to use some international price benchmark as the starting point for the prices in PNG. This may result in the need for some prices to be adjusted (either upwards or downwards), and may raise concerns for the domestic manufacturer and supplier if they felt that costs that are particular to PNG had not been fully accounted for in the process of setting this starting price using such a benchmark. Similarly, PNG consumers (including industrial users of sugar) would be concerned of sugar prices were increased when they may have expected to be able to benefit from some cost advantages as a result of the existence of a domestic sugar industry.

Should the Commission adopt an international comparative price as the starting point for a monitoring arrangement, the Commission would have to consider the impact of the present tariff on the prices in PNG. Currently this tariff is set at a very high rate (70%). However, it is unclear as to what extent the domestic industry needs some or all of this tariff to compensate for higher cost of product in PNG (its for this reason and to promote a domestic industry that the tariff has been applied). A cursory examination at retail prices for sugar in PNG and in Australia would suggest that much of the value of the tariff would need to take into account the different wholesale and retail trade margins.

The Commission is generally not convinced that using an international price comparison to set the initial price would be appropriate in this instance. In its submission on the Draft Report, RSL offered to assist the Commission in undertaking various international benchmarking and price comparison exercises, but noted that these would be time consuming, costly and not necessarily conclusive in terms of the final outcomes. In particular, RSL noted that the nature of the international sugar market was such that it did not necessarily reflect a true 'free and competitive' market. Rather, prices in other countries and in supposed international trading markets reflected various policies and actions taken by existing sugar producing countries to influence the prices to suit their particular domestic and international trading positions. The Commission's own analysis of pricing in various markets confirmed the wide range of movements in prices over time, and did not give the Commission any degree of confidence that simple use of international price benchmarks of themselves could be used to confirm the current prices of RSL as being at an appropriate level from which a monitoring program could commence.

Thus, if a monitoring approach is to be used, the Commission concluded that it would need to undertake its own analysis of the financial performance of RSL to assess whether current ex-factory prices are consistent with efficient costs in the PNG context in order to confirm the starting prices. The Commission has used similar approaches in its Flour and Rice industry reviews.

Having established the starting point for the prices to be monitored, the Commission needed to establish the benchmark series to be used to monitor the price movements over time. Again, drawing from its own analysis and from information provided by RSL, this task was found to present some difficulties. While initially it was anticipated that international price movements (as distinct from actual price levels) would be suitable for this purpose, the Commission needed to undertake further analysis in order to derive a comparator series that could be readily used by the Commission and available for general access so that all parties and interested groups could replicate the series and form a view as to whether or not the RSL prices were meeting the requirements under the monitoring arrangements.

In terms of the mechanics of the monitoring arrangement, the Commission's approach to price monitoring has been to review price movements over time rather than simply on a month-by-month basis. Thus, this allows for some variation around the benchmark series that the Commission adopts. Furthermore, the Commission would normally issue a 'please explain' to the industry if it felt that price movements were not in step with the benchmark series over time. After considering the industry's response, the Commission would then decide whether there was the need to take more interventionist action such as seeking to have the prices for the products concerned declared for price control purposes.

4.6 Commission's Final Determination on Form of Regulation

In response to the Draft Report, RSL did not oppose the use of some form of price monitoring arrangement, although sought clarification of how this arrangement might operate. In addition, RSL was concerned to make representations about the initial starting price for sugar products. This issue is discussed further in the following chapter of this Final Report.

The Commission will therefore adopt a price monitoring approach to the regulation of sugar prices. In the following Chapter, the Commission discusses the comparator to be used as an indicator to monitor the price movement of sugar. The Commission will base its monitoring on the movement in the final ex warehouse price of sugar in Port Moresby, Lae and Mt Hagen. RSL sets a single price for supply from these locations. Effectively, therefore the price quoted includes a freight component and that freight component is averaged out across PNG such that single price applies regardless of from which location the sugar is purchased. Thus, in the process of reviewing the initial starting prices for sugar products, the Commission will need to consider the freight costs to these warehouses and treat this as part of the overall 'production' costs for sugar.

4.6.1 Products to be monitored

Ramu sugar comes in different sizes under different product names. The main brand is Ramu Natural Mill White Range which is mainly produced for household consumption and comes in sizes ranging from 7 grams to 10Kg. Ramu Specialty Range is also targeted for household consumption although for a specific cooking use. Ramu Premium Bulk Sugar and Private Label Range and Industrial Sugar are primarily designed to service the industrial sugar consumer market. From the above categories, the Commission has to decide on which categories and sizes of sugar to use for monitoring purposes.

The Commission could adopt an approach that monitors the prices for all of these categories. The task of collecting the latest ex-warehouse prices from RSL and comparing movement in prices against the comparator series is a relatively simple task. Alternatively, the Commission could monitor the prices of only certain packet sizes that are widely consumed. Based on consumption by household, the Commission could monitor the Ramu Natural Mill White Range which comes in sizes ranging from 500 grams to 1Kg. Focussing upon the non-industrial products implies a degree of market countervailing power being held by industrial customers and thus an inability by RSL to transfer costs from the household brands to the industrial brands.

Table 4.1 Ramu Sugar Ex Warehouse Price Schedule, June 2007

Product Description	Packing per ctn/bale	Net Weight per ctn/bale	National List Price per ctn/bale	National List Price per ctn/bale	National List Price per ctn/bale
Ramu Natural Mill White Range			**(1 FCL)**	**(Full Truck Load)**	**(5 FCL Min Buy)**
Ramu Mill White Sugar Poly Pack	10 x 1Kg	10Kg	K30.80	K30.34	K30.03
Ramu Mill White Sugar Paper Pack	15 x 1Kg	15Kg	K49.05	K48.32	K47.83
Ramu Mill White Sugar Poly Pack	20 x 500gm	10Kg	K32.05	K31.57	K31.25
Ramu Mill White Sugar Poly Pack	40 x 250gm	10Kg	K37.65	K37.09	K36.71
Ramu Mill White Sachet Sugar	500 x 7gm	3.5Kg	K16.25	K16.01	K15.85
Ramu Mill White Sugar Poly Pack	1 x 5Kg	5Kg	K14.00	K13.79	K13.65
Ramu Mill White Sugar Bulk Bag	1 x 10kg	10kg	K26.60	K26.21	K25.94
Ramu Specialty Range					
Ramu Refined White Sugar Poly Pack	10 x 1Kg	10Kg	K40.50	K39.90	K39.49
Ramu Castor Sugar Poly Pack	20 x 500gm	10Kg	K48.55	K47.83	K47.34
Ramu Gold Sugar Poly Pack	20 x 500gm	10Kg	K34.40	K33.89	K33.54
Ramu Soft Brown Sugar Poly Pack	20 x 500gm	10Kg	K73.30	K72.21	K71.47
Ramu Premium Bulk Sugar					
Ramu Mill White Sugar	1 x 25Kg	25Kg	K 62.05	K 61.12	K 60.50
Ramu Mill White Sugar	1 x 50Kg	50Kg	K 118.60	K116.83	K115.08

Source: RSL submission 2007

The Commission believes there is little advantage from only monitoring a selection of the products produced by RSL when a national price list is readily available. Thus, the Commission will monitor the movement in the prices for all sugar products produced by RSL and quoted on their price schedule. A current price schedule for RSL is shown in Table 4.1.

4.6.2 Price Regulation of the Wholesale and Retail Margin

The current regulation of the wholesale and retail margin is based on a 'rule of thumb' approach adopted by the Price Controller around the time of the establishment of the Price Controller's Office. The Commission is not aware of any underlying merits in the 11% and 10% mark-ups applied to wholesaling and retailing respectively. The Commission has also received submissions from RSL which states the margins in the main centres of Port Moresby, Lae, Goroka and Mt Hagen remained well within these caps in response to competition in these locations. In regions outside of these main centres there is less competitive pressure on margins and thus there is more likelihood that the percentage margin caps will actively be reached by retailers and wholesalers in those locations.

Further investigation is required into the level of competition within the wholesale and retail sectors overall (and not just for sugar and other price controlled products). Thus, as announced in the 2007 Budget, the Commission will be undertaking a review of competition in the wholesale and retail sector in 2007.

The wholesale and retail trade does not calculate its preferred margins simply on a standard percentage on the product and apply this percentage across all products as has been the practice adopted by the pricing regulatory arrangements in PNG. Rather, the wholesaler or retailer is conscious of the number of 'turns' or product sales that can be achieved over a year when setting their preferred margin for a particular product. A product that may only sell one item per year would presumably command a higher percentage margin than a product that has considerably larger turnover volumes. This issue was discussed in the Commission's report on rice where it was noted that wholesalers and retailers do not price up to the regulated margins set by the Commission, but rather base their margin on a lower rate reflecting the high turnover of this particular product.

The use of standard margins for the wholesale and retail activities across a range of products as previously applied has some serious limitations. Consideration needs to be given to the products concerned and to the number of turns or sale achievements that occur during the year to assess just what might be an appropriate efficient mark up for the retailing and wholesaling services. This may result in different margins being appropriate in different regions, reflecting the number of 'turns' that stock can be expected to achieve in a given year. However, the use of margins with different rates applying in different locations creates administrative problems and may not contribute to improve competitive outcome.

In terms of this present inquiry, the Commission's final determination is that the wholesale and retail margins for sugar products will be subject to price control for the period of this determination until the foreshadowed wholesale and retail review is completed. The Commission will set a maximum standard mark-up in kina terms based on the existing percentage rates and these rates will apply until the wholesale and retail review is completed.

4.6.3 Duration of the Determination

The Commission has considered the options for the duration of the determination. Under the revisions to the Act, the Commission is required to undertake an extensive public review each time there is a request for a price change. This is to ensure that there is the opportunity for full public debate and transparency in decisions that are taken by the Commission.

The Commission has the opportunity to make a determination that extends over a period of time. This is consistent with 'incentive regulation' that is based upon a price path being determined using projections of efficient costs and creating the opportunity over time for the regulated business to achieve efficiencies above and beyond those projected. Thus, the opportunity exists to set a price path extending beyond a single price-setting event.

The Commission has used price paths extending up to 10 years for certain regulated utilities. The more usual regulatory period is 5 years. This period allows time for the regulated entity to seek to improve its efficiency beyond that set under the price path, and usually represents a period of time for which financial and business projections can be confidently made.

Over the next five years, a number of further developments can be expected in the sugar industry. Tariffs are scheduled to be reduced from 70 percent to 40 percent by 2010 and this could result in new entry by importers or at least the threat of new entry which will act to keep prices more in line with international benchmarks. With these types of reform underway within the economy, the Commission considers that a five year price determination provides a good balance between the interests of consumers and those of the supplying industry.

In setting a five year price path, the Commission's determination will set the price adjustment rules that will apply over the next five years from 1st September 2007. A further review of the Sugar industry will be undertaken by the Commission prior to the end of the five year period, which is, prior to 1st September 2011.

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The Commission has adopted the following forms of price regulation for sugar products over the next five years:

- **a price monitoring approach for the ex warehouse price of sugar products;**
- **the products to be monitored under this arrangement will be all the products produced by RSL as currently quoted in its ex warehouse price schedule (these products to be identified separately in the relevant Gazettal Notice) ; and**
- **a price control approach for the wholesale and retail margin on sugar products, with the absolute kina value of the wholesale and retail margin being held constant for the five year price determination period or until the Commission completes a more detailed review of the wholesale and retail sector, whichever comes first.**

The Commission's determination will apply from 1st September 2007 for a five year period.

CHAPTER 5 PRICE MONITORING & CONTROL ARRANGEMENTS

In accordance with the Final Determination outlined in Section 4.6, the Commission has considered the procedures and mechanisms that will be applied to the price regulatory arrangements for Sugar over the next five year.

5.1 Initial Prices

The monitoring mechanism that the Commission proposes to use for price regulation purposes requires the determination of an initial ex warehouse price for each of the products to be monitored. The Commission has the choice of adopting the current ex warehouse prices as currently reported to the Commission or setting a price based upon appropriate analysis of what is an efficient price for the products concerned.

In the Draft Report, the Commission discussed in some detail the basis upon which it would undertake a separate analysis to derive an appropriate estimate of efficient costs assuming that it was not prepared to accept the current prices that are specified by RSL in its price listing. The Commission subsequently received extensive confidential information form RSL on various aspects of its cost build up and financial position, together with supporting arguments on matters to do with profit levels, operating costs, and the nature of the firm's pricing arrangements. The Commission used this information together with information gathered from other sources to analyse the financial details of RSL. In particular, the Commission was concerned to ensure that it separated out the sugar activities of RSL from the oil palm, beef and alcohol production activities of the business, gave full consideration to the appropriate estimates of investment that had been made in the business, considered the way in which common and joint costs were allocated between the various activities of the business, took into account the cyclical nature of the business and in particular the special circumstances in 2006 when RSL had to import large quantities of sugar to compensate for the crop failure in PNG, and made appropriate allowances of the nature of costs in PNG.

In undertaking this analytical review, the Commission developed its own financial model of RSL's business, drawing on the financial details that were provided by RSL from published and confidential sources. The Commission then sought to assess the implied profitability of the business against the Commission's own estimate of the Weighted Average Cost of Capital (WACC) that might be expected to be generated by a business similar to Ramu Sugar in PNG. The financial modelling used by the Commission is not replicated in this report as it contains confidential material. However, the Commission's conclusions and reasons are discussed further below.

In drawing conclusions from its financial analysis, the Commission was aware of the potential for possible cross subsidisation between the prices charged for different types of sugar products sold by RSL. The analysis that the Commission undertook essentially considered the overall profitability of RSL, and sought to establish whether there was any evidence to suggest that RSL was making 'monopoly profits' from its activities in PNG. However, cross subsidisation in the pricing of individual sugar products could still mean that certain consumers could be paying a higher price for sugar than they might otherwise be required to pay. Of particular concern to the Commission was the possibility that household consumers were paying prices that significantly cross subsidised the price charged for sugar sold to corporate customers. In the discussion further below, the Commission outlines its conclusions from its analysis in this area.

The following sections discuss in brief some aspects of the analysis that the Commission undertook as part of its review of the overall profitability of RSL and the potential for inappropriate cross subsidisation between products.

5.1.1 Operating Costs

The Commission is required to have regard to the efficient operating costs of the regulated business when establishing prices for regulation purposes. In this process the Commission must consider the particular costs that the business incurs in the PNG context, while at the same time seeking to ensure that consumers are not required to pay prices which incorporate inefficiencies in operating arrangements or other forms of 'cost transfer' between regulated and unregulated activities or related business.

The Commission was provided with a series of years of operating and other costs and financial information for RSL. It was able to use this information to construct a number of comparators of movements in costs per unit of production and output over time and to review the movement in these costs against other cost changes across the economy. It was not readily possible to benchmark individual costs against other sugar producers, and any comparison would have been limited by the peculiarities of the cost structures in PNG. Nevertheless, it was possible to identify a number of issues relating to the data that allowed the Commission to intensify its investigations into the activities of RSL and to clarify various aspects of the financial accounting arrangements within the firm. It also allowed the Commission to form a view as to how costs had been performing over time, the reasons why costs in some areas appeared to be growing at rates higher than might otherwise be expected, and to identify apparent efficiency improvements in other areas.

5.1.2 Rate of Return

The Commission is required to ensure that the supplier/producer of regulated goods or services is able to earn an appropriate profit on this activity. For this purpose, the Commission determines a rate of return which is reflective of the circumstances in PNG and the relative risk faced by the regulated business.

In determining a rate of return to apply, the Commission uses a measure known as the Weighted Average Cost of Capital. Essentially the WACC seeks to measure the return on investment by combining a return that might be expected on the equity invested in the business and the interest rate that would apply to debt held by the business. The actual calculation of the WACC is premised on a number of assumptions regarding the various components that go towards the make up of the return on equity and the interest cost of the debt including the relative riskiness of the business by comparison to other business activities in PNG.

The simplest formula for the WACC calculation is presented in equation (1) below:

$$WACC = R_e \times \frac{E}{V} + R_d \times \frac{D}{V} \qquad (1)$$

where, R_e is the nominal post-tax cost of equity, R_d is the nominal post-tax cost of debt, E is the total equity, D is the total debt and V is debt plus equity.

The WACC is therefore the sum of the returns to debt and equity, weighted by the share of debt and equity in the total value of the business.

In its Draft Report, the Commission discusses the various components of the WACC in greater detail. It is not intended to repeat this discussion in the Final Report. However, it is noted that Ramu Sugar in response to the Draft Report raised a number of issues relating to the Draft Report's estimate of the pre tax nominal rate of return presented as an indication of the WACC that the Commission was considering applying in any financial analysis of RSL. Table 5.1 summarises the various parameters that were included in the Draft report estimate.

Table 5.1 Draft Report WACC Parameters and Value

Parameter	Value
Nominal Risk Free Rate	7.9%
Real Risk Free Rate	4.5%
Inflation Rate	3.3%
Cost of Debt Margin over rf	2.0%
Nominal pre-tax cost of debt	9.9%
Real pre-tax cost of debt	6.4%
Market Risk Premium	6.0%
Corporate Tax Rate	30.0%
Effective Tax Rate for Equity	30.0%
Gearing	50.0%
Debt Beta	0.06
Asset Beta	0.45
Equity Beta	0.83
Post-tax nom return on equity	12.9%
Post-tax real return on equity	9.3%
Nominal Vanilla WACC	11.4%
Real Vanilla WACC	7.9%
Post-Tax Nominal WACC	9.9%
Post-Tax Real WACC	6.4%
Pre-Tax Nominal WACC	14.3%
Pre-Tax Real WACC	**10.6%**

The Commission has considered the comments made by RSL (which mainly relate to the riskiness of the business environment in PNG and the need for appropriate rate of return to reflect the risky nature of their investment in PNG) and has also examined a number of the parameters used in the WACC calculation to take into account the latest available information.

The Commission is not necessarily convinced of the very high relative level of risk associated with the operation of the sugar mill as compared to other businesses in PNG as proposed by RSL. The Commission notes that not only does RSL have the benefit of a high tariff rate (70% on imported sugar which effectively restricts imports of sugar into PNG), but has been able to obtain special duty free clearance for sugar into PNG to compensate for the failure of the domestic crop despite the high tariff that would apply to other importers. However, the Commission has adjusted the equity beta for its WACC calculation to bring the beta to a level which implies that RSL is no more or no less risky than other businesses in PNG (previously the beta level implied that RSL was slightly less risky than the market as a whole).

The Commission has also re-examined some of the international rates to reflect the current market estimate of the risk free rate, and taken into account current inflation rates in PNG. The resulting rate of return calculation is summarised in Table 5.2, and produces a pre tax nominal rate of return of 18.6% (of previous rate of 14.3%)

Table 5.2 Revised WACC Parameters and Value

Parameter	Value
Nominal Risk Free Rate	11.0%
Real Risk Free Rate	5.4%
Inflation Rate	5.3%
Cost of Debt Margin over rf	2.0%
Nominal pre-tax cost of debt	13.0%
Real pre-tax cost of debt	7.3%
Market Risk Premium	6.0%
Corporate Tax Rate	30.0%
Effective Tax Rate for Equity	30.0%
Gearing	50.0%
Debt Beta	0.06
Asset Beta	0.54
Equity Beta	1.00
Post-tax nom return on equity	17.0%
Post-tax real return on equity	11.1%
Nominal Vanilla WACC	15.0%
Real Vanilla WACC	9.2%
Post-Tax Nominal WACC	13.0%
Post-Tax Real WACC	7.3%
Pre-Tax Nominal WACC	18.6%
Pre-Tax Real WACC	**12.6%**

5.1.3 Value of Asset Base

The Commission has used historical assets value data from the financial reports prepared by RSL to estimate a value for the asset base. The Commission has been assisted by the accounting practices of RSL which have differentiated between the purpose for which assets are used, and has reviewed the asset valuations over time taking into account the revaluation practices adopted by the business. These estimates have been used in the Commission's financial analysis in conjunction with the nominal rate of return estimate provided in Table 5.2.

5.1.4 Depreciation

The Commission has used the depreciation provisions provided in the accounts for RSL for purposes of allowing for a recovery of the capital used in the production process. As noted above for asset values, the accounts for RSL provide some allocation of these costs according to the services being provided by the business.

5.1.5 Capital Expenditure

No additional forward capital expenditure requirements were identified by RSL, although the Commission noted in its analysis that it had fully allowed for new investment that had occurred over recent years in its assessment of the return on investment in the business.

5.1.6 Commission's Profitability Assessment

The Commission's financial model of the RSL sugar business essentially combined data on the profit and loss of the business over a number of years and compared this with the expected level of profitability as derived from the WACC analysis summarised above.. One year of data was not considered to be sufficient as it could be influenced by extraneous or special factors. Furthermore, while businesses track themselves on an annual basis, for more detailed financial analysis purposes, it is normal practice to look at the performance of a business over a longer period of time to assess any variation in performance.

The analysis undertaken by the Commission, after adjustments to the data provided by RSL, suggested that over recent years, RSL has been achieving a pre tax nominal rate of return on its investment in the business commensurate with the pre tax nominal rate of return identified as consistent with an efficient outcome in Table 5.6 above. That is, while the pre tax nominal rate of return varied around the 18.6% level identified in Table 5.6, on average the rate fell slightly below this level.

Thus, the Commission was able to conclude that on average, the profitability of the sugar business for RSL was not such as to imply the generation of monopoly profits.

However, the Commission also had to consider whether and to what extent there was some degree of cross subsidisation within the prices being charged by RSL.

5.1.7 Price Cross Subsidy

As noted above, it is possible that RSL is making a 'normal' profit while at the same time cross subsiding prices such that one group of consumers are paying considerably more than another group for the same or similar goods or services. It is important to note in this regard, that the existence of difference in prices does not automatically mean that prices are being cross subsidised. Furthermore, an efficient market is also consistent with a market where producers may exercise a degree of price differentiation between different customer groups.

In a competitive market, such price differences may exist along with a high level of competition between suppliers. For example, the prices that some customers may pay could reflect some degree of extra 'service' that they receive. A household consumer for example may find it more convenient to buy 500grams of sugar at one time rather than buy a 50kg bag, and as such would normally pay for the privilege of having that small quantity of sugar suitably packaged and available for purchase. Similarly, a large bulk purchaser of sugar would expect to pay prices commensurate with the higher volumes of sugar that they consume (and thus the lower overall overhead on each individual sale) and the less inconvenient forms of bulk delivery of sugar which avoid for example the need to package the product.

Thus price differences do not necessarily mean cross subsidisation that is less than beneficial to the economy as a whole.

A cursory examination of RSL's ex warehouse prices demonstrates that there are differences on a per kilogram basis in the price charged for different quantities and package sizes of what is otherwise described as the same sugar product. The Commission needed to consider whether the level of cross subsidy between the different product types and sizes was consistent with an efficient competitive market where a degree of price differentiation can occur, or whether the prices reflected the exercising of monopoly practices which more adversely impact on one consumer group over another.

To form a view on the pricing of sugar, particularly the pricing that applies to household consumers, the Commission undertook an exercise in examining the relative price of household sugar products in PNG with prices in Australia for similar sized product after allowing for exchange rate differences and the 70% tariff that applies in PNG.

The Commission found that, although the analysis was itself relatively elementary, the prices being charged for sugar products of the type being consumed by households in PNG did not appear to be high by comparison to their counterparts in Australia (after allowing for the tariff impact). The evidence supported the view that even given the existence of the 70% tariff, the prices being charged by RSL did not fully take the 'benefit' of the tariff at the 70% level. The Commission concluded therefore that the degree of cross subsidisation that may be occurring in the pricing of individual sugar products in PNG is not such as to raise social welfare concerns in terms of the prices that households are required to pay.

5.1.8 Adoption of Initial Prices

Based on the analysis on over levels of profitability within the business and the relative prices that are being charged for sugar products supplied to different customer groups in PNG, the Commission has formed the view that the current ex warehouse prices declared by RSL are an appropriate starting point for the price monitoring arrangements that are to be adopted under the price declaration arrangements for sugar.

5.1.9 Price Monitoring of Ex Warehouse Price

The price monitoring arrangements for sugar products will apply to the ex warehouse price for sugar in Lae, Port Moresby and Mt Hagen.

The Commission has considered possible series to be used as the benchmark for the monitoring of sugar prices in PNG. The Commission has sought to find a benchmark which will reflect the movement in sugar prices internationally while at the same time recognising that there may be special circumstances in PNG which causes prices to move in a slightly different manner to that reflected in international price movements.

The Commission notes that in its submissions to the Commission, RSL has highlighted the vagaries in the performance and direction of price movements as reflected on the international markets. These markets are influenced directly by the policy actions of major international sugar trading countries, and the result price series that can be derived from public market data does not necessarily reflect the underlying movement in prices in a free competitive market. To avoid reliance upon these indicators, when setting its own prices, RSL has advised that it has regard to the underlying level of inflation in PNG as well as the longer term trends in the international price for sugar.

The Commission has also sought to identify a monitoring series that is publicly available and which can be readily accessed by the industry in PNG and by consumers in general.

To this end, the Commission initially considered two possible options, namely:

- the average retail price of sugar in Australia as reported in the Australian Bureau of Statistics publication, Average Retail Prices of Selected Items[7]; and
- The New York Board of Trade (NYBOT) contract rates for sugar[8].

In its response to the Draft Report, RSL argued that there is no single appropriate comparator series that can sensibly used to monitor sugar price movements. As an alternative RSL has proposed that the Commission adopt one or a combination of the following:

1) An index based on RSL's main cost items (labour, materials, spares, etc), weighted according to the proportions in total costs, and track this index;
2) The PNG CPI, lagged one year (because sugar price is part of the CPI); and /or
3) An index based on the tracking of key technical performance indicators that impact significantly on cost efficiency, such as resource and capacity utilisation, perhaps in the form of an overall efficiency index.

The Commission has considered these and other possible monitoring series. The Commission notes that the use of a materials cost index for RSL in part defeats the purpose of the independent price assessment as effectively all it does is repeat the error of the previous price setting models used by the Price Controller. Effectively what it allows is for RSL to pass through its cost increases with no pressure being placed on the business to seek efficiency improvements to address cost increases as would be expected of a business operating in a competitive market.

Reliance solely upon the CPI (lagged or unlagged) essentially is the same approach, although it does take into account the need for the business to keep any price increases within the limits set by the level of domestic inflation. Finally, the overall efficiency index is a possible option from a technical perspective as it goes to the issue of efficiency improvement, and would act to drive the business to pass on efficiency improvements occurring elsewhere in the sugar refining and milling industry. However, the data requirements to create and maintain such an index means that it is not a practical option that the Commission can adopt.

Having examined a number of options, including those involving the use of series derived from the New York Board of Trade data, the Commission has identified a series that appears to provide a good indicator of the movement in prices for sugar in PNG in recent years, incorporates the elements of the underlying domestic rate of inflation and an international series on sugar prices, and is relatively simple to reproduce and apply in the PNG context. The series is comprised of a 50/50 weighting of the PNG CPI series and the exchange rate adjusted Australian Bureau of Statistics Series for 2kg packet of sugar. The series has been developed with a base of March 2002 =100, and is the 12 month moving average series based on the quarterly results for the PNG CPI series and the ABS sugar price series.

Table 5.3 and 5.4 provide the kina value of the Australian retail price of a 2kg bag of sugar and the PNG CPI series (excluding betel nut, tobacco and beverages).

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[7] Publication number, ABS 6403.0.55.001, 2kg white sugar, average all capital cities
[8] www.nybot.com/reports/monthlyData/SUGAR11.XLS, Nearby, Contract, close price

Table 5.3 Average Retail Price (Kina per packet) 2 Kg White Sugar Australia (eight capital)			
Period (Qtr)	Kina Per packet	Period (Qtr)	Kina Per packet
2002 Mar	4.79	Dec	5.39
June	5.36	**2005 March**	5.28
Sept	5.00	June	5.11
Dec	5.18	Sept	5.08
2003 March	5.12	Dec	4.81
June	5.44	**2006 Mar**	4.71
Sept	5.25	June	4.94
Dec	5.61	Sept	4.99
2004 Mar	5.61	Dec	5.92
June	4.96	**2007 Mar**	6.22
Sept	4.82		

Source: Australian Bureau of Statistics Pub No. 6403.0.55.001

Table 5.4 PNG CPI (excl betel nut, tobacco and beverages) – Quarter On Quarter Moving Average (March 2002=100)			
Period (Qtr)	CPI	Period (Qtr)	CPI
2002 Mar	100	Dec	120.38
Jun	104.64	**2005 Mar**	119.56
Sept	106.79	June	120.03
Dec	109.61	Sept	120.79
2003 Mar	113.11	Dec	119.61
June	115.80	**2006 Mar**	118.51
Sept	118.21	June	118.49
Dec	120.71	Sept	119.15
2004 Mar	122.59	Dec	123.07
June	121.66	**2007 Mar**	128.32
Sept	120.82		

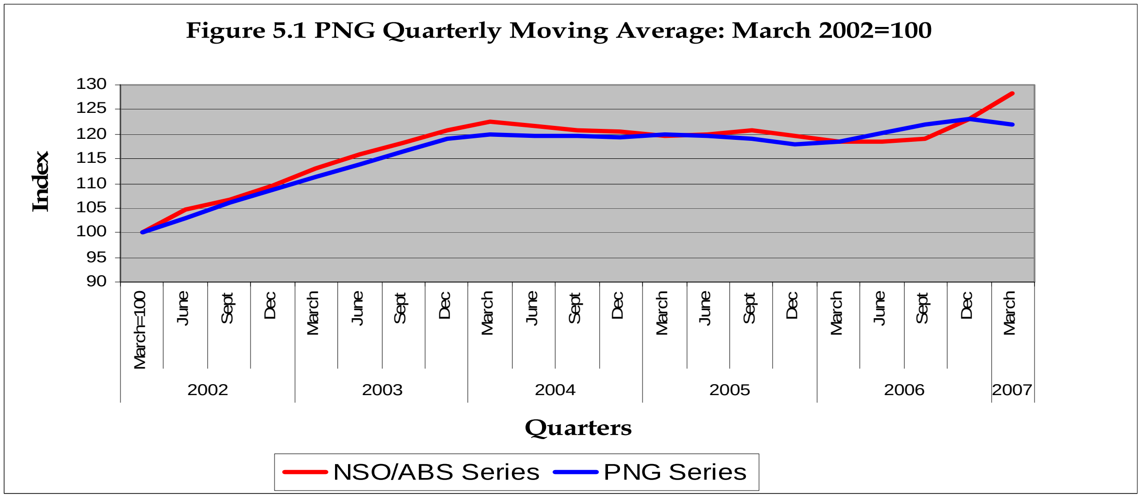
Source: PNG NSO

Table 5.5 Index of Movement in Weighted CPI and ABS Sugar Monitoring Series (March 2002=100)				
	PNG Sugar Prices	Australian Sugar Prices	PNG CPI Series	Combined Series (PNG CPI and Australia Sugar Price)
Year - Qtr	**4 Qtr Moving Average**	**4 Qtr Moving Average**	**4 Qtr Moving Average**	**4 Qtr Moving Average**
2002 Mar	100.00	100.00	100.00	100.00
June	102.97	106.62	102.66	104.54
Sept	106.15	107.53	106.04	106.75
Dec	108.68	109.36	109.87	109.63
2003 Mar	111.30	111.14	115.08	113.21
June	113.98	111.57	120.04	116.02
Sept	116.56	112.91	123.51	118.48
Dec	118.98	115.22	126.20	120.99
2004 Mar	119.96	117.91	127.27	122.83
June	119.78	115.33	127.99	121.98
Sept	119.58	113.02	128.62	121.21
Dec	119.44	111.83	128.94	120.82
2005 Mar	120.07	110.01	129.11	120.04
June	119.51	110.81	129.24	120.49
Sept	118.97	112.21	129.38	121.23
Dec	117.79	109.09	130.13	120.15
2006 Mar	118.44	106.13	130.88	119.13
June	120.16	105.22	131.76	119.16
Sept	121.84	104.73	133.56	119.88
Dec	123.19	110.71	135.43	123.70
2007 Mar	122.02	118.75	137.89	128.80

Source: ABS Retail Prices Sugar, NSO Average Retail Prices Sugar, NSO CPI excl betel nut, tobacco &beverages

Table 5.5 summarises the movement in the two series and the combined weighted series. This table presents the data in the form of a 12 month quarterly moving average series. This removes some of the seasonal variation in the series and will be the basis for the monitoring series that will be used by the Commission.

Figure 5.1 tracks the movement in the monitoring series with movement in the price of sugar as reported by the NSO. This shows a strong link between the proposed monitoring series and movement in the prices of sugar in PNG in recent years. The Commission therefore proposes to use this series for purposes of monitoring movements in the ex warehouse price of sugar products over the period of the price determination.



5.2 Price Control of Wholesale and Retail Mark-Ups

The Commission will maintain the present declared status for the wholesale and retail margins for sugar products under the provisions of Section 10 of the Act. Under the provisions of Section 21 of the Act, the Commission will declare the following wholesale and retail mark-ups to be applied as the maximum mark-ups that can be used for sugar products (see Table 5.6). These absolute mark-ups will remain unchanged for a period of five years or until such time as altered by the Commission as the result of a proposed review of the wholesale and retail sector.

Table 5.6 Declared Wholesale and Retail Mark-Up for Sugar Products

Product Code	Product Description	Package	Mark Up per Pack	
			Wholesale Kina/Pack	Retail Kina/Pack
Ramu Natural Mill White Range				
RMWPP1KX10	Ramu Mill White Sugar Poly Pack	1Kg	0.34	0.34
RMWPA1KX15	Ramu Mill White Sugar Paper Pack	1Kg	0.34	0.34
RMWPP500GX20	Ramu Mill White Sugar Poly Pack	500gm	0.18	0.18
RMWPP250GX40	Ramu Mill White Sugar Poly Pack	250gm	0.10	0.10
RMWPC7GX500	Ramu Mill White Sugar Sachet Pack	7gm	0.004	0.004
RMWPP5KX1	Ramu Mill White Sugar Retail Pack	5Kg	1.54	1.55
RMWBB10KX1	Ramu Mill White Sugar Bulk Bag	10Kg	2.93	2.95
Ramu Speciality Range				
RRWPP1KX10	Ramu Refined White Sugar Poly Pack	1Kg	0.45	0.45
RCAPP500GX20	Ramu Castor Sugar Poly Pack	500gm	0.27	0.27
RGOPP500GX20	Ramu Gold Sugar Poly Pack	500gm	0.19	0.19
RSBPP500Gx20	Ramu Soft Brown Sugar Poly Pack	500gm	0.40	0.41
Ramu Premium Bulk Sugar				
RMW25KX1	Ramu Mill White Sugar	25Kg	6.83	6.89
RIGMW50KX1	Ramu Mill White Sugar	50Kg	13.05	13.16

The Commission will conduct periodic inspections of retail and wholesale businesses to confirm that these absolute kina value margins are not exceeded in the prices charged.

CHAPTER 6 FINAL DETERMINATION

The Commission has examined the available data and market evidence for each of the products included under the Sundry Goods Inquiry. The Commission has been required initially to decide whether price regulation of these products should continue and if so what form of price regulation should be used.

Based upon its examination of the available market data, the Commission has made these final determinations:

Final Determination 1

The Commission's final determination is to recommend to the Minister for Treasury that coffee products be deregulated for price setting purposes. The current regulated wholesale and retail margins will also cease to apply.

Final Determination 2

The Commission's final determination is to recommend to the Minister for Treasury that price regulation of tea products be discontinued. The current regulated wholesale and retail margins will also cease to apply.

Final Determination 3

The Commission's final determination is to recommend to the Minister for Treasury that price regulation for sugar be continued.

Final Determination 4

The Commission's final determination is to recommend to the Minister for Treasury that price regulation of torch, radio batteries and the like be discontinued. The current regulated wholesale and retail margins will also cease to apply.

Final Determination 5

The Commission's final determination is to recommend to the Minister for Treasury that price regulation for soap products be discontinued. The current regulated wholesale and retail margins will also cease to apply.

Final Determination 6

The Commission's final determination is to recommend to the Minister for Treasury that price regulation for poultry products be discontinued. The current regulated wholesale and retail margins will also cease to apply.

Final Determination 7

The Commission's final determination is to recommend to the Minister for Treasury that price regulation for butter be discontinued. The current regulated wholesale and retail margins will also cease to apply.

Final Determination 8

The Commission's final determination is to recommend to the Minister for Treasury that price regulation for margarine be discontinued. The current regulated wholesale and retail margins will also cease to apply.

Final Determination 9

The Commission's final determination is to recommend to the Minister for Treasury that price regulation for milk be discontinued. The current regulated wholesale and retail margins will also cease to apply

The Commission's Final Determination effectively will remove all Sundry Goods from the declared goods for price regulation purposes with the exception of Sugar. The Commission considers that there is justification for price regulation of sugar to continue at least for the period of this price determination.

The Commission has then examined the appropriate form of price regulation to apply to Sugar, and in particular, whether a more intrusive form of price control should be used or a less intrusive price monitoring should apply.

Based on its deliberations, the Commission has concluded in this Final Determination that it will recommend to the Minister the following forms of price regulation for sugar products over the next five years:

- a price monitoring approach for the ex warehouse price of sugar products
- the products to be monitored under this arrangement will be all those products listed in RSL's standard ex warehouse price schedule as currently exists, the full list to be included in the Gazettal Notice of the determination.
- a price control approach for the wholesale and retail margin, with absolute kina value of the wholesale and retail margins being held constant for the five year price determination period or until the Commission completes a more detailed review of the wholesale and retail sector, whichever comes first.

The Commission has proposed to apply the determination from 1st September 2007 for a five year period.

The Commission has determined that the price monitoring series to be used for purposes of the regulation of the ex warehouse price of sugar products produced and supplied by RSL will be a series based on a 50/50 combination of the movement in the PNG CPI (excluding betel nut, tobacco and beverages) provided by NSO, and the exchange rate adjusted ABS price series for 2kg pack size sugar, the series to be based on the 12 month quarterly moving average and to be based on March 2002=100. RSL will provide to the Commission as soon as possible after the first day of each month, an update of its ex warehouse prices, and the Commission will monitor movements in these prices against the NSO CPI/ABS sugar price series.

For the wholesale and retail margins on sugar, the Commission is mindful of a more detailed review of the wholesale and retail sector that the Treasurer has foreshadowed in the 2007 Budget. The Commission will be undertaking this review during 2007. Thus, the Commission is proposing to set fixed wholesale and retail mark ups in Kina terms to apply as price caps until the foreshadowed wholesale and retail review is completed. This will provide a maximum value in monetary terms that can be applied as the wholesale and retail mark-ups on sugar sold for domestic purposes.

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Appendix 1 Section 21 (2A) of the *Prices Regulation Act* Chapter 320 (Amended)

When making an order under Subsection (1), the Commission shall have regard to:

A. the need to protect consumers and users of the declared goods or services from misuse of market power in terms of prices, pricing policies (including policies relating to the level or structure of prices) and the standard of the declared goods or services;

B. the cost of making, producing or supplying the declared goods or services;

C. the desirability of encouraging greater efficiency in relation to making, producing or supplying the declared goods or services;

D. the need to ensure an appropriate rate of return on any investment in relation to the declared goods or services;

E. the borrowing, capital and cash flow requirements of persons making, producing or supplying the declared goods or services;

F. considerations of demand management and least-cost planning;

G. existing standards of quality, reliability and safety of the declared goods or services, and the desirability of encouraging improvements in those standards;

H. the effect any proposed order on general price inflation over the medium term;

I. the economic and social impact of any proposed order; and

J. any other matters the Commission considers relevant.

Appendix 2 Submissions to the Review

The following submissions were received from the industry participants and other interested parties throughout the Review process.

Stakeholders	Sundry Goods Concerned
Nestle (PNG) Ltd	Coffee
Kongo Coffee Ltd	Coffee
WR Carpenters and Estates	Tea
Ramu Sugar Ltd	Sugar
Chin H Meen & Sons Ltd	Batteries
Colgate Palmolive (PNG) Ltd, K. K. Kingston Ltd, Panamex Ltd	Soap Products
Poultry Industry Association	Poultry products only chickens
Port Moresby Freezers	Butter and Margarine
Papindo	Sundry Goods
BNG Trading Company Ltd	Sundry Goods
Department of Treasury	Sundry Goods