total, the imports of such commodities as dates and dried figs are large in relation to domestic production.

Western Europe, particularly the United Kingdom, in the period prior to the war, was the main export market for many of our fruits and fruit products. Certain varieties and sizes of apples and winter pears and a portion of the dried and canned fruit packs were produced especially for the European markets.

Fresh apples and pears were exported principally to the United Kingdom; that trade, disrupted during the war, has shown little recovery since. Canned fruits, such as fruits for salad, peaches, pears, and apricots, were exported in considerable volume, especially to the United Kingdom, before the war, but this outlet has disappeared almost entirely. Since the war there has been a slight increase in exports to non-European countries but the volume is relatively small. Large amounts of raisins and dried prunes, together with smaller amounts of dried apricots, peaches, pears, and apples were exported before the war, principally to Europe. In the years since the war exports of raisins and dried prunes have been maintained near prewar levels but only because of Government export subsidies. Exports of other dried fruits have declined sharply.

CITRUS FRUITS and products were exported in sizable volume, especially to Canada before the war, and this trade has continued to grow in the years since the war. The United Kingdom took a considerable volume of our exports of citrus fruit and products before the war. This market has disappeared almost entirely, but there has been some increase in exports to other European countries, such as Belgium and the Netherlands, and to non-European countries.

Imports of tree nuts before the war amounted to almost as large a volume as was produced in this country, but now, because of increased domestic production, they represent a smaller percentage, although the volume imported is about the same. Cashews and Brazil nuts are the two most important imports. We export few tree nuts.

Foreign trade in vegetables is much less important than for fruits. Exports of canned vegetables represent only a small part of production. Exports of fresh vegetables have increased sharply. Almost all of this volume goes to Canada, principally during the winter and spring months. Canada, in turn, ships us both certified seed and table-stock potatoes, rutabagas, and some summer vegetables. In winter we import tomatoes, green peppers, and cucumbers from Mexico and Cuba. Onions, garlic, and cabbage are imported from overseas in years of limited domestic production and relatively high prices. (*Reginald Royston, Arthur E. Browne.*)

Sugar

Each person in the United States consumes an average of about 95 pounds of cane and beet sugar each year. The major use of sugar is to sweeten foods such as ice cream, baked goods, beverages, and candy. A small amount of sugar is consumed directly as such.

The total annual consumption of refined sugar in the United States amounts to about 7.6 million tons. The sources are the sugar beet regions of the Midwest and West, the sugarcane areas of Louisiana, Florida, Puerto Rico, and Hawaii, and the foreign sugarcane areas, principally Cuba and the Philippines. Continental and offshore domestic areas supply about 53 percent of total consumption; the rest is imported.

A fairly complex marketing structure carries sugar in its final form to the consumer from the farms where sugarcane and sugar beets are grown.

Cane sugar, which forms the bulk of domestic consumption, undergoes two refining processes before distribution to end users. The first refining process is done by factories in production areas where raw sugar is made from sugarcane. In a few instances, the second refining operation is done at the same plant, but most raw sugar is further processed by large refineries in major port cities in the United States. Thus sugarcane is sold by farmers to raw-sugar mills, which manufacture raw sugar from the cane and sell their output to refineries. Refiners perform the final processing necessary and act as primary distributors of sugar to industrial users, who use sugar in their operations, and to wholesale and retail buyers, who sell sugar to institutional and household consumers.

The development of the separate phases of processing and marketing came about for several reasons. The manufacture of raw sugar from cane, which is seasonally produced, extremely bulky in relation to value, and highly perishable, by mills located in production areas permits the second refining operation to be performed on a volume year-around basis by a relatively few large-scale refineries located in consuming areas. The complete manufacturing process performed at one factory would require great capital outlay, highly skilled labor, and adequate fuels. In the infancy of the sugar industry, those requirements were lacking in some of the production areas. Some marketing advantages accrue also to the location of refiners, who are primary distributors, in consuming areas.

Processing of beet sugar, because of the nature of the extraction methods, is an integrated operation at the factory located in the beet-growing region. Those processors are faced with the problem of seasonal use of costly facilities, but they have the advantage of location in areas where most of the beet sugar is consumed.

Another factor contributing to the complexity of the marketing structure is the way sugar is used. More and more manufactured sugar-containing products are bought; consequently there is a decline in direct sugar purchases by consumers for use in baking, canning, and other home uses. The industrial use of sugar has increased since 1935 from about 28 percent of total sugar marketed to slightly more than 51 percent in 1953. Conversely, sugar purchases for household, restaurant, and institutional usage have shrunk from about 72 percent of total marketings to about 49 percent.

Increased industrial use has been particularly notable in the beverage, baking, ice cream, canning, bottling, and frozen-food industries. Considerable quantities of sugar, most of which has already undergone two refining processes, consequently enter other manufacturing processes. The shift to industrial usage has come about because of the willingness of consumers to pay for additional marketing services embodied in finished products.

The greatest problem faced by domestic producers and processors over the years has been the achievement of relatively stable prices high enough to maintain a healthy industry.

The most important external factor contributing to that problem has been world market conditions. Sugar is one of the commodities on which many governments have placed tariffs, internal taxes, certain controls of supply, consumer subsidies, and other trade restrictions. Some countries have set up the restrictions for revenue purposes. Others use them to protect high-cost domestic industries. Uncertainty as to supplies in wartime motivates to a large extent the maintenance of sugar industries by many countries through various control measures. Sugar production is an industry that has a high capital investment and heavy fixed costs. Output cannot be adjusted readily to changes in de-

Entries and Marketings of Sugar in Continental United States by Area of Origin, in Thousands of Tons

Year	Mainland beets	Mainland cane	Hawaii	Puerto Rico	Virgin Islands	Cuba	Philippine Islands	Other countries	Total
Average 1935–39	1,469	451	963	908	5	1,992	970	53	6,811
1944	1,155	515	802	743	3	3,618	.....	106	6,941
1945	1,043	417	740	903	4	2,803	.....	87	5,996
1946	1,379	445	633	867	5	2,282	.....	46	5,657
1947	1,574	383	842	969	3	3,943	.....	45	7,758
1948	1,656	455	714	1,013	4	2,927	252	62	7,084
1949	1,487	558	769	1,091	4	3,103	525	51	7,588
1950	1,749	518	1,145	1,053	11	3,264	473	61	8,274
1951	1,730	460	941	959	6	2,947	706	13	7,762
1952	1,560	552	972	983	6	2,980	860	51	7,964

mand and price. These also are factors which occasion the establishment of controls.

International trade barriers have two major effects on marketing sugar. The amount of sugar exported to countries or areas in which it enjoys no preference amounts to only about 10 percent of the world's total production and consumption of sugar. This limited amount constitutes the world free sugar market, to which Cuba is the chief supplier. It more nearly represents a residual supply, which completes the requirements of deficit-supply countries not filled by producers within the protective systems of such countries. This characteristic leads to instability in the world sugar market and makes prices in that market highly susceptible to the full inflationary and deflationary effects of changes in world production and consumption. Even small changes have significant effects because of the narrowness of the free world market.

HIGH TARIFFS, internal taxes, and other barriers have resulted in high prices to consumers in many countries. In many instances they bear no relationship to prices received by exporters of sugar. High retail prices have tended to restrict consumption. Although per capita consumption in the United States is relatively high while prices to consumers are relatively low, the reverse situation prevails in many countries.

Some protection has been given the United States sugar industry against the instability of the world market.

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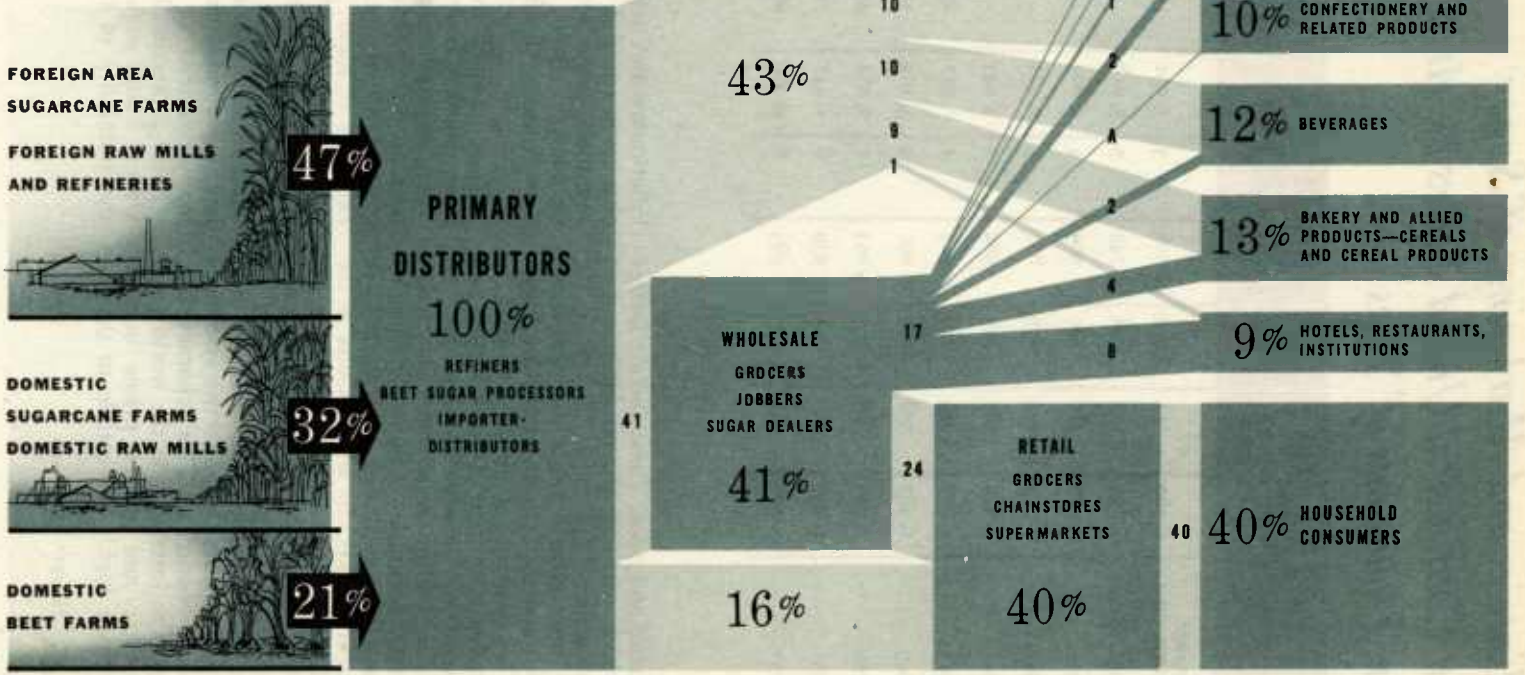
Channels of Sugar Distribution : United States

ALL FIGURES EXPRESSED AS PERCENT OF TOTAL VOLUME
"A" REPRESENTS LESS THAN 0.5 PERCENT



For many years a tariff system applied to sugar imports. Its net result was to encourage domestic production, while at times Cuba, the principal supplier, was obliged to reduce her export prices to disastrously low levels. Recurrent market crises led to the adoption of the Jones-Costigan Sugar Act in 1934. The Sugar Act of 1948, as amended, still maintains the general features of the first sugar act.

The Sugar Act is designed to maintain a healthy and competitive domestic sugar industry of limited size and to improve our import trade. As stated in the act, the objective is to achieve prices that will not be excessive to consumers and will fairly maintain and protect the domestic industry.

Provisions are included in the act to insure that a fair share of the consumer's dollar goes to growers and to workers in the beet and cane fields. To achieve the objectives, sugar requirements of consumers for the following year are determined by the Secretary of Agriculture each December; quota provisions for foreign and domestic areas to fill the requirements are administered; and conditional payments are made to domestic growers. The act contains an amendment to the Internal Revenue Code providing for an excise tax of one-half cent a pound, raw value, on the manufacture or importation of sugar. Tax collections have exceeded payments to growers by 15 to 20 million dollars a year.

It would be just about impossible, short of rigid controls, to isolate the United States sugar market from the world market, but the Sugar Act has reduced the impact of world market conditions on domestic prices. Since its inception in 1934, United States sugar prices have been much more stable, which has been beneficial to the domestic industry, and have shown a much less proportionate increase than have the prices of most other food products which has benefited consumers.

WHILE SUGAR LEGISLATION provides a buffer against world market conditions, it is not a substitute for efficient marketing practices nor is it a cure-all for problems affecting price which are prevalent in all phases of the domestic marketing structure.

Cane and beets have to be marketed and processed shortly after harvest. Farmers must sell their crop at harvesttime with only moderate regard for price. To pay the growers, raw mills market the bulk of their raw-sugar production during and shortly after the processing season. Heavy volume of selling during this period in the past often has depressed prices more than if more orderly marketing methods were followed.

Farmers and mills therefore adopted a variety of settlement methods. Average prices for periods of 2 weeks to 12 months, depending on area and individual contractual arrangements, are used often in settlements between cane growers and processors. The common settlement practice for sugar beets is on the basis of net proceeds from sugar sales. As to raw cane sugar, many mills have attempted to hedge average settlements by corresponding arrangements to sell raw sugar. For example, sales of raw sugar often are made on various average price bases. This in effect removes such sellers from a bargaining position and reduces the volume of sugar as well as the number of sellers acting as a register of raw sugar values. There are indications that the raw-sugar market has become quite narrow, and at times small isolated transactions in raw sugar have a significant effect on the raw-sugar price level. Thus, these attempts to reduce market risks have given rise to other problems.

Problems affecting price also abound in the marketing of refined sugar. One is price resistance in the area of industrial usage. Retail prices of some products, among them soft drinks and candy, so-called "nickel" items, vary little. Other problems relate to long-standing sales practices, such as guar-

antees to buyers against price declines and bookings in advance of price increases. Such protection against both price declines and increases concentrates market risk on sellers of refined sugar.

RESEARCH financed with funds made available under the Research and Marketing Act of 1946 is delving into sugar-marketing problems to ascertain their fundamental causes and what practices can be put into effect to eliminate them. Considerable research also is being directed toward the development of more profitable market outlets for molasses and bagasse, the principal sugar byproducts. The sugar industry is exploring the possibilities of reducing marketing costs by widespread adoption of liquid and dry sugar and bulk handling methods. The United States Government in its negotiations with other countries on the provisions of an International Sugar Agreement is striving to reduce trade barriers on sugar so that world consumption can be increased and the world "free" market can become larger and more stable. The combined results should make for more sound and efficient sugar marketing. (*Marshall E. Miller.*)

Tobacco

The American farmer markets an average of more than 400 hours of labor in the tobacco he sells from an acre of land. It takes about a minute to examine and bid on that amount of tobacco at auction.

Some 850,000 farm families in 1953 —roughly 1 out of every 7—in the continental United States and Puerto Rico marketed 2.1 billion pounds of tobacco, grown on 1.7 million acres. More than 90 percent of the tobacco was bought by about 20 major firms and their affiliates.

Americans paid around 5.2 billion dollars at retail for tobacco products in 1953. More than 1.6 billion dollars went for Federal tobacco taxes. Estimated State and municipal taxes amounted to more than 500 million dollars. Payments for transportation, processing and storage of leaf, manufacturing, distribution, imported leaf, and materials other than tobacco amounted to about 2.3 billion dollars. This figure includes profits of those engaged in the marketing process after purchase of leaf tobacco. United States farmers received approximately 800 million dollars from domestic manufacturers for the 1953 crop. In addition, they received around 300 million dollars for tobacco sold for foreign use.

About 25 percent of the United States crop is exported to foreign countries. The remainder is used by United States manufacturers. Foreign tobaccos imported in 1953 for blending with domestic tobaccos totaled about 7 percent of our consumption.

The manufacture of tobacco products of uniform quality depends on careful selection and blending of many different kinds and qualities of tobacco grown in different areas of this country and, for the large bulk of our products, in foreign countries.

Tobacco grown in this country and Puerto Rico is divided under Government standards into 6 major classes covering 26 types and a miscellaneous class covering minor types. Some types are divided into more than 100 grades and qualities. The different classes and types of domestic tobaccos can be grouped into those used primarily for cigarette and pipe and "roll-your-own" mixtures (flue-cured, Burley, and Maryland types); chewing tobacco and snuff (fire-cured and dark air-cured types); and cigars (filler, binder, and wrapper types).