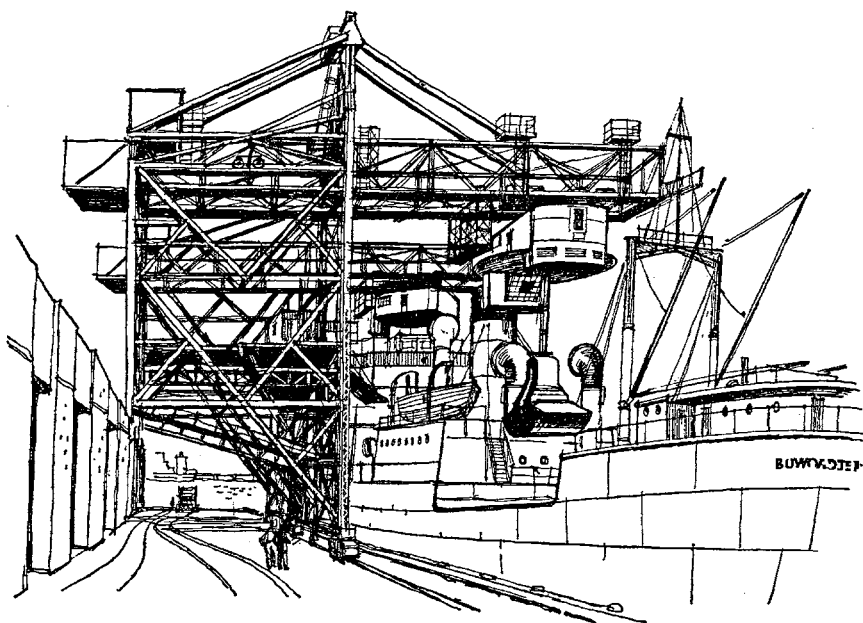




CHAPTER 7

Sugar Marketing Operations

J. M. DIXON

The structure or general framework of the market situation has already been described, but little has been said of the manner in which selling, shipping, financing and all other commercial aspects of marketing are carried out inside the general framework. These functions have rarely been described except by and for the specialists concerned with them. They are the essential link, however, providing the customers with what they want and C.S.R. and the sugar industry with their income. In this chapter Mr Dixon gives many details which are not widely known. There is a special interest in this account because, in the South Pacific countries, over 98 per cent of all sugar, whether raw or refined, is marketed by C.S.R.

This chapter also touches on rates of sugar consumption in various countries and on the methods of marketing and distribution which aim to keep costs low in order to retain cheap prices to the consumer.

September 1955

THE successful selling of the end product ultimately determines the prosperity of everyone in the industry. If it is not sold successfully, all the efforts of farmers, millers and refiners, with their employees and the host of businesses which supply and service them, will suffer. The final customers are children buying sweets or soft drinks, men buying their beer and, most importantly, millions of housewives buying not only their four pounds of sugar and tin of golden syrup but also the tin of jam, the bottle of sauce or the packet of biscuits which could not have been made without sugar.

These customers will rarely, if ever, give a thought to how the sugar is there to meet their needs. But in the background is the story of a large and intricate, yet systematic, organization of shipping, insurance, finance and many other aspects of commerce. There are experts working on ways of reducing transport and other costs, and advertising and market research men studying customers and estimating market trends. As with many other bulk commodities entering international trade, there is a background of international conferences and agreements, of politics and government intervention, and there is an important area where buyer and seller still carry on their age-old commercial bargaining.

C.S.R. carries out most of the work for the marketing of sugar produced in the South Pacific—for export to overseas markets of raw sugar from Australia and Fiji, for the purchase of supplies of raw sugar for New Zealand, and for the sale of refined sugar in Australia and New Zealand. In its early days in Australia the company was a buyer of raw sugar from remote countries, and in its New Zealand refining business it is still so. Today it has become one of the world's big sellers of raw sugar. Further, it has markets close at hand—the domestic Australian market for refined sugar, which has been its most important market for a century, and the New Zealand home market, which has been an important market for over seventy years.

In the financial year ended on 31 March 1955 the company marketed, in a wide range of places, under very different conditions and in varying types of markets, 1,404,381 tons of sugar and refined sugar products, in the following categories:

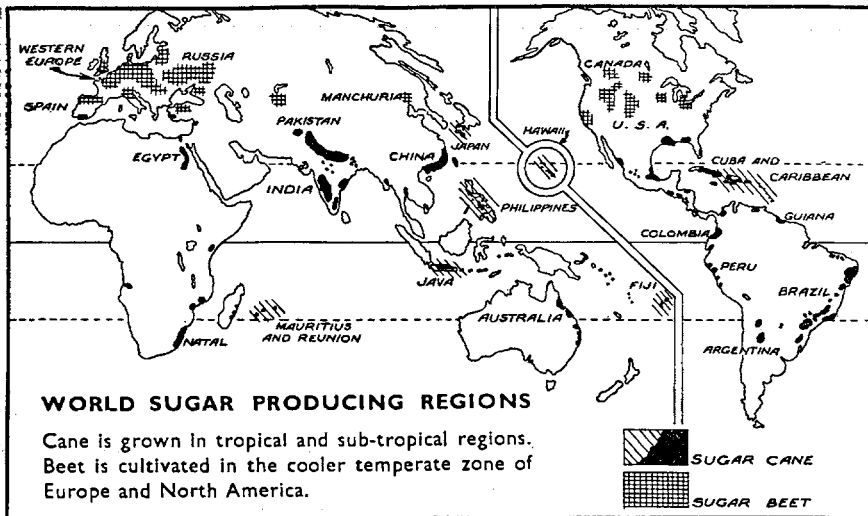
<i>From its refineries in Australia</i>	...	...	486,852 tons
<i>From its refinery in New Zealand</i>	...	...	97,263 „
<i>Exported as raw sugar from Australia</i>	...	...	681,808 „
<i>Exported as raw sugar from Fiji</i>	...	...	126,745 „
<i>Consumed in Fiji</i>	...	...	11,713 „
			<u>1,404,381 tons</u>

SUGAR MARKETING OPERATIONS

The total value of these sales, expressed in Australian currency, was approximately £79 million. Compared with the immediate prewar period there has been an increase of about 50 per cent in tonnage and 300 per cent in value.

Raw sugar exports from Australia and Fiji come under the British Commonwealth Sugar Agreement (B.C.S.A.) and the International Sugar Agreement (I.S.A.) as previously described. These agreements and the home consumption market in Australia provide price umbrellas which are as useful as most umbrellas are. They restrict movement a little and can be clumsy to handle. They give no protection if one bulges out and, unless wide awake, one can still get wet feet. Otherwise they are excellent, unless the economic storm gets violent. They confer some protection from bad economic weather but none from internal inefficiency. They leave solid compulsions to know one's markets and customers and to minimize costs.

In view of the description already given of these agreements and of the part played by the company's officers in bringing them about they need only be touched on here. It will be recalled that under B.C.S.A. the price for half of Australia's exports and three-quarters of Fiji's exports is negotiated annually on the basis of reasonable remuneration to efficient producers. The marketing of the rest of the export raws—other than the "negotiated price" quantity—goes on almost throughout the year. The foundation of the price is the free



market or "world price". It changes daily and, while generally depressed by pressure of supplies, it is in many respects typical of other open markets. Reports of crop size or rumour about the intentions of the International Sugar Council affect it. Gossip, especially of the intentions of the biggest seller, Cuba, and of big buyers, is rife. Like all such international bazaars it is no place for the uninformed or the unalert to operate. As to the quality of the goods, credit worthiness and performance of contract—vital matters in clinching a deal on the market—the reputation of the buyer or seller, as the case may be, is most important. Many of the world's producers put up their wares for sale; the buyers (who are the refiners and include C.S.R., for New Zealand), through daily market information, letters, cables and brokers' services, do their shopping from many corners of the world. The centres of this market are Mincing Lane in London and the Coffee and Sugar Exchange in New York. Sellers of good standing, who can offer sound quality and the best delivery service, have the best chance of making good sales.

The Sugar Marketing Division of the company handles most of the selling, transport and shipping arrangements from the head office; but much of the refined sugar is sold through branches of that division located wherever there are C.S.R. refineries. The company has its Representative in London to assist with the sale of export raw sugar from Australia and Fiji by maintaining close co-operation with shipping brokers and sugar brokers and by contact with customers, fellow sellers, and the Colonial Office.

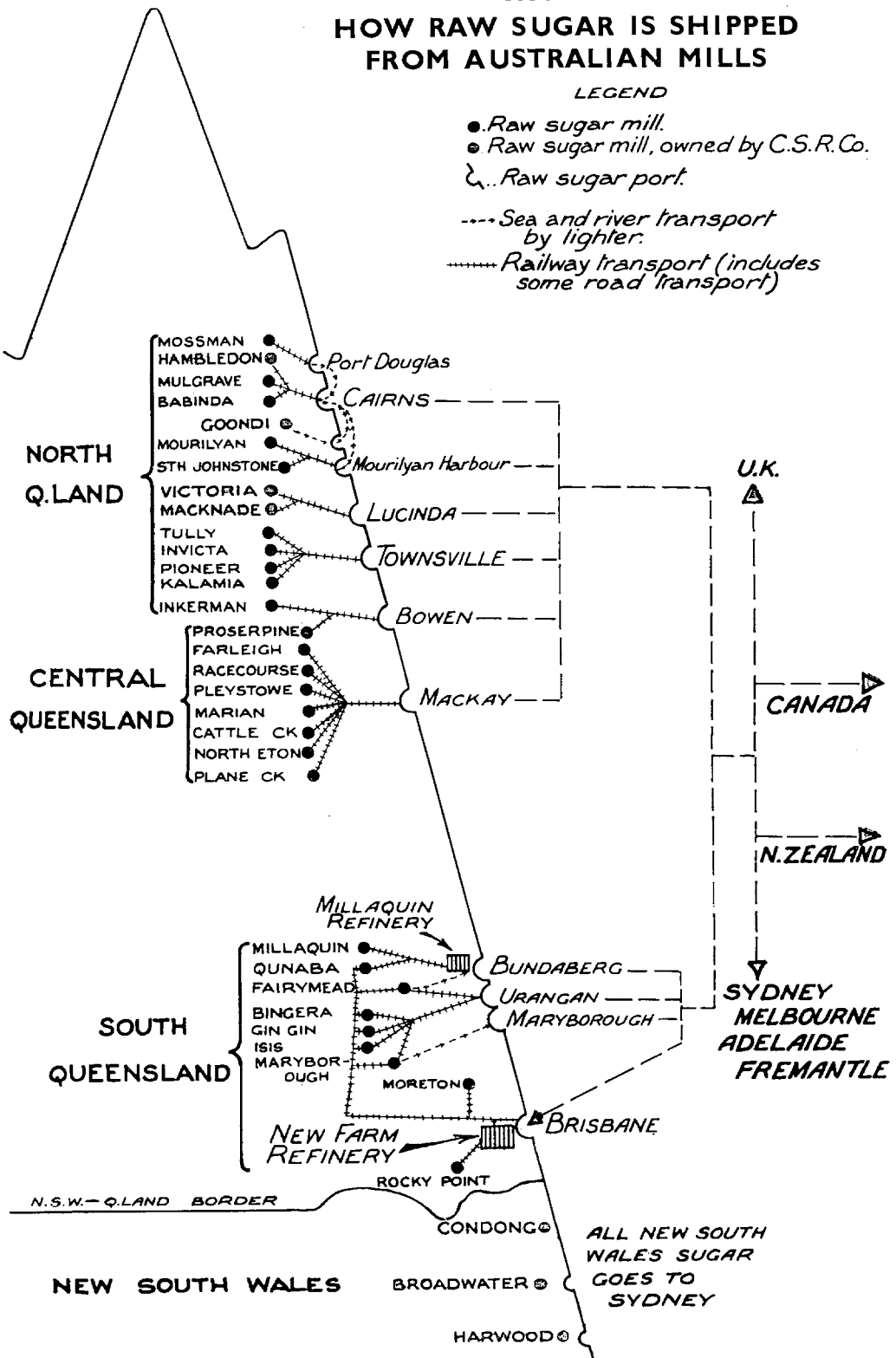
The company does not make any profit directly from its marketing work. If it made a profit of $2\frac{1}{2}$ per cent on sugar sales turnover, the result would be a sum greater than the total profits from all other activities—milling, refining and other business apart from sugar. In practice, the marketing of the Australian crop, both raw for export and refined in Australia, is done under the contract with the Queensland Sugar Board. The company's incentive lies in its interest in that contract as a whole, in its knowledge that an unprosperous Australian sugar industry means an unprosperous C.S.R., in the tradition of responsibility for functions carried on for so long, and in the fact that its own mills make one-fifth of the Australian raw sugar sold; it is selling its own raws in the common pool with the rest.

In Fiji, the raw sugar manufactured by the company is marketed to the best advantage. In New Zealand, the incentives to buy raws well, to transport them cheaply and to minimize all distribution costs are similar to those normally found in manufacturing business in that country.

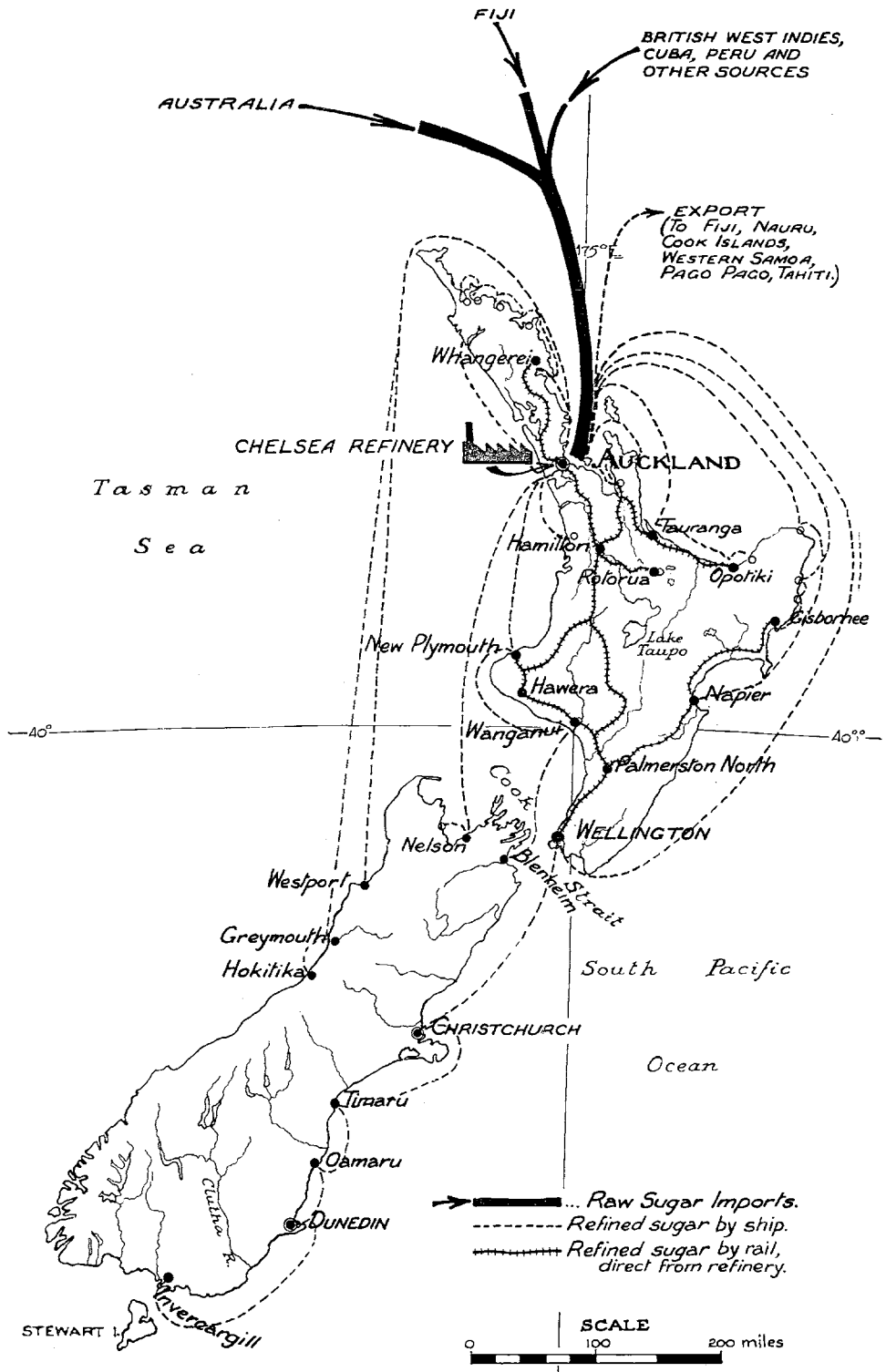
SCHEMATIC DIAGRAM SHOWING HOW RAW SUGAR IS SHIPPED FROM AUSTRALIAN MILLS

LEGEND

- Raw sugar mill.
- Raw sugar mill, owned by C.S.R. Co.
- ⤿ Raw sugar port.
- Sea and river transport by lighter.
- Railway transport (includes some road transport)



SOURCES OF RAW SUGAR SUPPLY AND REFINED SUGAR DISTRIBUTION IN NEW ZEALAND



The Marketing Pool in Australia

All raw sugar produced at Australian mills, whether it is to be exported or refined for consumption in Australia, is placed in the marketing pool under the jurisdiction of the Queensland Sugar Board. The Queensland raws, including those made at C.S.R. Queensland mills, are compulsorily acquired under statutory powers and the New South Wales raws are purchased from C.S.R. by agreement.

The Sugar Board, having become the legal owner of the sugar, makes contracts, re-negotiated annually, with the two Australian refining companies for the whole of the handling, selling, refining and financing of the pool's raw sugar. The Millaquin Sugar Company Limited handles about 25,000 tons, which is refined at Bundaberg, and supplies about one-third of Queensland's requirements. The remainder comes under the contract with C.S.R.

Under this contract, the company arranges shipping to supply its own refineries, sells the surplus sugar abroad and arranges all the required export shipping, refines Australia's requirements (except for the Millaquin quantity), sells the refined sugar and other sugar products in Australia, and finances the whole operation. The whole of the work is in the nature of a contract for services supplied, and in much of it C.S.R. is acting as agent for the Sugar Board.

The company attends to all the detailed arrangements such as marine, fire and flood insurance, and the obtaining of payment from overseas buyers. There is the specialized and difficult matter of arranging shipments to suit storage at mills, ports and refineries. There is the financing of the crop by cash advances to the mills as raw sugar is shipped; the interim and final payments to the mills after the disposal of most of the crop and the meeting of expenses; and the final accounting.

In all this work the Sugar Marketing Division is closely associated with various other functions of the company, such as insurance, central accounting, and the purchasing of jute bags. This division of the company also procures the raw sugar for New Zealand, markets the refined sugar there, and markets the export raws from Fiji. The company's sugar selling organizations at its branches in Australian mainland capital cities and in Auckland operate as parts of the whole Sugar Marketing Division.

For the 1954 season the quantity of Australian sugar handled for the pool by the company for home consumption (refined) and export (raw) was 1,257,500 tons and the sale proceeds were £64.6 million. In this work the company recovers its expenses and is paid management, financing and selling fees per ton of sugar sold in Australia.

In evidence to the Sugar Inquiry Committee in 1952, the company submitted detailed information showing that the management, financing and selling fees collected on *home consumption* sugar amounted to £2 7s 10d per ton out of the then total retail value of sugar and bags of £78 5s 4d. The company does not make any profit from the management services and expertise employed in the marketing of Australia's *export* sugar.

Selling the Export Raws

The first consideration in selling the export raws is the performance by Australia and Fiji of their long-term contracts to supply the United Kingdom and New Zealand with sugar at the "negotiated price". The balance of the export sugar is called "free sugar" and can be marketed anywhere. Tariff preferences in Canada and the United Kingdom pull most of Australia's free sugar to those countries, although it still has to compete with other preferential sellers—the British West Indies, South Africa and Mauritius.

Shipment of the export raw sugar must conform, within reasonable limits, to a month-by-month pattern set by the rate of production and the availability of storage space. Shipments must also conform to the calendar year quotas imposed by the International Sugar Agreement; this factor causes considerable difficulty, as the international quota year ends in December, which here in the southern hemisphere is a period of heavy shipping just after the finish of crushing. Unsold sugar is not shipped so that sales must be made well in advance, taking the foregoing considerations, and others, into account.

In addition to selling free market sugar to the United Kingdom, Canada, and New Zealand, sales have recently been made to Japan, Hong Kong, Malaya and Ceylon. These peacetime sales to Asian markets are a new development.

The great volume of sugar for shipment presses heavily on port loading facilities and it is usual for sales to be made on a c.i.f. basis, so that the price to the buyer includes freight and insurance to destination. Under this arrangement, the company engages the freight and this allows the flow of shipping to be better organized than would otherwise be possible.

It is usual practice to hold a firm offer of freight (an option on a vessel with all conditions specified, including quantity, freight rate and approximate time of loading) before making an offer of sugar to a buyer. Dealings in freight are almost entirely with individual ship-owners for individual cargo lots in tramp vessels. For the most part,

SUGAR MARKETING OPERATIONS

C.S.R. negotiations with shipowners are conducted through Elder Smith and Company, chartering brokers operating on the Baltic Shipping Exchange in London. This exchange is the world's great shipping freight market-place and almost all important shipowners are represented there. The brokers, armed with a knowledge of the company's broad plans, attend daily on the Baltic, even if no business is in immediate prospect, to keep in touch with shipowners and other brokers and learn what ships may be interested in sugar from the Pacific. The rate of freight is negotiated, often after much haggling, on each occasion of chartering a ship; it fluctuates according to the general balance of supply and demand on the freight market, owners' expectations and attitudes, including their reaction to the state of affairs on the Australian waterfront, the availability of other cargo in the Pacific, and other factors. The freight rate is naturally most important and its relation to freight rates obtainable by other sellers in other parts of the world often determines whether or not business is possible. Dealings with overseas refiners are conducted in the main through the long-established London sugar broking house of C. Czarnikow Limited.

A typical sale might start with a cable from Czarnikow in, say, April advising that a Montreal refiner is in the market for a full cargo, about 8,000 tons, to arrive in the second half of September.

The first step is to get a freight option on a tramp vessel that is working, or can work, towards Australia and is willing to load sugar and go to eastern Canada, probably via the Panama Canal. She may be carrying an inward cargo of motor cars to discharge at Melbourne, or sulphur from the Mexican Gulf for Port Kembla, and can be ready to load in Queensland about mid-July. The freight rate is a critical point and the vessel has to be insurable as a first-class risk.

The next step is to decide an offering price, taking into account all the cost and market factors such as the current (Cuban) "world price," the value of the tariff preference, freight rates from Cuba to Montreal, the buyer's probable idea of price, what prices competitors are likely to be quoting, what could be obtained if the cargo were sold elsewhere. Always there is the market judgment in the background. An offer based on all these considerations will be cabled, frequently within one or two days. Meantime other sellers are making their offers. Sometimes the freight option expires before the buyers are ready to decide. More often than not, no sale will result from a single negotiation and the whole process will be repeated, even many times, until a sale results or one party does a deal in another direction.

If agreement is reached with the buyer, the option over the ship

is exercised and both freight contracts and sugar sale contracts are signed. Insurances have to be effected, the ship has to be fitted into the loading programme with all the other ships. Invoices, bills of lading and insurance policies are made out. The voyage takes some fifty days, the sugar is unloaded and the buyer makes a substantial payment. The final exact weight and quality of the sugar are determined at destination by previously agreed methods. Finally, account sales are prepared and full payment is received months after loading started and generally several more months after the sale negotiations took place.

From Edward Knox's early days, dealing in the sugar markets, as buyer first and later as both buyer and seller, has been an important part of the business. The atmosphere of traditional association with the sugar market fosters the development of market sense in individuals; less tangible elements help, such as company reputation, experience and records, and "talking shop" inside the company and with overseas sugar organizations. All this tends to institutionalize the desired blend of aptitudes, knowledge, and experience, and to produce a leavening of market intuition.

To move the 1954 export crop from Australia and Fiji required no fewer than 143 shipments, mostly full cargoes, quite apart from almost a like amount of shipping to take the raw sugar from Queensland ports to Australian refineries.

There are few companies in the world which market more raw sugar. The normal tonnage of export sugar from Australia and Fiji amounts to 770,000 tons a year and represents about one-third of the total exports from the British Commonwealth countries. C.S.R. is well-known in the United Kingdom, Canada, most other parts of the British Commonwealth, and also around the Pacific and Indian Oceans. Senior sugar marketing officers make frequent visits abroad to make personal contacts, especially with shipping brokers, sugar brokers, the big British refiners and buyers (Tate & Lyle Limited), the British Ministry of Food, the four Canadian refiners, and sellers from Mauritius, South Africa, and the British West Indies.

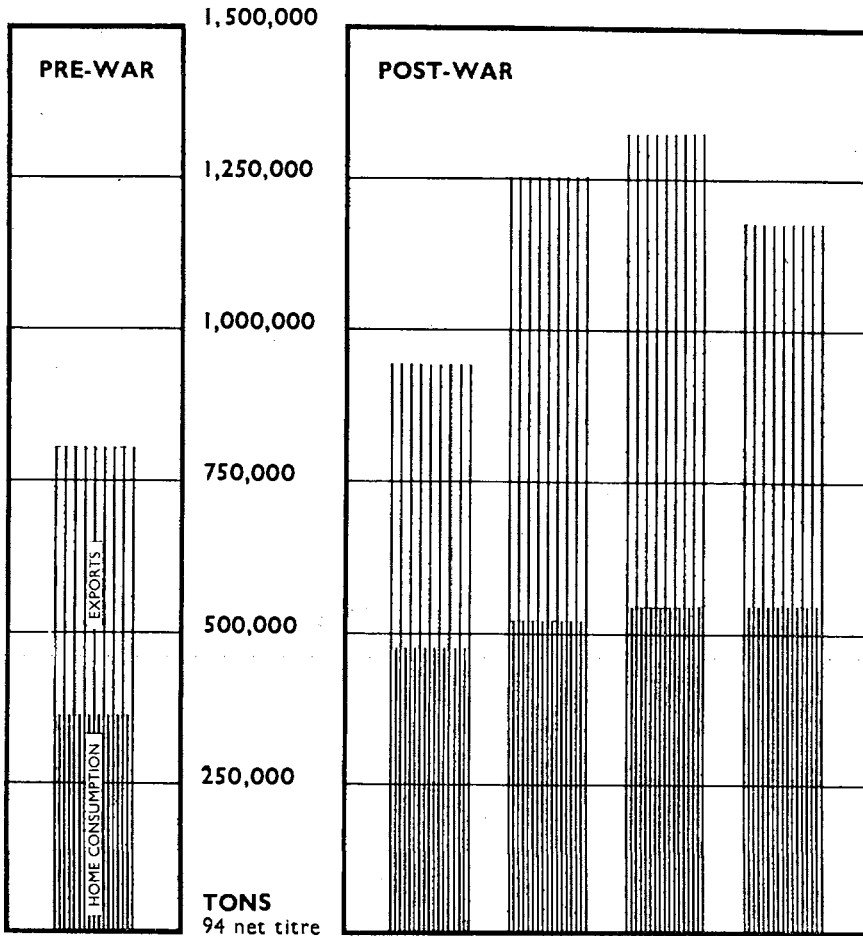
Shipping the Raws

Some of the problems connected with the movement of sugar are similar to those found with the movement of other bulk commodities, such as wheat. Wool is not comparable, its quantity being too small. There is the necessity to avoid congestion at ports and to obtain the quickest possible turn-round of ships as a factor in keeping down freight charges. The depth of water available at certain ports and

SUGAR MARKETING OPERATIONS

MARKETS FOR AUSTRALIAN RAW SUGAR

Production has expanded to satisfy increasing consumption in Australia and higher quotas for export. Exports have exceeded quotas in recent years because other exporting countries fell short of their quotas. Source: C.S.R. records.



PRE-WAR
average
1936-37-38

362,572
442,151

804,723

HOME
EXPORT

TOTAL

1952

1953

1954

1955

Seasons

477,481
471,008

521,800
732,064

542,742
783,667

545,000
626,000

948,489

1,253,864

1,326,409

1,171,000

the length of ships has to be considered in arranging the loading programme. Many factors, such as a vessel's next commitments, have to be allowed for in allotting her for discharge or loading at ports of fast or slow turn-round. These are the normal, although quite involved, matters to be considered in such major shipping programmes.

There are also special factors in the case of sugar. For example, the mills are paid a major proportion of the value of their sugar as it is shipped. In order that each mill will share equitably in these financial advances, shipments have to be spread, according to a formula, not only between different ports but also between the mills shipping through the same port. Again, the sugar has to be kept moving fast enough to avoid stoppages of the mills and of the cane harvesting arrangements because of overfull stores. Supplies must be kept up to the Australian refineries and contracts have to be filled with overseas buyers who have ordered particular quantities within particular times. The quota under the International Sugar Agreement must be shipped in the quota year. The quota cannot be exceeded but if it is not filled the deficiency is lost and cannot be recovered.

In recent years shipping has been made far more difficult by the industrial troubles and the increase in handling time and costs on the Australian waterfront. These conditions have increased costs and have made it more difficult to obtain the necessary ships and load them fast enough to keep the sugar moving out of the congested Queensland ports. Before the war it was possible to move all the sugar in about seven months. Nowadays it takes the best part of twelve months, and sometimes more, to move the crop. With all the stores full at the end of the milling season about Christmas, there is continuing anxiety to obtain the shipping and to empty the stores before the mills start again in June.

Owing to port and labour conditions, crew troubles and delays from bad weather, cargo ships do not run to timetable. Vessels commonly arrive at sugar ports later than forecast. Very often the whole or a large part of the shipping programme covering many ports and vessels has to be rearranged at, literally, an hour's notice; and there may be a dozen sugar ships in or travelling between Queensland ports at one time, with as many as three in some individual ports.

The shipping of raw sugar from Fiji is an onerous enough responsibility but, thanks to satisfactory stevedoring work and good relations between waterside labour and employers, the problem of removing the sugar has not often been acute. When difficulties have occurred, they have been caused by delays to ships in Australia and New Zealand en route to Fiji.

Sugar Packages

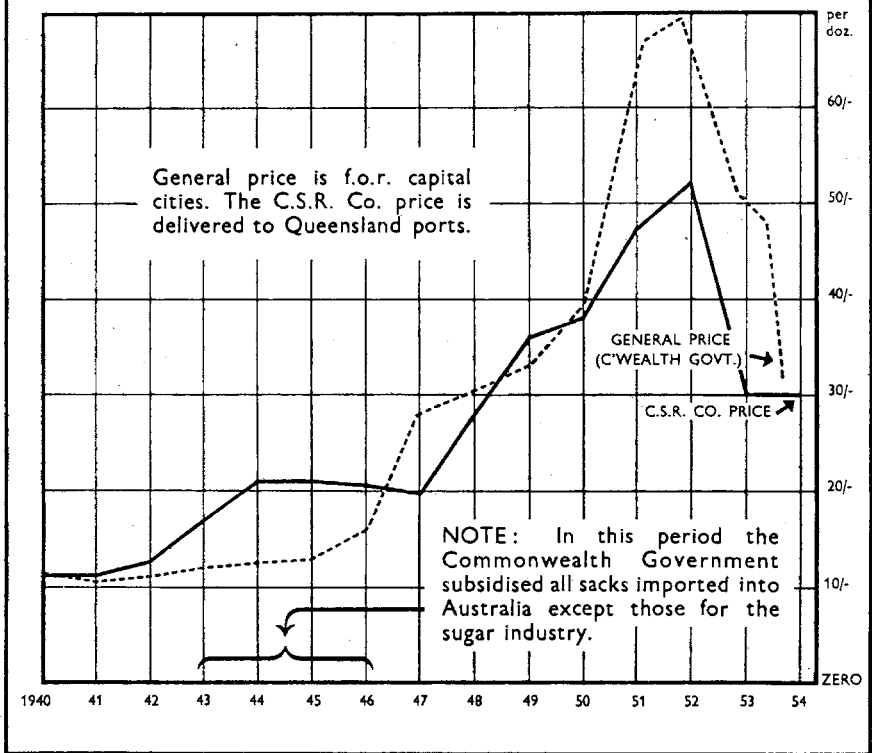
Sugar, both raw and refined, is packed in jute bags for storage and transport, although the need for this packing is decreasing with the introduction of bulk handling methods and liquid refined sugar. In one year C.S.R. uses in Australia and New Zealand 12.7 million bags, each holding 70 lbs. of refined sugar. In addition last year 17.5 million 3-bushel bags were supplied to Australian mills for the packing of their raw sugar, without direct charge to the mills, as part of the contract with the Sugar Board. In eight out of the last nine years this has been done at a cheaper price than the general price operating throughout Australia for wheat bags. Sugar bags are the same size and of the same or superior quality, yet in 1951, for instance, the price was 28 per cent less than for wheat bags. The company does its own buying through experienced channels on the tricky Calcutta jute market.

Since jute is available only from India and supplies could possibly be interrupted, safeguarding stocks have to be carried. And packages are an expensive item in sugar industries, as can be seen from the actual figure for 1951, before bulk raw sugar handling had made progress and when jute prices were higher than now, when C.S.R. spent £4.5 million on jute goods. This covered Australia, Fiji and New Zealand for sacks for raw sugar and for hessian for the familiar 70-lb. refined-sugar bag, which later is generally used for scores of domestic and commercial purposes.

Bulk Handling of Raw Sugar

Bulk handling of loose raw sugar is the main action within the power of the industry to combat the high costs of packaging, handling and shipping raw sugar—about four times the prewar costs. Mr Herbert has dealt with the general economic aspects of this. Raws are now being handled in bulk at two of the company's mills in northern New South Wales; Pyrmont refinery has been equipped to unload and store bulk raws at a cost, so far, of £800,000; the Melbourne refinery is receiving in bulk on a less mechanized basis; work is advancing well on Mackay Harbour loading facilities and a start was made on the Lucinda project in 1955. Until these mechanical bulk loading installations are ready, bulk sugar will be loaded by emptying the bags into the holds. Raw sugar presents considerable difficulties in bulk handling because it is sticky and will not flow like wheat; under some conditions it compacts into masses; it is liable to deterioration; it must be protected from rain and dampness at all times; and

PRICE OF 3-BUSHEL SACKS IN AUSTRALIA



it has a high value and spillage losses would therefore be costly—to a far greater degree than with coal, iron ore, rock phosphate and several other bulk commodities.

Very detailed and expert engineering and economic investigation is needed well in advance to determine the best methods, especially for the purpose of gaining the maximum advantages from the heavy capital expenditure. The whole world was searched and bulk handling of many commodities was investigated before decisions were made. The company's recent report on its overall bulk plan and its recommendations for the Australian industry said:

Handling raw sugar in loose bulk instead of in bags and doing this in a semi-automatic way should be looked upon as a means of reducing costs, improving co-ordination and control of raw sugar transport, eliminating the arduousness of the work of man-



Raw sugar from Babinda co-operative mill at the port of Cairns. Most Queensland mills rail their sugar to the nearest port, where it is loaded by slings for shipment to refineries. Sugar from a few mills goes by lighter to the main port. Installations are planned at Queensland ports (some are under construction) for storing and loading raw sugar in bulk, instead of in bags.

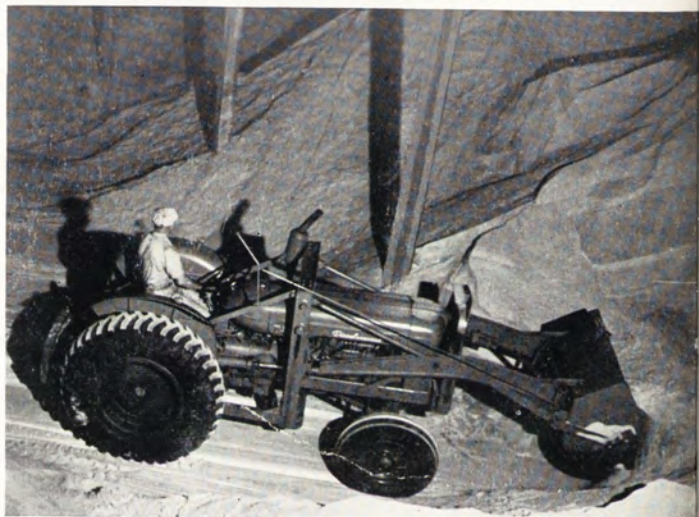
Left: Stevedore-foreman and C.S.R. wharf officer at Lautoka.

Below: Raw sugar being shunted to the C.S.R. Co.'s wharf, Lautoka Mill, Fiji, for shipment overseas.

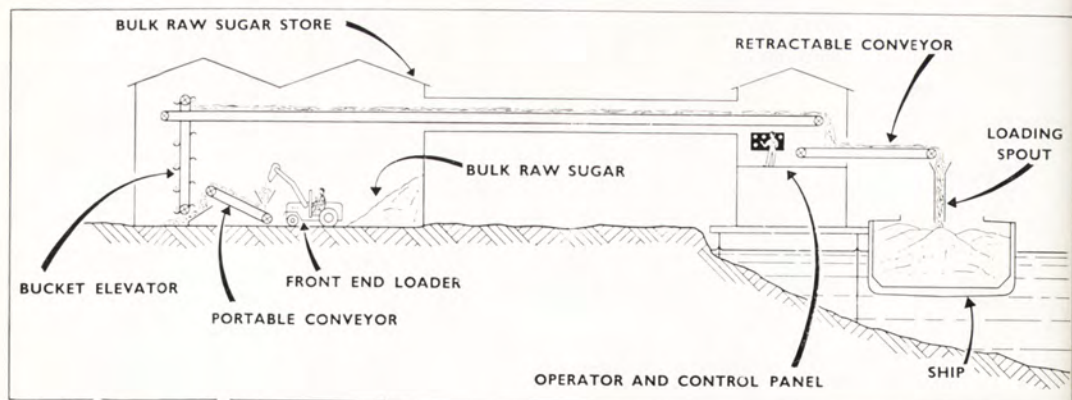




A mechanical thrower piling raw sugar from the mill process on the floor of the bulk store at the company's Harwood Mill on the Clarence River, N.S.W.



Front-end loaders load loose raw sugar from the bulk store onto a series of conveyor-belts which drop it into the hold of a ship.



Method of loading raw sugar in bulk at Harwood Mill.



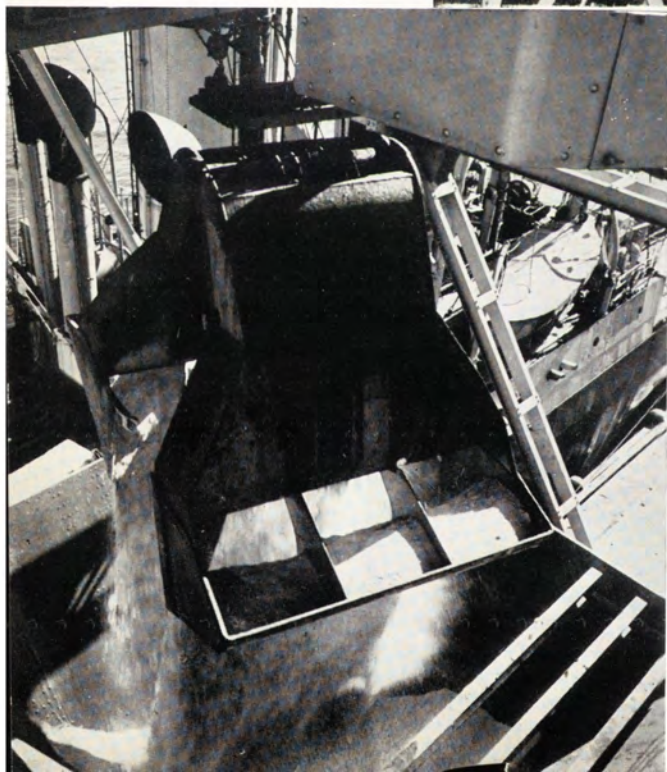
Overseas ship discharging raw sugar at Auckland refinery,
New Zealand.

Bagged raw sugar in refinery store.





Control panel for belt conveyor system handling bulk raw sugar at Pymont refinery.



One of two large cranes at Pymont refinery used for unloading raw sugar in bulk. The grabs bite about 4 tons of sugar.



Delivering refined sugar in 70 lb. hessian bags from the refinery to grocers. About half the sugar consumed in Australia is sold through grocers. The other half is used by food and beverage manufacturers.



C.S.R. golden syrup on sale in an Auckland self-service store.



Large quantities of sugar are used by the jam making and fruit preserving industry. Photograph by courtesy of Leeton Co-operative Cannery Ltd.



The C.S.R. Company's stand at the Royal Easter Show, Sydney, is always popular with children, who receive a wisp of fairy floss (spun sugar) on a stick of sugar cane.



Opposite page: An example of the advertisements inserted by the C.S.R. Company in metropolitan daily papers and national women's magazines in Australia.

Sugar — an energy food — accounts for a large part of the caloric content of the diets of advanced communities.

Sugar and spice and all things nice



Children love sweet things. The delights of the confectionery shop are one of the most enjoyable experiences of childhood. When we grow up we associate sweet things with pleasant ideas—we talk about a sweet child or a sweet disposition. Children need plenty of food to build their growing bodies and to provide the energy they use up in play and sport. Foods which contain cane sugar are particularly rich in energy, and play an important part in a good all-round diet.

Tropic Sunshine

Sugar, one of our most important foods, is made by the sun's rays shining on the green leaves of the cane plant in Australia's tropic north. The sugar is stored as sweet juice in the cane stalk.

Over 9,000 independent farmers grow Australia's cane. The juice is crushed out at 34 mills (C.S.R. owns 7) and made into raw sugar. The sugar your grocer sells is refined from this raw or crude product. C.S.R. owns five of the six Australian refineries.



Your grocer sells C.S.R. loaf sugar in a handy 2-lb. packet.

THE COLONIAL SUGAR REFINING COMPANY LIMITED
Sydney • Melbourne • Brisbane • Adelaide • Perth



Signing the British Commonwealth Sugar Agreement in 1951 at the Food Ministry's Headquarters in Horseferry Road, London. The late Sir Albert Feavearyear, of the Food Ministry, shows the late Mr H. R. F. Watson of the C.S.R. Company (representing Fiji) where to sign. The Minister of Food, Major the Rt. Hon. Gwilym Lloyd George, M.P., on the right.

Standing round the table *from the left*: Sir Thomas White, Australian High Commissioner in London, Mr G. M. Eccles of the British West Indies, Mr H. R. P. A. Kotzenburg, Mr D. A. Donelan, and Mr R. M. P. Heyneke, South African representatives, Mr J. M. Dixon of the C.S.R. Company, and Sir Philippe Raffray of Mauritius. *British Official Photograph.*

handling bags, and improving working conditions. It is essentially a transfer of work from men to machines and vastly improves the speed of flow of the sugar. It requires very high capital expenditure and there must be full control, and carefully co-ordinated control, of all the operations, from mill to refinery, in order to get sufficient advantages in the shape of lowered working expenses to justify the high costs associated with the capital: maintenance, depreciation, redemption, and profit or interest on the funds employed.

The main reductions in working expenses are to be found in the elimination of the jute bag, the reduction in the number of men employed and in the quicker turn-round of ships, which will enable one ship to transport much more sugar per year than the same size of ship can transport by existing methods.

Financing the Sugar

Sugar is paid for at the approximate time when it is delivered to the customer, whether it be delivery of refined to grocers and food manufacturers or delivery of raw sugar on discharge from ships at overseas refineries. Obviously, a great deal of money is expended on the sugar before then, in payments to the mills for the raw sugar and in transport expenses, bags, refining, and so forth. These payments amount to a considerable total and large sums are always outstanding. Money required for such purposes is called the "working capital" of business, as distinct from the "fixed capital" invested in land, buildings and plant. In the business done by C.S.R. for the Australian sugar marketing pool the maximum amount outstanding at any one time (outlaid but not yet recovered in sale proceeds) has amounted to as much as £15.4 million and recently has varied between £12 million and £5 million. This can be looked upon as the Sugar Board's overdraft with C.S.R. In addition, of course, the company requires further large sums of working capital for Fiji, for New Zealand and for all other parts of its business.

The system of advances to the Australian mills is a very liberal one, and they require less working capital than any similar large business which is comparable. In particular, they require much less than the Fiji mills which make similarly heavy payments for cane as crushed, meet the manufacturing expenses, and often carry sugar stocks for many months. All these outgoings are only recouped by the company months later when the customers in Australia and the overseas refiners pay for the sugar as it is delivered to them.

The Chairman of the Sugar Board, Mr P. J. Donnollan, has pointed out that the Australian raw sugar producers (growers and millers) are more fortunate as regards finance than some other major primary industries, in that they receive a high proportion of the proceeds soon after delivery of the cane or manufacture of sugar and a final payment before the next season starts, although many million pounds of the season's proceeds are still tied up in sugar in stock and in transit. Mr Donnollan has remarked that, while millers have praised the system, it has operated in an effective delay-free way that tends to cause it to be taken for granted. And he adds, "C.S.R. is the principal contributor to this satisfactory state of affairs; this is an important service performed by the company for the industry."

Marketing Refined Sugar in Australia

Refined sugar is one of our most common foods, as usual on the table as salt, appearing on every housewife's grocery order, and essential in a vast range of manufactured foods and drinks. Although we think of it as it appears in the sugar bowl on the table or in the canister on the kitchen shelf, it is manufactured and used in quite a variety of forms. Because it appears in every household's budget, its cost and the method of marketing are of interest to all.

93 per cent of all refined sugar sold in Australia is in the highest quality granulated form, with only about one part in a thousand not pure sucrose. There are two grades: 1A, which is graded for size of crystal and is primarily for the household; and 1XD, which is intended for dissolving, mixing and grinding by manufacturers and is not graded.

Other familiar refined sugar products are brown sugar, used on porridge and breakfast foods, loaf sugar, caster sugar and icing sugar. Additional "fancy" grades are sold in small quantities, including "coffee crystals", the large brownish crystals which are asked for widely but in small purchases. The demand for coffee crystals is quite small in total tonnage—perhaps 300 tons a year in a total refinery production of 580,000 tons—but they are now being made again because of numerous requests.

Most of these refined sugar products have been familiar objects of everyday sight and enjoyment since childhood. No one seems to know when or where golden syrup was christened "Cocky's Joy"—but to Australians the association is obvious. Many people remember it as a regular part of their diet, on steam puddings, on pancakes, on "puftaloons" (fried scones), or simply on bread.

SUGAR MARKETING OPERATIONS

Apparently Australia eats more sugar per head than any other nation. This is consistent with the results found by statisticians and market analysts who have sought to devise ways of forecasting sugar consumption, investigations which are of major interest in planning C.S.R. factory capacity for several years ahead. Sugar consumption is largely related to the level of national income and to the degree of equality of income through the population, and in these respects Australia holds a high position. It is also influenced by the price of sugar and, as Mr Herbert has pointed out, Australians are well situated, compared with other countries, in the price they pay for sugar. Climate, national tastes and food habits are also important. These factors underlie the high average annual consumption in Australia of about 118 lbs. New Zealanders, too, are good sugar customers, consuming about 103 lbs. per head.

The wide disparities in sugar consumption per head, the connection between high living standards and sugar consumption, and the scope for increasing total world consumption are indicated by the latest available figures for pounds consumed per head per year:

<i>Australia</i>	118	<i>Belgium</i>	61
<i>United Kingdom</i>	112	<i>Mexico</i>	56
<i>Sweden</i>	109	<i>France</i>	55
<i>Canada</i>	104	<i>Italy</i>	34
<i>New Zealand</i>	103	<i>Japan</i>	24
<i>United States</i>	92	<i>Turkey</i>	18

(Sources: *Australia and New Zealand—C.S.R. United Kingdom—estimated by Ministry of Food, 1955. Others—International Sugar Council*).

Sugar and Dental Decay

The company does not enter into the controversial topic of dental decay and its possible relation to high sugar consumption. It holds to the opinion, however, that the issue should not be pre-judged on the incomplete evidence at present available. C.S.R. officers keep themselves informed on the latest professional work and opinion about dental caries and they are fully aware that there is presumptive evidence against sugar. Adequate control of dietary experiments is difficult, however, and purely circumstantial evidence can hardly be regarded as conclusive.

The appetite for sugar seems to be a natural one, gratified fully by people who can afford it. Sugar is wholesome and pleasant; and it provides a necessity for the human system, important especially as an

energy-source for the young, the adolescent, and the active adult.

There is now a very promising control for dental decay in the fluorides, and further study in this and other fields may well disprove or modify the dogmatic assertion that "sugar rots teeth". Research is incomplete and that even the highest authorities are not unanimous is indicated by the quotations printed in Appendix 24.

The Grocery Trade in Sugar

Today the Australian housewife pays her grocer ninepence a pound for sugar. At all stages of manufacture and distribution the profit margin on sugar is low—amongst the lowest for any food.

The grocer has paid 7.91d per pound, giving him an overall margin of 1.09d per pound; his "mark-up" on sugar, at 13.8 per cent on cost, is one of the lowest in his shop. The sugar is supplied to the grocer in the familiar sugar bag which later finds dozens of uses—as oven cloths, as aprons for rough work, for holding potatoes or nuts and bolts, for carrying the bottled beer on a fishing trip and later for bringing home the catch. The grocer sells the bags for the equivalent of 0.15d per pound of sugar; this helps a little and brings his total margin to 1.24d—or a penny farthing out of the retail price of ninepence.

This is about the same as the total margin C.S.R. gets for providing the whole refining plant, paying for wages and for materials used in refining the sugar, providing the bags, selling and delivering the sugar, financing it and generally managing the sugar marketing pool, and this margin, too, must cover all the management expenses and profit of the company for this work. This is a striking example of the cheapness and economic efficiency of large-scale manufacturing and distribution, compared with the high cost of final selling to the consumer—the price which must be paid for the great convenience of the retail shop with its wide range of goods.

The grocer is often dissatisfied with the margin he gets on sugar and is conscious of the expense of re-packing the sugar into paper bags and the slight wastage involved. This situation, however, is not made by the company or the sugar industry; neither exercises control over what the retailer charges. In the grocer's shop, sugar has traditionally been a low-margin line. The governmental price controls of recent years simply continued the percentage margins established in the grocery trade over many years by the forces of competition; and, as this is written, there is no price control in most of the Australian states.

SUGAR MARKETING OPERATIONS

In regard to the company's profits from refining and other operations on behalf of the Sugar Board (including the marketing of the export sugar on which no profit is made), the position was summarized by the 1952 Sugar Inquiry Committee: "If the company had forfeited the whole of the profits from these sources . . . the difference in price would have been less than $\frac{1}{8}d$ per pound." Even if the forfeiting of profit were practical or desirable, $\frac{1}{8}d$ is too small an amount to affect the retail price of sugar "because they don't make coins that small". The housewife would still pay the ninepence and someone else would benefit by the $\frac{1}{8}d$.

One distinctive feature of the sugar trade is that terms of payment to the company are "cash", which means cash with the order or weekly settlement under a bank guarantee. In fact, many retail grocers and small manufacturers buy from wholesalers and do not or need not pay immediate cash to them. Even if they do pay immediate cash it is not a great financial burden, because research has shown that the average stock of sugar carried is only two weeks' supply by city and suburban grocers, and two weeks and a half in the country. Recognized wholesale merchants receive an allowance of $2\frac{1}{2}$ per cent on specific conditions: that they maintain a considerable volume of sugar sales, carry stocks of various other groceries for quick supply in small lots to retailers and small manufacturers, and extend credit to retailers.

Under the Sugar Agreement Act the company, on behalf of the Sugar Board, *must* accept orders from *anyone* for *cash*, if the quantity ordered is not less than half a ton. The obligation to supply *anyone*, regardless of their credit standing, is an additional part of the background to the cash basis of sales.

The Food Processors

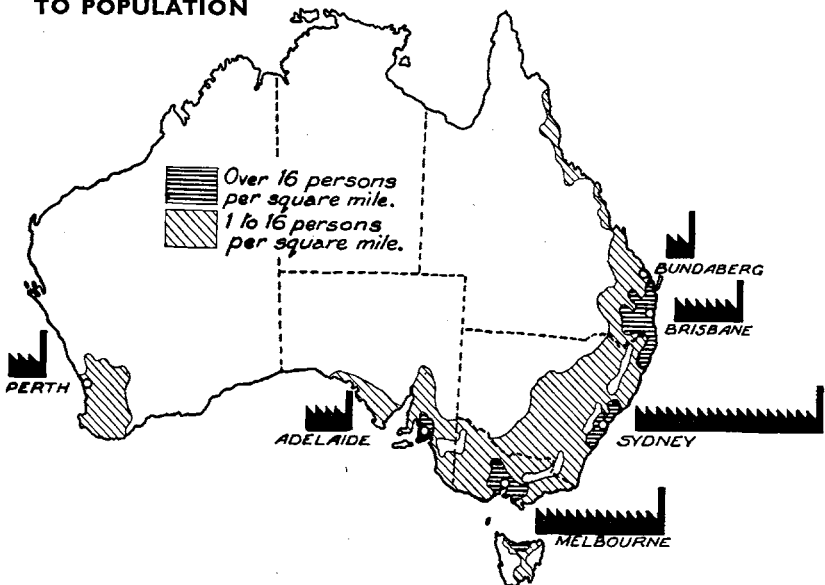
Approximately half of the refined sugar sold in Australia is used by food manufacturers and in a few other industries such as leather tanneries. Manufacturers using a ton or more per month receive in the price they pay the equivalent of the $2\frac{1}{2}$ per cent cash discount received by wholesalers, making the net price £72 per ton. Big users are fruit canners, jam makers, brewers, and manufacturers of condensed milk, biscuits, confectionery, jelly crystals, ice cream, soft drinks, fruit cordials and cakes. Some of these manufacturers, especially of canned fruit and condensed milk, export a considerable proportion of their products. By a special arrangement, they get the sugar exported in this way at a price equal to the cheapest possible price at which sugar could be landed in Australia, duty free, from any source

SOUTH PACIFIC ENTERPRISE

in the world; that is, at the landed equivalent of the "world price". As this is written this involves a reduction of £17 2s 0d per ton from the standard price of £72 for refined sugar. There is also a special discount of £2 4s 0d per ton for sugar used in canned fruit and jam for domestic sale inside Australia, to assist the fruit growers and processors.

This arrangement covering exported goods containing sugar is not subsidization. It is a fair arrangement placing the manufacturers in the same position as if they imported the sugar, manufactured in bond and subsequently re-exported the sugar in their goods. Despite this arrangement costs in Australia for fruit, milk, tinplate and labour have gone so high that these industries are experiencing difficulties in their overseas markets. South African manufacturers, who have very cheap sugar (below "world price") as well as cheap labour and other low costs, are tough competitors for our exporters of processed

LOCATION OF AUSTRALIAN SUGAR REFINERIES IN RELATION TO POPULATION



Australian refineries are situated in the main centres of population, close to most of the people who buy sugar. The size of the refinery symbols indicates approximately the proportionate amount of sugar refined at each. The refinery at Bundaberg is owned by the Millaquin Sugar Company. The other five are owned by C.S.R.

fruit. The loss of overseas markets by the Australian exporters is a loss, too, for the sugar industry and, indeed, for Australia.

Economy in Distribution of Refined Sugar

The wholesale merchants have to maintain selling staffs for their large general business with retailers. Selling refined sugar through approved wholesalers, who number only 106 for the whole of Australia, avoids the expense of a large selling and distribution staff for sugar, which would be needed if dealings were direct with thousands of retailers.

Economy in distribution is greatly assisted also by the big proportion which is delivered direct from the refineries to the retail shop or food manufacturer. While practically all *orders* from retailers go through the wholesale houses, just over 50 per cent of *deliveries* is nevertheless made direct from the refineries to the retail shops and factories. A further 30 per cent is delivered from the refineries direct to wharves and to rail trucks for country areas. The proportion of deliveries direct from factory to user or retailer is probably higher than can be found with any other major foodstuff. It has great advantages. It saves multiple handling costs and gives speedy service, often several deliveries a week. It provides the freshest possible sugar and reduces the losses by leaks, contamination, and vermin. Stocks carried by grocers and factories, and therefore the expense to them of storage, finance and handling, are kept down.

This valuable economy in distribution is largely made possible by the high concentration of population and food-processing industries in the Australian capital cities and by the existence of C.S.R. refineries in all capital cities except Hobart. Even in Hobart the sugar is supplied at the same price as in the other capitals.

The refineries are important as the commercial reservoir of sugar ready for consumption within quick delivery range of the customers. They also provide strategic or safeguarding reserves of sugar, which all over the world are found essential where large populations of consumers are a long way from the cane fields and raw sugar mills.

Advertising costs represent a major factor in the selling of most products. In the case of sugar, after exhaustive consideration, the company decided to keep advertising costs to a very low figure. This tends to keep down the ultimate cost to the consumer and conserves the slender margins of all who participate at any stage in the production and distribution of sugar. With such a well-known foodstuff, and with such high existing consumption levels, the utmost possible cheapness

is a better salesman than heavy advertising. Such a policy may not be correct for other goods where circumstances are different—as, for example, the company's own building materials, which are extensively advertised.

Modern trends are towards handling refined sugar in bulk, either liquid or granulated according to the needs of manufacturers. These developments demand specialized delivery vehicles and special installations at the customer's factory as well as at the refinery. Liquid sugar is delivered in road tankers in the Sydney area and will be made available in Melbourne if there is sufficient demand. The demand for bulk granulated is slow to develop in Australia but it, too, will come. The company's Australian refineries are fortunately situated for the exploitation of these modern methods of reducing costs and giving service to customers.