REPORT OF THE ROYAL COMMISSION ON PRICE SPREADS OF FOOD PRODUCTS

Volume II

SEPTEMBER 1959

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TO HIS EXCELLENCY

THE GOVERNOR GENERAL IN COUNCIL

MAY IT PLEASE YOUR EXCELLENCY,

We, the Commissioners, appointed as a Royal Commission in accordance with the terms of Order in Council P. C. 1957-1632, to examine and to make recommendations upon certain matters relating to the price spreads of food products of farm and fisheries origin in Canada:

BEG TO SUBMIT TO YOUR EXCELLENCY THE FOLLOWING REPORT.

TABLE OF CONTENTS

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Volume II

AGRICULTURE

PART I-T	HE GENERAL PROBLEM AND ITS SETTING	Page
1.	Representations by Primary Producers and Consumers	1
	Some Comments on the Use and Interpretation of Index Numbers	3
	Revision of Price Indexes for Purposes of the Commission	5
2	The Effects of Price Changes on the Position of the Consumer	6
- .	Factors Affecting Retail Prices for Food Products	11
2	The Effects of Drice Changes on the Desition of the Drimany Draducer	12
5.	Factors Affecting Farm Prices for Agricultural Products	18
	Changes in Poloting Prices in Other Countries	20
4.		20
PART II	THE FUNCTIONS AND STRUCTURE OF THE FOOD MARKETING SYSTEM	
Chapter	r 1. Introduction	23
1.	The Marketing of Wheat	23
	The Marketing of Poultry	25
2.	Functions and Structures. Their Delation to the Droblem of Drive Spreads	27
э.	Markets and the Delations Detween Them	27
	Marketing Functions	28
	Market Structure	29
	Difficulties Encountered in Measuring Intermediate Prices and Spreads	31
Chapter 1.	r 2. Food Retailing Changes in Food Retailing Developments to 1951	33 33 33
	Developments since 1951	35
2	Causes of Changes in Food Petailing	30
4.	Adaptation to Changing Demand	40
· ' ·	Skill in Techniques of Influencing Demand	45
	Efficiencies of Chain Organization	57
	Availability of Capital	60
3.	The Independent Food Store	65
Character	- 2 - Find Whatersting Descenting Assembling	67
Chapte	r 3. Food wholesaling, Processing, Assembling	27
1.	Wholesaling	07
2.	Processing	69
	The Situation in 1951	69
	Developments since 1951	/0
	Developments in the Major Fields of Food Processing	73
3.	Assembling	77
	Co-operatives	78
	Marketing Boards	79
4.	Government Price Supports	81

ż

PART III—GROSS MARGINS AND RETURNS TO LABOUR AND CAPITAL IN FOOD PROCESSING AND DISTRIBUTION

PAGE

Chapter 1.	Introduction	83
1. Th	e Relation of the Analysis of "Gross Margins" to the Study of Price Spreads	83
2. "O	ross Margins": An Accounting Measure	83
3. Th	e Components of Gross Margins from Financial Records	84
Pa	yments to Firms in Other Sectors of the Economy	84
Ea	rnings of Employees	85
Ot	her Operating Expenses	21:85
N	et Operating Profit	۲۵ ۵۶
N	on-Trading Income and Expenses	85
No	et Profit Before Income Tax	85
Co	proprie Income Taxes	85
	et Pront Alter Taxes	86
4. 11	he Sources of Information of Oross Margins and Components	07
Chapter 2	. Gross Margins and Components, 1948 to 1957	87
1. G	ross Margins: 1948 to 1957	87
R	etailers	87
• • • • •	holesalers.	10.11
Pr	OCCESSOTS	ς οο ο
i Su	1mmary	γ <u>γ</u> ο
2. C	omponents of Gross Margins: 1948 to 1957	50
Chapter 3	Salaries and Wages, Taxes, and Returns on Investment	93
1. Sa	laries and Wages	93
R	etailing	93
· w	Tholesaling	94
່ 🦉 🎦	rocessing.	95
· 2. T	axes	99
3. N	et Profit After Taxes as a Return on Investment	' 100
N	leasures of Investment	100
R	ates of Return on Investment	101
4. C	hanges in Returns to Resources in Food Marketing and Agriculture	106
PART IV—F	OOD EXPENDITURES, FARM RECEIPTS AND THE "MARKETING ILL"	
Chapter 1	. Consumer Income and Food Expenditures	110
1. P	ersonal Disposable Income	110
2. F	Distribution of Consumers' Income and Proportion Spent on Food	110
3. R	etail Food Expenditure for Canadian Farm Products	<u></u> 11
Chanter 3	Farm Receipts	12
Chapter 2	. The Marketine Bill	12
Chapter .	Some Components of the Marketing Bill	12 12
	I ransportation	13
	Cold Storage	13
	Packaging	. 13
Chapter 4	4. Government Services and Food Marketing	. 13

and the first of the second state of Contents

PART V-	COMMODITY PRICE SPREADS	Vertical spears and they PA	GE
1.	Introduction		141
2.	A Working Definition of a Price Spread		142
3.	Problems in Calculating a Price Spread		142
4. 5.	The Meaning and Significance of Commodity Price Spread Sources of Data	Information	148 151
6.	Summary of Findings of the Farm Commodity Studies	*********	154
7.	Beef		160
	Pork Dairy Products		166 170
1.1.1	Poultry and Eggs	n anger van de lier de lier. Berningen de lier de li	181 188
	Potatoes		194
	Peas		198 201
	Canned Corn		205 207
	Strawberries		212
	Sugar Beets	••••••	219
	Maple Products		222

FISHERIES

183. Jero

and the first second

1.1

PART VI—FISHERIES		• • • •
Chapter 1. The Nature of the Problem in the Fisheries	1 - 1 2 2 4 5 - 4 5 - 2 4 6 5 F	22
1. Dominance of the Export Market	Рым — 1844г розси 	
2. Factors Other Than Price Affecting the Welfare of Fisher	men	22
3. Resource Management Programs and Other Government	Measures	
4. Regional Specializations in Production	*****	2
5. The Difficulty of Measuring Fishermen's Incomes	t 2 an a t 4 a t	2
6. Incomes, Investment and Output		
7. Trends in Fishermen's Prices and the Volume of Landing	S	
8. Investment and Rates of Return in Fish Processing	*****	
9. The Marketing Bill for Fish Consumed in Canada		
Chapter 2 Regional Situations and Problems	a ha ha sa sa sa ta	
1 British Columbia Fisheries	ray yang sakar	
Principal Species and Products		
Restricted Supply	*****	
High Production Costs	······································	2
Marketing Structure	,	2
Canned Sockeye Salmon	*****	2
Pacific Halibut		2
2. The Atlantic Coast Fisheries		2
Principal Species and Products		2
Conditions of Production		2
Marketing Structure		2
Lobsters		
Cod Fillets		2
Haddock Fillets		: <u>2</u>

Chapter 2—Concluded		ita d	PAG
3 The Fresh-Water Fisheries		 	. 26
Principal Species and Products		 	26
Conditions of Production		 	. 26
Marketing Structure		 	. 26
Whitefish Fillets and Dressed Whitefish	-	 	26

List of Tables

Table 1.	Index Numbers of Retail Prices of Foods of Domestic Origin and Farm Prices of Canadian Food Products for Domestic Consumption, 1949 to 1958
Table 2.	Personal Disposable Money and Real Income per Capita, 1949 to 1958
Table 3.	Net Farm Operating Income and Real Income per Farm, Canada, 1949 to 1958
Table 4.	Changes in Real Net Farm Operating Income per Farm, by Regions, 1949 to 1958
Table 5.	Relation between New Capital Assets of Corporations, and Changes in Disposable Incomes and Prices, 1949 to 1957
Table 6.	Total Assets of Corporations in Food Processing, Wholesaling and Retailing, 1949 to 1957
Table 7.	Sources of Finance for Retail Food Corporations, 1949 to 1957
Table 8.	Selling Value of Factory Shipments, by Groups in the Food Processing Industry, 1957
Table 9.	"Gross Margins", Food Retailing and Wholesaling
Table 10.	"Gross Margins", Food Processing
Table 11.	Components as Proportions of Gross Margins, Food Retailing and Wholesaling 1949 and 1957
Table 12.	Components as Proportions of "Gross Margins", Food Processing, 1949 and 1957
Table 13.	Average Standard Hours and Rates of Pay per Week in Food Retailing, October, 1957
Table 14.	Changes in Hourly Earnings, Hours of Work, and Weekly Wages in Food Processing in Relation to all Manufacturing, 1949 to 1957
Table 15.	Rates of Tax on Taxable Income of Corporations, Canada, 1949 to 1957
Table 16.	Rates of Return on Investment after Taxes
Table 17.	Increases in Shareholders' Investment for Groups of Corporations, 1949 to 1957
Table 18.	The Relation between Income and Food Expenditure per Person, 1949 to 1958
Table 19.	Estimates of Retail Cost of 1949 per Capita Food Basket
Table 20.	Changes in the Consumption of Food per Capita by Food Groups: Total in Pounds at Retail 1948-50 and 1955-57
Table 21.	Per Capita Consumption of Certain Types of Processed Foods in Canada, Average 1948-50 and 1955-57
Table 22.	Personal Expenditure on Food and Retail Expenditure on Farm Foods of Domestic Origin as Related to Total Retail Expenditure on all Farm Food Products, 1949 to 1958
Table 23.	Farm Cash Receipts from Sales of Food Products to the Domestic Market as Related to Total Farm Cash Receipts, 1949 to 1958
Table 24.	Relative Changes in the Volume of Various Groups of Farm Food Products Produced in Canada for Domestic Consumption, 1949 to 1958
Table 25.	Estimates of the Farm-Retail Marketing Bill, Canada, 1949 to 1958

tradient's house to be able and the Tables of Contents

		PAGE
Table 26.	Relative Changes in Aggregate Retail Value, Farm Value, Marketing Bill and Farm Value as a Proportion of Retail Value, Canada, 1949 to 1958	124
Table 27.	Index Numbers of Volume of Food and Services at Retail, Raw Food Materials at Farm and Marketing Services between Farm and Retail, 1949 to 1958	125
Table 28.	Yearly Changes in Aggregate Farm Value, Marketing Bill, Retail Value and Consumer Incomes, 1949 to 1958	126
Table 29(a)	Changes in Various Cost Components of the Farm-Retail Marketing Bill, 1949 to 1957	129
Table 29(b)	Relative Changes in Various Cost Components of the Farm-Retail Marketing Bill, 1949 to 1957	129
Table 30.	Per Cent Distribution of Total Food Transportation Costs for Farm Products Produced and Consumed in Canada, 1949 to 1957	130
Table 31.	Relative Changes in Unit Transportation Costs, 1949 to 1957	130
Table 32.	Changes in Average Rail Hauls per Ton for Selected Farm Food Products: Three-Year Averages, 1949-51 and 1955-57	131
Table 33.	Changes in the Distribution of Advertising Expenditures among Institutional Groups of the Food Industry, 1949 to 1957	133
Table 34.	Changes in the Per Cent Distribution of Cold Storage Costs among Various Groups of Food Products, 1949 to 1957	134
Table 35.	Summary of Farm-Retail Spreads for 20 Commodities, Canada, 1949 to 1957	154
Table 36.	Indexes of Farm-Retail Spreads for 20 Commodities, Canada, 1949 to 1957	155
Table 37.	Summary of Farm Share of Retail Price for 20 Commodities, Canada, 1949 to 1957	156
Table 38.	Indexes of Farm Share of Retail Price for 20 Commodities, Canada, 1949 to 1957	157
Table 39.	Summary of Farm-Retail Spreads on Beef, Canada, 1949 to 1958	163
Table 40.	Summary of Farm (Stockyard)-Retail Spreads on Pork, Canada, 1949 to 1958	169
Table 41.	Total Milk Production and Utilization as a Per Cent of Production, Canada, 1949 to 1958	171
Table 42.	Summary of Calculations of Farm-Retail Spread on Fluid Milk, Canada, 1949 to 1958	174
Table 43.	Summary of Calculations of Farm-Wholesale-Retail Spreads on Evaporated Whole Milk, Canada, 1949 to 1958	176
Table 44.	Summary of Calculations of Farm-Retail Spread on Plain Process Cheese, Canada, 1949 to 1958	177
Table 45.	Summary of Calculations of Farm-Wholesale-Retail Spreads on Creamery Butter, Canada, 1949 to 1958	179
Table 46.	Summary of Farm-Retail Spreads, Dairy Products Group, Canada, 1949 to 1958	179
Table 47.	Summary of Calculations of Farm-Retail Spread on Chicken Broilers (Evis- cerated), Canada, 1953 to 1958	183
Table 48.	Summary of Calculations of Farm-Wholesale-Retail Spreads on Eggs "A" Large, Canada, 1949 to 1958	180
Table 49.	Summary of Farm-Lakehead-Mill-Wholesale-Retail Spreads on Wheat-Into- Flour, Canada, 1949 to 1958	192
Table 50.	Summary of Farm-Flour Mill-Wholesale-Retail Spreads on Wheat-Into-Bread, Canada, 1949 to 1958	192
Table 51.	Summary of Farm-Wholesale-Retail Spreads on Potatoes Canada, Crop Years 1949/50 to 1957/58	19:
Table 52.	Summary of Farm-Processor-Retail Spreads on Canned Tomatoes, Canada,	201

Table 53.	Summary of Farm-Processor-Retail Spreads on Canned Peas, Canada, 1949 to 1957
Table 54.	Summary of Farm-Retail Spreads on Frozen Peas, Canada, 1952 to 1957
Table 55.	Summary of Farm-Processor-Retail Spreads on Canned Corn, Canada, 1949 to 1957
Table 56.	Summary of Farm-Retail Spreads on Fresh Apples, Canada, Crop Years 1949/50 to 1957/58
Table 57.	Summary of Farm-Processor-Retail Spreads on Canned Strawberries, Canada, 1949 to 1957
Table 58.	Summary of Farm-Retail Spread on Frozen Strawberries, Canada, 1952 to 1957
Table 59.	Summary of Farm-Processor-Retail Spreads on Canned Peaches, Canada, 1949 to 1957
Table 60.	Summary of Farm-Refinery-Retail Spreads on Sugar Beets into Sugar, Prairie Region, Crop Years, 1949/50 to 1957/58
Table 61.	Summary of Farm-Wholesale Spreads on Maple Syrup, Quebec and Ontario, 1950 to 1957
Table 62.	Value to Canadian Fishermen of the Total Catch of the Principal Species of Fish and of the Part of the Catch Retained in Canada, by Areas, 1957
Table 63.	Index Numbers of Retail Prices of Fisheries Products and of Prices Received by Fishermen, Canada
Table 64.	Retail Value, Fisherman's Value and Marketing Bill for Fish Food Products Landed and Consumed in Canada, 1949 to 1957
Table 65.	Summary of Fisherman-Retail Spread on Canned Sockeye Salmon, 1949/50 to 1958/59
Table 66.	Marketing Margins for British Columbia Canned Sockeye Salmon, Alternate Pack-Years, 1950/51 to 1958/59
Table 67.	Summary of Fisherman-Retail Spread, Frozen Halibut Steaks, 1950 to 1958
Table 68.	Summary of Fisherman-Retail Spread, Canned Lobster, Selected Years, 1949 to 1958
Table 69.	Summary of Fisherman-Retail Spread, Fresh and Frozen Cod Fillets, 1952 to 1958
Table 70.	Summary of Fisherman-Retail Spread, Fresh Unwrapped Haddock Fillets, 1950

PAGE

List of Charts

Chart	1.	The Problem	. 4
Chart	2.	Retail Price Index for Food of a Class or Kind Produced in Canada and Farm Price Index Based on Domestic Market Disappearance	7
Chart	3.	Price Indexes of Selected Groups of Farm Products and Related Food Groups in the Consumer Price Index, 1949 to 1957	9
Chart	4.	The Consumer Price Index, Total 1949 to 1958, and Components, 1951 to 1958	10
Chart	5.	The "Cost-Price Squeeze"	13
Chart	6.	Net Farm Operating Income, Canada, 1949 to 1958	15
Chart	7.	Trend in Output per Member of the Farm Labour Force, Canada, 1941 to 1958	20
Chart	8.	Farm Prices and Retail Food Prices in Other Countries, 1950 to 1957	21
Chart	9.	Growth of Food Chain Organizations, 1951 to 1958	36

PAGE

Chart 10.	Markups for Selected Food Products Expressed as Percentages of Selling Prices, Food Chains, Week of August 11 to 16, 1958
Chart 11.	Characteristics of Employment in Food Processing, 1956
Chart 12.	Rates of Return on Investment, Before and After Taxes
Chart 13.	Actual Per Capita Expenditure on Various Classes of Consumer Goods: 1958 as a Per Cent of 1949
Chart 14.	The Relationship between Changes in Incomes and Changes in the Proportion of Income Spent on Food, 1949 to 1958
Chart 15.	Food Expenditure as a Proportion of Total Expenditure by Income Groups
Chart 16.	Relative Changes in the Volume of Selected Groups of Farm Food Products Produced and Consumed in Canada, 1949 to 1958
Chart 17.	Pattern of Farm-Retail Values for Beef, Canada, 1949 to 1958
Chart 18,	Pattern of Farm-Retail Values for Pork, Canada, 1949 to 1958
Chart 19.	Pattern of Farm-Retail Values for Fluid Milk, Canada, 1949 to 1958
Chart 20.	Pattern of Farm-Wholesale-Retail Values for Evaporated Whole Milk, Canada, 1949 to 1958
Chart 21.	Pattern of Farm-Retail Values for Plain Process Cheese, Canada, 1949 to 1958
Chart 22.	Pattern of Farm-Wholesale-Retail Values for Butter, Canada, 1949 to 1958
Chart 23.	Pattern of Farm-Retail Values for Dairy Products Group, Canada, 1949 to 1958.
Chart 24.	Pattern of Farm-Retail Values for Chicken Broilers, Canada, 1953 to 1958
Chart 25.	Pattern of Farm-Wholesale-Retail Values for Eggs, Grade "A" Large, Canada, 1949 to 1958
Chart 26.	Pattern of Farm-Lakehead-Mill-Wholesale-Retail Values for Wheat-Into-Flour, Canada, 1949 to 1958
Chart 27.	Pattern of Farm-Flour Mill-Wholesale-Retail Values for Wheat-Into-Bread, Canada, 1949 to 1958
Chart 28.	Pattern of Farm-Wholesale-Retail Values for Potatoes, Canada, Crop Years 1949/50 to 1957/58
Chart 29.	Pattern of Farm-Processor-Retail Values for Canned Tomatoes, Canada, 1949 to 1957
Chart 30.	Pattern of Farm-Processor-Retail Values for Canned Peas, Canada, 1949 to 1957
Chart 31.	Pattern of Farm-Processor-Retail Values for Canned Corn, Canada, 1949 to 1957
Chart 32.	Pattern of Farm-Retail Prices for Apples, Canada, Crop Years 1949/50 to 1957/58
Chart 33.	Pattern of Farm-Processor-Retail Values for Canned Strawberries, Canada, 1949 to 1957
Chart 34.	Pattern of Farm-Processor-Retail Values for Canned Peaches, Canada, 1949 to 1957
Chart 35.	Pattern of Farm-Refinery-Retail Values for Sugar Beets into Sugar, Prairie Region, Crop Years 1949/50 to 1957/58
Chart 36.	Index Numbers of Retail Prices of Fisheries Products and Prices Received by Fishermen in Canada, 1949 to 1957
Chart 37.	Index Numbers of the Volume and Value of Landings, Value of Boats and Gear, and Number of Fishermen, by Years, Canada, 1946 to 1957
Chart 38.	Value of Investment and Value of Landings: Regional Annual Averages per Fisherman, 1946 to 1958
Chart 39.	Index Numbers of Prices Received by Fishermen and of the Volume of Fish and Shellfish Landed, Canada, 1946 to 1957
Chart 40.	Index Numbers of Price Received by Fishermen and of the Volume of Fish and Shellfish Landed, by Regions, 1946 to 1958
Chart 41.	Raw Material Cost and Average Monthly Wholesale and Retail Prices at Vancouver of Canned Sockeye Salmon per Case of 96 Half-Pound Tins, 1949 to 1958

AGRICULTURE

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PART I

THE GENERAL PROBLEM AND ITS SETTING

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1. Representations by Primary Producers and Consumers

During the public hearings, representatives of farm organizations repeatedly referred to the index of prices received by farmers (the Index of Farm Prices of Agricultural Products) prepared and published by the Dominion Bureau of Statistics.¹ This index is well publicized in the farm papers, and farmers, or at least their representatives, follow its changes with close attention. Similarly during the hearings, references were made on behalf of consumers by the Canadian Association of Consumers, the National Council of Women of Canada, labour groups and farm groups² to rising prices as reflected in the food component of the Consumer Price Index computed by the Dominion Bureau of Statistics. Newspapers and other media regularly report on this index and its components. Many consumers are familiar with it, and watch with interest the changes which occur.

As the hearings progressed, it seemed to the Commission that the general problem as presented could be illustrated by a chart showing the movements of the food component of the Consumer Price Index and the Index of Farm Prices of Agricultural Products. The chart, reproduced in this report as Chart 1, was prepared and copies were distributed to food processors and distributors at the time the firms were invited to make submissions to the Commission. A large reproduction of the chart was displayed during the public hearings in the central provinces.

Both indexes, as presented in Chart 1, are based on the year 1949, the official Index of Farm Prices of Agricultural Products being recalculated to put it on the 1949 base. This year was one in which prices and the relation between prices changed relatively slightly. It was selected by the Dominion Bureau of Statistics as the base year for many indexes of prices during the postwar period.

Chart 1 shows that in 1950 and 1951 food prices paid by consumers and prices received by farmers both moved up rapidly and in about the same proportion. In the second half of 1951, farm prices turned down sharply, to be followed somewhat later by a fall of lesser proportions in retail food prices. Both indexes continued to decline to 1953. After 1953, the index of retail food prices remained stable until 1956 when it began to rise; the decline in the index of farm prices continued to 1957. Farm prices turned upward in the latter part of 1957.

¹ For example, see the briefs presented by the Canadian Federation of Agriculture (*Proceedings*, p. 4716), the Interprovincial Farm Union Council (p. 3920), the Saskatchewan Farmers Union (p. 1393), the Alberta Wheat Pool (p. 606) and the Ontario Federation of Agriculture (p. 2497).

² For example, see the briefs presented by the Canadian Association of Consumers (*Proceedings*, p. 4336), the Ontario Federation of Labour (p. 2712) and the Canadian Federation of Agriculture (p. 4703).

CHART 1

"THE PROBLEM"⁴

1949=100





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Some Comments on the Use and Interpretation of Index Numbers

At this point, two comments on the interpretation of Chart 1 should be made. In the first place, the difference between the indexes at any time does not measure the spread between farm and retail food prices, although the tendency for the indexes to diverge since 1951 is an indication of a widening of the spread after that year. Index numbers measure changes in prices; they cannot reflect the actual difference between prices. The fact that the two indexes are at the same point in 1949 does not mean that there was no spread in that year. There certainly was. We can, however, see from the chart that retail prices have increased more rapidly than farm prices. Consequently the spread has increased since 1949. In the second place, the selection of 1949 as the base year does not necessarily mean that the relation between farm and retail food prices or the spread in this year was "fair and reasonable". No such judgment is made either by the statisticians who selected 1949 as a postwar base, or by the Commission in using Chart 1. The concept of a relationship between farm and retail food prices which is "fair and reasonable" is dealt with elsewhere in our report, because the terms of reference require the Commission to comment on whether price spreads are "excessive". Chart 1 does not enable us to come to any conclusion on this point. The importance of these comments on the interpretation of Chart 1 can be seen by glancing at Chart 1A (on the same page as Chart 1) which represents the same price information expressed as indexes using the year 1957 as equal to 100.

In view of references made to price indexes in evidence received by the Commission, it seems necessary for us to make one or two other comments on the use and interpretation of index numbers.

We refer first to the quantity weights used in the calculation of price indexes. The index of prices received by farmers measures changes in the total market value of a fixed "carload" of farm products, the amount of each product being the same as the quantity sold off farms in the base period. These amounts represent the quantity weights. The base period for the Index of Farm Prices of Agricultural Products (Chart 1) is the average of the five years, 1935-39. The output, and quantity sold off farms, of particular farm products varies considerably from year to year as a result of weather and other factors. The average of five years, rather than the quantities in any one year, is used in this index in order to eliminate the effects of year-to-year variations around a more normal volume of production and sales.

The quantity weights which are arrived at for the five years, 1935-39, are applied to all subsequent years for which the price index is calculated. This is the commonly used procedure in the calculation of indexes designed to measure changes in prices alone. However, it may lead to some misinterpretation of the meaning of changes in the index, particularly in relation to farm incomes. A change in the Index of Farm Prices of Agricultural Products does not tell in what way gross farm income has changed. For example, over any period farmers may have been going out of production of a product, and therefore at the end of the period the price of this product has little effect on the actual income received by farmers. The statistician from time to time adjusts the quantity weights to a more recent base. But there is a more substantial difficulty in attempting to draw inferences about farm incomes from an index of prices. The index of prices takes no account of the

1 See Vol. I, Chapter 3.

intricate relations between price and quantity sold, the two elements determining total farm revenues. The index may reflect a decline of 20% in prices, but the quantities produced and sold may have increased by 30%. In this event, although there has been a decline in prices received, gross farm income has increased.

The index of retail food prices measures the changes in the total value of a fixed "basket" of items expressed in physical units, the quantities of the particular commodities being arrived at from studies of family food expenditures made in 1947-48. The use of fixed quantity weights leads to similar problems of interpretation to those we have noted in relation to the index of farm prices. The retail food price index does not take account of changes which have occurred in the proportions in which consumers buy particular commodities. But there is another problem in the calculation and use of indexes of prices paid by consumers. As we will have occasion to emphasize in our analysis of the spread, what the consumer pays for when she purchases food, or any particular food product, is the raw material as it leaves the farm, plus a lot of services which become associated with the farm ingredient as it progresses along the marketing system. Some of these services are related to changes in the physical form in which the final product appears, but many of them are intangible. To put it another way, the consumer when she purchases a unit of a commodity pays for a package of satisfaction derived both from the services performed by the farmer in producing the original farm product and from the services of those engaged in marketing. The price paid is expressed in terms of a physical unit which may be similar to or different from a unit of the original material, and covers all services whether or not these have tangible expression in the form of the final product.

The appreciation of this view of the elements which are covered by the food expenditures of consumers, as will be clear from our later analysis of price spreads, has wider implications than we are urging at this point. But it has relevance to the use and interpretation of indexes of retail prices in two distinct ways.

First, the total "package" which the consumer pays for includes effects of services which are evident in the commodity. Statisticians who are engaged in preparing price indexes can observe changes of this kind and can make allowances for them. For example, tea in bags seems to represent a "package" which is preferred to the "package" represented by tea bought loose. As consumer buying habits change the statistician can shift from pricing loose tea to pricing tea bags: the index does not rise as a result of the shift to higher priced tea bags. This is the correct adjustment if the index is concerned with changes in the prices of the same "commodity"—tea in this case. If we think of tea as the only food, or as representing all food, the index does not show an increase in food prices, but the consumer is evidently getting more satisfaction from her food dollar. The practical problem of the statistician is rendered more difficult than our illustration suggests because many changes are more difficult to observe and make allowance for than the change to tea bags and, in a period of rapid changes, it may be impossible to keep up with them.

The total "package" which the consumer pays for also includes satisfaction derived from services which have no evident effect on the physical commodity. These the statistician cannot see, and therefore he is unable to make allowances for them. For example, it seems evident that consumers prefer the complex of con-

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ditions associated with the supermarkets to those associated with the corner grocery store. It may be impossible to measure and compare the elements in the particular combination of conditions in each case, but the preference of the consumer is evident in the transfer of her patronage from the corner grocery to the food supermarket. The cost of providing the conditions must enter into the prices charged for the commodities sold, including those commodities which enter into the calculation of the food retail price index. In this case the commodity is not the same over time—the tea has other things associated with it. If then the consumer pays a higher price this does not mean that she is getting less satisfaction from her food dollar.

The problems we have referred to are not unfamiliar to the statistician.¹ He strives for an index which is the most appropriate for any particular purpose; his problem is rendered more difficult if the index has to be used for a variety of purposes.

Revision of Price Indexes for Purposes of the Commission

We have thought it proper to illustrate the general problem with which the Commission is concerned in terms of the two price indexes in Chart 1. The problem of the consumer (rising food prices) and the problem of the primary producer (falling farm prices) were presented to us by reference to these two indexes. However, both indexes required some modification to adapt them to the particular purposes of the Commission.

The Commission concluded that it was concerned with the spread between the prices of commodities *produced on Canadian farms and consumed in Canada*. The basket of commodities used to determine the food component of the Consumer Price Index includes imported items such as tea, spices, and citrus fruits. The carload of products used in determining the Index of Farm Prices of Agricultural Products is based upon quantities sold off farms in Canada and in some cases, for example, wheat, a large part of the output is not consumed in Canada. It also includes a number of non-food products such as tobacco and wool.

The Commission made adjustments in both indexes so as to make them more appropriate to its purposes. The food component of the Consumer Price Index was adjusted to give weight only to the quantities of foods produced on Canadian farms and consumed in Canada. The Index of Farm Prices of Agricultural Products was recalculated using quantities for 1949, and only the amounts of food products actually used within Canada in that year. The adjusted indexes are shown in

¹ We have indicated earlier that the total "package" which the consumer pays for includes effects of services which are evident in the commodity as well as services which are available to the buyer but which are not associated with the individual commodity. Thus, the increase in the calculated food price index during the past 10 years would tend to overstate the increase in prices as such because it is impossible to take account of all increases in services. We do not wish to suggest, however, that all changes represent increases in services. Indeed, during the war years the changes that took place probably represented on balance a decrease in services, with the price index as a result understating the increase in prices because of a reduction in the quality and variety of items and services associated with them. This qualification on the interpretation of price increases is often overlooked. The Commission has noted several current references to this problem: "Quality Changes and Index Numbers" in the *Proceedings of the Business and Economic Statistics Section, American Statistical Association*, December 27-30, 1958, and the bi-monthly *Business in Brief* of the Chase Manhattan Bank, No. 25, March-April, 1959. It was also touched on in the submission of the Retail Merchants' Association of Canada, *Proceedings*, p. 4409.

Table 1 and Chart 2. Although the tendency for the two indexes to diverge in the early '50's is evident in both charts, some differences between Charts 1 and 2 are apparent. The divergence occurs at a later point of time in Chart 2, and is not as great as in Chart 1. a super series and more the menture to the operate self of metaro

Both these differences are due mainly to the lesser weighting of wheat (and other grains) in the Index of Prices Paid to Farmers for Food Products for Domestic Consumption (Chart 2). Wheat prices (and prices of other grains) fell earlier and further than prices of other farm products. Prices of imported foods. particularly coffee, rose sharply in 1954, and in subsequent years the index of prices of imported foods remained consistently above the index of retail prices of foods of a class or kind grown in Canada. However, the exclusion of imported foods from the Index of Retail Prices (Domestic Foods) in Chart 2 had only a delette en en terretere en la construcción de la co slight effect. العجيمة فرأتكم التوجر المتراج

Table 1-Index Numbers of Retail Prices of Foods of Domestic Origin and Farm Prices of Canadian Food Products for Domestic Consumption, 1949 to 1958

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			e de la composition d La composition de la c	n ta waxaa adda Gaalay yadaa a	Retail ^a Farm ^b Prices : Prices
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1949	• • • • • • • •				101.4
1950	•••••				116.9 118.4
1952				. 28 Jairt & Louis 1993.	~116.4
1953					n 112.0 provider at 101.4 st
1954					110.4 97.4
1955				•••••	110.3 96.0
1956					
1957				•••••	
1958				•••••••••••	120.2

(1949 = 100)

• D.B.S. unpublished data. • Compiled by the Commission using fixed quantity weights based on domestic consumption of farm food products of Canadian origin in 1949.

The tendency for the indexes in Chart 2 to diverge is an indication that the general spread between farm and retail food prices has increased between 1949 and 1958 and particularly since the early '50's. Price indexes of various groups of farm products are shown in Chart 3, along with the related retail food price indexes. The index for each commodity group has a particular character. The extent of the divergence of farm and retail prices is different for different product groups. Nevertheless, it is evident that a widening of the spread occurred in most cases.

2. The Effects of Price Changes on the Position of the Consumer

As expressed to the Commission, the concern of consumers was directed to rising food prices and to various matters bearing on the efficiency of food marketing. References to the efficiency of food marketing are found in other parts of the report. At this point we refer to the effect of prices, and food prices in particular, on the position of the consumer.

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Constant Weights 1949=100 દેક પુરાદે તરુ



The general movement of retail prices, as measured by the Consumer Price Index, is represented in Chart 4. The chart also breaks down the index into several component groups, including the food group. The general index suggests that retail prices rose rapidly from 1949 to 1951; remained relatively stable from 1952 to 1954, and in 1955 began to move upward again.

From Chart 4 it is clear that the relation between prices (including additional services) changed significantly during the period. Since 1951, the index of retail prices of food has remained consistently below the indexes of prices of other groups of consumer goods, with the exception of clothing. We are inclined to attribute this, in substantial measure, to the conditions of supply of the farm ingredients about which we have more to say later in this part¹.

Over the period 1949 to 1958 personal disposable money income per capita² increased by \$445, or at an average annual rate of increase of about 5%. The rate of increase was not uniform over the 10 years, however. Incomes rose rapidly in the early years, particularly in 1950 and 1951. The rate of increase was much slower in the next three years. In 1955 and again in 1956 there was a sharp increase in incomes, followed by a decline in the rate of income expansion in 1957. The rate increased again in 1958. (Table 2.)

Prices paid at retail also changed. In the early part of the period prices, as measured by the Consumer Price Index, increased rapidly, particularly in 1951. Between 1952 and 1954 both incomes and prices were relatively stable. Rising incomes in 1955 and 1956 were associated with a renewed upward movement of prices, although the rate of advance in prices was less than in 1950 and 1951. Adjusting money incomes for changes in the Consumer Price Index, it would appear that, over the period, personal disposable real income per capita³ increased at an average rate of about 2% per annum. The increase was greatest in the later portion of the period.

We have already noted that the food component of the Consumer Price Index rose less rapidly than the general index over the whole period, and since 1951 has remained consistently below the general index. Food prices rose between 1949 and 1951, with a very rapid increase in the latter year. The index declined through each of the years 1952 to 1954. From 1955, food prices began to rise, the increase becoming significant in 1957 and 1958. In six of the years the rate of increase in the food component was less than the rate of increase in the total Consumer Price Index. It follows from the analysis of food prices that real incomes in terms of food have increased more rapidly than in terms of commodities generally.

3 Whenever we refer to real income in this part of the report, we will be measuring the income in 1957 dollars, having adjusted the money income data by the relevant price index.

¹ See pp. 18-20.

² Personal Disposable Income equals personal income less direct taxes (including income taxes and succession duties). Personal income measures all income received by Canadian residents and includes: (1) factor income of persons; (2) transfer payments received by persons; (3) investment income and investment income accumulated on behalf of persons by life insurance companies, private pension funds, etc. (It excludes incomes of the factors of production which are not paid out to persons, such as undistributed corporation profits and profit of government enterprises.) (4) For farm operators and other unincorporated businesses the whole net income is included since it is not statistically feasible to separate withdrawal for personal use from amounts retained in the business. Therefore, personal income includes the change in the book value of the inventories of unincorporated businesses—including farm inventories.

The General Problem and Its Setting



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Table 2-Personal Disposable Money and Real Income per Capita, 1949 to 1958

	Personal Disposable Money Income Per Capita		Consumer Price Index		Personal Disposable Real Income Per Capita		Food Component Consumer Price Index	
Period	\$	Change %	1949 = 100	Change %	1957 \$	Change %	1949 - 100	Change %
1949 1950 1951	881 925 1,056	5.0 14.2	100.0 102.9 113.7	2.9 10.5	1,100 1,119 1,158	1.7	100.0 102.6 117.0	2.6 14.0
Total Change 1949-51. Annual Change 1949-51	175 88	19.9 9.5	Ξ	13.7 6.7	58 29	5.3 2.6	-	17.0 8.2
1952 1953 1954	1,112 1,139 1,111	5.3 2.4 -2.5	116.5 115.5 116.2	2.5 -0.9 0.6	1,186 1,216 1,171	2.4 2.5 -3.7	116.8 112.6 112.2	-0.2 -3.6 -0.4
Total Change 1951-54. Annual Change 1951-54	55 18	5.2 1.7	-	2.2 0.7	13 4	1.1 0.3		-4.1 -1.3
1955 1956 1957 1958	1,168 1,253 1,272 1,326	5.1 7.3 1.5 4.2	116.4 118.1 121.9 125.1	0.2 1.5 3.2 2.6	1,229 1,297 1,272 1,292	5.0 5.5 -1.9 1.6	112.1 113.4 118.6 122.1	$-0.1 \\ 1.2 \\ 4.6 \\ 3.0$
Total Change 1954-58 Annual Change 1954-58	215 54	19.4 4.5	. =	7.7 1.9	121 30	10.3 2.5	-	8.8 2.2
Total Change 1949-58. Annual Change 1949-58	445 49	.50.5 4.6	·	25.1 2.5	192 21	17.5 1.8	=	22.1 2.2

The General Problem and Its Setting

The statement that the real incomes of Canadian consumers have increased since 1949, and particularly since 1951, is a generalization. A few illustrations are sufficient to show a wide range in the rates at which real incomes of groups of consumers have changed since 1949. In 1956, the Consumer Price Index (base 1949) stood at 118.1; the food component at 113.4. Income tax statistics¹ show that for certain occupational groups, the average incomes for those with taxable returns increased, 1949 to 1956, as follows: "Total Professionals", 42.0%; "Employees of Businesses", 34.6%; "Pension Income Predominates", 10.7%. It would appear that, over the period, the group receiving mainly pension income experienced some decline in real incomes.

Factors Affecting Retail Prices for Food Products

This part of our inquiry is concerned with the difference between farm prices and prices paid by consumers for food products of farm origin. In a narrow sense we are concerned with what happens between the farm and the consumer. In another, and broader sense, we have been asked to inquire into the factors which determine farm prices and the factors which determine retail prices, and thus to explain the differences between them. But this necessarily takes us beyond what happens between the point at which the farm material leaves the farm and the point at which the consumer acquires the food product. The price received by the farmer is affected by what happens on the farm and by what determines the supply of farm materials. The price paid by the consumer is affected by what happens outside of the food market and by what determines the demand for food products.

We will have a good deal to say about consumer demand which can be most usefully said at other points in our report. One or two comments of a general nature will be sufficient here.

We have already mentioned one of the major factors affecting consumer demand for food, viz., consumer incomes, and we have traced the changes in consumer incomes over the period 1949 to 1958. The incomes of consumers are not generated within the food industries only. The demand for food products is therefore affected, through incomes, by factors operating in other parts of the economy.

No one would doubt that there is a relation between incomes and prices. The relation is, however, a complex one, and the effect of income changes may be obscured by the occurrence of other changes which affect prices in another direction. We suggest, nevertheless, that the data in Table 2 support the view that the movement of prices as measured by the Consumer Price Index and the movement of food prices as measured by the food component of the Index were both related in part to changes in incomes. The rise in money incomes in 1950 and 1951 was a factor causing the sharp rise in prices, including food prices, in 1951. The slower rate of advance in incomes in 1952 and 1953, and the decline in incomes in 1954, were associated with the relatively stable general price level and the decline in food prices during these years. It seems clear that the increase in money incomes in 1955 and 1956 contributed to the upward movement of prices evident in 1957.

^{1 &}quot;Individual Income Tax Data", Taxation Statistics, Department of National Revenue, published annually.

An increase in disposable income per capita, which may be brought about in a number of ways, means that consumers are in a position to increase their expenditures on food and usually they are willing to do so. The portion of the increase in incomes which will be directed to food purchases depends on a number of factors. From many studies of consumer expenditures on food certain regularities are apparent. First, the portion of the increase in incomes which is directed to food expenditures declines with increasing incomes. Second, expenditures on some food products increase more rapidly than expenditures on others. There is indeed some substitution, and expenditures on some foods may even decrease.¹ Third, more of the increase in expenditures will be directed to paying for services associated with food, than to paying for the farm constituent. We can put this another way. When incomes rise, there is a greater increase in demand for other things than for food; there is a greater increase in the demand for some foods than for others; there is a greater increase in demand for food services than for food materials. Nevertheless, with an increase in incomes, the initial effect is to increase prices of food materials. A decrease in incomes has the opposite effect.

Consumer demand for food is determined by other factors as well as incomes, e.g., changes in age distribution, nature of employment, and subjective changes in consumers' attitudes. However, the observed regularities to which we have referred indicate that, in practice, these other factors operate within fairly narrowly prescribed limits related to income and, in the case of particular products, to relative prices. It is conceivable that we could all become vegetarians, but in practice this sort of revolutionary change in consumption habits does not happen. Changes do occur, as the surge of new products between 1949 and 1957, receiving the approval of consumers, makes clearly evident. But again, substitution may occur, and the desire and willingness to pay for these new products does not mean a comparable change in the demand for food as a whole. These considerations are important in interpreting the effects of advertising and promotion of particular products, and we shall have occasion to return to them in later sections of the report.

3. The Effects of Price Changes on the Position of the Primary Producer

Farm representatives were sensitive to any implication that rising retail prices were caused by upward pressure of farm prices. They emphasized the decline in farm prices since 1951, when other prices were tending to rise, and the consequent effect on the incomes of farmers. There was frequent reference to the "Cost-Price Squeeze".²

In a period of generally rising prices, all prices are influenced by factors which tend to make them move together. We have noted that increases in retail prices went along with increasing incomes. Although the growth was irregular, we can say that aggregate demand increased from 1949 to 1958. All price changes have, therefore, occurred during a period of rising demand. However, even under these conditions some prices have been falling. We have seen from Chart 1 that from

¹ During the past 10 years, per capita expenditures on potatoes have decreased. See Volume II, Part V.

² For example, see the briefs presented by the Interprovincial Farm Union Council (*Proceedings*, p. 3920), the Canadian Federation of Agriculture (p. 4703) and the Saskatchewan Farmers Union (p. 1388).

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1951 farm prices declined over seven years until they turned upward in the latter part of 1957. Similar price declines were recorded for some other raw materials, for example, raw cotton, wood pulp, lead and zinc.

While the prices of farm products were falling, the prices of many things used by farmers, as producers, were increasing. This condition is referred to as the "Cost-Price Squeeze". The phenomenon is illustrated in Chart 5.

We have observed in our discussion of the interpretation of price indexes that a decline in the index of prices received by farmers does not necessarily mean that gross farm incomes have been declining. An increase in gross incomes of producers, whether measured as aggregate income, income per farm, or income per capita, may occur even if prices received are declining. Similarly the Index of Prices Paid by Farmers for Goods and Services Used does not tell us whether the costs of production, measured as aggregate costs, costs per farm, or costs per unit of a product, have increased or decreased. To determine this, it would be necessary to know the quantities used in the aggregate or per farm, and in the case of costs per unit, the quantities of the product produced. What the Index of Prices Paid by Farmers for Goods and Services Used does tell us is that production expenditures would have been less than they actually were if the prices of things used had not advanced as they did.

Fortunately, the Dominion Bureau of Statistics provides a more direct means of observing what has been happening to farm incomes. We are aware that the attempt to estimate gross farm income and operating expenses and depreciation



-Base shifted from 1935-39 = 100 by recalculation.

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presents the statistician with difficult problems. We do not underrate these difficulties. However, we are satisfied that the estimates prepared by the Dominion Bureau of Statistics come much closer to a correct view of the changes in incomes from farming operations than could be derived from price indexes alone.

We have reported on the effects of price changes on the position of the consumer. The income figures we have used in the earlier section include the incomes of farm people, but it is not possible to separate out farm incomes from the estimates of disposable money incomes. However, we do wish to look at the effects of price changes on farm people *as consumers*. For this we need a measure of farm incomes which is comparable to the measure of disposable incomes for consumers generally.

The Dominion Bureau of Statistics estimates various components of farm incomes, and from these several different measures of farm incomes can be built up. The measure which seems to us most useful in studying the changes in the income position of farm people as consumers may be referred to as "net farm operating income". This consists of the sum of (a) sales off farms, (b) direct consumption on farms, and (c) supplementary payments, less cash operating expenses, not including depreciation. The estimates of "sales off farms" measure the cash income received in any year from farming operations. We recognize that, if farmers are carrying inventories of products, part of the cash income received in the year may have come from sales out of carry-over. In considering farm people as consumers. we feel that these cash receipts can be appropriately included as income in the year the cash is received. Direct consumption on the farm, including produce consumed and use of the dwelling house, must be added to cash incomes. Supplementary income from government sources, received during the year, is current income. We add these three values to obtain the gross farm operating income. We then deduct the estimate of cash operating expenses. This does not include cash paid out for capital items, e.g., new machinery. In arriving at net farm operating income, changes in inventories enter into the value for a year if cash income has been obtained during the year by sales out of carry-over. However, additions to stocks are not shown as income in the year in which they have been accumulated. In our view, the measure of net farm operating income comes as close as can be to the measure of disposable income, except on one point. It is known that people living on farms obtain some income from employment off the farm. Unfortunately, no useful estimate of the amount of income from this source is available. Its inclusion would raise the level of estimated incomes by an amount unknown and we have no clear evidence on how it would affect the changes in farm incomes from year to year, or over the whole period.¹

To convert from net farm operating income to "real income" two price indexes have been used. The portion of net farm operating income represented by direct consumption of food has been deflated using the Index of Farm Prices of Agricultural Products; in deflating the portion of net farm operating income derived from other sources, the Index of Prices of Goods and Services Used in Farm Family Living has been used.

¹ The Dominion Bureau of Statistics is currently analyzing the information obtained in an extensive farm income and expenditure survey taken in 1958.

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We realize that other measures of farm incomes could have been used, and that the choice of measure might have some effect on the conclusions to be drawn from the data. However, we looked at other measures than net farm operating income and have found that they do not significantly affect the major conclusion to be drawn from our analysis, viz., that in a period when the real incomes of Canadian consumers in general were rising, farm real incomes were not. We include Chart 6 which presents a picture of the changes in aggregate net farm operating income and Table 3 which provides data on income per farm in actual and in real terms.

We have referred to the difficulty of drawing inferences about farm incomes from price indexes alone. The importance of this point can be illustrated from Table 3, in which we have included the index of farm prices, an index of volume of production, and an index of Prices Paid by Farmers for Goods and Services. During the period 1949 to 1958, the years in which the greatest changes in incomes occurred were 1951 and 1954. It is evident that the large increase in income per farm in 1951 came about as a result of much higher prices and much larger output than in 1950. The substantial decline in farm income in 1954 was evidently brought about mainly by a considerable decline in output between 1953 and 1954. Table 3 also shows that sometimes (e.g., 1953) price and output have changed in the same direction, and sometimes they have changed in opposite directions (e.g., 1952).



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	Index of a Farm Prices		Index of ^b Farm Costs		Index [®] of [®] Farm Output		(Actual) Net Farm ^d Operating Income		(Real) Net Farm Operat- ing Income ^d	
Period	1949= 100	Change %	1949 = 100	Change %	1949 = 100	Change %	\$ per Farm	Change %	1957 \$ per Farm	Change %
1041	43.1		56.9		89.2	-	932	- .	1,783	-
Total Change 1941-49		11.1		+75.7	: ' ,	+12.1	+1,744	+187.1	+1,414	+79.3
Annual Change 1941-49		+12.1	_	+7.3		+1.5	+218	+14.1	+177	+7.6
1949 1950	100.0 102.2	+2.2 +13 7	100.0 103.1 112.7	 +3.1 +9.3	100.0 112.7 126.5	+12.7 +12.2	2,676 2,129 3,059	-20.4 +43.7	3, 197 2, 466 3, 185	$-\frac{1}{22.9}$ +29.2
Total Change 1949-51		+16.2	_	+12.7		+26.5	+383	+14.3	-12	-0.4
Annual Change 1949–51		+7.8	- -	+6.1	_	+12.5	+191	+6.9	-6	-0.2
1952 1953 1954	107.5 98.1 92.7	-7.5 -8.7 -5.5	119.1 117.5 116.2	+5.7 -1.3 -1.1	135.9 129.1 97.9	+7.4 -5.0 -24.2	3,098 3,054 2,378	$+1.3 \\ -1.4 \\ -22.1$	3,081 3,155 2,457	-3.3 +2.4 -22.1
Total Change 1951-54		-20.2	. — :	+3.1	-	-22.6	-681	-22.3	-728	-22.9
Annual Change 1951-54		-6.3	_	+1.0		-7.0	-227	-6.9	-243	-7.1
1955 1956 1957	91.2 91.9 91.1	-1.6 +0.8 -0.9	116.8 121.3 125.3	+0.5 +3.9 +3.3	123.0 138.6 109.2	+25.6 +12.7 -21.2	2, 335 2, 659 2, 633	-1.8 +13.9 -1.0 +14.2	2,424 2,753 2,633 2,946	-1.1 + 13.0 - 4.4 + 11.1
1958 Total Change 1954-58	93.9 . —	+3.1 +1.3	125.4	+0.1		+16.4	+630	+14.2	+489	+19.
Annual Change 1954–58	. –	+0.3		+1.9	-	+3.9	+157	+6.1	+122	: +4.I
1949-58	. –	-6.1		+25.4	:;; ; .'	+14.0	+332	+12.4	-251	-7.
1949-58	. —	~ -0.7		+2.5	· -	+1.5	+37	+1.3	-23	-0.4

Table 3-Net Farm Operating Income and Real Income per Farm, Canada, 1949 to 1958

• Index of Farm Prices of Agricultural Products. (Base shifted from 1935-39=100 by recalculation.)

^b Composite Index of Prices of Commodities and Services Used by Farmers, exclusive of living costs. (Base shifted from 1935-39=100 by recalculation.)

• Index Numbers of Physical Volume of Agricultural Production. (Base shifted)rom 1935-39=100 by recalculation.)

d "Net Farm Operating Income" is the sum of cash income from the sale of farm products, income in kind and supplementary payments less cash expenses. It does not allow for depreciation.

In order to place the changes from 1949 to 1958 in the perspective of a longer term, we have included in Table 3 the change in income per farm over the period 1941 to 1949. At the outbreak of war in 1939, the farm industry was beginning to emerge from the disastrous depression and successive droughts of the '30's. During the war and in the postwar years to 1949, farm incomes rose substantially because of both increased output and higher prices. The average annual increase over the period 1941-49 was \$218 or an average rate of increase of 14.1% per annum.

Between 1949 and 1951 incomes rose by \$383 per farm, or at an average annual rate of 6.9%, the increase being wholly in 1951. Incomes remained high,

The General Problem and Its Setting

with little change in 1952 and 1953, but the sharp fall in 1954 reduced incomes below the 1949 level. Since 1954, incomes have tended to increase, the annual rate of increase averaging 6.1%.

The income data are corrected for price changes using the two deflators we have mentioned. We call attention to the fact that, although the indexes in Chart 1 might suggest that the farmers' position was greatly improved by the price increases occurring beween 1949 and 1951, it is evident from Table 3 that real farm incomes actually did not increase during this period. The gains from rising incomes were offset by the increases in prices paid by farmers as producers and consumers. The decline in incomes from 1952 to 1954, along with continued advance in consumers' prices, resulted in a deterioration in the real incomes of farm people. Since 1954, their real incomes have tended to increase, the annual rate of increase averaging 4.6%. A considerable part of this increase occurred in 1958.

Taking the whole period from 1949 to 1958, income per farm has increased slightly but, with prices paid by farmers as consumers increasing, real incomes have declined at an average annual rate of 0.8%.¹ This can be compared with the earlier estimate of an increase in personal disposable real income per capita for consumers generally of 2%. The significant conclusion is that, in a period when real incomes generally were rising, farm real incomes were not.

In dealing with the position of consumers generally, we noticed that different groups of consumers had experienced different rates of improvement in real incomes, and that in some instances real incomes had apparently declined. Similarly, changes in prices have not had identical effects on all groups of farm people. The differences are due to a number of factors, among them the direction of change in prices of particular products. Unfortunately, it is not possible to compare farm incomes on the basis of specialization of production. We do know, however, that the type of farming, including the proportion of different products produced on farms, varies appreciably in the major geographical regions of the country. We have, therefore, made a study of the changes in net farm operating income, actual and real, by regions. For our purposes, the changes in real incomes are more significant. The relevant data on real incomes are found in Table 4.

The main point to be stressed is the much greater year-to-year variability of real incomes in the Prairie Provinces. In this region real income in 1951 was 47.4% higher than in 1950. In 1954 real income declined 35.3% from the 1953 level. Again between 1955 and 1956, real incomes in the Prairie Provinces increased 37.1%.

In the Maritime Provinces, while there were some year-to-year variations, incomes did not change greatly in any of the three periods. In Quebec incomes increased between 1949 and 1951, but declined in each of the succeeding periods. Incomes of Ontario farmers also increased during the first period and, after a sharp decline between 1951 and 1954, increased in the last period. In British Columbia incomes declined in the first two periods but increased between 1954 and 1958 as they did in most other areas.

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¹ In considering the income position of farmers as consumers we have treated the farm as a household. To look at the changes in incomes per capita we would have to take account of the change in the number of persons per farm unit. Between 1951 and 1956 the numbers increased from 4.7 to 4.8, which indicates that we have not overstated the decline in the income position of farmers as consumers by considering income on a per farm basis.

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Royal Commission on Price Spreads of Food Products

The generalization that over the period 1949 to 1958 real incomes per farm declined applies to all regions. The average rate of decline in the Prairie Provinces (1.3%) was greater than in the other regions.

Table 4-Changes in Real Net Farm Operating Income per Farm, by Regions, 1949 to 1958 (Per Cent Changes)

 Period	Canada	Maritime Provinces	Quebec	Ontario	Prairie Provinces	British Columbia
1950 1951	-22.9 +29.2	$+2.3 \\ -3.2$	+1.1 +7.8	-10.6 +21.6	-36.0 +47.4	-7.6 + 1.8
Total Change 1949-51 Annual Change 1949-51	$-0.4 \\ -0.2$	$-1.0 \\ -0.5$	+9.0 +4.4	+8.7 +4.3	$-5.6 \\ -2.7$	$-5.9 \\ -2.9$
1952 1953 1954	-3.3 + 2.4 - 22.1	0.6 -13.7 +13.0	-6.6 -1.0 -0.7	-13.7 +0.5 -9.8	+1.5 +5.6 -35.3	-9.9 +8.4 -3.5
Total Change 1951-54 Annual Change 1951-54	-22.9 -7.1	-3.1 -1.0	$-8.2 \\ -2.7$	$-21.8 \\ -6.8$	-30.6 -9.3	-5.8 -1.9
1955 1956 1957 1958	-1.3 +13.6 -4.4 +11.9	-4.1 +16.1 -7.9 +1.5	+6.6 -12.0 +0.2 +2.7	+9.1 -4.9 +1.0 +9.0	-9.8 +37.1 -8.3 +17.7	-3.6 +7.0 +1.1 0
Total Change 1954-58 Annual Change 1954-58	+19.9 +4.6	+4.2 +1.0	$-3.4 \\ -0.8$	+14.2 +3.4	+33.5 +7.5	+4.3 +1.1
Total Change 1949-58 Annual Change 1949-58	-7.9 -0.8	-0.1 0	-3.4 -0.4	-3.0 -0.3	$-12.6 \\ -1.3$	-7.5 -0.8

• "Net Farm Operating Income" is the sum of cash income from the sale of farm products, income in kind and supplementary payments less cash expenses. It does not allow for depreciation.

Factors Affecting Farm Prices for Agricultural Products

In our analysis of incomes, it became evident that changes in farm incomes in the prairie region were significantly different from the changes in other parts of Canada, and that these differences were related to the degree of specialization in wheat production in the prairie region. Wheat output is highly variable from year to year, causing relatively violent annual fluctuations in incomes of prairie farmers. We have also noted that, following the period of generally rising prices (to 1951), prices of wheat and other grains fell more rapidly than the prices of other farm products. Clearly, wheat prices, and through them the incomes of prairie farmers, have been affected by factors other than those affecting the prices of other farm materials.

The peculiar factor in the case of wheat prices is the dependence on markets outside Canada. If Canadian wheat is to be sold at the same price to all buyers, the price which can be obtained for Canadian wheat for export is the price which will prevail. This price is only slightly affected by conditions peculiar to Canada. On the other hand, prices of products which are produced in smaller quantities relative to the domestic demand, e.g., beef, tend to be more affected by domestic conditions. These prices can, within limits, move independently of prices for the

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The General Problem and Its Setting

same products in other countries. However, as the price of grains enters into the costs of producing other farm products, the price of wheat and other grains becomes a factor affecting the supply and therefore the prices of those other products on the Canadian market.

It seems evident to us that the decline in the prices of raw materials including the prices of agricultural products, which began in 1951 was a phenomenon affecting all countries united together by the system of international trading.¹ The break in prices was not unrelated to the conditions in the immediately preceding period. The outbreak of the Korean War, and the possibility of extension of hostilities affected prices in two ways. Increased public expenditures connected with the buildup of military potential had the general effect of expanding incomes and advancing prices. Included in this buildup was the stockpiling of strategic materials. The cessation of hostilities, the cut-back in government expenditures, antiinflationary financial and fiscal policies, and the sharp reduction in demand for materials, all contributed to the break in prices in 1951. These factors affected the Canadian economy but were not peculiar to it. However, it is the consequences in Canada with which we are concerned.

We have already noted the substantial increase in personal disposable money incomes which occurred from 1949 to 1951 (19.9%). The associated increase in domestic demand affected the prices of all domestically produced commodities. At the same time there was a strong demand in export markets. Domestic demand and export demand both combined to strengthen prices during this period. The break in prices in 1951 was caused both by a slowing down in demand and by the pressure of supplies to which we refer later. The fact is that after 1951 the rate of increase in personal disposable incomes slowed down, and difficulties began to be experienced in export markets.² Aggregate domestic demand actually declined in 1954. Subsequently personal disposable money incomes rose rapidly. This undoubtedly strengthened domestic demand and helped to support farm prices in later years. However, the difficulties experienced in the export markets for wheat continued.

To appreciate fully the causes of the decline in agricultural prices in Canada, we must look at what was happening on Canadian farms in the years immediately prior to 1951. The developments of particular importance were the rapid rate of investment in mechanical equipment, the decline in the numbers employed in agriculture and the increase in productivity per worker.

Between 1946/and 1951, average annual sales of farm implements and machinery increased from \$82 million to \$236 million. In the three years 1949 to 1951, farmers acquired new equipment to the value of \$670 million. The incentive for this phenomenal rate of new investment was provided by rising prices and increasing shortage of labour and was made possible by increasing incomes. In effect it provided for necessary replacements which could not be made during the period of wartime shortages, replaced horses as the motive power, stocked Canadian farms with new and more efficient machinery, and enlarged the productive

¹ See section 4 of this part, "Changes in Relative Prices in Other Countries". ² During the early '50's world food production was increasing rapidly. An index of world food production per capita increased from an average of 98 for the years 1948/49 and 1949/50 to an average of 104 for the years 1952/53 and 1953/54 (average 1948/49-1952/53=100). In Western Europe, particularly, the increase was very great, from 92 to 108. (The State of Food and Agriculture, 1958, F.A.O., Table II-3, p. 12).

capacity of the industry. At the same time, the number of workers in agriculture declined each year from 1,190,000 in 1946 to 943,000 in 1951, a decrease of about 20%. The trend in output per farm worker is shown in Chart 7.

We have seen in Table 3 that, despite the fall in prices, the high level of net farm operating income reached in 1951 was maintained through 1952 and 1953. Investment in new equipment continued at a high rate. Sales of farm implements and machinery totalled almost \$600 million in the two years 1952 and 1953. The number of workers declined to 863,000, a further drop of close to 10%. The increase in output per worker which continued after 1951 is evident in Chart 7.

We have, we believe, assembled sufficient evidence to establish that the conditions of production on farms prior to 1951 built up a pressure of supplies which contributed to the break in farm prices in 1951, and continued to exert its influence in the years following.

4. Changes in Relative Prices in Other Countries

The Commission has made a study of the movements of prices in other countries during the '50's. The study discloses an almost universal tendency for the general price level to rise. No country has escaped a general increase in retail food prices, except the United Kingdom where food prices have declined slightly. The



The General Problem and Its Setting



CHART 8 ICES AND RETAIL FOOD PRICES IN OTHER COUNTRIES.

direction of change of farm prices has been different. Countries which, along with Canada, have experienced a tendency to falling farm prices include South Africa, Australia and the United States. In another large group of countries, including Norway, Denmark, Netherlands, Switzerland, Belgium and France, farm prices have tended upwards, but at a less rapid rate than retail food prices. In both these groups of countries, the relative changes in farm and retail food prices were such as to indicate an increase in the "spread". A few illustrations are shown in Chart 8. There have been a few countries, among which there is no large foodexporting country, in which the spread has apparently narrowed. These include Japan, Greece, West Germany, Austria and Finland.

This part of our study indicated that the general problem we set out to investigate is not peculiar to Canada, and that the widening of the price spread for food products has been a phenomenon experienced in most countries in the '50's.

PART II

THE FUNCTIONS AND STRUCTURE OF THE FOOD MARKETING SYSTEM

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CHAPTER 1.

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People speak of "the market" for a certain product, but in our complex economy a product is hardly ever disposed of in a single transaction. Most products pass through several hands, are bought and sold several times, and may even change in form at several stages. Before we discuss in general terms market structure and the functions performed by firms engaged in the food industry, let us consider the marketing of wheat and poultry. We have selected these two examples of marketing processes to illustrate the complexities of the marketing system before we begin a detailed discussion of food retailing, wholesaling, processing and assembling.

Our particular examples, wheat and poultry, were selected because they reflect two quite different results of the play of economic and social forces in the evolution of marketing systems. The wheat marketing system in effect in the western provinces today is the result of a long and continuous process of adjustment both to production and to market conditions, with governments playing an active role. The culmination of this activity on the part of governments was, of course, the establishment of the Canadian Wheat Board which is responsible and reports to the Department of Trade and Commerce of the Federal Government.

By way of contrast, the marketing of poultry for meat up until recent years was in the main a local process and in effect was comprised of thousands of marketing situations, ranging widely in scale, and varying in type from direct sales by farmers to consumers, to sales to assemblers who in turn sold the poultry to others in the marketing system. But in a relatively short period of time, a matter of a few years, the poultry marketing situation and system has changed almost completely. This, in our view, can be attributed chiefly to the rapid application of a whole new range of techniques of production and processing of the broiler chicken.

Whatever contrasts and differences may be thrown into relief by use of the two examples, it is not our purpose at this point in the report to convey directly or by inference any suggestion of particular virtues or faults in the various commodity marketing systems. There is more explicit comment on some of the issues raised about these marketing systems in later sections of this part and in Part V.

1. The Marketing of Wheat

Wheat used for bread flour production is grown on nearly two hundred thousand farms in the Prairie Provinces and the Peace River region of British Columbia. Although small quantities of bread-type wheats are grown elsewhere

as well, we shall look at the typical marketing pattern for the Prairie Provinces. Wheat grown on two hundred thousand farms must be collected at points where it can be forwarded or can be held awaiting shipment. Our comments in this section relate only to the marketing of wheat to be consumed as bread in Canada. Wheat, of course, flows through marketing channels destined for many other uses in Canada and elsewhere.

The farmer brings his wheat by truck to a warehouse known throughout the grain-growing region as a country elevator. Clusters of these country elevators, dominating the prairie landscape, are the first collecting points in the marketing system where the functions of *assembling* and *buying* grain are carried out. Each country elevator is operated by an agent of a company which may own a string of these warehouses scattered across the prairies.

The actual process of buying the grain from the farmer is facilitated by the existence of standard grain grades established by the Canadian Government. Here the function of product *standardization* appears.

Settlement with the deliverer of the grain at the country elevator is made on the basis of a price determined much further forward in the marketing system. Canadian grain prices are set in terms of a "Lakehead" (Fort William-Port Arthur) quotation. The price used to make settlement with the farmer, therefore, is that given for the appropriate grade at the Lakehead, less freight, elevator handling, and certain other charges and adjustments.

If there is an insufficient quantity of wheat of a particular grade to make up a carload, or if the grain-handling facilities further on in the marketing system are overloaded, then the grain will be held in the elevator, well protected against the elements and natural pests. The function of *storing*, therefore, enters at this point. Eventually the grain is loaded into box cars and these move in trainloads toward the Lakehead; this illustrates the *transportation* function.

While the operator of a country elevator is the agent of a line elevator company, the company in turn is only an agent of the Canadian Wheat Board, and the Board itself an agency of the Canadian Government. When the wheat moved out of the farmer's possession, ownership was transferred to the Canadian Wheat Board. The Canadian Wheat Board in fact advanced the first payment to the farmer, and, because the grain may be held by the Board for several months before sale, it must borrow funds from the banks in order to pay farmers immediately on delivery. The banks thus facilitate the marketing process by performing a *financing* function.

There are elements of risk in the moving and storing of wheat. There are possibilities of fire and explosion in grain elevators; there are possible losses of vessels on the Great Lakes. Against these risks the grain has been insured by an insurance firm; this firm is carrying out a facilitating function called *risk bearing*. We note here that under Canadian Wheat Board operations risk bearing in price fluctuations is now borne by the Government and by the buyers.

Although there are a number of flour mills in Western Canada, a considerable part of the wheat destined for flour milling moves down the Great Lakes and is manufactured into flour in mills in Ontario and Quebec. We will follow the events in bringing wheat to Central Canada for milling. The flour mill must purchase its supplies of wheat from the Canadian Wheat Board which performs a function of

The Functions and Structure of the Food Marketing System

selling as well as of buying. The grain from hundreds of country elevators has been assembled in store at the Lakehead terminal elevators. On the way to this assembly position, the carloads of grain are sampled and graded at Winnipeg. When the grain is being put into the terminal elevator, it is again sampled and graded.

Most of the wheat is shipped from the Lakehead terminals to the flour mills by lake boats. It may also move by train and by truck before reaching its destination at a mill in Ontario or Quebec.

Most flour mills have space for *storing* grain, and they withdraw it from storage bins in accordance with their level of milling operations. By appropriate blending of grades of wheat and the application of milling techniques—these including precisely controlled "extraction rates"—the mill produces *standardized* types and grades of flour. These types and grades are the basis on which the flour is sold and used. The flour mill may advertise its products in trade magazines and these media, by conveying information on matters such as where and from whom the flour may be purchased, and the prices and the grades available, perform a facilitating function of providing *market information*.

Following the actual milling process, the flour is packaged in barrels, cotton bags (in earlier days these had a salvage value to the consumer and at the same time were a highly successful promotional device), paper bags, or other containers in various quantities, types, and grades. Some of these packages are designed for use in bakery operations, while others will appear on retail store shelves. Flour mills normally maintain a stock of their products and, to this extent, they are again involved in performing a *storing* function.

Most flour mills sell directly to the larger bakeries but in some instances they may sell first through a broker to a food wholesaler. In any event, there are further requirements in transportation and some in storage before the flour enters into the bread-making process.

In the bakery, flour is combined with a large list of other ingredients—eggs, yeast, milk powder, water, etc. It is *processed* by intricate mixing, dough-rising and baking operations to emerge, perhaps, as a 16-ounce loaf of bread. Each loaf is *standardized* as to weight, colour, texture, and appearance. It then may be sliced and *packaged* in a colourful wrapper. Very often it carries a brand name and, more recently, the staff of life is being identified with movie and television glamour.

Bread may then be *transported* by a delivery salesman to the consumer's home or it may be *transported* to a retail store. At the store, the bread is sold and may be *transported* along with other groceries by store delivery to the consumer, the wheat in this loaf ending perhaps a two-thousand-mile journey.

2. The Marketing of Poultry

Some changes in food marketing can be attributed to the dynamic nature of agriculture itself, and particularly to the impact of technological advances in farm production. Almost every line of agricultural production—grains, fodder crops, meat animals, dairying, poultry meat, eggs, vegetables, fruits and others—has been subject to the force of advancing technology.¹ In certain lines of production and

¹ In the production and marketing of poultry meat, technological change has been particularly rapid and has had an effect on price spreads which we discuss in Part V.
at certain times, market forces—in contrast to forces more closely related to the farm production effort itself—appear to be the dominating influences. But the situation is never static for long and the balance is shifting continually.

Prior to the rise of the broiler as the most important source of chicken meat, Canadian consumers bought mainly heavy chicken (over 4½ pounds) and fowl, the latter a salvage poultry meat from the egg-producing enterprise. The heavy roasting chicken met the large family's Sunday-dinner needs, and the fowl was a source of meat supply for lower income families. Supplies of both heavy chicken and fowl tended to be somewhat erratic and seasonal, and both type and quality of product were highly variable.

The developments leading to the breakthrough in the technology of mass production, assembly and distribution of the broiler chicken represent years of research and experiment culminating in an explosive-like expansion of a whole new industry within agriculture. Starting in this case, first with the egg, came the mass hatching of chicks carried out as a large-scale factory-type operation. The farmer, now specializing only in the task of rearing these from the day-old-chick stage to a highly uniform, high quality, healthy bird of three to four pounds, accomplishes all this in a period of nine to eleven weeks. The broilers are turned out by a broiler-producing unit, three or four times a year, not in batches of tens or hundreds, but in thousands and tens of thousands of birds: a broilerhouse accommodating 50,000 birds at a time is not uncommon in the industry now. In a short span of years, the commercial marketing of broilers has increased from an almost negligible quantity in 1947 to over 125 million pounds in 1957, and in the latter year accounted for over 60% of the commercial marketing of all chicken and fowl.

The technical progress making this possible has been, in addition to the development of the mass chick hatchery, progress in poultry genetics leading to a selection of specialized types of birds for particular kinds of production (eggs or meat), progress in controlling the physical environment for brooding and housing (for example, the use of the electric heat lamp, control of temperature and moisture) and progress in control of disease (for example, use of medicinal cures and protective medicines in water and feed). Additional factors have been: the great increase in knowledge about feeds, and the application of this knowledge both in the production of feed and in its most economic use in the broiler operation; and the adoption of mechanical devices for watering and feeding the birds, which increases immensely the number of birds that can be cared for by one person. In bringing about these changes in farm production of poultry, those in the business of selling feed to farmers have been particularly aggressive. Along with others, they have entered into contracts with farmers for the large-scale production of broilers and have financed these operations to a considerable extent.

We have described briefly this introduction of technology at the farm end of the poultry industry. It has made possible the outflow from the production unit at regular intervals of tens of thousands of live birds ready for market. This mass of raw food material must find an outlet of similar proportions. The live birds cannot be held awaiting a buyer: they are fit and ready and even a 24-hour delay will result in additional costs if they have to be fed or, on the other hand, a loss in weight and quality if they are unduly delayed in the marketing process.

Hence we find in the marketing system the development of large-scale buyers of broiler chickens. These may represent processors or be directly connected with food retailers. In any event, the live broilers must move almost immediately into a factory-like operation where they go through a killing and plucking process (the latter a mechanical operation), an eviscerating and possibly cutting line, and finally through a packaging and labelling operation. This whole development represents the application of mechanization and techniques of relatively recent origin, making possible the transfer of the processing operation from the hands of the farmer, his wife and children to an off-farm separate entity under specialized management.

The web of relations within what we call the marketing system is so intricate that it is often impossible to establish any simple cause and effect relation or to put one's finger on the point at which the change was initiated. Indeed this is true of the developments in poultry marketing and in the broiler industry. Many factors have been involved in the outcome but the changes would hardly have occurred without the technical developments resulting from experimental research.

3. Functions and Structure: Their Relation to the Problem of Price Spreads

Markets and the Relations Between Them

Most food products, as they move from the farm to the consumer, pass through a series of markets in which they change hands at a price. In each market the activities of both buyers and sellers are involved.

A market is difficult to define. We can talk about the Canadian market for apples but at each stage between the primary producer and the consumer apples are bought and sold in many places in Canada. In this sense there are many different markets. These markets become related into a national market in so far as apples can be moved between local markets. At any time the wholesale price of apples may be different in particular local markets but the differences are limited by the possibility of sellers disposing of their apples to buyers in some market in which the price is higher.

Similarly, having reference to a crop year, we can speak of the market for apples but, at each stage between the producer and consumer, apples are sold daily or hourly. In this sense there are many markets within the crop year. These markets over time become related by the opportunity to hold apples from a time at which the price seems to be low to a later time when the seller expects he can get a higher price. This activity limits the possible differences in prices.

Again we can refer to a market for all apples, but many different varieties of apples are sold. There are, therefore, different markets for different apples. These markets too are related: the prices between the varieties cannot differ too greatly or buyers will shift from the high-priced to the low-priced variety.

When the farmer sells a steer, he receives a price for it; when the consumer buys beef, she also pays a price. The difference between the two prices is the total spread.¹ The price the farmer receives is arrived at in a market in which the farmer is the seller and some firm, or its representative, is the buyer. The price paid by the consumer is determined in the market in which the consumer buys

¹ This is subject to qualification to which we draw attention in the measurement of commodity price spreads in Part V.

from a firm which is the seller. If, as the material moves from the farm to the consumer, it is bought and sold several times, then several intermediate prices are established.

The firms which are engaged in the many markets for food products participate in the pricing process as buyers and later as sellers. These firms have traditionally been grouped into four categories: assemblers, processors, wholesalers and retailers. On the basis of this classification of firms, markets and prices would then be established at five levels.

In the case of beef, there may be a price paid to the farmer at the farm gate by a dealer who delivers the cattle to the packing plant. This is the farm price. The dealer receives payment from the processor at the packing plant. The basis for this payment is an assembled price. After processing, the packing plant sells beef to a wholesaler at a price which is the processed price. The wholesaler sells to a retailer at the wholesale price and the consumer buys from the retailer at the retail price. This illustrates the series of markets, prices and components of the total spread according to the conventional classification of marketing functionaries. The markets at different stages (farmer, assembler, processor, wholesale, retail) are also related. The relations are more complex than those which we have noted previously between markets in place and time and for varieties or grades of products.

It would be useful in relation to the Commission's problem if it were possible to break down the total spread (farm price to retail price) into its component spreads (assembler's, processor's, wholesale and retail). We could then determine how much of the general increase in spreads was associated with each level of the marketing system. Unfortunately, for reasons which we will make clear later, this is not possible, although in the commodity studies reported on in Part V we have attempted in some instances to make this analysis.

Marketing Functions

At each stage the difference between the price paid and the price received by a marketing firm—that is, the spread—is the price received by the firm for such functions or services as it performs. The traditional classification of marketing firms into assemblers, processors, wholesalers and retailers is related to certain typical functions. The assembler brings together the relatively small quantities produced by many farmers and delivers them to a plant which requires a large and continuous supply of material for efficient operation. The processor converts the material into a form more acceptable to the consumer. The wholesaler assembles the products of many processors and makes them available in the quantities and at the time required by the retailer. The retailer provides a convenient place from which many consumers can obtain the quantities they wish at the time they wish them. These are the main features of the distinction between assemblers, processors, wholesalers and retailers and, although changes are constantly occurring in the marketing system, the classification remains a realistic and useful one.

Associated, however, with the main activities of assemblers, processors, wholesalers and retailers, are many other more particular functions or services. They include transportation, storage, sorting and grading, packaging, advertising, financing, risk bearing and bringing buyers and sellers together. These particular

functions may be performed at any or all stages in the marketing system, although in varying proportions. The total complex of functions performed by firms at each stage has some relation to the spread; it is the price received by the marketing firm for performing these functions. The point we want to emphasize, however, is that the extent of particular functions performed at each stage may change or the distribution may shift over time. It is not always easy to identify these changes and shifts, but we can illustrate by reference to one change and to one shift which have occurred in recent years. There has been a change in that promotional activities have acquired an increasing weight in the marketing system.¹ As an example of shift, the functions typically performed by wholesalers have been increasingly taken on by organizations classified as retailers.² Changes and shifts of these kinds have their effect on the total spread and on the components of the spread. Increased packaging and advertising involve additional expenditures on the part of the firms concerned, although they may also serve to reduce expenditures of other kinds per unit of the product. The assumption by retailers of functions previously performed by wholesalers has the effect of increasing the retailer's spread. To the extent that this shift results in economies, it also leads to a reduction in the total spread.

Market Structure

In each market there are buyers and sellers. The structure of the market has to do with the relations between buyers, between sellers, and between buyers and sellers. This takes us into a consideration of types of competition and competitive behaviour.

There is a difference in structure between a market in which there are many sellers and a market in which there is only one seller, or even a few sellers. The significant difference is that where there are many sellers it is not easy to obtain concerted or uniform action among the group. Where many sellers are acting independently and without reference to the actions of one another, competition among the sellers takes one form. Where there is only one seller, competitive behaviour is impossible. Where sellers are few in number, it is easy to eliminate or to modify the form of competition which prevails when there are many sellers acting independently. The many sellers of a particular farm product in a given market can provide for concerted action through voluntary use of a selling agency or, with legal support, by a compulsory marketing board. In the latter case, it is possible for the one selling agency to differentiate between the buyers in particular local markets and to sell to them at different prices. This appears to be the practice of the Tree Fruits Marketing Board in British Columbia in the sale of apples.³ In the case where there is a small number of private firms, elimination or modification of the form of competition which prevails when there are many sellers acting independently could be effected by agreement, but in Canada such agreements have been illegal and, therefore, not enforceable; or it could happen merely as a result of each of the few sellers being unwilling to act independently in some ways, for example, to reduce prices. In any case, the nature of competition among a small

¹ For a treatment of the extent of the increase in expenditures on food advertising, see Part IV.

² See the discussion of changes in food retailing in the following chapter.

³ See Chapter 3 of this part for a consideration of marketing boards."

group of sellers differs in form from the competition among many sellers acting independently. Pricing on a basis similar to that of the Tree Fruits Marketing Board appears to be the policy of sugar beet processors in the disposal of their product in Western Canada.¹ In other instances, individual sellers endeavour to distinguish the product they are selling from the product being sold by their competitors. For example, the number of firms producing and selling prepared breakfast foods is small. These firms change their product or the package in which it is presented so as to maintain its separate identity; promotional effort is directed largely to the same end. All these conditions have their effect on the determination of prices in the market.

There is, similarly, a difference in structure between a market in which there are many *buyers* and one in which there is only a single buyer or a small number of buyers. Where there are many buyers, they are likely to be acting independently of one another. Where there is only one buyer, the firm is not influenced by the possibility of having to adjust itself to the actions of other buyers. Where the number of buyers is small, the kind of competition occurring among many buyers may be absent, either as a result of agreement (which is illegal) or simply because no one buyer is willing to induce action by other buyers. Competition then takes other forms, such as special arrangements with respect to matters other than price.

There is a difference in structure between a market in which buvers and sellers are unrelated and one in which buyers and sellers or some buyers and some sellers are related, i.e., are not acting independently. Relations between buyers and sellers may be established in a number of ways. In some instances, a relationship is established through corporate organization; the price paid by a company which has a corporate link with the selling firm is not the result of a transaction conducted "at arm's length". The relation referred to here is evident between firms engaged in flour milling and in the baking industry. In other instances the link between buyer and seller may be through the directorate of companies. Thus, we find interlocking directorships between food processing firms, corporate chain stores, and other firms in or servicing the food industries. Contracts of various kinds also represent relations between buyers and sellers which affect the structure of the market and have a bearing on price determination. It has been brought to our attention that sugar beet processors in the Prairie Provinces have a form of contract with their growers which enables the grower to participate in changes in the price of sugar. The growth of vertical integration brings the producer of poultry and the buyers into a relationship which can affect the prices paid and received. Other forms of contract can be found at other stages of the marketing system. Later in our report we comment on the complex arrangements entered into between the retail chain buyers and their suppliers.²

We make these comments and offer these illustrations at this point, not with the purpose of passing judgment on the effects on prices, but merely to emphasize that the structure of the market is a complex phenomenon which has a significant influence on prices along the marketing system and, therefore, on price spreads for food products.

1 See Report Concerning the Sugar Industry in Western Canada and a Proposed Merger of Sugar Companies, Canada Department of Justice, Ottawa, 1957.

² In the following chapters of this part, we discuss advertising allowances granted by processors to chain food store organizations.

Difficulties Encountered in Measuring Intermediate Prices and Spreads

We mentioned earlier the insuperable difficulties involved in any attempt to break down the total spread (farm price to retail price) into its component spreads (assembler's, processor's, wholesale and retail). Later in this part we use data drawn from the Census of Distribution which classifies marketing firms in the traditional way, and we have chosen to use this classification in our discussion of changes in food marketing. It is necessary, therefore, to call attention to the limitations imposed by the data and to the difficulties in observing changes in functions or structure in the food marketing system.

First, the data drawn from the Census are built up from information on "establishments" (individual places of business) which are units within business firms; in discussing functions and structure we have reference to firms. Business establishments and firms do not fall into neat categories in terms of the functions of food marketing. Most firms do not specialize in the handling of food products only, as is noticeable in the case of manufacturers classified as food processors who sometimes handle several quite separate farm products. In many instances byproducts result from the processing of some or all of the farm products, and frequently the processor combines with the processing of farm products the manufacture of physically unrelated non-farm, non-food products. All these activities are carried out by the same firm: the functions or services are intricately mixed up together. The processor's spread for any one of the farm products or for all of them may be considerably influenced by his success in combining all the enterprises into one integrated operation. Some firms in the meat packing industry engage in such integrated operations.

Another difficulty we may notice is that not all farm products pass through the hands of the several functionaries as they move towards the consumer. Fresh eggs, potatoes and apples are not handled by firms normally classified as processors or are bought and sold by processors only incidentally to their main business. On the other hand, cereals and most livestock products are subject to change in form before reaching the consumer. Of course, this is also true of powdered eggs, potato chips and apple juice. Thus there is no processor's spread for fresh apples although there is one for apple juice. Further, if the farmer by-passes the market in which assemblers are buyers and sells directly to the retailer, the price he actually receives is not the farm price, but rather a price equivalent to the wholesaler's price.

As we have said, there is no clear-cut distinction between firms in terms of the functions they perform. Some firms classified as retailers are performing functions normally associated with wholesaling, for example, storing and warehousing. Some wholesale firms are involved in what are normally considered retail functions, such as providing display material to retail stores. Many processors buy some of their materials directly from farmers and to this extent engage in the functions of assembling. Consequently, the prices paid in particular transactions at any stage in the marketing system may be different because they represent payment for different services.

We have overlooked still another difficulty in measuring or interpreting the spread when we refer, for example, to the processor's spread as representing the revenue going to the processor for the services performed by him. In many cases

a large part of the revenue going to the processor is paid out by him for services provided by others. He may have little or no control over the price he pays for these services. There is, therefore, some error in referring to the difference between the processor's price and the assembler's price as revenue going to the processor for *his* services or functions. Elsewhere we refer to the transportation of food products by the railways and trucking firms. Food marketing firms pay for this service, but the railroads and trucking firms handle many products other than foods and the rates charged for transporting foods are not determined independently of the other business done by the transportation agencies.

CHAPTER 2.

FOOD RETAILING

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1. Changes in Food Retailing

Our main source of information on the structure of food retailing in Canada is the 1951 Census of Distribution. For more recent years our information has had to be drawn from a variety of sources, including briefs presented at the hearings and the replies to the questionnaires distributed by the Commission. We begin by describing the structure of food retailing in 1951, with some reference to trends leading up to this year. We then refer to more recent trends.

Developments to 1951

The 1951 Census of Distribution reported that the number of food stores (retail outlets) increased from 37 thousand in 1941 to 40 thousand in 1951. In 1951 the main categories of retail food stores were grocery stores without fresh meat, combination stores (grocery stores with fresh meat), meat markets, fruit and vegetable stores, and bakery product stores. These five categories were responsible for 99% of total retail food sales and represented 96% of all retail food outlets. Although the number of grocery stores without fresh meat increased slightly from 1941 to 1951, the main increase was in combination stores. All other categories declined in number.

Throughout our report we will have occasion to distinguish between three types of retail food stores: corporate chains, voluntary chains and unattached independent stores. The 1951 Census of Distribution defines a retail chain as an "organization operating four or more retail stores in similar or related kinds of business under the same ownership". In most cases, organizations with multiple ownership of four or more retail stores are incorporated companies. In this report, therefore, a corporate chain is one which conforms to the definition of a retail chain in the Census of Distribution. This definition excludes retail stores which are independently owned but which are associated together in voluntary chains usually sponsored by wholesalers. Each of the large voluntary chains in Canada has a national headquarters through which franchises are granted to wholesalers, who in turn service retail store—the unattached, independent store—is separately owned and is serviced by wholesalers of its choice.

We shall also have occasion to refer to "supermarkets". The supermarket is a large-scale, multiple-produce store, operated on the self-service principle. It is frequently located in or close to the residential suburbs, with parking facilities adjacent to the store. In terms of the classification of the Census of Distribution, this is a large-scale combination food store.

The corporate food chains have existed in Canada for many years. They increased their share of the retail food business quite rapidly during the '20's, but their business grew little during the '30's, with their relative position remaining about the same throughout this latter decade.

During the war years, corporate chain stores failed to maintain their share of total sales. Their per cent declined from 31% in 1939 to 24% in 1946. Following the war, however, sales of corporate chains began to increase relatively rapidly, and by 1951 represented 32% of total sales of grocery and combination stores. In this year the corporate chains operated (in addition to some other categories of stores) 337 grocery stores and 866 combination stores for a total of 1,203 retail food outlets.

Voluntary food chains had gone through a period of rapid expansion in the '20's and early '30's, but by 1951 their share of the food business had declined to a small proportion (6%) of the sales of grocery stores and 4% of the sales of combination stores. Of the total of grocery stores (22,239) in 1951, 585 were listed by the Census as being members of voluntary chains or buying associations. For combination stores the number was 615, making a total of 1,200.

Between 1941 and 1951 there was an increase in the number of combination food stores and a decline in the number of specialized food stores. The average sales of combination stores in 1951 were four times as great as the average for the remaining food stores. Consequently, the shift to combination stores between 1941 and 1951 was accompanied by an increase in the size of retail food outlets. In 1951 there were 472 combination food stores with sales of \$500,000 or over. There were also 21 grocery stores in this category of sales, making a total of 493. Of this total, more than 400 were operated by corporate chains.

It is clear, therefore, that, although in 1951 corporate chains and voluntary chains had about the same number of outlets, the volume of sales of the corporate chains was very greatly in excess of that of the voluntary chains because of the much larger stores operated.

In 1951, five corporate chains—Dominion Stores, Loblaw Groceterias, Canada Safeway, A & P Food Stores, and Steinberg's—accounted for 88% of the sales of all corporate food chains. Other corporate chains in Canada in that year included Sobeys Stores (operating mainly in Nova Scotia), Thrift Stores (Montreal), Dionne Ltd. (Montreal), Carroll's Ltd. (Ontario), Shop Easy Stores Ltd. (a subsidiary of Western Grocers, a food wholesaling firm in the Prairie Provinces), O. K. Economy Stores Ltd. (Saskatchewan), Jenkins Groceterias Ltd. (Alberta), Overwaitea Ltd. (British Columbia), and Super Valu Stores Ltd. (a subsidiary of Kelly-Douglas, a British Columbia wholesaler).

By 1951, grocery stores (other than those selling beer) obtained about 16% of their receipts from the sale of non-food products, including candy and confectionery, tobacco, household supplies, paper products, drugs and other commodities. The corresponding proportion for combination stores (other than those selling beer) was about 10%. Beer and wine alone represented 28% of the sales of grocery stores handling these items, and 13% of sales of combination stores.

To summarize the situation at 1951: the corporate chains, mainly five large organizations, were responsible for almost one-third of the total food sales. After recovering from the restrictions of the war period and apparently anticipating the postwar expansion of demand, the corporate chains were beginning to expand their operations relatively rapidly by the construction of new large outlets (supermarkets). The voluntary chains were well established, but were still servicing retail stores of relatively small size. By 1951 the corporate chains had extended the range of commodities handled, and had increased the variety of non-foods.

The smaller, unattached stores, many of which were handling a rather limited line of food products, were declining in number and in the proportion of total food sales made by them. The elimination of stores resulted from both the increase in efficient size of store and also from the competition of the chains. The decline in the small specialized store, and the relative growth of the combination store were evidence that the trend to one-stop shopping was under way.

Developments since 1951

a) Corporate Chain Stores

We turn now to refer to more recent developments. The expansion of the chain organizations has been relatively rapid during the '50's. From 1951 to 1958, the proportion of the total business of grocery and combination food stores done by corporate chain stores increased from 32% to $44\%^1$ (Chart 9). The five largest corporate chains increased their retail outlets from 622 in 1949 to 909 in 1957. Their share of the total sales of all corporate chains remained at about 88% until 1957 but has increased somewhat since then.

During these years each of the major chains expanded rapidly. While some of this expansion has been a result of the acquisition of smaller chains, most of the expansion has been the result of development of new facilities. In the following paragraphs we deal with the nature of the expansion of the major chains; in doing so we refer briefly to the main inter-corporate relationships.

Dominion Stores has expanded its own facilities, closing numerous small stores and opening supermarkets, and by 1959 was well into an expansion program in Western Canada. This firm acquired Thrift Stores (Montreal) in 1955 and Acadia Stores (Nova Scotia) in 1956 and now operates stores across Canada. A large block of the common stock of Dominion Stores is held by Argus Corporation, which has other food interests as well.

Loblaws has also expanded rapidly, with an extension of operations in Ontario and a recent expansion into Western Canada. In 1958, this firm entered into an agreement with O. K. Economy Stores (a chain with 40 stores in Saskatchewan). Loblaws also has large interests in chain food stores in the United States. This firm is controlled by George Weston Ltd. George Weston Ltd. also owns Western Bakeries, Weston Biscuit Co., McCormick's, Western Grocers and other firms associated with the marketing of food products.

The Steinberg chain, having done business in Montreal since the early '30's, has expanded at a rapid rate in the Province of Quebec, particularly in Montreal, and in recent years has extended into New Brunswick and Ontario. In 1959 this firm purchased 38 Grand Union stores in Ontario, and Ottawa Fruit Supply, a wholesaling firm now servicing Clover Farm Stores.

Two large United States based firms have also had extensive operations in Canada, conducted through their Canadian subsidiaries, Canada Safeway and A & P Food Stores. While they have expanded their business in recent years,

¹ The proportion varies across Canada, ranging from a low of 22% in the Atlantic Provinces to 59% in Ontario. The proportion of the business done by corporate chains in major urban areas is higher than that indicated by the provincial averages.

Royal Commission on Price Spreads of Food Products



from D.B.S. reports on <u>Retail Trade</u> except for voluntary chain proportions. For these, the 1951 estimate was obtained from data in the Census of Distribution and the 1958 estimate was obtained from Canadian Grocer.

the rate of expansion has been at a less rapid rate than in the case of the three previously mentioned firms. Canada Safeway operates stores in the Prairie Provinces, British Columbia, and at the Lakehead in Ontario. A & P now operates stores in Ontario, Quebec and Manitoba.

All of these retail chain store organizations now perform most of their own wholesaling, although in its recent expansion into Western Canada Loblaws' stores are being serviced by the wholesale facilities of Western Grocers. Most of these firms do relatively little of their own processing, although Canada Safeway has a fruit and vegetable cannery, bakery and other processing facilities. Steinberg's has added some processing to its operations, including its own bakery.

As has been indicated, four of the remaining group of smaller corporate chains have become linked with the larger ones during recent years. Other corporate chains which were in existence previous to 1951 continued to grow, but, as has been noted, all of these smaller chains together accounted for only 12% of the sales of all chain food stores through the period up to 1957.

b) Voluntary Chains

The increase in the proportion of the retail business handled by voluntary chains during this period was even greater than for corporate chains. Red and White stores have been operated as a voluntary group for many years. The other two main voluntary chains are Independent Grocers' Alliance, which has operated in Canada since 1951, and Clover Farm Stores, which entered the Canadian market in 1955.

From our questionnaire returns, it appears that by 1958 the numbers of wholesalers and retailers in these three voluntary chains were as follows:¹ Red and White, seven wholesalers servicing 995 stores; I.G.A., nine wholesalers servicing 656 stores; and Clover Farm, five wholesalers servicing 299 stores.

In addition, some of these same wholesalers service groups of smaller stores under a different store name. For example, the Lucky Dollar stores are operated under a franchise from the Canadian headquarters of Red and White stores and are serviced by the same wholesalers that service Red and White stores. (In 1958 there were 482 Lucky Dollar stores.)

In addition to these country-wide voluntary chains, there are numerous local groups of retail stores under a common store name, with the entire sponsorship often being handled by the individual wholesaler who services them. Examples are: Superior and Carload Food Markets in Ontario, sponsored by York Trading, and Tomboy Stores in the Prairie Provinces, sponsored by Western Grocers (George Weston Ltd.). Maritime Merchants Alliance in the Maritime Provinces links retailers with several wholesalers. Retailers themselves have also organized voluntary chains. Examples are: Les Epiciers Unis in Quebec, Solo Stores in Manitoba, and Associated Grocers in Alberta, organized by retailers.

In 1951, there were 1,200 grocery and combination food stores operating under these types of arrangement. In addition, there were 14 meat markets and 520 general stores, making a total of 1,734. (Some of the general stores were not food stores but they are included in order to allow comparison with the data available for 1958.) In 1958, it is estimated that there were 4,200 stores in voluntary food chains and that they were handling 20% of the retail food business in Canada.² (Chart 9).

c) Unattached Independent Stores

With 44% of the retail food business conducted by corporate chains and about 20% conducted by voluntary chains in 1958, about one-third of the total was done by unattached independent stores. Most of these, as well as those in voluntary chains, are operated by individual proprietors. The participation of co-operatives in the retail food business amounted only to about 2% of retail food sales, and does not seem to have changed appreciably in the last 10 years.

¹ The July 18, 1959 Canadian Grocer indicates the following numbers: Red and White (7 wholesalers and 941 stores); I.G.A. (9 and 692); Clover Farm (9 and 261).

² The source of this estimate is the July 19, 1958 issue of Canadian Grocer.

d) The Supermarket

The increasing importance of the supermarket is evidenced by the continuing shift to the combination food store and by the increasing size of store. The shift to the combination food store was taking place previous to 1951; we have noted that between 1941 and 1951 there was a decline in the number of food outlets selling a narrow range of products, and an increase in the number handling a full range of food items. These combination food stores were also larger than the others.

Between 1951 and 1957, the increase in size of store continued. The data for corporate chains indicate that the number of stores with sales of \$500 thousand per annum or over increased from 446 in 1951 to 791 in 1957. The number with sales between \$300 thousand and \$500 thousand also increased, while the number with sales of under \$300 thousand decreased from 625 to 351.

A further indication of the growth that has taken place in size of store can be obtained by considering data on the change in store area and in volume of sales per store for stores operated by the five major chains. Between 1949 and 1957, the average area per store more than doubled, increasing from 4,400 to 9,600 square feet. New stores currently being built are often as large as 20,000 square feet. The average sales per store in 1957 dollars increased from \$674,000 to \$1,193,000 during the period.

During the '50's, with the rapid development of supermarket outlets, there has been an increasing proportion of food-store sales accounted for by non-food items. Because of this, several of the chain store firms have instituted non-food departments in their organizations.

We have referred to the increasing proportion of the retail food business done by corporate chains. These firms are thought of as retail organizations. They also perform the functions of the wholesaler, however, including the operation of warehouses from which they service their retail stores. Thus, the relative growth of the corporate chains has involved a shift of functions from the wholesaler to the retailer.¹ Each of the corporate chains has expanded its wholesaling facilities as its retail business has been expanded. For example, between 1949 and 1957 Canada Safeway extended its warehouse space from three-quarters of a million square feet to one and one-quarter million square feet. At the time of the Commission hearings in Montreal, the Commissioners went through the Dominion Stores' and Steinberg's warehouses in that city. Both of these warehouses had been added during the postwar period and represented large expansions over the previously operated facilities. In addition to expanding their own facilities, the retail stores operated by corporate chains have been serviced by existing wholesale facilities as they moved into new areas. In some cases these facilities have been under the control of the corporation or the parent corporation as, for example, the servicing of Loblaws' stores in Western Canada by Western Grocers, and the servicing of Steinberg's stores in the Ottawa-Hull area by Ottawa Fruit Supply.

¹ At the same time, the voluntary chains have also grown rapidly. To the extent that wholesalers servicing retail stores within voluntary chains participate more in the operations of these retail stores than other wholesalers do for unattached independents, there is a shift in functions from the retailer to the wholesaler.

e) Summary

During the '50's corporate chains have rapidly increased their share of the total market and the size of their retail outlets. The supermarket located at a convenient site or associated with the shopping centre has become characteristic of the corporate chain. The voluntary groups have also flourished during this period and have, apparently, competed successfully with their corporate rivals. The pressure on the independent, unattached, food store has continued. Some of the larger of these have entered into voluntary chains; while the others have not shared in a greatly expanding national market, there has not been a sharp decline in the absolute volume of their business. We have indicated the rapid growth in the proportion of the retail food business done by corporate and voluntary chains.¹ This change in structure has resulted in increased concentration of buying power and has repercussions throughout the marketing of food products. Five large corporate chains and three country-wide voluntary chains now conduct over half of the retail food business. This fact becomes even more significant in view of the concentration of chain store operation in major urban areas. The growth of the chains has also resulted in shifts in the performance of functions because the corporate chain organizations have taken on functions formerly performed by the wholesaler and to some extent certain of the functions formerly performed by the processor.

2. Causes of Changes in Food Retailing

We have given some indication of the growth of the chain supermarket in recent years. Within the past 10 years the chain supermarket has become the dominant institution affecting the structure of the food marketing system in Canada. While the supermarket is not necessarily a feature of the food chain organization, and may be adopted by independent store operators, almost the entire development of supermarkets in recent years has taken place within the chain organization, both corporate and voluntary.

To what circumstances can we attribute the phenomenal growth of the corporate and voluntary chain supermarket? In a general way the expansion of this type of retail organization can be attributed to the growth and changing character of the aggregate demand for food and the services which go along with it. The corporate chains clearly anticipated this postwar development and set the pace. The reorganization of independent stores into voluntary chains, was accelerated by the necessity of meeting the strong competition of the corporate chains. Many of the independents had to enter these arrangements in order to survive; the continued growth of the voluntary chains employing the supermarket techniques is evidence of the effectiveness of both the chain organization and the techniques of the supermarket. However, the recent developments in the retail end of food marketing are not merely an illustration of effective adaptation to changes in demands. They have been facilitated by successful application

¹ Similar increases have been occurring in other countries. In the United States, it is estimated that corporate chains increased their proportion of sales from 37% to 39% between 1947 and 1958 and voluntary chains from 29% to 45% (*Progressive Grocer*, April, 1959). The development of voluntary chains has also been rapid in the food retailing field in the United Kingdom and West Germany (*The Economist*, December 27, 1958, and March 7, 1959).

by the chain stores of techniques for influencing demand, by the efficiency of operation of the chain organization, and by the availability of capital to expand chain supermarket operations.

Adaptation to Changing Demand

The supermarket food store represents an adaptation both in the methods used and in the physical environment of the store itself to changed conditions in the Canadian consumer demand for food. But the food supermarket adaptation has been only a part of a general redesigning process in the whole field of retail marketing. The changing conditions of consumer demand, and the changes they bring about in the retail marketing structure, comprise a series of interrelated developments, varied in their effects upon the different types of retail and service establishments and organizations. Those conditions having the greatest influence in retail food marketing include (a) the growth and increasing urbanization of the Canadian population, (b) the increase in availability of means of personal transportation (the automobile) making for new designs and patterns in urban living, and (c) substantial gains in real incomes per person and per family. Each of these developments and others have given rise to marked changes in the personal and family social habits and scale of living.

Some of the developments referred to are not of recent origin but represent continuation of long-term trends and tendencies. The all-compelling forces operative during wartime urgency speeded up some of the changes which, under pressure of normal economic and social forces, might have taken place much more gradually. For example, the greatly increased requirements for a wartime labour force brought large numbers of women into a wide range of occupations and thus increased incomes per family. Again, the growth of industries for war production, with many new industrial plants located on the outskirts of cities and towns, in part set the way to new patterns in urban growth and suburban living. Readjustment from wartime conditions came quickly, and in the first full year after the war, 1946, substantial increases occurred in investment in social and industrial capital. The pace of growth, expansion and change in population and in economic activity quickened and, except for two relatively short periods of hesitation, continued at the quickened rate through 1957.

a) Growth and Increasing Urbanization of the Canadian Population

Three aspects of the population change have been impelling factors in the changes in all retail merchandising, but more particularly in food retailing. These have been absolute population growth, the speeding up of the long-run transition from a farm and rural Canada to an urban Canada, and the accompanying emergence of the "metropolitan area".

From 12.1 million in 1945, the total population increased by nearly 1.9 million people to just over 14 million in 1951.¹ We know that the intake of food, as measured in quantity per person, has a high degree of year-to-year stability.

¹ Including Newfoundland, which became part of Canada in 1949. (The population of Newfoundland in 1951 was 361,000.)

Thus, this increase in population would require nearly a million and a half additional tons of food by weight at retail per year. By June 1, 1957, the population had grown to 16.6 million, a further increase of nearly 2.6 million people, with an intake of an additional 2.0 million tons of food a year. This illustrates the importance of population increase as a major contributing factor to increases in aggregate demand for food. The economic significance of this point is brought home by a further calculation. Assuming the maintenance of family food buying power, which in effect held during the period 1951 to 1957, the aggregate increase in food consumption due to population increase would require the addition of about 500 supermarkets each doing an annual food retail business volume of two million dollars a year.

Looking at the geographic distribution of supermarket development, we find that it has not proceeded evenly either regionally across Canada, or within regions, provinces or subdivisions of provinces. We turn, therefore, to look at changes occurring in distribution of population. Here we find substantial shifts. Growth in population and increases in population density have been most pronounced in the central provinces of Ontario and Quebec and in the province of British Columbia. Within these provinces the really substantial gains have been restricted to limited areas: the western and southwestern parts of Quebec; central and southwestern Ontario; and the Fraser Valley and southern Vancouver Island portions of British Columbia.

Within all regions, the metropolitan areas have grown rapidly in population. Between 1941 and 1951, the 14 metropolitan areas¹ increased in population by nearly 28%, while the total population increase² was under 19%. Metropolitan growth, with the consequent concentration of population in metropolitan areas, continued through the period 1951 to 1956 with an increase of 19% for metropolitan areas as against a total population rise of 15%. Along with increases in total population in metropolitan centres, there have been almost corresponding gains for the total population in other major urban areas. Meanwhile, the rural population in absolute numbers has remained nearly constant. Because the increase has been concentrated in urban areas, the rural population³ declined relatively from 44% of the total to 37% between 1941 and 1951, and in 1956 it comprised about one-third of the total. The farm component of rural population has shown a sharp absolute and relative rate of decline.

The relation between the growth of cities and the evolution of food retailing can be illustrated from a study of the Toronto metropolitan area. The growth of population in the metropolitan area was accompanied by a spreading out of population into the suburban areas. The expansion of services to the rapidly increasing number of consumers in these suburban areas was effected by the opening of new supermarkets by the corporate chains, many of which were located in shopping centres.

The population of Metropolitan Toronto rose from 0.9 million in 1941 to 1.1 million in 1951, to 1.4 million in 1956. Over the 15 years the increase was

1 Halifax, Saint John, Quebec, Montreal, Ottawa-Hull, Toronto, Hamilton, London, Windsor, Winnipeg, Calgary, Edmonton, Vancouver, Victoria.

3 Rural population—all persons residing in towns and villages of less than 1,000 whether incorporated or not, and persons living on farms.

² Excluding Newfoundland, Yukon and Northwest Territories.

just over 50%, but the increase between 1951 and 1956 alone represented the addition of a city of the size of Ottawa. The rate of growth of population differed considerably, however, in the three main regions of the metropolitan area—the city proper, the inner suburbs and the outer suburbs. The city proper showed a slight increase in population between 1941 and 1951, but population declined in subsequent years to about the same number as in 1941. The population of the inner suburbs rose at a rapid rate between 1941 and 1951; the rate of increase declined after 1951, however. The most spectacular change took place in the outer suburbs which saw their population rise from 57,000 in 1941 to 196,000 in 1951, to 413,000 in 1956.

The shift of population into the suburbs was accompanied by a change in the number of occupied dwellings, the number of families per dwelling and the number of persons per household. In 1956, the city proper had some 10% fewer dwellings than in 1941, and the number of persons per household declined. The trend towards one-family dwellings with fewer persons per household was also evident in the inner suburbs, particularly between 1951 and 1956 when the number of occupied dwellings increased by 19%. In the outer suburbs the enormous increase in population was accompanied by an increase in family size and in the number of persons per dwelling. The number of occupied dwellings rose from 15,500 in 1941 to 51,600 in 1951 to 107,500 in 1956. The proportion of families with no children declined between 1951 and 1956, and, at less than 30%, was considerably lower than in the inner suburbs (42%) and in the city proper (44%).

Unfortunately, in analyzing the information on location and size of store, it is not possible to distinguish between stores associated in voluntary chains and the unattached, independent stores. It is, however, possible to separate corporate chain stores from the others. Further references in this section are to corporate chains only. Within the metropolitan area, the rate of increase in chain store sales has been greater in the suburbs than in the city proper, and much greater in the outer suburbs. The data available show that the increase in sales has been the result of the opening of new outlets of large size, frequently in shopping centres.

In the city proper the total number of chain food stores at the beginning of 1951 was 97, and at the end of 1957 was 93; total sales had increased by 35%. although sales in the 75 stores which remained open during the entire period rose only 11%. In the inner suburbs the picture was tilted slightly in the opposite direction: the 34 outlets at the beginning of 1951 had become 37 at the end of the period, and the sales in the 29 stores in continuous operation were up 8% as compared with a 52% increase in total chain store sales for this area. In the outer suburbs there were 14 stores in continuous operation during the period, only one of the 15 stores open at the beginning of 1951 having closed, but this group was only a quarter of the 56 outlets at the end of 1957. The increase in sales of the existing stores was higher, 21%, than the increase for existing stores in other areas, but the increase in total sales by 1957 was six times the value in 1951. Concomitant with this increase in total sales has been the growth of sales per store. Annual sales per store in 1951 averaged \$1.1 million, and \$1.8 million in 1957. Average sales were higher for the new stores than for those in continuous operation, and for the outer suburbs were much higher than in the inner suburbs or the city proper. Thus it is evident that the typical food store in Toronto

during the period 1951 to 1957 had increased sales, and that total food sales increased particularly by the addition of large chain outlets in the outer suburbs.

Information on shopping centres supports the evidence that the typical new food store in Toronto has been the corporate chain supermarket. Out of 23 shopping centres opened in the metropolitan area from 1951 to 1957, 21 were in the outer suburbs, one in Leaside, and one in the city proper. By 1957 there were 27 food stores located in the shopping centres and all but four of them were chain store outlets. Of the four independent stores, three are known to be members of one of the voluntary chain groups. There were 56 chain food stores in the outer suburbs in 1957; of these, 20 were located in shopping centres, and their average sales of \$2.3 million a year are higher than the average of \$1.8 million for the whole group.

We have used an example of one metropolitan area to illustrate the responsive increase in supermarket outlets to the burst of new population and the mushroom growth of suburban residential areas within a present-day metropolitan area—an increase both in numbers and in the per cent captured of the rising volume of food business. Up to this point we have related supermarket development to the volume increase in food requirements resulting from population increases. This is only part of the story, however, and neglects many, perhaps equally important, associated and contributing influences. Among these, one stands in bold and shining relief: the family automobile.

b) The Automobile

The strong propensity to urban living, (which, incidentally, is not a characteristic by any means unique to Canada) in the earlier years gave rise to two directions in the expansion of cities. As a result of the building of tenements and apartments, there was a marked increase in density of population within the city proper. Even the larger cities were mainly compact, closely-knit communities held together by the limitations of available public transportation facilities.

Technically, the automobile in design and reliability of performance was well advanced before World War II, but its distribution by ownership then was limited considerably indeed. The economic and social forces which were to change public attitudes to the automobile from mainly a business or pleasure category to that of an article almost as necessary as the cookstove, were joined after the war. Through the dozen years since then, these forces have pressed inexorably on the social and business status of a rapidly increasing proportion of Canadians.

The number of automobiles registered just about doubled between 1945 and 1951, rising from 1.2 million to 2.1 million, and rising again to 3.4 million in 1957. The ratio of population to automobiles was cut in half over the 1945 to 1957 period, falling from 10.4 persons to 4.9 persons per automobile. In 1951, 42% of Canadian households had an automobile; by 1958, the proportion had increased to 63%.

At the same time as the increase in numbers, the diffusion of automobile ownership over an increasingly wide range of the population opened the road to a growth of major suburban residential districts beyond the historic "city limits". The cities spilled into arable farm lands, pastures and vacant fields and

the previously barely definable metropolitan areas became recognizable. "Suburbia" grew apace while the "city proper" stood still or languished. The new suburban home with its conveniences, a spacious lot and social elevation, became the objective alike for the dweller of the city proper and the country dweller moving into urban employment.

The acquisition of an automobile, along with a "ranch style" modernly equipped and furnished home, would have been impossible for the many in relation to the purchasing power of Canadian family income prior to World War II. But increases in productivity, bringing much greater individual earning power, and increases in the number of wage earners in the family, taken together contributed to a substantial development in family buying power.

With a car, a new urban or suburban home, young and growing children, and a five-day work week, the typical Canadian urban family represented an immediate, rapidly expanding and attractive market. This family had wants or was susceptible to being influenced in their wants and they could pay cash, or, alternatively, were good credit risks. The family shopping sortie was fitted into and became a part of the family social and living pattern. It might, for general shopping such as groceries and household supplies, be a special period set aside on a weekday evening or on a Saturday. It might be a regular visit to a store or a shopping centre on the way home from work. Whatever the arrangement, it was, in nearly all instances, tied in with the use of the family automobile. This required certain conveniences—a place to leave the car and easy access to a place for loading the results of the shopping into the car. Further, there were other things besides food needed for the household, such as drugs, hardware, and an increasing array of other items.

c) Increasing Real Income per Family and per Person

Between 1949 and 1958, there was an increase of about one-quarter in the real income per adult in the Canadian population: the average per adult in 1949 was \$1,559 and in 1958, \$1,940, expressed in 1957 dollars. This has resulted in the opening of a mass market for consumer goods of all kinds.¹

The increases in the real incomes of consumers have resulted in increasing demands for the services associated with food products, for example, increases in the variety of items and availability of many products on a more continuous basis throughout the year. Many improvements in quality of food products, such as the increased freshness of many products and the increased trimming and curing of meats, have been made in response to consumer demands. The overall effect of increased incomes on the quantities of food products consumed has been negligible.

All of the foregoing aspects of consumer demand, as well as other matters of importance, have exerted a substantial influence in the development of the supermarket with its parking area and its convenient car-loading facilities. Today it is established as the central and dominant institution in shopping centre developments. It utilizes the services of advertising media and other devices of many kinds to attract and hold customers.

1 In Part IV we comment on changes in spending patterns.

Skill in Techniques of Influencing Demand

The individual supermarket is the significant unit in the chain organization.¹ It is regarded as a convenient display area with a given amount of shelf space, and the total effort of the organization is directed towards maximizing the volume of business done by each unit.² A large part of the total strategy to this end precedes the establishment of each new unit: at this stage careful consideration is given to the selection of site, with an eye both to convenience to potential customers and to competition; to the size of store in relation to the customer potential; and to layout in terms of attractiveness and convenience to customers. All this, with the exception of activities which may be designed to exclude competition,³ appears to be in the interests of consumers.

Once the investment has been made and the facilities provided, efforts continue to be directed towards maximum volume of business, both by inducing customers to come to the store and by encouraging them to buy when they are there. At this point the strategy involves a range of devices. The weight given to various elements is the organization's competitive weapon on which its relative success depends.

Price is only one factor in the strategy, and probably is given a lesser weight than some others. The Commission's inquiries indicate that, as between different supermarkets, whether operated by the same chain or not, there is little variation in the total cost of a basket of food products in any given area.⁴ Firms check one another's prices, and, despite the best efforts to establish customers' loyalty, many consumers shop at different stores. There is, however, at any time in the same area a considerable variation in the prices of particular items. Pricing as part of the strategy is determined at headquarters. The local manager receives instructions on prices; little discretion is left to him.

The conclusion to be drawn from our study of prices in supermarket outlets is borne out by the information we have obtained on markups. While there are different levels of markups for particular classes of commodities, the normal level may be departed from at any time as part of the general strategy. The information the Commission obtained in reply to the questionnaire indicates this quite clearly, as can be seen in Chart 10. In this chart the markups are shown for selected commodities in chain store organizations in Toronto and Montreal.

Prices of particular commodities are determined, at any time, mainly with a view to drawing customers to the store. This is the purpose of the "special". Prices on specials may be reduced substantially in order to feature the items in the weekly advertisements, and planning of the specials to be offered at any time may be undertaken well ahead of the occasion.

¹ While we stress the use by chain organizations of techniques to influence demand, the unattached independent stores also engage in promotional activities, although to a lesser degree.

² For example, one of the chain store organizations, in its reply to the Commission's questionnaire, stressed the role of store contests in "rejuvenating sick stores".

⁸ See p. 66 of this part on the acquisition of store sites.

⁴ See the report of the study of retail food prices in Toronto and Vancouver in Volume III of this report.

CHART 10 PER CENT MARKUPS OF SELLING PRICES, SELECTED FOOD PRODUCTS,FOOD CHAINS, WEEK OF AUGUST 11 TO 16, 1958

	DAIRY PRODUCTS							EGGS	FLOUR	CAKE MIXES	WHITE BREAD	
Butter Creamery	40 Score or over	Fluid Milk 1 quart Paper Carton	Skimmed Milk Powder 3 Ib. Package	Evaporated Milk 16 ounce Tall Tin	Processed Cheese 2 Ib. Package	Cheddar Cheese Branded Medium 12 ounce		Grade A Large	5 Ib. All Purpose	All Brands	Private Label	Largest Volume Advertised Brands
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	GROCERIES									PROI	DUCE	
0	H Baby Foods All Brands	→ Vegetable Soup Z 10 ounce Tin	H Tomato Juice S 20 ounce Fancy	H Canned Peas S 20 ounce Choice	- Canned Peaches Z 20 ounce Choice	H Canned Salmon S 1⁄4's Fancy Sockeye	- Canned Lobster S 1/4's Fancy	H Maple Syrup Z 16 oz. Bottle	→ Apples Feb. 1958 Z McIntosh 5 lb. Fancy	H Potatoes Jan. 1958 X 10 lb. Canada No. 1	– Tomatoes 2 Ibs. S Canadian Grown Field No. 1	– Carrots 2 Ibs. Package Canadian S Grown Tops Off
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CHART 10 (continued) - 2

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				MEATS	;		- -	FROZ	EN FO	ODS	FRESH	FISH
	Beef Mark-up on Total Side	Pork Loins	Fresh Kam	Bacon Sliced 1 Ib. Rind off	Fowl Grade A	Broilers Grade A	Cut-up Chicken Packaged in Store	Peas 12 ounce Package Fancy	Cod Fillets	Sliced Halibut	Boiled Lobster	Haddock Fillets
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CHART 10 (continued) - 3

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Items such as uncured meats and fresh fruits and vegetables, which are not sold under brand names, fill a special role in the expansion and maintenance of sales volume in the supermarket. For some of these items, entire merchandising programs have been developed. Highly skilled personnel negotiate the contracts for the merchandising programs with the objective of drawing in customers through special prices. In the submission of the Canadian Retail Federation, it was pointed out that "the chains were also able to develop specialists in buying and in management and to provide a close co-ordination of the wholesaling and retailing functions under one management".¹ The central procurement of products was also referred to by several of the chain store organizations in their replies to the Commission's questionnaire.

An important aspect of the merchandising programs is the emphasis on quality and "value" rather than price. Indeed the weekly advertisements of the chains stress quality. In order to back up their advertising efforts along this line, these organizations concentrate on selling products that the bulk of customers accept as being of high quality. In canned products they usually stress the "fancy" and "choice" grades; in beef, "red and blue brand"; in eggs, "A large"; and in fresh fruits and vegetables they pay particular attention to moving products through their warehousing facilities and retail outlets as rapidly as possible.

Another important element entering into merchandising strategy is the rate of turnover and value in terms of shelf space of particular commodities. The size and layout of the store being established, the volume of business and "gross margin" of the store depend upon the volume of business and gross margin for each unit of shelf space. The important relations are illustrated in the following table.

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Shelf space per package Turnover per week	12 sq. ins. 1,000 units	6 sq. ins. 1,000 units	6 sq. ins. 2,000 units	6 sq. ins. 2,000 units
Buying price (at store)	\$1.00	\$1.00	\$1.00	\$1.00
Selling price (at store)	\$1,25	\$1.25	\$1.12	\$1.06}
Markup	25%	25%	121%	61%
Margin/sq.foot/week.	\$20,83	\$41.67	\$41.67	\$20.83

The operation of the supermarket is adjusted to the habit of one-stop, oncea-week food shopping. This meets the convenience of customers with automobiles, i.e., most customers in the areas in which supermarkets are located. A necessary condition of this type of shopping is that customers must be able to get all, or most of the food commodities they wish in the supermarket. As there is little shopping done on certain days of the week, however, the rate of turnover of goods on the shelf is limited. Consequently, supermarkets attempt in various ways to induce patronage at these slack times. The more often the buyer comes to the store, the larger her purchases over a period of time will be. This results from the tendency

1 Proceedings. pp. 4547-8.

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to "impulse" buying, which is a recognized feature of customer behaviour in supermarkets. There are, however, certain commodities which consumers tend to buy more frequently than others. These staples occupy an important place in merchandising strategy, and may be priced so as to provide an incentive to patronize the store.

Our inquiries indicate that there has been a tendency for chain supermarkets to carry an increasing range of non-food items and that sales of non-foods represent an increasing proportion of total sales. The explanation of this tendency is probably to be found in the trend to one-stop shopping. The expanding content of non-foods in sales is offered as one of the factors increasing gross margins.

The objective of the supermarket's promotional strategy is to persuade consumers to shop at a particular supermarket. The strategy is aimed at obtaining and maintaining store traffic at a profitable and predictable sales volume. Consequently, supermarket promotion of a particular food commodity is not an end in itself; rather such promotion is but a tactical device to lead consumers into the store and is, therefore, a part of the overall strategy of gearing store traffic to the desired sales volume.

The chain store executive has many promotional techniques at his disposal; the most common techniques are advertising, premiums, trading stamps, contests, and displays within the store. Of the promotional expenses of the corporate chains for which we had information for 1957, newspaper advertising accounted for 37%, premiums and trading stamps 26%, contests 6%, displays within the store 6%, other types of advertising and other promotional expenses 25%. The executive decides on whether to employ some or all of these techniques over a given period of time. He decides on the relative importance of the chosen techniques in terms of budget allocation. In addition, he decides on the timing and sequence of introduction of the chosen promotional techniques for any given promotional campaign. There appears to be an almost infinite variety of promotional plans.

It is extremely difficult to evaluate the effectiveness of a promotional campaign, or of the components that make up the campaign. Consequently, the chain store executive experiments continuously. When he does evolve what appears to him to be a successful promotional scheme in terms of promotion objective and strategy, he can expect that his competitors will either imitate his scheme or strive for an even more effective one.

Another factor limiting the promotion executive is company policy concerning the use of certain promotion techniques. Firstly, company policy may allow the executive unfettered freedom and aggressiveness if he desires to employ a promotional device such as trading stamps. Secondly, company policy may be defensive in attitude, allowing the executive use of trading stamps only if immediate competitors adopt the technique and use it successfully. Thirdly, company policy may be against the use of the given technique at all times, notwithstanding competitor success.

Questionnaire returns from the corporate retail food chains reveal that in 1957 no two firms allocated the promotional budget in the same way.

We now turn to an examination of the promotional techniques that are most commonly employed by the Canadian retail food trade in general, and by the chain supermarket segment in particular.

a) Advertising

Advertising is the paid transmission of sponsored messages through media such as newspapers, radio, television, handbills and billboards. The content of chain store advertising is basically informative: the item is noted and its price is given. The greater the number of stores in the chain within the advertising medium area, the less is the cost of advertising per store. Consequently, the voluntary or corporate chain food store possesses a real economic advantage over its independent cousin. On the other hand, promotional discipline is required if the chain stores are to exploit the advantages of large-scale advertising; for example, all stores in the chain must carry the advertised products and must offer these products at the advertised price.

Since the bulk of supermarket shopping occurs during the weekend, the greatest volume of advertising takes place on Thursdays and Fridays. Weekend "specials" are highlighted. A meat product is often the special because it constitutes the heart of menu-planning for the majority of housewives. The aim of such advertising is to "pre-sell" the consumer on certain key food products in order to lead her into the store so that she may shop there for all her household's food needs.

Questionnaire returns indicate that advertising plays a dominant role in chain supermarket promotion. Seven of the 10 reporting corporate chains allocate over 50% of their promotional budget to advertising. Newspaper advertising appears to be the most popular promotional technique; the range of usage, however, is very wide—from 18% to 81% of total promotional expenditures were allocated to newspaper advertising during the last reported fiscal year of the 10 reporting chains. Only one chain viewed billboard advertising as an effective advertising medium; two other chains had more confidence in the effectiveness of handbill distribution. In terms of expenditures, radio advertising was more important than television advertising for all but two of the reporting chains.

While the objective of chain store advertising is to influence the consumer to shop at the store, the technique employed is to highlight certain commodities usually well-known, branded food products—along with meats, produce and other "specials". The branded product may or may not be specially priced for the occasion. The promotional efforts of the food processor have already popularized the brand. Further popularity is exhibited if the product is advertised as being available in the given supermarket. Since chain store advertising of the product assists the processor with his promotional effort, the processor co-operates in advertising his brands. Co-operation may take various forms, from supplying printing plates and mats to paying part or all of the cost of the advertisement or commercial. Such payments to retailers, whether in the form of a special discount, a credit memorandum or cash settlement, are called "co-operative advertising allowances".¹

b) Premiums and Trading Stamps

The objective of both premium plans and trading stamp plans is the same, viz., to attract and retain trade. Basically, a premium plan is the practice of

¹ We deal with advertising allowances as received by chain store organizations later in this chapter and, as paid by suppliers, in the following chapter.

allowing customers, as a reward for their patronage, to purchase specified articles at discount prices while the retailer is still reimbursed for out-of-pocket costs of the items. In contrast, a trading stamp plan rewards customers for their patronage by giving them specified articles without direct monetary compensation to the retailer.

The five most commonly used kinds of food store premium plans are listed below:

- (1) The customer is offered a discount on the purchase of a premium being sold in the store. No food purchases are necessary.
- (2) The customer is offered a discount on the purchase of a premium in the store if her food order is of a minimum size.
- (3) The customer is offered a discount on the purchase of a premium if she submits her cash register receipts on goods purchased in the store. The cash required and the total receipts necessary vary with the value of the premium. Redemption may take place in the store or by mail order.
- (4) The customer purchases premiums at a discount but on an instalment basis. Generally, she is eligible to purchase a "premium certificate" in ratio to the dollar amount of her order—usually a 1:10 ratio. After purchasing the required number of certificates, she then redeems them for the desired premium.
- (5) The customer is given a rebate on the food order which may be credited to the purchase of subsequent food orders, or it may be credited to the purchase of a desired premium.

An examination of "trading stamp" plans by Canadian food stores reveals that the actual plans may be placed in one of two categories: (1) The traditional trading stamp plan is one in which retailers give gummed stamps to customers in some ratio to their purchases, usually one stamp for every ten cents of purchase. The stamps are accumulated by pasting them in books which typically hold 1,500 stamps. Customers then exchange their accumulated stamps in the store for merchandise that is usually listed and illustrated in a catalogue. The value of the merchandise selected determines the number of filled books to be redeemed.

The food retailer may purchase a trading stamp plan from a trading stamp company, or, if the retail firm is large enough, it may form a subsidiary trading stamp company. Regardless of ownership structure, the trading stamp company provides the services of printing and distributing the stamps, books and catalogues: of providing the necessary banners, advertising and other promotional aids; of purchasing the gifts and guaranteeing adequate and continuous supply; and of providing redemption facilities. The retailer's obligation is to purchase the stamps from the stamp company, usually in pads of 10,000 stamps at \$20 per pad. A pad usually represents \$1,000 of retail sales. Apparently the cost of a trading stamp plan to a retailer is equivalent to about 2% of sales. Executive and trade opinion is that a retailer requires an increase of at least 20% in his dollar sales volume if the plan is to be judged a success. (2) A tape or cash register receipts plan is a simplified version of the traditional trading stamp plan. The customer saves her sales receipt slips and redeems them at the store for gifts. Assuming no resulting increase in store sales volume, this plan should account for less than 2% of sales, but how much less is not known.

Questionnaire returns indicate lack of agreement among the retail chains as to the relative importance of premium plans and trading stamp plans as promotional devices. One large chain allocated over 75% of its promotional budget to premium and trading stamp plans while another large chain spent no money on such schemes.

Some food chain store executives would rather not be bothered with premiums and trading stamp plans. In their opinion, the plans at best are defensive measures, to be incorporated when competitors employ such devices, and to be discarded when competitors discard them. The consensus of executive opinion appears to be that the innovator of a trading stamp plan in a given retail trading district achieves a substantial gain in traffic, sales volume and profit, but that such gains are dissipated when competitors imitate the innovator.

Experience seems to bear out the above pattern of behaviour. In 1956, one Toronto food chain introduced a premium plan and it was countered immediately by the chain's major competitor. Similarly, in Ottawa in 1956, three corporate chains introduced trading stamp plans immediately after a voluntary chain introduced a trading stamp plan. In January, 1959, three major food chains in Montreal introduced trading stamp plans as soon as a fourth chain announced its plan. Likewise, in 1958, trading stamp plans were simultaneously discarded by three major chains in the Lakehead area.

It appears that premium and trading stamp plans boost store traffic if competing stores in the trading district have no such plan. The aggressive (or desperate) merchant capitalizes by innovating a plan, but he quickly loses his unique position through reaction by competing merchants. If realignment occurs, and no net benefit is enjoyed by any one competitor, then abandonment of the premium or stamp scheme by one usually leads to abandonment by the others.

c) Contests

Contests that offer prizes are another form of promotion. Contests are somewhat similar to trading stamps in that both types of promotion give away premiums to the customer. Like other types of store promotion, this form of "bonus" merchandising attempts to link customer loyalty to a given store.

An examination of the uses of contests by Canadian food retailers bears out the great popularity of using contests for store openings. The range of contest prizes is wide—from baskets of food to appliances, to automobiles, to houses, to mink coats. Also common are contests that require the contestant to recall the particular brand names of the store's suppliers. Such contests are subsidized to an unknown extent by the suppliers whose brands are advertised by this medium.

Analysis of questionnaire returns shows the varying degree of importance that retail chains place on contest promotions. Only four of the 10 corporate chains budgeted for contests during the fiscal year that such data were requested, and their estimates, as a per cent of total promotional expenditure, ranged from 6% to 12%.

d) In-Store Displays

In-store displays may be defined as any form of visual matter that promotes the sale of goods while the customer is in the store. Sales of products are influenced to some extent by their particular floor location. It is also claimed that: a food article situated at eye level will experience better sales results than if the article were situated at ankle level; a food article which is allotted more shelf space than its competitors will sell better than they; a jumbled, massive display of a food product located on an "island" counter will sell better than if it were located on a counter shelf; and special in-store displays can boost the sales of appropriate products.

It is claimed that such layouts, locations and displays produce an "impulsive" or reflex selection of the merchandise so displayed. While such a claim may be debated, there is little doubt that the self-service feature of the supermarket requires the use of such in-store display tools as tapes, banners, seasonal dress-up materials and mobiles, in addition to the store equipment of counters, cabinets, floor stands and peg boards.

The questionnaire returns report no general pattern of use of in-store displays. All but two of the 10 reporting chains allocated part of their promotional budget to in-store displays. Of the eight chains that did budget for this form of internal promotion, the scale of preference, measured as a per cent of the total promotional budget for the fiscal year requested, ranged widely from 1% to 26%.

In-store display assistance is obtained from food store suppliers, either in varying forms of special display discounts or in contribution by the supplier of the display pieces to be used in the promotion.

Two aspects of the general merchandising strategy of the chain supermarket are of special interest to our inquiry: first, the manner in which prices are used as a competitive weapon; second, the use of special promotional devices.

The absence of consistent markups for particular commodities clearly presents a problem of measurement of the "spread" for any commodity. We have observed that markups tend to vary around some level; also, we observe from Chart 10 that there is a difference in the "normal" markup as between groups of products. However, we do not know whether there is any regularity in the deviation from normal, or whether there is any relation between changes in markup and changes in selling price. We are inclined to believe that the changes are made from time to time in the light of all the circumstances. This is the only answer that could be obtained from chain store operators, or could be discovered from the most minute investigation of markup practices.¹ It is one of the features of merchandising strategy which is related to the skill, ingenuity and judgment of those directing the total strategy. We are also forced to the conclusion that it is impossible, or misleading, to measure the "normal" spread from markups or prices taken at a particular time or over a short period of time.

¹ We are not inclined to express concern at the prevalence of the use of per cent markups in contrast to dollars and cents markups because we are of the opinion that no rigid rules in this respect are adhered to. The *Report of the Royal Commission on Prices* (1949) attaches somewhat more significance to the different effects of the two procedures.

The pricing practices of chain supermarkets are not necessarily consistent with the generally accepted view that markups are related to the total cost of handling particular commodities in retail outlets.¹ In the chain supermarket we encounter an operation in which overhead or indirect costs are an important factor, an immense variety of products is sold, and markups are deliberately used to influence the total volume of business. Evidence we have received suggests that chain stores frequently do study the direct costs of performing particular operations, e.g., the cost of washing potatoes. We believe too that chain stores observe the profitability of different departments, a process which involves some allocation of overhead costs and probably some conception of "normal" markups for particular departments. However, with a heavy investment in permanent facilities, substantial maintenance and operating costs common to the whole store, and labour which at many points handles a great number and variety of products, the total retailing operation is one in which any meaningful allocation of costs by commodities is probably impossible.² Moreover, the practice of markups as we have been able to study it means that costs in the retail outlet are not the only or even the pre-eminent criterion for determining markups, either in the short or in the longer run. We are at a loss, once again, to find any consistently applied principle of pricing of particular commodities in chain supermarkets, other than that prices will be adjusted in such a manner as is expected to result in a maximum volume of sales for the store.

Under these conditions, it is quite possible that the markup on a particular commodity may at any time be less than the total cost of handling it. This would be profitable to the supermarket operation if the lower price of this commodity induced larger sales of other commodities, i.e., attracted patronage to the store. The loss could be considered in the same light as an advertising or promotional expense, no different in its effect from the actual expenditure for placing an advertisement in the local paper.

In the case of a commodity on which the markup is low relative to costs, is any of the burden of the policy passed back to the supplier in the form of a lower price paid to him? The decision of a chain retailer to reduce the markup on a particular commodity is made with the purpose of reducing the retail price. If the retail price is reduced to the same extent as the markup, the lower markup has no effect on the supplier. We have already noted, however, that we have not been able to discover any regularity between changes in markup and changes in price, and we have referred to the extensive preparation which goes into the offering of "specials". A special is offered at a temporarily low price, but the markup is not changed if the retailer can pass back the reduction in price to the supplier. We do not have conclusive evidence on this point but there is evidence that in many cases the supplies which have been offered at special prices have also been secured at special prices, on special terms, or as a special deal. At this

¹ Mr. Knapton of A & P Food Stores, in his appearance at the public hearings, made the following statement: "The food business is a very competitive business, and there have been some merchandising patterns prevalent in the trade with some basic staple commodities merchandised at relatively low markups, considerably below a normal expense rate. In order to offset these, it is necessary to mark some commodities at slightly more than the expense rate in order to arrive at a final markup which will cover your expense rate." *Proceedings*, p. 2946.

² Such an allocation of costs would be just as impossible for the small independent stores. But, with a small retail operation, it may be necessary to follow convenient "rules-of-thumb".

point the structure of the market in which the supplies are procured is relevant to the determination of effects. In a market in which the number of buyers is small, and suppliers become attached to particular buyers, it is certainly possible that the short-term effect is to reduce the price paid for supplies for specials below the amount justified by bulk-buying. In the longer run, if there is any significant regularity with which particular commodities are used as specials, the lower price paid for supplies on these occasions becomes part of the expected or normal price. If the occurrence of specials is capricious, this represents a risk, and therefore a cost to be borne by the supplier.

As we have seen, the evidence is that consumers pay about the same for a basket of food in any supermarket in any particular area. The inference is that, if stores are using the prices of particular commodities to attract consumers, the low prices incurred are balanced by higher prices on other commodities.¹ We have likened the low markup on any commodity to advertising expense. Direct advertising expenses find their way into the prices of commodities, but does that mean that prices are higher than they would have been in the absence of advertising?

The promotional devices, including direct advertising, employed by chain supermarkets are directed towards increasing or maintaining the sales volume of the supermarket as a unit. The supermarkets sell food. This includes food materials and the services associated with them. Additional services, which are themselves promotional, can be included if they prove acceptable to the consumer; the consumer is willing to pay for added services and to meet the costs of providing them. The extensive promotional efforts of food merchandising firms notwithstanding, the information we have provided elsewhere indicates that the quantity of food material consumed per person has not increased.² Sales promotion can, however, increase the total volume of sales of particular commodities. The adoption of frozen foods would have been much less rapid and general without promotional effort, and the acceptance of the frozen product has doubtless increased the amount of the product consumed in all forms, although not in proportion to the increase in sales of the frozen product. The increased consumption of frozen peas must have caused some reduction in the demand for dried peas; it may also have reduced the demand for other foods.

In a period of increasing population when the market for all foods is expanding, it is difficult to distinguish the separate causes of increase in the consumption of foods. If the per capita physical consumption of any particular food commodity increases appreciably, there must be a significant measure of substitution and reduction in consumption of other food materials.

In recent years promotional expenditures as a per cent of sales have increased, and the dollar volume of sales has gone up rapidly. It is easy to fall into the error of relating these developments as wholly cause and effect. To a considerable extent they are both the result of the same cause, namely, increasing population and demand. In a period of increasing demand, if each seller wishes to maintain his share of the expanding market and any one of them undertakes promotional activities, all must engage in them. In a period of rising incomes, however, it is easy to pass on the increased cost to the buyer.

¹ In Mr. Knapton's statement, already cited, p. 55, it is indicated that this is so. 2 See Part IV.

Efficiencies of Chain Organization

We have referred to the supermarket as the significant unit in the chain store organization. We have noted elsewhere that the supermarket type of retail outlet is also found outside the chain organizations. The chain organizations characteristically use the supermarket type of outlet, however; it is very uncommon among the unattached independent food stores. We have also seen that the voluntary chains have been expanding their operations and growing along with the corporate chains. At the same time the size of the voluntary chain retail stores has been increasing. All of this suggests that, although not an essential part of it, the supermarket is a vehicle which can be effectively utilized within the chain organization.

The competitive advantages of the chain organization result from the large scale of operation. Although not all features of supermarket operations have tended to reduce operating costs, and some activities have tended in the direction of raising rather than lowering the cost of food materials and associated services obtained through supermarkets, the supermarket is itself a large unit, and lends itself to the mass operation of the chain organization. It is an instrument of mass merchandising. In the preceding section we looked at the distinctive practices of supermarket operation. In this section we are concerned mainly with the activities of the chains which go on behind the supermarket store and through which the large chain organization achieves efficiencies or other advantages which strengthen its competitive position compared to that of the small organization.

At an earlier time the chain food stores were reputed to offer competition to the independent store mainly in terms of prices. We have not attempted any detailed study of the history of the operations of chain organizations; we are satisfied, however, that up to a point their growth has been due to the capacity to offer effective competition in terms of prices stemming from the economies of largescale operation. Even if it is true today, as suggested by representatives of chain store organizations, that price competition is not their principal competitive weapon,¹ it can be argued that to some extent their ability to operate at lower costs and to compete in terms of prices has made it possible for them to pursue other forms of competition successfully.

In organizing their total merchandising efforts, the chains have made changes throughout their whole system of procurement and sale of food. Their efforts have been centred on attaining a high total volume of sales through a high rate of turnover per unit of retail shelf space and per unit of warehouse space.² The maintenance of the high volume on a continuous basis is dependent on the highly co-ordinated supply system that has developed.

There are two aspects of the large volume of business of individual chain organizations: (1) economies of scale; (2) enhanced bargaining position arising from the large scale.

The economies associated with large volume which tend to make for low unit costs, and place the chain organization in a favourable position to com-

¹ See, for example, the following statement in the submission of Loblaws to the Commission at its public hearings: "In connection with advertising, it may be mentioned that the growth of the Loblaw chain has never put price first. Prices compare favourably, and must compare favourably, with prices of competitors but the first emphasis is on quality." *Proceedings*, p. 3713.

² To the extent that they accomplish this, they also obtain a high rate of turnover per unit of labour.

pete in terms of prices, spring from a number of factors. In the first place, both the merchandising and the procurement aspects of retail organization and operation require a vast amount of information. The combination store, with its multiplicity of commodities drawn from all parts of the agricultural industry, and served by many different secondary industries, is a complex and complicated concern. Its success can be affected by the extent of the information available and the skill with which the information is interpreted. The unattached independent storekeeper simply cannot be fully informed on supply conditions; this service has been provided to him by his wholesaler on whom he has to rely, but whose judgment he does not have to accept. He can act independently if he so chooses. Similarly, the judgment of the wholesaler may be affected by the size of his own operations, and the opportunity he has, through specialization within his organization, to become fully informed. Again the task is a difficult one because of the great range of commodities handled. Further, the wholesaler may find his knowledge rendered ineffective if it does not influence the actions of the retailers with whom he is associated. Indeed this seems to be evident from certain features of the development of the voluntary chains. Not only are the wholesalers servicing independent retail stores within a chain becoming larger, but there is an increasing tendency for them to reduce the opportunities for individual action on the part of the operators of retail outlets. The sponsoring wholesaler is increasingly intruding into the management functions of the retail outlets.

In the second place, chain stores are organized in a manner that enables information on all aspects of the business to flow quickly to those who make use of it. They are also organized to obtain and analyze information on many factors outside the business itself. Information on factors both within and outside the firm is crucial if the firm is to be able to adapt quickly to changes. To cope with the necessity of organizing information, some chain organizations have established centralized research departments. In a quickly changing situation, such as has characterized food marketing in recent years, access to information and the capacity to employ those capable of interpreting it have proved particularly important to the chain store organizations.

In the third place, the large organization which can engage the services of highly competent specialists in information, procurement and merchandising techniques, and can spread the cost of these services over a large volume of sales, has a substantial advantage in operating efficiency over the smaller independent concern. The corporate chains within their company organization have exploited their potential advantages of size most effectively. But the success of the voluntary chains has also reflected the gains from large-scale organization. The wholesalers in voluntary chains have reached forward into the associated, although independently owned, retail outlets and have imposed effective merchandising methods on them. At the same time the corporate retail chains expanded their wholesaling activities because of the advantages from integrated operations; the volume of business undertaken at the wholesale level has provided opportunities for efficiencies of operation and procurement. The unattached independent retail stores and the relatively small wholesaler serving them have both found themselves at a competitive disadvantage.

We have outlined various features of large-scale operation in food retailing which suggest net economies with increasing size. We do not have any evidence on which to conclude that the large Canadian food chains have increased the efficiency of their operations as a result of their expansion over recent years. In our opinion, it is unlikely that the large chain organizations need to operate at their present size in order to obtain the full advantages of economies of scale.

In addition to the economies of scale dealt with above, the large chain organizations—both corporate and voluntary—have a competitive advantage arising out of their enhanced bargaining power. Their procurement policies have been adapted to increasing scale and both types of chains have used their strengthened position as large-scale buyers to modify the nature of their relations with their suppliers, including the terms on which they buy from them. The impact of chain store procurement practices on processors and others is dealt with later in the report.¹ At this point we refer to one or two features only of these practices which are clearly related to the competitive position of the chains.

The corporate and voluntary chains have been able to draw heavily on suppliers for advertising allowances. In this way the chains have been able to pass back to suppliers part of the costs of advertising and thus to reduce the extent of these costs which must be borne by themselves: the division of costs is shifted even if total advertising costs are not reduced. The competitive position of the unattached independent store is affected in so far as these stores or the wholesaler supplying them are unable to extract the same terms from their suppliers.

The large chain organizations have also been able to obtain from suppliers substantial discounts for quantity purchases—discounts which cannot be secured by smaller buyers. In so far as suppliers' costs per transaction are reduced in relation to the size of the transaction, there is a real gain from quantity buying which may, in the end, be passed on to the consumer. But the immediate effect is to improve the competitive position of the chain stores vis-a-vis the unattached independent.

Another way of looking at these discounts and allowances is to note that they lower the effective prices to the buyers receiving them.² Thus, there is some degree of error in using actual prices that are quoted in order to look at a breakdown in price spreads; in doing so we underestimate the retailer's spread and overestimate the supplier's spread.

The Commission in its questionnaire to corporate chains requested information on the magnitude of various types of discounts and allowances and changes that have taken place in the use of different types. During the past 10 years, while the overall magnitude of promotional allowances and volume and other discounts in relation to purchases has remained relatively constant, there has been a shift towards more use of promotional allowances and away from the traditional volume discounts. In 1957, for the seven largest corporate chains returning the Commission's questionnaire, the total of discounts and allowances amounted to \$11 million, which is equivalent to 1.2% of the cost of all goods purchased by

¹ See Chapter 3 of this part of the report.

²The buyers will presumably have additional promotional expenses when they incur the expenditure of the advertising for which the advertising allowances were granted.

these chains. About half of the total was in the form of promotional allowances. As this is an overall total for all purchases of the chains considered and includes many products on which no discounts and allowances are received, the impact would be considerably greater for certain types of food products.

The area of special discounts and allowances was the subject of an intensive study by the Combines Investigation Branch of the Department of Justice.¹ They reviewed the discount structures, including trade discounts (which distinguish between classes of customers), quantity discounts, cumulative (volume) discounts, and special discounts and allowances. The latter group—special discounts and allowances—was defined as "all those forms of discount and allowance which do not appear on the face of the invoice". These were the subject of particular attention in the report; promotional allowances would be a large factor in this category. Two results of the study are pertinent here. The first is that no clear-cut evidence was obtained from a survey conducted in 1954 that the chains with the largest purchases have the highest rate of receipt of special discounts and allowances.² Second, the rate of payment of such discounts and allowances by suppliers to corporate and voluntary chains was much higher than those paid to wholesalers and other accounts—2.34% and 2.47% of sales respectively, as compared with 1.11% and 0.65% of sales respectively, to the last groups.³

We will return later to the effect of discounts and allowances on the competitive position of the retail food chains vis-a-vis their suppliers.⁴ It should be noted at this point, however, that the increasing concentration of purchases of chain organizations may well have the effect of exerting downward pressures on prices of suppliers who in turn may well exert pressure on the prices paid to farmers and fishermen. To the extent that these pressures cannot be exerted through adjustments in prices themselves, discounts and allowances fill a particularly significant role.

Availability of Capital

The rate of creation of new capital in the economy as a whole is related to incomes and prices. The relationship is established in the following way. The process of creation of capital goods, although not the only activity putting income in the hands of consumers, generates income. In so far as the employment of labour and other productive resources in capital creation competes for these resources with industries producing consumer goods, it does at the first stage limit the rate of expansion of production of consumer goods. The increased demand for these goods, stemming from the increased total disposable incomes, may then push up the prices of consumer goods.

The creation of new assets by business corporations is not the only source of new capital creation. It is evident from Table 5, however, that there is some relation between disposable incomes, prices, and the rate of creation of new assets by Canadian corporations. We have already presented our analysis of the

¹ Report Transmitting a Study of Certain Discriminatory Pricing Practices in the Grocery Trade made by the Director of Investigation and Research, Restrictive Trade Practices Commission, Department of Justice, Ottawa, 1958.

² Ibid, see Table 5-3.

⁸ Ibid, see Table 5-2.

⁴ See Chapter 3, p. 70.

relation between disposable incomes and prices in Part I and have distinguished three periods within the last 10 years. Table 5 shows that investment in new corporate assets advanced rapidly in 1950 and 1951, when incomes and retail prices also rose; increased at a less rapid rate from 1951 to 1954, when incomes and prices rose less rapidly or declined; and picked up again in 1955, contributing to a renewed increase in incomes and prices. The table also shows that the creation of new assets in the food industries followed the same pattern.

Table	5—Relation	Between	New Capital	Assets of	Corporations	, and	Changes in	i Disp	osable
		i tet	Incomes an	d Prices,	1949 to 1957		1.11		4.1
			(Inc	reases by Y	ears)		a da da da da	•••	· · · .

	Year		Total Assets of all Corporations*	Aggregate Personal Disposable Income	Consumer Price Index	Total Assets of Food Corporations*
·	· · ·	· · ·	(%)	(%)	(%)	(%)
1949/50 1950/51 Average 194	9–51	•••••	12.4 13.2 12.8	7.1 16.6 11.8	2.9 10,5 6.7	10.4 9.6 10.0
1951/52 1952/53 1953/54 Average 195	.1–54	• • • • • • • • • •	10.4 12.4 8.9 10.6	8.6 5.2 0.5 4.7	2.5 -0.9 0.6 0.7	8.7 8.9 6.2 7.9
1954/55 1955/56 1956/57 Average 195 Average 194	4–57 9–57	•••••	12.3 16.0 9.2 12.5 11.8	7.9 10.0 4.7 7.5 7.5	0.2 1.5 3.2 1.6 2.5	9.6 11.8 7.4 9.6 9.1

• SOURCE: Taxalion Statistics, Department of National Revenue (data for profit and loss corporations).

Table 6 shows the trend of assets of corporations in food processing, wholesaling and retailing.¹ The rate of increase in assets of food firms would be significantly greater than indicated in the table if the new investment in retail store facilities was fully included. It is generally not included in the assets of corporations because of the rise of "lease-back" arrangements by which specialized firms finance the building of stores and lease them back to the corporate chains on a long-term basis. It will be seen that total assets in food retailing have increased relatively rapidly during the whole period, 1949 to 1957; were relatively well maintained during the years of slower advance, 1951 to 1954; and have expanded remarkably since 1955.²

The investment funds from which the retail food corporations acquire new assets include bank loans, issue of stocks and bonds, and accumulated earnings retained and reinvested by the corporations. Table 7 shows the sources for financing the expansion of retail food corporations between 1949 and 1957. We

¹ Retail food corporations include corporate chain store organizations and other corporations engaged in food retailing.

² To avoid misinterpretation of the data in the table, it should be noted that the per cent rate of investment for corporations in food retailing overstates the rate at which investment in food retailing as a whole has increased, because the chain organizations have increased their share of the business. Investment in the businesses of the other retailers which are not incorporated has not been increasing as rapidly.
	Processing Wholesaling		esaling	Reta	iling	All Food Corporations		
Year	Total	Annual Increase	Total	Annual Increase	Total	Annual Increase	Total	Annual Increase
<u>. </u>	(\$ million)	(%)	(\$ million)	(%)	(\$ million)	(%)	(\$ million)	(%)
1949 1950 1951	913.6 991.7 1080.1	8.5 8.9	338.0 388.6 418.6	14.9 7.7	200.4 223.2 259.2	$\frac{11.4}{16.1}$	1452.0 1603.5 1757.9	10.4 9.6
Average 1949-51	_	8.7		11.3		13.7		10.0
1952 1953 1954	1147.0 1351.4 1396.9	6.2 17.8 3.4	485.7 471.4 467.8	16.0 -2.9 -0.8	277.3 257.7 345.2	7.0 -7.0 33.9	1910.0 2080.5 2209.9	8.7 8.9 6.2
Average 1951-54	-	8.9		3.8	-	10.0	-	7.9
1955 1956 1957	1495.4 1678.9 1730.1	7.1 12.3 3.0	526.8 551.8 617.5	12.6 4.7 11.9	400.5 477.5 562.0	16.0 19.2 17.8	2422.7 2708.2 2909.6	9.6 11.8 7.4
Average 1954~57 Average	-	7.5	_	9.7	. —	17.6		9.6
1949-57	-	8.3	·	7.7	· - ·	13.8	-	9.1

Table 6-Total Assets of Corporations in Food Processing, Wholesaling and Retailing, 1949 to 1957

SOURCE: Taxation Statistics, Department of National Revenue (data for profit and loss corporations).

Table 7-Sources of Finance for Retail Food Corporations, 1949 to 1957

	Accur Earnings	nulated Retained	St Outst	Stocks Outstanding		onds Bank Loans tanding Outstanding		cks Bonds Bank Loans anding Outstanding To		ocks Bonds Bank Loans anding Outstanding Total		otal
	Total	Annual Increase	Total	Annual Increase	Total	Annual Increase	Total	Annual Increase	Total	Annual Increase		
				(\$ 1	million)			· · · ·		• 14		
1949	42.8 50.4 57.7 65.0 57.8 78.4 93.7 113.3 131.3	7.6 7.3 7.3 -7.2 20.6 15.3 19.6 18.0	47.6 49.0 53.7 56.5 49.7 58.8 66.0 99.1 101.0	1.4 4.7 2.8 -6.8 9.1 7.2 33.1 1.9	19.6 19.3 20.0 16.2 26.5 43.5 44.2 63.5 89.4	-0.3 0.7 -3.8 10.3 17.0 0.7 19.3 25.9	5.8 6.9 13.3 14.2 11.2 14.3 10.2 14.1 16.6	$ \begin{array}{r} 1.1 \\ 6.4 \\ 0.9 \\ -3.0 \\ 3.1 \\ -4.1 \\ 3.9 \\ 2.5 \\ \end{array} $	115.8 125.6 144.6 151.9 145.2 194.6 214.1 290.0 338.3	9.8 19.0 7.3 -6.7 49.4 19.5 75.9 43.3		
Total Increase 1953-57	73.5	_	51.3	-	62.9	- -	5.4		193.1	:		
Total Increase 1949-57	88.5		53.4	_	69.8	<u> </u>	10.8		222.5	`		

SOURCE: Tazation Statistics, Department of National Revenue (data for profit and loss corporations).

notice in the first place that in the nine years, 1949 to 1957, total investment by these corporations (not including property held under lease) amounted to 222 million. Of this, however, \$193 million or 85% was invested in the four years 1954 to 1957. Over the nine years, funds have been provided in roughly the following proportions: accumulated earnings, 40%; stock issues, 25%; bond issues, 30%; bank loans, 5%. In the later years of more rapid increases in investment, the amount of new investment financed from retained earnings has been well maintained; bank loans have remained a relatively small factor; and the corporate chains have turned to the market to finance a substantial part of the more recent and more rapid expansion.

We have noted that the rate of increase in assets of retail food firms does not, because of the use of "lease-back" arrangements, take account of the increased investment in retail store facilities. The general practice of chain store organizations for many years has been to build and sell, or have built for them, stores specially constructed for their use and to lease them back on a long-term basis, usually 20 years or longer. Investing institutions, such as life insurance companies, own a considerable proportion of these store premises. In some instances subsidiary companies own some of the stores and warehouses of the corporate food chain as, for example, Loblaw Leased Properties Ltd., and Ivanhoe Corporation, the latter a subsidiary of Steinberg's. One of the corporate chains, in its reply to the Commission's questionnaire, indicated that at the time of a shift away from ownership of store premises early in the period under review, important amounts of capital were released for expansion needs.

Corporations engaged in food retailing, in financing their increased business, have relied on retained earnings to a considerable extent. They have also increased the use of bond financing. New common stock has been issued only to a limited extent. With the overall rate of return during the period from 1949 to the present at a level considerably above the rate of interest paid on preferred shares and bonds, the return on the investment of holders of common shares has remained at a relatively high level throughout the period.¹

We refer above to the earnings on the retail food operations of these corporations. In addition, many of these firms have derived considerable profits from their real estate operations. This shows up when they sell the stores which they have erected on the sites previously purchased.

The relatively high rate of return on equity capital by the corporate chains has to a large extent been retained for reinvestment in the expansion programs of these firms. This is not unusual. Firms typically maintain a reasonable stable dividend policy; earnings are retained in periods when they are high and dividends are to a considerable extent maintained when earnings decline. Earnings have been at a high level throughout the last decade and have, to a large extent, been retained; as a result, the equity per share has increased rapidly.

While the corporate chains do differ in their dividend policy, it is apparent that, since the early '50's, the two largest chains, Dominion Stores and Loblaws, have followed much the same course. The rate of dividend payments in relation to net profits after taxes has been relatively constant at about one-third. The dividends actually paid on common shares represent a return of about 5% per

¹ We deal with the rate of return on investment in more detail in Part III.

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Royal Commission on Price Spreads of Food Products

annum on an investment made in the early '50's. The investor with common stock has the enhanced value of his stock as an additional return. In the case of Steinberg's, where the company is controlled by the family, the policy appears to have been not to distribute dividends on common shares to any extent; dividends have been paid on the preferred stock. Dividend payments during the last three years have averaged less than 10% of the net profit after taxes. In the case of Canada Safeway, the dividend payments have been very irregular. With all of the common stock owned by its parent company, however, there is no incentive to maintain a stable dividend as is the case with companies whose shares are in the hands of the public. In the case of A & P, information on the overall Canadian operations is not made public. The Great Atlantic and Pacific Tea Company is incorporated under the Federal Companies Act and Atlantic and Pacific Food Stores is incorporated under Quebec legislation.

The earnings, both in the grocery and real estate operations, coupled recently with the shift in preference to common stocks, have caused sharp increases in the prices of the common shares of the corporate chains. For example, the prices of the common shares of Dominion Stores and Loblaws have increased rapidly during the '50's. For the former, the share prices in 1958 averaged almost six times those of 1950, and for the latter, more than three times. These increases are considerably more rapid than the increase of 98% for the overall food and allied products group, and 82% for the total index as reported by the Dominion Bureau of Statistics. The increase for these two corporate chains indicates the effect of relatively high earnings when they are concentrated on the holdings of equity capital.

For the other three of the major corporate chains, information is not sufficient to look at increases in stock prices over the period. In the case of Steinberg's, the common stock is held by the family; class A shares (equivalent to common stock, except that they are non-voting) were only sold to the public in late 1958. The common stock of Canada Safeway is owned by the parent company; only preferred stock is listed on the stock exchange. A & P has not issued public stock in its Canadian operations.

In Part III, we will discuss profits in the food industries. At this point we are concerned mainly with access to capital for expansion as a factor contributing to the relatively rapid growth of the chain organizations. We have pointed out the remarkable manner in which food retailers, and particularly the chain organizations, have adapted themselves to the needs of consumers during the recent period of expansion of the economy and of substantial and rapid changes in the patterns of consumer behaviour. We have noticed that this period was a favourable one: the combination of expanding demand and pressure of supplies of food materials was conducive to profits in the food industries for all firms, and for profitable growth by those firms in food retailing which were forward-looking enough to see the opportunities, concerned to be in the forefront of expansion, and at the same time able to secure on favourable terms the necessary funds for investment.

We have seen that the total amount of new investment reached substantial proportions, and that much of it has been in large units. It seems evident to us that the chains were in a favoured position to obtain the investment funds

required. As we will confirm later, the general climate of conditions, along with the efficient operation of the chains, did result in a substantial rate of profits. The chains, already operating on a large scale, found that their large aggregate earnings provided them with a ready source of funds for reinvestment. Further, the profit position and prospects, the fact that they were themselves underwriting their expansion in considerable measure, and the greater facility with which large competent organizations can secure capital in the market placed the chains in a preferred position to the smaller, unattached food retailer in providing for expansion.

3. The Independent Food Store

In the previous section we have dealt with the causes of the growth of the chain supermarket organizations, both corporate and voluntary, in recent years. The total sales of food by unattached independent stores appear to have decreased somewhat during the period from 1951 to 1958, from 1.2 billion to 1.1 billion, which would represent a decline in the share of total food sales by this group from 63% to 36% during this period. This has not, however, meant a decline in sales of existing stores because much of the increase in the voluntary chains' business has been occasioned by the shift of stores into voluntary chains.

The unattached independent food retailer has a place in food distribution which can be attributed to the particular advantages that he may have. Many of these advantages may also exist for retailers in voluntary chains. Independent stores have been able to compete effectively with the chains particularly in the less densely populated areas where the volume of sales has not been sufficient for efficient chain operation. In areas where they compete directly with the chains, they are able to provide certain types of services such as: (1) providing a degree of personal attention to the shopper not possible in a larger organization;¹ (2) offering telephone service, charge accounts and delivery service;² and (3) in some instances staying open to serve customers in evenings and on holidays (particularly where the workers in the store are members of the owner's family). These advantages are attributable to a considerable extent to the fact that the independent store operator may be the owner, the manager and the worker in the store along with members of his family. In addition to providing the above services, he has greater flexibility and can adjust prices quickly and in some instances can even buy products advantageously. There also appears to be a place for independent stores handling food specialties, although the potential extent of overall operations here does not appear to be great.

In addition to providing services of a different nature from those provided by the chains, the independent store, because of its characteristic combination of owner-manager-worker into one, has a resiliency which enables it to survive

¹ Mr. Falls, of the Ontario Federation of Labour, made the following point: "In the old days you saw the butcher leaning on a knife and talking to a young lady and telling her how to cook the meat. Today he is working downstairs on productivity... and they have girls wrapping...,", *Proceedings*, p. 2769.

² In the submission of the Retail Merchants' Association of Canada, it was indicated that fewer of these services are now being offered by the independent stores than previously, *Proceedings*, pp. 4407 and 4441.

a period of adversity. We have observed a rapid growth in the chain store business during a period of rising incomes. With their many fixed obligations, these organizations—in particular the corporate chains—would have more difficulty in a period of declining incomes.

While, as we have seen, the corporate chain stores have a considerable advantage in availability of capital, it is still possible to enter business as an independent food retailer with a limited amount of capital. To gain a reasonably large volume of sales, however, a store must be in an appropriate location. This has become increasingly difficult as desirable sites have been acquired by the chain store organizations several years prior to store construction. For example, few independent store owners have found it possible to obtain locations in shopping centres.¹ Such locations are particularly important because zoning regulations have the effect of limiting alternative locations. We do not suggest that there will not continue to be a large number of independent retailers. However, the increasingly rigorous competition to which they will be subjected and the relatively small scale on which most of them will operate will require of their management a high level of competence and efficiency.

We have set out these considerations to indicate the reasons for the continued existence of the large number of independent retailers. There appears to be a place for them in food retailing. It should be noted, however, that the incomes of the many retailers operating small stores are and will remain relatively low.

1 See p. 43.

CHAPTER 3

FOOD WHOLESALING, PROCESSING, ASSEMBLING

1. Wholesaling

A wide variety of agencies engaged in food distribution are called wholesalers. Of the 1,659 establishments defined as wholesalers proper¹ in the 1951 Census of Distribution, 1,277 were classified as Wholesale Merchants and 114 as Voluntary Group Wholesalers. The functions of the Wholesale Merchants include some or all of the following: assembling, warehousing, order-taking and delivery, and furnishing customers with such services as merchandising aids, credit, and help in store engineering. The voluntary group wholesalers perform these functions for the retail merchants affiliated with them.

The number of wholesalers declined between 1941 and 1951; this, of course, includes the wartime period during which there were some restrictions on the establishment of new businesses. The decline was noticeable for all groups of wholesalers handling specialized lines of food products, except those handling frosted or frozen foods and canned foods. On the other hand, wholesalers handling a general line of groceries increased in number during the period, and in 1951 accounted for 60% of the total sales of all wholesalers proper.

The changes that took place between 1941 and 1951 were clearly associated with the decline in the specialty food store and the rise of the combination food store in retailing.

During the period since 1951, the business of all wholesalers as a group has been increasing, with sales for the three groups (those handling groceries and food specialties, fresh fruits and vegetables, and meat and dairy products) having increased from \$1.2 billion to \$1.8 billion between 1951 and 1957. Most of this increase has been accounted for by one group, those handling groceries and food specialties, of which practically all the business is done by those handling a general line of groceries. By 1957, these wholesalers handling a general line accounted for over 70% of the sales of all food wholesalers.

This continuation of the shift evident in the previous decade is associated with two factors. First, the decline of the specialty food store and the rise of the combination food store, already underway before 1951, has, as we have observed previously,² continued during the '50's at a rapid rate. Secondly, with the rapid development of the voluntary chains in the '50's,³ the business of the general line food wholesalers servicing the retail outlets in these chains has been increasing.

Some of the larger wholesalers in Canada are; Western Grocers, a subsidiary of George Weston Ltd. (operating in western Canada with subsidiaries of its own which include Dominion Fruit Company, the parent company of the retail

¹ Wholesalers proper are distinguished from the other groups under the general designation of wholesalers in the Census by the fact that they buy and sell on their own account.

² See p. 33.

chain of Shop Easy Stores Ltd.); National Grocers (operating in Ontario); Kelly, Douglas and Co. (operating mainly in western Canada, with a subsidiary, Super Valu Stores Ltd., a retail chain operating in British Columbia); and M. Loeb Ltd. (having expanded recently from operations in the Ottawa area to Sudbury with the acquisition of J. A. LaPalme and Son, and to Alberta, where partial interest has been acquired in Edmonton Associated Wholesale and Horne & Pitfield). All of these wholesale firms participate extensively in voluntary chain operations.

With approximately two-thirds of the retail food business now handled by corporate or voluntary chains, the role of the wholesaler servicing the completely independent retail store has declined. The increase in the business of food wholesalers as a group during the period from 1951 to 1957 can be attributed almost entirely to the rapid increase in the business of voluntary group wholesalers.

We have described the voluntary chains in the preceding chapter.¹ While they may be organized on the initiative of the retailers themselves, most of the rapid development which has taken place during the '50's has been among voluntary chains sponsored by wholesalers. Active recruiting by wholesalers of stores to participate in voluntary chains, and their assistance with merchandising and other matters once the stores are in the group, represent an intrusion of wholesalers into the retailing of food similar to the performance of wholesaling by the corporate retail chains. The degree of intrusion varies between the different voluntary groups and also between the individual wholesalers within a particular group. For example, wholesalers servicing retail stores in the largest voluntary chain in Canada, Independent Grocers Alliance, participate to a considerable extent in the management of the stores, while there are voluntary groups at the other extreme where there is little more than a common store name. In these latter cases participation in a voluntary chain results in little change: the merchandising and other services may be little different from those traditionally performed for unattached independent retailers by the wholesalers who service them.

To recapitulate, the three principal changes which have occurred at the wholesaling level in recent years have been: (1) the increasing assumption of the wholesaling function by the corporate chains as these organizations have increased their share of the retail market; (2) the increasing association of independent retail stores with voluntary chain wholesalers. This was induced by the competition of the corporate chains. Wholesalers and independent store operators have recognized their identity of interests, and the expansion of the share of the retail market secured by stores associated with voluntary chain wholesalers has proved the effectiveness of these arrangements; (3) retailers outside of the voluntary chains have endeavoured by various means to meet the competition of the chain stores, both corporate and voluntary. To the extent that wholesalers participating in voluntary chains give more limited service to unattached independent stores, these stores are at a disadvantage. However, a number of wholesalers have instituted cash and carry warehouses (with or with-

¹ See p. 37.

out self-service) in an attempt to reduce the cost of food to the smaller retailers. Wholesalers themselves have continued to feel the impact of the increasing proportion of the retail food business done through the chain stores.

2. Processing

Firms in the processing industries process the products of the farm into the form wanted by the consumer. They also store both the raw material and the processed product. For transportation they rely mainly on specialized transportation agencies. Product standardization (or quality control) and packaging, as well as a number of other functions, are performed by food processors. Many non-food by-products are often produced as part of the diversified operations. These range from the drugs produced in the meat packing industry to the beet pulp produced in sugar refineries for use as animal feed. Food processing firms are also engaged frequently in other enterprises, for example, fertilizer production in the meat packing industry. Where these enterprises are carried on in the same establishment as the food processing, the value of the output is included in the statistics of value of products produced.

The Situation in 1951

In 1951, there were 5,633 establishments (plants) processing food products of farm origin. They purchased materials (mainly raw materials) valued at \$2.0 billion, and sold products of gross value of \$2.6 billion.

In terms of the total value of products sold, the major group comprises those handling livestock and livestock products, including dairy products. These establishments accounted for half the total in 1951. Other groups, in order of size, were flour mills, bakeries, fruit and vegetable processors, sugar refineries, and breakfast food plants. In terms of number of establishments, the most numerous groups were bread and bakery products (2,607) and butter and cheese plants (1,690). These industries include many small local plants. The value of sales per establishment was largest in the slaughtering and meat packing industry. One hundred and fifty-five meat packing plants sold products valued at \$0.9 billion, or about \$5.7 million per plant. (Their cost of materials amounted to about \$5.0 million per plant.) The next highest value of sales per plant was in the flour milling group. Here 108 establishments sold products valued at \$0.3 billion, or \$2.6 million per plant (cost of materials averaged about \$2.2 million). In all of the groups there are, of course, large variations in the size of plant.

The degree of concentration of ownership varies considerably in the various fields of food processing. Ownership of butter and cheese plants¹ tends to be widely dispersed and many local plants are owned and operated by farmer cooperatives. In 1948, five firms in the slaughtering and meat packing industry produced 70% of the total output; three firms in the prepared breakfast foods industry produced 92% of the total output. Other fields which showed an appreciable concentration included (beet) sugar refining (four firms, 100%, condensed

¹ Excluding those producing special process cheese.

milk (six firms, 62%), fruit and vegetable processing (three firms, 40%), bread and other bakery products (five firms, 33%), and flour milling (three firms, 32%).

Developments since 1951

In the past 10 years, the value of products sold by the foods industry has increased steadily. While part of the increase can be attributed to increased prices, the increase in the volume of production from 1949 to 1957 was of the order of 33%.

A number of changes that have taken place in the operations of food processors have been occasioned by the changing structure of food distribution outlined above. The changing structure includes the increasing concentration in food retailing, and the pronounced move towards integration of wholesaling and retailing functions. The impact on processors is conditioned to a large extent by whether or not their products are of a type that are sold under a brand name. For such products, the appeal to the consumer is made largely on the basis of the brand. The supplier is under constant pressure to maintain his "share of the market" in order that his brand will be kept on retailers' shelves. This entails the maintenance of a flow of the product through the year in a volume sufficient to meet the demands of the large buyers, and the provision of a large variety of items and package sizes.

The processor of products which are sold under brand names appeals to the consumer through advertising and other promotional devices in order to differentiate his products from those of competitors. Where most of the products of an industry have these characteristics, promotional expenses are relatively high. This is particularly evident in the prepared breakfast foods industry and to a lesser extent in firms processing fruits and vegetables.¹ The promotional expenditures in these as well as other fields of food processing may, as we have observed previously, take the form of advertising allowances to distributors,² or they may be incurred in advertising and other promotional activities carried out by the processing firms themselves.

Products of a type that are not sold under a brand name, such as uncured meats and fresh fruits and vegetables, fit into a role of particular significance. They are often used by retailers as "specials" to draw in customers.

Superimposed on the features of the products referred to above is the desire of the chain retailers to economize on the costs of procurement. They demand a large volume and wide variety of products and package sizes. The small processor has difficulty in meeting these demands. Neither is he in a position to obtain some of the technical efficiencies available to the processor who handles a wide variety of items as, for example, the greater efficiency possible when operations are conducted over a longer season.

There has also been in food processing an increased centralization of the selling function in head offices. While this development did not start during the

1 See later sections dealing with the particular fields of food processing. 2 See p. 60.

past 10 years, it has now reached a stage where the individual salesman is permitted little flexibility. To a considerable extent, the sales function is being shifted to head office where sales are handled by a smaller but more highly skilled staff.

With the increased bargaining position of the chain store organizations, there have been a number of developments affecting all processors, whether large or small. There has been an increase in the use of distributors' (wholesalers' and retailers') brands in certain lines, and distributors have increased the degree to which they purchase products on specifications. Also, the increased bargaining power has enabled the chain organizations to obtain advertising and other allowances except in a small number of cases where suppliers have been able to persuade the consumers to demand their products through extensive national advertising. In addition, the holding of inventories of seasonally processed products, such as fruits and vegetables, has been shifted back to the processors. To the extent that processors are successful in passing back the effects of the increased bargaining power of the chains, prices of primary producers are lowered and price spreads increased.

While changes in the various fields of food processing have been less striking than those in the retailing and wholesaling of food, many changes have occurred. The products themselves have been changed with the demand by consumers for greater variety and for more "built-in maid service". Many changes have also been made in food packaging. Extensive research programs have resulted in a continual stream of new products, and these have typically been accompanied by extensive promotional programs to ensure that the products attain sufficient volume to hold places on the retailers' shelves. Examples of the development of new products in recent years are the lines of baby foods and frozen foods that have come on the market. These changes in products affect prices at various levels, and the changes in one field often have widespread effects as, for example, the impact of the promotional activities in support of prepared breakfast foods on the sales of bakery and other products.¹

The objective of promotion from the point of view of food processors is that the activity contribute to company profit. No firm wishes to make a significant expenditure unless it feels assured that such an expenditure will be profitable to the firm. Consequently, promotional activity may aim at: (1) selling more of a processor's products; (2) selling more of the processor's higher gross margin products; (3) increasing the processor's share of the market; (4) increasing consumer loyalty to the processor's product; or (5) obtaining wider and more intensive distribution at the wholesaler and retailer level. These, and other aims, are sometimes thwarted by competitor activity and customer pressure. For example, aggressive promotion on the part of competitors may force the processor to embark on a promotional campaign to maintain rather than increase his share of the market. Customer buying power may alter the processor's aim from one of obtaining wider and more intensive distribution to one of maintaining existing distribution.

The manner in which promotion is employed depends on the firm's prevailing attitude towards the role of promotion as an effective vehicle of marketing effort for the exploitation of existing or potential market opportunity. At any one time,

1 Two of the bakery firms brought out this point in their replies to the Commission's questionnaire.

different processors in the same industry may apply different weights of importance to promotion as a form of marketing effort. For example, a processor may think it more worth while to employ more salesmen than to employ more promotion. In other words, the aims of promotion are not exclusive; they are a part of the marketing aims of the company.

Selection and use of the many available promotional devices depend on the processor's evaluation of such devices to fulfil the tactical role selected for them.¹ As stated above, competition in its many forms forces some processors to use promotional plans that deviate from their aims of promotional effort.

Existing promotions by food processors are of two types: price promotions and non-price promotions, some of which are directed to the trade and others directed to the consumer.

Price promotions directed to the food trade range from quantity discounts of various types, to shelf and display discounts (a discount if the customer displays the product at a certain location in the store), to "baker's dozen" deals (an additional unit of the product provided at no cost over the number ordered). Many other arrangements exist.

Questionnaire returns from the food processing industry for the year 1957 indicate that very few firms grant shelf and display discounts.² One breakfast food company allowed a shelf discount in the form of merchandise; a firm in the dairy products industry provided for such allowances on certain products; a flour milling firm gave one at certain times of the year to retail food chains; and a meat packer discounted for retail location. End-of-year cumulative quantity discounts are prevalent in the fruit and vegetable processing industry and in the ice cream segment of the dairy industry.

Price promotions that are directed to the consumer include one-cent offers, bonus coupons, mail-in premiums, banded deals (a multiple number of units banded together at a special price), and outright price discounts that may or may not be printed as part of the label.

Non-price promotions directed to the trade include such methods as advertising in the trade papers, contests for store managers and the granting for a limited time of exclusive distribution rights on new products. Generally, while such practices as trade advertising prevail throughout the food processing industry, they account for a relatively small share of the promotional budget. By far the largest portion of the processor's promotional budget is allocated to the non-price type of promotion that is directed to the ultimate consumer—either directly to the consumer or to the consumer through the auspices of the retail stores. Non-price promotions that are directed to the ultimate consumer via the store include cooperative advertising allowances, the use of store demonstrators, in-store displays, in-pack premiums and packaging changes.

One breakfast food firm allocated 14% of its 1957 promotional budget for co-operative advertising. Such allowances are considerable in the fruit and vegetable processing industry as well and range from 13% to 32% of the promotional budget. A fish processing company allowed 16% of its promotional budget to

¹ Canadian Grocer lists 50 kinds of promotional schemes. See p. 30 of the September 27, 1958 issue.

issue. 2 However, it is conceivable that such discounts may, in fact, be given, but accounted for under a different promotional category, such as "special deals" or "advertising allowance".

co-operative advertising, while a meat packer allowed 12%. Store demonstrators are employed mainly in the fruit and vegetable and meat packing industries; the returns indicate a range of 2% to 4% of the promotional budget. There is also the supplying of display materials to be used inside the stores. Budget allocations for such displays ranged from 2% to 73%, with no consistency within any particular industry. For example, our data indicate the following ranges: 3% to 21% in the meat packing industry; 6% to 24% in the fruit and vegetable processing industry; 2% to 6% in the breakfast foods industry; and 8% to 73% in the dairy products industry. In-pack premiums are an important promotional device in the breakfast foods industry; their cost ranged from 5% to 30% of the promotional budget. We do not have data on costs of package changes: while the intent of the many changes in packaging design and materials are promotional in nature, the costs of such changes are included with the overall costs of packaging materials and containers.¹

Consumer advertising appears to be the main method of promotion used by food processors. Advertising expenditures (*excluding* co-operative allowances in most cases) ranged from one-third to three-quarters of the total promotional budgets of the larger processors. Newspaper advertising receives the greatest allocation of the advertising budget; television advertising is also important. Typically, firms spent between one-third and two-thirds of their advertising budget on newspaper advertising. Some of the larger firms in the dairy products, meat packing, flour milling, fruits and vegetable processing, and breakfast foods industries indicated that their 1957 television billings accounted for one-third to two-thirds of their total advertising budget. One large firm in the breakfast foods industry placed 56% of its advertising in magazines, and a bakery firm spent 41% in radio advertising.

Developments in the Major Fields of Food Processing

We describe the changes in each of the major food processing fields in this section. To indicate the relative importance of the various fields, we have included Table 8 which gives the selling value of shipments in each field in 1957.

In meat packing, the degree of concentration of firms was already relatively high, with 70% of the output controlled by five firms in 1948. By 1956, four firms—Canada Packers, Swift's, Burns and Schneider—produced 71% of the output (in 1955, Canada Packers acquired Wilsil's and Calgary Packers, and Burns acquired Modern Packers).² The effect of the increased concentration of buying by distributors has resulted in a shift to a smaller, more highly skilled sales staff in place of a larger number of less skilled sales personnel. Evidence presented at the hearings by representatives of meat packing companies³ suggested that the cost of the shift to the more highly skilled sales staff had, to a considerable extent, offset the economies of the smaller number of sales personnel

1 We discuss these costs in Part IV.

²The meat packing industry is at present the subject of an inquiry under the Combines Investigation Act.

³ See Proceedings, p. 3858, testimony of Mr. R. S. Munn, President of Burns and Company. Mr. McLean of Canada Packers also referred to the fact that their sales procedures required some modification as far as the chain store organizations were concerned (*Proceedings*, pp. 4116-7).

required. Shifts in population in relation to areas of meat production have resulted in an increase in the amount of transportation required to get a unit of product to the consumer. Other changes affecting meat packing include a tendency towards higher relative prices for the better cuts, occasioned by the increase in aggregate demand, and a shift in cured meats to shorter and milder curing. These product changes have, however, had little overall effect on the structure of the meat packing industry. Firms primarily engaged in meat packing may of course be influenced by factors affecting the demand for fertilizers. animal feeds and other by-products which they also produce.

Table 8-Selling Value of Factory Shipments, by Groups in the Food Processing Industry, 1957

Group	\$ Million	Per Cent
Meat Products	947	32.0
Dairy Products ^a	602	20.3
Biscuits	331	2.0
Flour Mills.	204	6.9
Fruit and Vegetable Preparations	265	9.0
Sugar Refineries	155	5.2
Macaroni and Kindred Products ^b	13	.4
Miscellaneous Food Preparations	336	11.3
Total Food Processing	2,964	100.0

• In addition, the selling value of shipments from milk pasteurization plants totalled \$139 million. • We have not dealt with this group in the text. One of the main food processing firms in this group is

Catelli.

* Excluding Fish Processing, with selling value of shipments of \$171 million.

SOURCE: Reports of industry sub-groups in the Foods and Beverages Industry, Industry and Merchandising Division, Dominion Bureau of Statistics.

In the dairy products industry, where the primary product may be used in a variety of ways, the nature of the changes that have taken place varies greatly. The production of processed dairy products has been affected to a considerable extent by government activity, with butter, cheese and concentrated milk products all having been under price support at one time or another during the past 10 years. In most years a considerable amount of butter storage has been performed on the government's account. The number of firms engaged in the production of butter and cheese is large but there has been a great deal of consolidation in recent years. The 30 largest firms produced 32% of the output in 1948 and 45% in 1956. The co-operative form of organization is particularly important in the processing of butter, cheese and powdered milk. In the processing of dairy products as a whole, 27% of the output was produced in co-operative plants in 1956. In two of the sub-groups within the dairy products industry -condensed milk and processed cheese-the degree of concentration is relatively high. In 1948, six firms handled 62% of the output of condensed milk, and in 1956, four firms, including Carnation and Bordens, produced 59%. For processed cheese, there was an increase during this period from five firms producing 81% to four firms producing 87%, of which Kraft is much the largest. Bordens, Kraft, and Carnation are subsidiaries of United States firms. In the

74

production of processed cheese, there is considerable stress on product differentiation and promotional activities in support of the various brands. In the submission of Kraft Foods to the Commission,¹ it was indicated that they had spent large sums of money in advertising and promotional activities.

In the distribution of fluid milk, which is not included as part of food processing, the situation varies from area to area. In general, there is a considerable degree of regulation by provincial governments and changes have taken place slowly with a considerable shift from home to store delivery, reduction in the frequency of home deliveries, and the increased use of paper cartons having been the main changes. In the evidence presented at the public hearings, this field was presented to the Commission by a number of interested farm groups as a model one because the price spread had not increased as much as in other fields² but at the same time it was the target for many of the criticisms of consumers.³ We report on our study of the price spread for fluid milk in Part V.

Firms producing bread and other bakery products have experienced a number of problems during recent years. With the main product being one for which there has been relatively little possibility of extending the market, these firms have had less scope than others in the food industry in adjusting to changing circumstances. Bakery products other than bread have, however, become an increasingly important factor. There has been a considerable shift to fewer and larger plants with new and more highly mechanized bakery equipment. This trend has resulted in more transportation in relation to the quantity of product handled. The bakeries during this period have also shifted in their route distribution from horse-drawn vehicles to trucks. With bread being a "traffic" item in the supermarket and distributors' private brands being priced considerably below the route prices, there has been some decline in the proportion of bread handled on home delivery routes. There was little, if any, increase in the proportion of the bakery business done by the main firms—from five firms with 33% in 1948 to six firms with 37% in 1956. The major firms include Canada Bread, Canadian Bakeries and Eastern Bakeries (subsidiaries of Maple Leaf Milling), Weston Bakeries (a subsidiary of George Weston Ltd.), Consolidated Bakeries (which includes Wonder Bakeries and other subsidiaries), General Bakeries, McGavin's, and Inter-City Baking Co. (a subsidiary of Lake of the Woods Milling). The fact that there are corporate links between flour mills and bakeries may well affect the pricing of products. Even if a baking firm which is a subsidiary of a flour milling company buys from its parent company when prices are the same as those offered by other companies,⁴ this preference may have a general downward effect on the overall pricing of flour because it narrows the market for other flour milling companies.

The flour milling industry in Canada has been influenced primarily by the wheat-surplus problem. (This industry, which was already quite highly mechanized in 1949, now has considerable idle capacity.) Difficulties of selling in foreign markets in recent years have been accentuated by the export subsidy program of

¹ Proceedings, p. 4597.

² See, for example, the submission of the Saskatchewan Farmers' Union, *Proceedings*, p. 1400. ³ See, for example, the submission of the Nova Scotia Branch of the Canadian Association of Consumers, *Proceedings*, p. 2155: "We are convinced, however, that the present system of distributing milk is inefficient and costly."

⁴ Mr. Ross of Canada Bread suggested that this was the practice. Proceedings, p. 2477.

the United States and the development of flour mills abroad. As with some of the other areas of food processing, firms in the flour milling industry engage in other activities such as the production of animal feeds. There was a sharp increase in the degree of concentration in this industry in Canada from 1948, when three firms did 32% of the business. to 1956 when four firms did 80%. These four firms are Maple Leaf Milling (including Purity Flour Mills, which has been a subsidiary since 1952). Robin Hood Flour Mills (a subsidiary of International Milling Co., an American company), Ogilvie Flour Mills, and Lake of the Woods Milling (controlled since 1954 by Ogilvie). We have referred to the fact that a number of bakery firms are controlled by these flour milling companies; some of these companies also own terminal and country grain elevators. The Flour Milling industry is influenced considerably by the operations of the Canadian Wheat Board, both in buying its raw materials and in selling its final product, the selling price of which is affected by wheat prices. The Canadian per capita consumption of the main product-flour-has not been increasing, and the range of products sold has not increased as it has in some other fields. One of the few new product developments has been prepared cake mixes.

The fruit and vegetable processing industry is one of contrasts. The large firm has been able to adjust relatively quickly to the increased variety of products and has taken the initiative in developing new products. For the larger firms, a decline in seasonality of operations has been occasioned by the wider variety, and this development has been assisted by bulk preserving which provides raw material for the firm to draw on in the off-season. The small seasonal canning company with a limited number of lines has found it much more difficult to adjust and such firms have generally been left behind in the development of a whole line of new products such as baby foods, frozen foods, sauces, etc. In some instances, however, small firms have had profitable operations in specialized lines for which markets were expanding. As most of the products of this industry are sold under processors' brands, national advertising and other forms of promotion play a significant role, with the large firms having advantages. Promotional expenses increased in relation to sales between 1949 and 1957, and by 1957 ranged from 3.4% to 7.1% of sales for the four major firms. For all firms in this industry, the holding of inventories has increased as the distributors have shifted this function back to the processor. The proportion of the output produced by the larger firms did not increase between 1948 and 1956; in the earlier year three firms produced 40% of the output, and in 1956 four firms produced 43%. These four firms are Canadian Canners, Heinz, Campbell Soups and Libby's (all subsidiaries of or controlled by United States-based firms). Some of the other firms in the field include W. Clark, Green Giant of Canada (controlled by Salada-Shirriff-Horsey since 1956). Stokely-Van Camp of Canada, David Lord and Alphonse Raymond.

Changes in the sugar refining industry have not been great in recent years. A highly standardized product is produced with relatively few firms engaged. There are four in beet sugar refining at present—Canada and Dominion Sugar, Quebec Sugar Refinery, Canadian Sugar Factories and Manitoba Sugar Company. The last two companies were controlled by the British Columbia Sugar Refining Company Control of the Manitoba Sugar Company was acquired in April, 1955; in 1957 the Restrictive Trade Practices Commission concluded that the public interest would

76

be best served if Manitoba Sugar operated as an independent company. Sugar beets are grown on contract with farmers¹ and the product is sold in a market where prices are influenced primarily by the price of imported sugar.

In the industries processing food products of agricultural origin the total product of the prepared breakfast foods industry is less than any of the industries referred to above. In this industry (which is dominated by subsidiaries of United States corporations) in 1948 three companies produced 92% of the output, and by 1956 the same number of companies produced 87%. The main firm in this field is Kellogg's. Until recent years Nabisco and Quaker Oats were the main other firms of significant size engaged in the production of prepared breakfast foods in Canada, followed by General Foods. General Mills began activities in Canada during the '50's. With consumers allotting a relatively small part of their food expenditures to prepared breakfast foods, there has been considerable scope for the creation of demand by promotional activities. With the development of markets for new products, firms in this industry have been able to avoid some of their previous problems of seasonal operations. It is also interesting to note that several of the companies in this industry have extended operations into the expanding pet food lines. These companies have engaged in many of the merchandising activities with which consumers' groups expressed displeasure at the public hearingscoupon offers, in-package premiums, advertising directed to children, etc., and a generally high level of advertising which increased during the period. Promotional expenses ranged from 13.4% to 20.2% of sales in 1957 for the major firms engaged in the production of prepared breakfast foods. While we stress the promotional activities of these firms, it should be noted that they are alert to the changing structure of food marketing. They have shifted to local warehousing when the greater variety called for this to provide efficient servicing of distributors, and they have watched the shelf life of their products closely by coding packages.

We have noted that the extent of participation by co-operative organizations in the processing of cheese, butter and powdered milk is considerable. It is greater in this field than in food processing as a whole, where the overall degree of processing done by co-operatives averages between 7% and 8% of the total. The proportion has remained about the same during the past 10 years.

3. Assembling

There are a number of agencies of varying types which have the common function of assembling primary products. In addition, they may transport and store the products and perform other functions.

In 1951, the Census of Distribution recorded 6,664 establishments handling farm products to the value of \$1.3 billion. Grain elevators and buyers were the largest group with about one-half of the total volume of sales of all assemblers handled through 5,314 establishments. All of the grain elevators are owned either by grain producers' co-operatives or by large private elevator companies. In 1957 the United Grain Growers and the Manitoba, Saskatchewan and Alberta pools operated 2,622 of the 5,343 elevators; these 2,622 elevators had a capacity of 198 million out of a total of 380 million bushels. The remainder of the capacity

1 We refer in Part V to the particular type of this contractual arrangement.

Particular and and

was operated by non-co-operatives, with the major companies being Searle Grain Co. (462 elevators), Federal Grain Ltd. (454) and its subsidiary, Alberta Pacific Grain Co. (331), Pioneer Grain Company (439), and National Grain Co. (324). Ogilvie Flour Mills operated 128 country elevators and 98 were owned by its subsidiary, Lake of the Woods Milling Co.

Other large groups of assemblers were those handling livestock, poultry products and fruits and vegetables. Livestock assemblers (410 establishments in 1951) reported sales totalling \$380 million. Poultry product establishments (416) reported a total volume of sales of \$70 million. Fruit and vegetable establishments (398) had total sales of \$102 million.

Co-operatives¹

In its submission to the Commission at the public hearings, the Co-operative Union of Canada included a definition of co-operative enterprise as follows:²

"One of the best definitions of co-operative enterprise is found in Chapter 3 of the Report of the Enquiry on Co-operative Enterprise in Europe, 1937, issued by the Government of the U.S.A. It reads as follows:

'A co-operative enterprise is one which belongs to the people who use its services, the control of which rests equally with all the members, and the gains of which are distributed to the members in proportion to the use they make of its services.'

In practice, co-operatives follow certain well-accepted principles, of which the following are fundamental: open membership; one member, one vote; limited return on capital; and surplus distributed in proportion to patronage. Methods of operation ordinarily include provision for promotional or educational work, cash trading is favoured, and goods are handled at regular market prices."

Co-operatives have for many years been particularly important in the marketing of agricultural products at the point of first sale. It is at this point that the assembly function is carried out. In 1951 co-operatives performed 36% of the assembling of commodities other than grain and approximately 50% for this latter commodity. Taking into account the relative magnitudes for grain and other products, the overall proportion of assembling done by co-operatives in 1951 was 43%. The importance of the co-operative form of business operation at this level, and the lesser importance at the processing (7%) and retailing level (2%), is associated with the fact that the co-operative movement in Canada has drawn its strength from farmers and other primary producers in contrast to some other countries where the participation of consumers of finished products has been much greater. We have noted that in particular fields of processing the proportion is as high as 27%; the proportion is also much higher than the national average in particular regions. The difference in relative importance of co-operatives at the various levels is occasioned to some extent by the varying

1 For a more extensive discussion of "The Role of Co-operatives in Canadian Food Marketing", see Volume III.

2 Proceedings p. 4152.

financial requirements of business, with the performance of the assembly function requiring lesser amounts of capital than some of the other stages of marketing.

The interest of the Commission in the role of co-operatives stems from the particular significance that the co-operative form of organization may have in performing alongside of other forms of business enterprise and operating as a check on the possibility of excessive price spreads. One of the factors in the participation of co-operatives is that the patronage dividends which are paid either to producers of food commodities or to consumers of food products alter the effective prices and thereby result in reduced price spreads.

For the period since 1951, information is not available on the proportion of the business of assemblers done by co-operatives. However, the data collected by the Economics Division of the Department of Agriculture indicate that the sales of "marketing" co-operatives have increased to about the same extent that the cash income from the sale of farm products has increased. This suggests that the proportion of the business of assemblers done by co-operatives has not changed greatly.¹

Marketing Boards²

There have been other changes at the farm end of the marketing system for food products, the most noteworthy in recent years being the development of producer marketing boards.³ The essential feature of the board method of marketing is that, where the majority of the producers of a commodity desire to market their product collectively, the minority may be compelled by law to fall in line with the wishes of the majority. Boards have been established under provincial legislation and have been an important factor in recent years in the marketing of a number of food products. There are three kinds of producer boards operating in the provinces of Canada. The simplest is the negotiating committee type which negotiates the minimum price to be received by the farm producer for his products. The second is a negotiating-agency board which both negotiates price and handles payments but does not handle the crop. The third is the central selling agency type which has an agency appointed to control and market the product, though it may not take ownership in any physical sense at any stage in marketing. Among the producer marketing boards are the British Columbia Fruit Board, which in 1939 designated B. C. Tree Fruits as its sole selling agency,⁴ and the British Columbia Coast Vegetable Board, which were established prior to the war. Since the war, and particularly in the '50's, there has been increased use made of such boards. In Ontario, a large number of negotiating boards have been established for fruit and vegetable products and dairy products, with farmers and processors both represented on the boards. A few boards have also been established which operate through a central selling agency, one of which f

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¹ In "marketing" co-operatives are included those that are engaged in processing for which we have separate information from the Dominion Bureau of Statistics which has been referred to under "Processing".

² For a more extensive discussion of "The Role of Marketing Boards in Canadian Food Marketing", see Volume III.

³ Many of the submissions at the public hearings of the Commission dealt with particular aspects of these boards' operations.

⁴ Royal Commission on the Tree Fruit Industry of British Columbia, p. 491.

is the Ontario Hog Marketing Board. Legislation exists in other provinces as well for the establishment of producer marketing boards, and a number have already been established.¹

While the co-operatives have voluntary membership, the sale of products through marketing boards is compulsory, provided that a stipulated proportion of the producers (in some cases, producing a stipulated proportion of the product) vote for establishment of a board. The marketing boards may, however, use co-operatives as their selling agencies, and in many cases have sold through existing co-operatives or have established agencies under co-operative legislation for the purposes of handling their products.

By far the widest variety of control methods has been used in the case of the British Columbia marketing boards. This is particularly true of the Fruit Board which has controlled such matters as the time and place of marketing, the quantity and quality of the product marketed, the per cent marketed in fresh and various processed forms, and the nature of the containers used. It has also undertaken extensive research, sought to expand demand through advertising, and performed processing and brokerage functions. The Fruit Board has sought to raise producer prices through regulating the flow to market, employing specialized and well-informed salesmen and practising price differentiation. In short, it has made the fullest use of controlled marketing legislation of any board in Canada.

The general practice of the Board is to sell to British Columbia and Alberta buyers at higher prices than those charged buyers in other provinces. There seems no reason to believe, however, that any such price differences have been more pronounced since 1950 than in the immediately preceding years. Indeed it seems likely that they have become considerably less in more recent years.

While we have not been able to assemble conclusive evidence of the effect of the action of marketing boards in general on producer prices, in the few instances where the Board has control over the supply and distribution between domestic and foreign markets, it seems evident that there has been an increase in the domestic price to producers. As to the effect of marketing boards on price spreads, it should be noted that marketing boards have not been established for the specific purpose of narrowing price spreads. Because of the great variety of factors operating at any one time, we have not been able to ascertain whether or not there has been any narrowing or widening of price spreads as a result of board activity.

In addition to producer marketing boards, there are the milk boards, established under provincial legislation, which operate in most provinces. In general, however, these operate almost as public utilities, setting prices to farmers and, sometimes, margins and prices to consumers. These have been in existence throughout the period since the '30's.

¹ The development is summarized by L. E. Poetschke and Wm. Mackenzie, The Development of Producer Marketing Boards in Canadian Agriculture, University of Alberta, 1956.

4. Government Price Supports

During the public hearings, representatives of some producer organizations suggested a relationship between narrow price spreads and government price supports.¹

We have examined the effects of government price support operations on price spreads for a number of commodities. In the case of butter, which has been under a program of price support throughout the 10 years, the Agricultural Stabilization Board and its predecessor, the Agricultural Prices Support Board, began placing butter in storage as soon as the open market price got down to the guaranteed minimum or floor level, and continued storing until it rose above that level, thus raising prices. The Board then resold its butter to the trade in periods when prices were above the guaranteed minimum level, thus reducing prices at that time. In the program of price support for butter, there have been a number of factors that have tended to widen the price spread. These include: the lengthening of the storage period for butter, additional costs involved in meeting the Board's buying specifications, the effect of Board activity in limiting gains in efficiency in the processing of butter, and the effect of price supports in increasing the supply of butter and thereby resulting in a tendency to pull farm prices down. There have also been a number of factors in the price support program for butter that have tended to narrow the spread. These include: the bearing of a portion of the marketing costs by the government (there have been only one or two brief periods during the past 10 years during which the Board's selling price more than covered its cost plus carrying charges); and the impeding of changes in the product as well as in packaging, promotional and other activities associated with the participation of the Board in butter marketing. In the case of butter, which has been subject to substantial support over the 10-year period, we conclude that support procedures have tended, on balance, to narrow the spread. An important factor outside of price supports which would have tended to keep the butter spread narrow is the availability of a lower-priced competitive product, margarine.

In the case of eggs, the participation of the government through price supports has been much more limited than in the case of butter. It is unlikely that the effect on the price spread for this commodity has been significant. For other commodities, including cheese, skimmed milk powder, apples, potatoes, cattle and hogs, price supports have been a factor during limited parts of the period only and could not have been an important factor in price spreads on these commodities in most years.

¹ For example, see the brief presented by the Saskatchewan Farmers' Union, Proceedings, pp. 1398-1410, and the answer to questions, pp. 1444, 1448.

PART III

GROSS MARGINS AND RETURNS TO LABOUR AND CAPITAL IN FOOD PROCESSING AND DISTRIBUTION

CHAPTER 1

INTRODUCTION

1. The Relation of the Analysis of "Gross Margins" to the Study of Price Spreads

An analysis of gross margins is one way in which we can look at price spreads. The retailer, for example, buys quantities of food products and sells these quantities to consumers. The difference between the total amount he spends for materials and the total revenue he obtains from sales is a measure of the aggregate spread on all the units he handles. This difference is the retailer's gross margin.

In this part we discuss the operating results of various types of marketing firms, the changes from 1949 to 1957 in the spread looked at in this way ("gross margins") and the main components, viz., payments to firms in other sectors of the economy, earnings of employees, other operating expenses, net operating profit, and net profit before income taxes. In later sections of this part, we refer in greater detail to the changes in earnings of employees, corporate income taxes, and returns on investment. We consider these matters in this part because they can be dealt with conveniently by using data relevant to the analysis of gross margins.

2. "Gross Margins": An Accounting Measure

In the accounts of business firms, we have the expenditures of the firm on raw materials and the revenue from the sale of the products; the difference between these is the "gross margin". Gross margins can be obtained from the financial records of retailers, wholesalers, processors and assemblers, and, when these are available over a period of years, changes in gross margins can be observed.

The gross margin of any firm in any year is measured in dollars and relates to the total of all products handled. As most firms handle a variety of products, it is not possible from the accounting data to obtain a "spread" per unit of any one product expressed in dollars. The gross margin for a group of firms is usually expressed as a per cent of sales in order to obtain a yardstick for the measurement and also because the number of firms reporting usually varies. These ratios of gross margins as a per cent of sales increases from year to year. If the gross margin as a per cent of sales increases from year to year, this means that the cost of raw materials is a declining proportion of sales.

The financial records of the firm enable us to break down the gross margin into parts. We can, therefore, use these records to analyze the changes which have been occurring in the components of the gross margin. For example, it is possible to discover whether expenditures on salaries and wages, as a per cent of sales, have increased or decreased.

If it were possible to obtain the financial records of all firms at, say, the retail level of food marketing, we could determine the total gross margins for all retailers, i.e., the total difference between purchases of foods by retailers and total sales by them to consumers. We could also obtain an average gross margin or spread for all retail firms. Where this is not possible, the financial records of a sample of firms can show the range in gross margins between retailers. If the sample were representative of all retailers, the average gross margin for the group would be similar to that for all retailers. The same type of data could be obtained for the components of the gross margins.

There are difficulties in carrying through this kind of study from the financial records of firms. Rarely are the financial records of all firms available; accounting procedures, although considerably standardized, do differ between firms, and result in some lack of comparability; firms frequently engage in activities other than the handling of food products, and it is difficult or impossible to eliminate these items from the accounts. The difficulties notwithstanding, the analysis of gross margins from accounting records does throw light on the spread and on changes occurring over a period of years.¹

We will deal with gross margins as a per cent of sales. We are concerned with price spreads looked at in this way because the business community and others watch changes in these gross margins and are concerned with what lies behind the changes they observe.² The changes in gross margins expressed as a per cent of sales have little meaning by themselves but they are for many a convenient vehicle for analyzing the effects of changes in value of sales, costs of raw materials and changes within business firms.

3. The Components of Gross Margins, From Financial Records

The Dominion Bureau of Statistics Operating Results of chain food stores, independent food stores and food wholesalers provide a gross margin as a per cent of sales, and also provide a breakdown of the various components of this margin in considerable detail. A breakdown can be obtained from the D.B.S. reports on the food processing industry, but information is not available for many of the expense items. The components in these breakdowns include the following.

Payments to Firms in Other Sectors of the Economy

Firms in food marketing buy from other firms goods and services required in the marketing of the food products which they handle. Grouping expenses into such a category as this is arbitrary and can only be done with those expenses

¹ The Dominion Bureau of Statistics, in its studies of operating results of food retailers and wholesalers, obtains information by a questionnaire sent to a sample of firms.

² See, for example, the November 22, 1958, issue of Canadian Grocer and the question on the cover: "The chains: What's Behind the Mounting Gross Margins"?

Gross Margins and Returns to Labour and Capital

which are reasonably well defined. We include here such items as real estate taxes, licences, insurance, supplies (other than raw materials), advertising, travelling, communication and delivery. We group these payments to other firms because the price of these goods and services is largely determined in the economy at large.

Earnings of Employees

This represents the payment of salaries and wages and employees' benefits by the firms to their own employees. It is a much more specific expense than some of the other groupings of expenses.

Other Operating Expenses

In conducting business, firms incur other operating expenses which we group under the heading, "Other Operating Expenses". We include here the items for occupancy, repairs and maintenance, depreciation, bad debt loss, and all other expenses. As with the first category, this is an arbitrary grouping and will obviously include a number of payments that are made to firms in other sectors.

Net Operating Profit

The above three categories make up the total operating expenses, which, when deducted from the gross margin, give the net operating profit. (In the case of individual proprietorships, this is the last step we can take. For these businesses we obtain at this point the net operating profit before deduction of proprietors' salaries and income tax.)

Non-Trading Income and Expenses

The firms may have non-trading income in the form of interest earned, net revenue from rentals, financing charges, delivery charges made to customers and bad debts recovered, revenues from investments and other non-trading activities. The firms may also have non-trading expenses in the form of interest expenses and any other expenses not pertaining to the business.

Net Profit Before Income Tax

Taking the net operating profit, adding non-trading income and deducting nontrading expenses, we obtain the overall net profit before income tax. (If we consider this in relation to investment, we obtain the rate of return on investment before taxes.)

Corporate Income Taxes

We are concerned here with corporate income tax payments, as they are a component of price spreads whether they are measured by gross margins or in some other manner.

Net Profit after Taxes

This is the overall net profit after deduction of corporate income taxes. (If we consider this in relation to investment, we obtain the rate of return on investment after taxes.)

4. The Sources of Information on Gross Margins and Components

The Dominion Bureau of Statistics publishes every second year (the evennumbered years) Operating Results and Financial Structure of Retail Food Stores (Independent) and also (in the odd numbered years) Operating Results of Chain Food Stores and Operating Results of Food Wholesalers. These reports cover a sample of firms in each group, with a breakdown in sufficient detail to set out most of the items referred to in the previous section, at least down as far as net operating profit.

For food processing, reports are published each year by the Dominion Bureau of Statistics on the Foods and Beverages Industry, with separate reports on the various sub-groups in this industry. In each of these reports, a summary table contains the following aggregate estimates for the industry or sub-group: salaries and wages; cost of fuel and electricity; cost at plant of materials used; and selling value of factory shipments. From the cost of materials, it is possible to extract the cost of packaging materials and containers. These data enable the computation of a measure along the same lines as the "gross margin" presented for food retailing and wholesaling, and a breakdown into certain of the components; the breakdown is not comparable, however, to that for firms engaged in food distribution.

In addition to these data, the Commission received returns from questionnaires sent to over one hundred firms engaged in food processing and distribution. Financial returns from these firms covered the period from 1949 to 1957. These returns were useful in supplementing the estimates of gross margins obtained from D.B.S. data and in providing additional detail on particular types of expenses. These returns also provided additional information on corporate income tax payments and net profits after taxes. From this information, rates of return on investment before and after taxes were obtained.

In using data from both of the above sources, there are difficulties arising from the lack of comparability between the categories of expenses listed by different firms. This sets limits on the degree to which analysis of particular expenses can be pursued. Also, in grouping firms, the dissimilarities of their businesses may reduce the value of the resultant estimates.

There are certain types of firms for which it is difficult to obtain data because of the nature of their operations. For example, the Commission did not attempt to obtain additional data to that obtained by the Dominion Bureau of Statistics on independent retailers. And neither the Commission nor the Dominion Bureau of Statistics has available information on operating results of assemblers of primary products, agents or brokers.

CHAPTER 2

GROSS MARGINS AND COMPONENTS, 1948 TO 1957

1. Gross Margins: 1948 to 1957

Retailers

Gross margins in food retailing have averaged around 15% to 20% of retail sales. They are relatively low for grocery stores, higher for combination stores and highest for meat and fruit and vegetable stores. The margins for combination stores are higher than for grocery stores because of the inclusion of meats. Similarly, the higher margins in meat and fruit and vegetable stores are occasioned by the fact that they specialize in products that are relatively perishable. (Table 9.)

Gross margins for chain stores have been 1% to 2% of sales above those for independent stores of similar type except for meat stores where the difference was slight. These higher margins in the chains are mainly a result of the fact that they buy further back in the marketing stream and perform their own wholesaling. In the case of meat stores, where the difference was slight, the addition of the wholesaling function has less effect because in neither the chains nor the independents does the meat move into and out of a wholesale warehouse, but in most cases comes directly from the packing plant to the individual retail outlet.

During the period from 1949 to 1957,¹ there were a number of changes in retailers' gross margins as a per cent of sales. There was little increase until 1951 or 1952. Since then margins have tended to increase for all categories. For the combination stores, both chain and independent, which in 1951 accounted for well over one-half of the sales of all food stores, gross margins have increased throughout the period, with the increase being greater for the chains. The increased handling of non-foods in combination stores, with their attendant higher markups, is a factor in the increasing gross margins.

Wholesalers

The gross margins of wholesalers as a per cent of sales at wholesale are considerably lower than those of retailers, and the differences would be even greater if the gross margins were expressed in relation to sales at retail. Within wholesaling the gross margin for fruit and vegetable wholesalers is considerably greater than for grocery wholesalers. The greater degree of perishability and handling of the products of the former group accounts for a large part of this difference. (Table 9.)

^{1 1948} to 1956 in the case of independent stores.

Group	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
				P	er Cen	ut of Sa	lez			
Retailers				. e	11	. 1.2			1.1	
Chain Combination Stores ^b		15.6		15.8		16.5		16.5		17.4
Chain Grocery Stores		16.0		15.5		15.0		16.0		15.0
Chain Meat Stores		17.6		15.8		n.a. •		18.8		20.2
Independent Combination Stores	14.6		14.9		- 14.5	(15.1		15.4	
Independent Grocery Stores	14.0	<i>.</i>	14.4	1	13.9	1	14.4		14.8	
Independent Meat Markets	16.6		16.1		17.8		18.9		19.6	
Independent Fruit and Vegetable Stores	17.5		17.5		17.7		18.4		19.4	
Wholesalers*										
Grocery Wholesalers	• .	7.7		8.0		7.7		7.2		6.8
Fruit and Vegetable Wholesalers		10.6		11.3		11.8		11.5		12.1

Table 9-"Gross Margins", Food Retailing and Wholesaling

•We have shown here the results for all of the firms reporting. For the independent retail stores and the wholesalers, the results are affected to some extent by the fact that different firms report in different years, but the general trend is not distorted.

^bThese are the average results for chain combination organisations of all sizes. The changes differ for firms in different size groups: for those with sales under \$10 million, gross margins have not increased over the period; all of the increase has been accounted for by the firms with sales of \$10 million or over.

•n.a. – not available.

SOURCE: D.B.S. Operating Results.

Gross margins of grocery wholesalers, by far the largest group according to sales volume, declined during the period from 1949 to 1957, while gross margins of fruit and vegetable wholesalers increased somewhat.¹

Processors

Information on firms engaged in food processing is published annually by the Dominion Bureau of Statistics in the reports on the Foods and Beverages Industry. We are concerned here only with firms that process food products of agricultural origin. Thus, from the Foods and Beverages Industry, we exclude for the treatment in this part the information on fish processing as well as on beverages, animal feeds and confectionery.

Firms engaged in food processing purchase agricultural raw materials and sell food and other products obtained as by-products. These firms may also process other products. Also, some of the raw materials are imported and some of the processed products are exported. However, the main activity of most of the firms in this industry is directed towards processing Canadian food products for use in domestic consumption. Therefore, gross margins in the food industry as defined above, and in the various sub-groups, are of considerable assistance in interpreting price spreads.

1 If we take the gross margin of the grocery wholesaler, with the appropriate adjustment for the different level of selling prices, and combine it with the gross margin of the independent combination store, we obtain an overall gross margin of 21.1% of sales in both 1949 and 1957. In the case of the chain combination store, which we discussed earlier, the gross margin increased from 15.6% of sales in 1949 to 17.4% in 1957.

Similar changes took place in the period from 1924 to 1930, an earlier period when chain food stores increased their relative share of the retail food business. Their gross margins increased from 18.2% in 1924 to 19.1% in 1930, while those for the wholesaler-retailer system declined from 30% to 26%. (Report of the Royal Commission on Price Spreads, 1935, p. 217.)

88

Gross Margins and Returns to Labour and Capital

The gross margins were obtained by taking the difference between the cost at plant of raw materials¹ and the selling value of factory shipments, and stating this as a per cent of sales.

The results in Table 10 indicate that the gross margins for the food processing industry are considerably greater than retailers' and wholesalers' margins; however, it should be noted that the margins are expressed as a per cent of sales at the processors' level.

For the food processing industry as a whole, the gross margin ranged from 30% to 37% of sales during the period 1949 to 1957. However, there was a great variation between the sub-groups, with the range from 66% to 76% for the breakfast foods industry, from 16% to 26% for the slaughtering and meat packing industry. There are a number of products, such as fresh produce, eggs and milk for fluid consumption, that do not undergo processing to any great extent; firms engaged in handling these commodities are not included in the food processing industry.²

Industry	1949 19	950 1951	l 1952	1953	1954	1955	1956	1957
			Per	Cent of a	Sales			
Foods and Beverages Industry	30.4 30	0.7 30.5	2 34.1	35.0	35.7	37.4	36.8	36 6 ·
Meat Products	18.1 17	7.0 16.5	2 21.9	21.7	22.7	25.8	24 4	23.0
Dairy Products	27.5 2	9.6 28.5	2 30.2	30.7	31.2	31.4	31.7	29.6
Bakery Products	53.1 52	2.2 53.0	55.5	56.2	55.5	56.1	54 5	55 2
Four Mills	16.9 19	9.7 20.8	3 20.3	21.2	22.1	23.0	22.0	23.8
Fruit and Vegetable Preparations	63.3 63	3.5 63.7	65.8	64.8	63.5	64.1	63.6	61.1
Sugar Refinerics	27.0 27	7.9 26.3	32.0	37.3	36.2	31.7	28.2	31.3
Breakfast Foods	66.0 67	7.7 67.4	70.7	73.6	75.4	76.5	74.9	73.1
	•						1. A	

Table 10-"Gross Margins", Food Processing

• The "gross margin" was obtained by taking the cost at plant of materials used (excluding packaging materials and containers) as a per cent of selling value of factory shipments, the residual being the gross margin. To the extent that materials other than raw materials are included, this procedure results in an understatement of the gross margin.

^bExcluding beverages, animal feeds, confectionery and fish processing.

SOURCE: Computed from D.B.S. reports on the Foods and Beverages industry."

During the period from 1949 to 1957, gross margins in the food processing industry increased from 30.4% to 36.6% of sales, with the sharpest increase taking place in 1952. (Another way of stating this is to say that the cost at plant of raw materials as a per cent of sales declined from 69.6% to 63.4%.) Part of this increase was occasioned by shifts in relative prices (which we discussed in Part I). There have also been a number of shifts towards increased processing of foods these have been referred to as increased built-in maid service.

¹ From the cost at plant of materials used, only the cost of packaging materials and containers was deducted. To the extent that items other than raw materials remain in the materials figure, this procedure results in an over-estimate of the cost of raw materials and an understatement of the "gross margin".

² The Dominion Bureau of Statistics included data on fluid milk distribution in its 1957 report on the Dairy Products Industry.

The sharp increase in gross margins in 1952 was centred in the principal processing field—slaughtering and meat packing. The other areas where gross margins increased considerably over the period from 1949 to 1957 were flour mills and breakfast foods; in these the increases were spread over the period.

Summary

Over the period 1949 to 1957, retailers' gross margins increased, with the greatest increase occurring in chain store margins. Margins of grocery whole-salers, the main wholesale group, declined as a per cent of sales, and margins of processors increased considerably. As a result, there has been a general increase in overall gross margins.¹

2. Components of Gross Margins: 1948 to 1957

We have dealt in the previous sections with gross margins for food retailers, wholesalers and processors. These gross margins, as a per cent of sales, have been used by many as a point of departure for the consideration of changes in food marketing. As we have indicated, they do serve to focus attention on the effects of changes, such as shifts in functions or the increased degree of processing of food products.

We might also consider the various components of gross margins in relation to sales or as porportions of the gross margins. These approaches were implied in several of the submissions received by the Commission at its public hearings. For example, we have the following two references:

"For wages and salaries to have contributed to the price spreads of food products, it follows that they would have had to increase their proportion relative to sales. Table 9 (below) shows that this has not been the case. Wages and salaries have remained relatively constant over the period 1946 to 1956, and in the last three years were slightly lower than the average for the entire period."²

"Figures derived from Taxation Statistics published by the Department of National Revenue show that the profits (after taxes) of all fully tabulated companies rose from 4.1 per cent gross sales or revenues for 1949 to 5.1 per cent in 1950, and dropped to 3.3 per cent in 1955 (the latest year for which such figures are available).

In the light of the current squeeze on profits, it becomes obvious that cost increases, including taxes, must of necessity be reflected in higher prices. The sole alternative is a loss of profit which, if continued, leads to eventual bankruptcy."³

We believe that any such consideration of the components of gross margins is of limited use because of the difficulty in interpreting the changes observed.

¹ Taking the gross margins of the processor-chain combination store and combining these as a per cent of retail sales, the increase has been from 41% in 1949 to 48% in 1957. Taking the processorgrocery wholesaler-independent combination store, the increase has been from 45% to 50%. See also footnote 1, p. 88.

² Submission of the Canadian Congress of Labour, Proceedings, p. 3895.

² Submission of the Executive Council of the Canadian Chamber of Commerce, Proceedings, p. 4629.

Gross Margins and Returns to Labour and Capital

While we do not consider the analysis of the changing components of gross margins as a fruitful approach for dealing with the causes of changing costs in food marketing, we do find it helpful to look at the relative magnitude of the various components in order to understand the impact of changes in wage rates and rates of return on investment with which we will deal later in this part of the report.

We have set out in Tables 11 and 12 the gross margins in 1957 for chain and independent combination stores, grocery wholesalers and various groups of food processors, and also the components expressed as a per cent of gross margins for the years 1949 to 1957.

Table 11-Components as Proportions of Gross Margins, Food Retailing and Wholesaling 1949 and 1957^a

	Gross Margins as a Per Cent of Sales		Per Cer	nt of Marg	gin 1949	Per Cent of Margin 1957		
Group	1949	1957	Earnings of Em- ployees	Other Expenses	"Profit""	Earnings of Em- ployees	Other Expenses	"Profit" ^b
Chain Combination Stores	15.6	17.4	52.6	31.4	16.0	43.7	35.7	20.6
Independent Combination Stores	14.6	15.4	33.6	36.2	30.2	28.4	40.8	30.8
Grocery Wholesalers	7.7	6.8	54.5	37.7	7.8	55.9	36.8	7.3

• 1948 and 1956 for independent combination stores.

• "Profit" for the chain combination stores and grocery wholesalers is the "net operating profit", while for the independent combination stores it is the "net operating profit before deduction of proprietors' salaries and income tax".

SOURCE: D.B.S. Operating Results for chain and independent food stores and for food wholesalers.

Table 12-Components as Proportions of "Gross Margins", Food Processing, 1949 and 1957

	"Gross Margins" as a Per Cent of Sales		Per C	ent of Ma	rgin 1949	Per Cent of Margin 1957		
Group	1949	1957	Salaries and Wages	Packag- ing Ma- terials	Other Expenses and Net Operating Profit	Salaries and Wages	Packag- ing Ma- terials	Other Expenses and Net Operating Profit
Foods and Beverages Industry	30.4	36.6	36.3	17.8	45.9	37.2	20.0	42.8
Meat Products	18.1	23.9	41.9	10.3	47.8	44.9	11.0	44.1
Dairy Products.	27.5	29.6	39.7	14.3	46.0	42.6	17.1	40.3
Bakery Products	53.1	55,2	47.8	3.6	48.6	51.2	4.9	43.9
Flour Mills. Fruit and Vegetable	16.9	23.8	29.3	36.7	34.0	31.3	26.4	42.3
Preparations.	63.3	61.1	25.3	37.0	37.7	26.9	43.3	29.8
Sugar Refineries	27.0	31.3	28.0	15.7	56.3	25.0	12.1	62 9
Breakfast Foods	66.0	73.1	21.0	20.0	59.0	21.0	19.4	59.6

• Excluding beverages, animal feeds, confectionery and fish processing. A set of the set of the Source: Computed from D.B.S. reports on the Foods and Beverages industry, 1212-1212 (1997).

It can be observed from the tables that firms engaged in food distribution have a higher proportion of their gross margins in the form of labour than the food processing firms as a group. (For the independent combination stores, part of the labour input is contained in the "profit" figure which includes the return to the individual proprietor.) Within the food processing group, there is considerable variation; the bakery products firms are relatively labour-intensive, while the breakfast foods firms are not.

With the breakdown provided in Tables 11 and 12, it is difficult to comment on what types of firms utilize relatively high amounts of capital in relation to labour.

In the food processing group, packaging materials and containers are shown as a separate item. The fruits and vegetables processing group has relatively high expenses for packaging materials, while these expenses are relatively low for the bakery products group.¹

Between 1949 and 1957, there have been some changes in the proportion of gross margins represented by the various items. In retailing, earnings of employees now account for a smaller proportion of the margin. Other expenses and profits now account for a greater proportion. This shift is probably associated with the rapid development of the supermarket type of outlet which represents a substitution of capital for labour.

For the wholesaling and processing fields, it is difficult to draw any general conclusions as to changes from these data. In wholesaling, labour costs account for a slightly greater part of the margin. In processing, there is a light increase in most groups in the proportion accounted for by salaries and wages and, except for flour mills, sugar refineries and breakfast food firms, costs of packaging materials and containers account for a greater proportion of the gross margin.

1 In spite of this, the submission of the National Council of the Baking Industry at the public hearings laid considerable stress on the increases in the cost of packaging materials.

92

CHAPTER 3

SALARIES AND WAGES, TAXES, AND RETURNS ON INVESTMENT

We have considered gross margins in relation to sales. This is a type of measure of price spread and as such we are interested in it. We have also noted certain shifts that have taken place in the components of gross margins. These shifts reflect the changes taking place in food marketing.

We are also interested in the rates of return and changes in these rates for wage earners and investors; we are, therefore, concerned with changes in wage rates and fringe benefits and with changes in rates of return on investment. We are also concerned with changes in corporate tax rates because investors receive only those returns remaining after these taxes are paid.

In considering rates of return to resources employed in food marketing, it should be observed that particular industries do not operate in isolation: they compete with other industries for supplies, labour and capital. The mobility of labour and capital is not such that there is at any time equivalence between prices paid for similar but not identical supplies, between wages of labour in alternative employment, or between returns to capital in different industries. However, the desire of suppliers to find and exploit the most promising outlets, the disposition of labour to compare earnings in other occupations, and the concern of investors to apply their capital to the most profitable enterprises all tend towards equivalence of the prices of close substitutes, the earnings of labour and the returns to capital.

We can take it that the prices paid by the food industries for such supplies as packaging materials and containers have moved up along with prices charged to other industries by the firms producing these materials. Our analysis of the earnings of labour in the food industries will disclose how closely the increase in earnings of labour in these industries has paralleled the changes in labour earnings in other occupations. Our analysis of the return to investment in the food industries will show whether returns to capital in these industries have advanced more or less rapidly than the returns to capital in other industries.

1. Salaries and Wages

In the preceding section, we have referred to earnings of employees in relation both to sales and to gross margins without analyzing the effect of various factors on labour costs. Here we are concerned with evaluating the effect of changes in wage rates, hours of work and other factors on labour costs.

Retailing

Most of the labour force engaged in food retailing, apart from the selfemployed, receive payment in the form of wages. About 95% of chain store employees are hired on this basis; most of the remaining 5% who receive payment

in the form of salaries are employed in head offices. In 1957 the five major chains employed 32,000, of which over 31,000, were working in stores, warehouses and plants. Of these 31,000, a considerable number were employed on a part-time basis. The proportion that held part-time jobs was 41% in 1957, an increase from 33% in 1949; many of these were married women who worked as cashiers and in other jobs in supermarkets.

Salaries in food retailing, as in other fields, are difficult to define quantitatively. For independent retailers it is not possible to draw any clear distinction between salaries and returns from the investment in the business. For chain store organizations, salaries are supplemented by allowances and profit-sharing arrangements. In addition, salaries vary widely within each chain store organization. These factors, along with the fact that additional employees in salaried classifications have been added in recent years at the lower levels, render it impossible to draw any conclusions from increases in average salary levels for all salaried employees in a firm.

Wage rates in food retailing vary considerably because of the wide range in type of work. Retail organizations hire store managers, clerks for meat, grocery, produce and other departments, cashiers and other employees to work in the retail stores. In addition, chain store organizations hire employees for jobs in their warehouses and plants. For most of these employees wages are established on a weekly basis.

The replies to the Commission's questionnaire indicate that during the period from 1949 to 1957 weekly wage rates paid by chain store organizations have increased about 50% or at about the same rate as for retail trade as a whole and for food processing. Data collected by the Department of Labour indicate that in October, 1957, the average wages of grocery clerks ranged from \$39.00 per week in St. John's to \$69.00 in Vancouver and Victoria; for women cashiers, from \$29.00 in St. John's to \$55.00 in Victoria. The standard work week varied considerably, from an average of 49 hours in Quebec City to 40 hours in Winnipeg, Edmonton and Vancouver. Further details are provided in Table 13.

In a previous section we noted that, in food retailing, earnings of employees now account for a smaller proportion of the gross margin than in 1949. Increases in wage rates have been offset to a considerable extent by savings in the use of labour. These savings are particularly evident in the shift to a higher proportion of food being sold through self-service supermarkets. The change to supermarkets results in a substitution of capital for labour; in addition, part of the work is transferred to the customers who themselves pick out the food items from the shelves.

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Wholesaling

We have little published information with which to evaluate the effect of such factors as changes in wage rates and hours of work on labour costs in food wholesaling. The Department of Labour publishes information on changes in average wage rates for all wholesole trade, of which food wholesaling is a component. This information indicates that weekly wage rates increased by 66% between 1949 and 1957, as compared with an increase of 49% for all retail trade. For food retailing, we noted that weekly wage rates have increased by about 50%.

Gross Margins and Returns to Labour and Capital

	Locality	Average Standard Hours per Week	Cashier Female	Grocery Clerk Male	Meat Cutter Male	Produce Clerk Male
	A STATE OF THE STA	(hours)	(\$)	(\$)	(\$)	(\$)
Newfoundland St. John's		43.8	28.58	38.88	n.a.	n.a.
Nora Scotia Halifax		47.2	32.25	43.85	56.29	44.00
Quebec Quebec City. Montreal	· · · · · · · · · · · · · · · · · · ·	48.6 45.2	41.44 40.76	54.39 52.84	62.98 64.02	n.a. 55,22
Ontario Ottawa Toronto Hamilton London Windsor		45.3 44.5 44.7 45.1 45.1	48.62 51.08 46.06 50.72 52.42	56.08 61.79 59.41 65.09 62.98	66.76 69.21 71.77 68.34 69.17	52.85 56.16 58.11 55.38 56.07
Maniloba Winnipeg		40.0	43.31	53.17	n.a.	D.8.
Saskalchewan Regina		40.9	43.11	51.95	62.37	n.a.
Alberta Calgary Edmonton		40.1 40.0	41.18 43.60	60.06 n.s.	68.60 74.09	65.27 n.a.
British Columbia Vancouver Victoria		40.0 40.2	53.38 55.12	68.73 69.25	77.00 77.12	n.a. n.a.

Table 13—Average Standard Hours and Rates of Pay per Week in Food Retailing, October, 1957

n.a. = Not available.

SOURCE: Wage Rates and Hours of Labour, October, 1957, an annual publication of the Economics and Research Branch, Department of Labour, Ottawa. (Data on food retailing shown separately since October, 1958.)

The lower rate of increase in food retailing stems partly from the use of an increasing number of part-time workers in food retailing for whom the rates of pay are lower than for full-time workers.¹

As we observed earlier, earnings of employees in food wholesaling accounted for a slightly greater proportion of the gross margin in 1957 than in 1949. While food wholesalers have made a number of changes in their operations that have resulted in savings in the use of labour, these have been less significant than in food retailing. One of the changes has been the institution by many wholesalers of cash-and-carry warehouses (with or without self-service) for the smaller retailers.

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Processing

In food processing, as in other industries, most of the labour force receive payment in the form of wages. The proportion is about 80% for food processing as a whole and varies from 85% in firms producing bread and other bakery products to 71% for flour mills. (See Chart 11.)

¹ Mr. Bainard of National Grocers, a food wholesaling firm, indicated that their wage rates in the Toronto area increased about 60% in the 10-year period, presumably from 1949 to 1958. (*Proceedings*, p. 2970.)



Gross Margins and Returns to Labour and Capital

Most of the wage earners in the food processing industry are male (74%) but the proportion varies considerably, from a high of 95% for flour mills to a low of 51% for firms processing fruits and vegetables.

The regularity of employment depends on the flow of the raw materials to the firms engaged in the various types of food processing. For two groups, fruit and vegetable processors and sugar refineries, there is a high degree of seasonal variation in employment of production workers. The types of firms with the least seasonal variation in employment are flour mills and bakeries.

As we have indicated previously, it is difficult to deal with salaries because of other considerations that may be involved in the returns to employees who receive payment in the form of salaries. Nevertheless, some indication can be obtained from the increase in average salaries paid to the 20% of the labour force in the food processing industry that are paid on this basis. During the years 1949 to 1956, average salaries in this industry increased 50%. The increase was greatest in firms producing breakfast foods (70%) and lowest in flour mills and sugar refineries (36%).

Wages in food processing are usually paid on an hourly basis. A wide range in type of occupations and rates of pay exists in food processing. The lowest wages are paid to female workers such as cake icers (\$0.95 per hour), wrapping machine operators for bread and cake (\$1.10) in firms producing bread and other bakery products, and bacon wrappers and packers in meat packing (\$1.34). Male employees typically receive higher wages as, for example, oven-men (\$1.45) and breadbakers (\$1.49) in bakery firms, wheat cleaners (\$1.51) and sifter operators (\$1.65) in flour mills, and ham trimmers (\$1.68) and butchers (\$1.83) in meat packing firms. The highest-paid wage earners in these firms are usually in jobs not special to the foods industry as, for instance, automotive mechanics (\$1.58) hired by bakery firms, millwrights (\$1.75) and electricians (\$1.78) hired by flour milling firms, and machinists (\$2.03) and steamfitters (\$2.03) hired by meat packing firms. The number of workers in occupations such as these in food processing firms is small. In the dairy products industry, wage rates are quoted on a weekly basis and range from \$40.46 for female packaging operators, to \$57.25 for buttermakers, to \$81.73 for stationary engineers, second class. 1

We turn now to a consideration of labour costs and returns to wage earners and we will consider regularity of employment in food processing, levels and changes in hourly earnings, hours of work per week and weekly wages. The data drawn from the *Review of Man Hours and Hourly Earnings*, 1946-57, published by the Labour and Prices Division of the Dominion Bureau of Statistics, include: payments for overtime work; cost-of-living, incentive or production bonuses paid at regular intervals; and amounts credited to wage-earners on leave with pay. First, we deal with changes in earnings between 1949 and 1957 and then we deal with the level of earnings in 1957. (Table 14.)

During the period from 1949 to 1957, average hourly earnings in the manufacturing industry as a whole increased 62%. In the foods and beverages processing industry the increase was about the same, 61%. In each case the decline in the

¹Rates of pay for the various occupations are obtained from Wage Rates and Hours of Labour, Department of Labour, Ottawa, October, 1957, and are averages for all of Canada. Overtime earnings are not included but the rates include cost-of-living bonus payments where applicable.

average work week was 1.9 hours, or about 5%. As a consequence, weekly wages rose by a lesser amount, 55% for manufacturing as a whole, and 53% for the foods and beverages industry. While these increases have differed slightly, they do illustrate the fact that firms engaged in food marketing hire labour in competition with firms in other sectors of the economy and must meet the general increases in wages that occur.

By 1957, the level of weekly wages for the foods and beverages industry was \$55.93, or 16% below the level of wages for manufacturing as a whole. As firms producing distilled malts and liquors had the highest wages in the foods and beverages industry, an average for the foods group alone would be somewhat lower. Within the foods group there is considerable variation, ranging from \$45.36 per week in fruit and vegetable processing to \$66.44 in meat packing. It should be noted that in fruit and vegetable processing many of the workers are women hired on a seasonal basis.

Table 14—Changes in Hourly Earnings, Hours of Work, and Weekly Wages in Food Processing in Relation to All Manufacturing, 1949 to 1957^a

		1949 to 1957	1957			
Industry	Increases in Hourly Earnings	Decreases in Hours per Week	Increases in Weekly Wages	Average Weekly Wages	Average Ilours Worked per Week	
•	(%)	(hours)	(%)	(\$)	(hours)	
All Manufacturing. Foods and Beverages. Distilled Malts and Liquors. Meat Products. Grain Mill Products. Bread and Other Bakery Products. Fruits and Vegetables.	62.3 60.6 74.0 56.8 60.1 63.6 57.6	1.9 1.9 2.1 2.4 2.6 1.1 0.4	55.0 53.4 65.3 49.0 49.7 59.5 56.0	64.64 55.93 72.50 66.44 62.28 54.40 45.36	40.4 40.5 39.9 40.0 41.6 42.8 39.0	

*All data in this table are based on annual averages for hourly-rated wage earners.

SOURCE: Review of Man-Hours and Hourly Earnings, 1948 to 1957, Labour and Prices Division, Dominion Bureau of Statistics.

Increases in weekly wages between 1949 and 1957 have been greater for the groups with a lower level of wages. An increase of 56% in weekly wages in fruit and vegetable processing has taken place, with the hours worked per week staying at about the 1949 level. In the bread and other bakery products group, there was a 60% increase in weekly wages after taking account of a slight decline in the average number of hours worked per week. In meat packing and the processing of grain mill products, where the weekly wages are above the average for the foods and beverages industry, weekly wages have increased 48% and 50% respectively, after taking account of declines in the hours worked per week.

In the foods and beverages industry between 1949 and 1957, the number of employees increased by 8%. During the same period, there was a 36% increase in the volume of production,¹ the net result being a 26% increase in output per

¹ We use here the revised Index of Industrial Production, published in D. B. S. Reference Paper 61-502, 1958.
Gross Margins and Returns to Labour and Capital

worker. This has accompanied a considerable degree of investment in the industry. We have indicated above that average weekly wages in the foods and beverages industry increased 53% between 1949 and 1957. We have observed previously that earnings of employees as a proportion of the gross margin have increased only slightly from 36.3% to 37.2%. (See Table 12.) Thus, while labour costs per unit of product have increased, other costs and profits have also increased to about the same extent.

For food marketing as a whole, earnings of employees increased about 50% between 1949 and 1957. During the same period the consumer price index increased 21.9%. Thus, real earnings of employees in food marketing have increased by about 23%, or at an average rate of 2.6% per annum. This increase in real incomes is slightly greater than for Canadian consumers generally which, as we noted in Part I, was about 2% per annum.

2. Taxes

There are a number of taxes incurred by business firms which are treated in much the same way as any other business expenses. These include property and other taxes and business licences. Most foods are exempt from sales and excise taxes. In arriving at its net profits, the firm deducts these several types of taxes from its revenues, along with other expenses. This net profit can be related to investment and rates of return on investment computed. In the corporate sector, however, corporate income taxes are applied to the net taxable income, and the effective returns on investment are those after the payment of these corporate income taxes. Indeed, businessmen to a considerable extent view these taxes as an item of cost similar to other items of cost. ¹

Table	15-Rates	of '	Tax	on	Taxable	Income	of	Corporations,	Canada.	1949	to	1957
-------	----------	------	-----	----	---------	--------	----	---------------	---------	------	----	------

Year	Corporate Income Tax	Old Age Security Tax	Tax as Proportion of Taxable In- come for Corpora- tions Engaged in Food Marketing ^a
;			(%)
1949	10% on first \$10,000, 33% on the remainder	None	33
19506	15% on first \$10,000, 38% on the remainder	None	34
1951	15% on first \$10,000, 45.6% on the remainder	None	42
1952	20% on first \$10,000, 50% on the remainder.	2%	48
1953	18% on first \$20,000, 47% on the remainder.	2%	48
1954	20% on first \$20,000, 47% on the remainder	2%	45
1955	20% on first \$20,000, 47% on the remainder	20%	41
1956	20% on first \$20,000, 47% on the remainder	2%	43
1957	20% on first \$20,000, 47% on the remainder	2%	41

· Computed from data provided in Taxation Statistics.

^b The same as 1949 until September, when the increases took effect.

SOURCE: Texation Statistics, Department of National Revenue.

¹ See, for example, the submission of the Winnipeg Chamber of Commerce, Proceedings, p. 932.

In considering rates of return on investment in the corporate sector of food marketing, we are interested, therefore, in the level and in changes in the level of corporate income taxes. The rates of corporate income tax increased in the early part of the 1949 to 1957 period, and have remained at levels close to 50% since then. The specific rates on taxable income are summarized in Table 15.

The effective rates are somewhat below this because of particular provisions in the tax legislation. For corporations engaged in food marketing, corporation taxes and old age security taxes in total have ranged from 33% to 48% of taxable income during the years 1949 to 1957. The proportions are provided in Table 15. The ratio of taxes to taxable income increased to a peak in 1952 and 1953 and has since declined.

3. Net Profit After Taxes as a Return on Investment

The net profits of corporations engaged in food processing, wholesaling and retailing are provided in *Taxation Statistics*, published annually by the Department of National Revenue. Between 1949 and 1957 the aggregate profits after taxes of all corporations engaged in food marketing increased from \$60 million to \$101 million.¹ This increase is influenced, of course, by the variations in tax rates we discussed in the previous section and also by the shift that has occurred towards the corporate form of organization.

We could observe the relationship of corporate profits, after taxes, to sales or as a proportion of the overall price spread as measured by the marketing bill in Part IV. We would observe some decline in profits in relation to these magnitudes. This fact, however, is of little help in looking at returns to capital invested in food marketing. In a period of expanding general economic activity and generally rising price levels, rates of return on investment may remain stable or increase even though profits after taxes are declining in relation to sales. In such a period, the volume of business done by firms may be expanding rapidly.

Measures of Investment

In order to consider rates of return on investment, it is necessary to measure the investment with which net profits after taxes are associated. We use here as a measure of investment the "shareholders' equity" which is the total of the value of the capital stock plus the undivided surplus. This does not indicate the total investment in the corporations. Bonded indebtedness and bank loans, for which interest payments are made, also reflect investment. We limit our consideration here to the shareholders' investment and the rates of return on this investment, and to the increases that have taken place in investment by shareholders. This investment may take place through the retention of earnings by the corporation or by the issuing of new shares.

¹ In order to give some perspective, we refer the reader to Part IV, where we indicate that the overall farm-retail marketing bill increased from \$900 million in 1949 to \$2,132 million in 1957.

Gross Margins and Returns to Labour and Capital

Rates of Return on Investment

We are interested in rates of return on investment in various phases of food marketing in relation to other sectors of the economy. We have assembled information on the actual rates of return and on changes within the various groups of firms engaged in food marketing in the period from 1949 to 1957. This information is summarized in Table 16.

The information that we have drawn together in Table 16 comes from two sources-the corporate tax statistics, published by the Taxation Division of the Department of National Revenue, and from replies to a questionnaire sent to business firms by the Commission. In each case the data are for incorporated companies.

	1949	1950	1951	1952	1953	1954	1955	1956	1957	Aver- age
Total Retail Trade Retail: Dairy Products	14.7 5.2 5.5 16.8 20.1	14.2 7.2 7.6 17.2 21.2	11.4 6.6 5.2 16.1 19.3	8.5 6.8 8.3 17.7 19.7	9.0 7.6 7.9 17.4 18.9	6.2 9.2 7.5 14.3 17.8	7.0 9.4 9.1 13.2 16.9	8.0 7.6 8.4 10.6 15.0	8.8 7.7 8.6 12.0 14.9	9.8 7.5 7.7 15.0 17.1
Total Wholesale Trade Wholesale: Food Products and Farm Products, n.e.c.* 5 Food Wholesalers	13.3 8.8 9.6	15.2 11.6 8.0	14.9 8.3 6.6	10.4 7.5 10.2	8.5 6.7 8.5	6.7 6.0 7.7	9.0 5.6 10.0	11.2 7.6 9.6	10.3 7.4 9.8	11.1 7.7 9.0
Total Manufacturing ^b Total Food Processing Slaughtering and Meat Packing 3 Meat Packers. Dairy Products Manufacturing Bakery Products 5 Bakery Firms Grain Mill Products 3 Flour Mills	12.8 8.5 7.6 9.4 12.0 10.3 6.3 8.3 26.4 6.2	15.2 9.0 10.5 9.5 15.9 8.3 4.3 8.3 30.5 6.5	13.7 8.8 9.0 3.6 10.4 '6.9 8.0 8.8 25.2 7.7	10.3 7.6 7.3 11.6 8.4 8.0 10.5 7.0 29.8 6.9	9.9 8.7 10.9 9.0 11.1 7.2 9.6 7.0 30.5 6.7	7.5 8.2 7.8 6.9 9.0 6.5 8.4 7.3 28.4 7.3	9.4 8.2 8.3 10.1 6.0 6.9 5.7 30.2 7.1	9.2 7.9 9.1 7.9 10.5 5.8 6.3 6.9 32.3 6.1	8.5 8.3 9.0 7.9 10.3 5.7 6.2 8.2 29.3 3.3	10.7 8.4 8.8 8.2 10.9 7.2 7.2 7.4 7.5 29.2 6.4
Vegetables. 4 large Fruit and Vegetable Processors 4 medium Fruit and Vegetable Proces- sors	6.2 5.0 c 8.8 9.1 7.9	4.9 11.0 13.0 15.3 9.4 8.1	10.8 10.3 14.4 15.4 8.6 8.4	9.2 8.6 17.8 6.8 6.6	7.3 9.4 6.7 7.0 9.7 9.2	7.6 10.8 9.8 12.8 9.6 7.5	7.6 10.0 3.7 14.2 8.3 7.9	7.2 9.3 7.4 9.6 8.4 8.7	7.2 6.4 4.2 6.5 10.4 9.6	7.6 9.0 6.7 11.9 8.9 8.2

•n.e.c. = not elsewhere classified.

⁻ n.e.c. = not electmere classified. ^bFor the years 1957 and 1958 we can also obtain a measure of the rate of return on investment from a survey of manufacturing firms carried out annually by the Canadian Manufacturers Association, which is reported on in Circular No. 3075 of the Association, dated May 14, 1959. For 1957 the rate was 9.2% and for 1958, 7.3%.

"This group of firms incurred a loss in 1949. Source: Those figures with numbers of firms indicated come from questionnaire returns; other groups are taken from *Taration Statistics*. In each case, both profit and loss companies are included.

Corporate net profits after taxes are the residual return to the shareholder after all expenses and taxes have been paid. As such, they vary from year to year, with variations arising from almost any conceivable source. For this reason it is difficult to compare rates of return on investment for individual years. We would expect, however, that average rates of return over a period would be approximately the same in overall retailing, wholesaling and manufacturing. This has been the situation over the period from 1949 to 1957 with the nine-year average ranging

÷,

from 9.8% for corporations engaged in retailing to 11.1% for those engaged in wholesaling; those engaged in manufacturing averaged 10.7%. It will also be observed that rates of return have declined from the levels reached in 1949 or 1950. (The decline is partly attributable to the fact that rates of corporate income tax have increased since the early part of the period.)

In order to indicate changes more clearly, we have shown in Chart 12 the rates of return on investment after taxes for the groups of corporations in the food field. The rates of return shown are those included in Table 16. In addition, we have shown in Chart 12 the rates of return on investment before taxes.

We have referred to a general tendency for rates of return on investment after taxes to decline from the levels reached in the early part of the period. This has varied between the different groups and one of the factors has been the differing conditions of growth. We would expect to observe a tendency for shareholders' investment to be increasing more rapidly in industries where rates of return are high and we would expect the rate of return to decline as investment in the industry increased, particularly if the rate of investment is high.

It can be seen by comparing the data in Table 17 with Table 16 and Chart 12 that these general conditions hold. In the retailing field, there are data for two food groups. One, dairy products, was a group with low rates of return and there was a decline in overall shareholders' investment in corporations in this group. However, it should be noted that rates of return here have been increasing. This is in contrast to most of the other groups with which we will deal.

The "other food products" group in the retailing field includes the corporate food chains as a major part. Here, we observe that the rate of return on investment has averaged considerably above that for all retail corporations—15.0% as compared to 9.8%. The rate of return showed some decline during the period accompanying the very rapid investment.

An analysis of the movement of the rate of profit, year by year, from 1949 to 1957 shows that the rate of return remained high from 1949 to 1953 and, indeed, would have increased sharply had it not been for increased corporation taxes in 1951, 1952 and 1953. From 1953, the rate of return declined until 1956 but there was a rise in the rate of return earned in 1957. The five major corporate chains, which form an important part of this group, had the same pattern of change in rates of return, but there was no increase in 1957. The average rate of return after taxes for the period was above that of the overall group—17.1% as compared to 15.0%. (Table 16.)

How can we explain the fact that the corporate chains have been able to earn a high rate of return for so long?

Changes in demand after the war created highly profitable opportunities for new facilities and new investment in food retailing. The corporate chains already established in Canada quickly adapted themselves to the new situation and their activities proved highly profitable. The rate of profit remained extremely high until 1953.

The rate of new investment in the corporate chains operating in Canada is limited by the capacity of the organizations to handle the administrative problems of expansion; their rate of expansion was, nevertheless, quite rapid, although not so rapid as to reduce the rate of return before 1953. The opportunities for the



Computed from data published in Taxation Statist Department of National Revenue.

103



Gross Margins and Returns to Labour and Capital

Table 17-Increases in Shareholders' Investment for Groups of Corporations, 1949 to 1957

Group	Per Cent Increase in Shareholders' Investment
Total Retail Trade.	94.6
Retail: Dairy Products.	6.6
Other Food Products.	301.1
Total Wholesale Trade	126.0
Wholesale: Food Products and Farm Products, n.e.c.*	49.3
Total Manufacturing	96.4
Food Processing ^b	71.6
Slaughtering and Meat Packing.	53.0
Dairy Producta	259.0
Bakery Products.	111.3
Grain Mill Products.	35.5
Canned and Preserved Fruits and Vegetables.	33.1
Miscellaneous Foods	68.8

n.e.c. = not elsewhere classified.

• Excluding fish processing. SOURCE: Taxation Statistics. Department of National Revenue.

development of new chain organizations is limited by the "know how" even if prospective returns are attractive to investors. Intrusion from the United States was possible, but to a considerable extent United States chains were occupied with expansion in that country.

The decline in profits following 1953 indicates: (1) the chains were catching up on the increase in demand in the more favourable situations; (2) the voluntary chains were expanding their operations; (3) some intrusion of new United States chains began.

The continued expansion of the major retail chains through 1958 and 1959 may well result in an eventual decline in profits but the 1958 reports of the major chains indicate that rates of return in 1958 remained close to the 1957 levels.

The general conclusion is that the tendencies characteristic of unobstructed access to investments promising high rates of return have been operating in food retailing, but with a lag resulting from normal problems of expansion, and shortperiod irregularities due to general movements of prices.

This analysis does not render invalid the argument that the chain stores are no longer low-price outlets and that their promotional techniques are designed to achieve volume of sales by adding services rather than by reducing prices.

In the wholesaling field, there is information for only one group dealing in farm and food products; for this group the rate of return on investment has averaged below that for the overall wholesaling field and has been declining. Also. the rate of growth of shareholders' investment has been less than for wholesaling in general. The Commission obtained information from a number of food wholesalers; information for five of the largest as a group is included in Table 16, and indicates less of a decline over the period than does the overall group from Taxation Statistics; also, the rate of return averaged 9.0% as compared to 7.7% for the whole group.

In the manufacturing field, rates of return for the groups in food processing (an overall average of 8.4%) are considerably below those for manufacturing as a whole (10.7%), except for the dairy products group where the rate of

return (10.9%) has been as high as for manufacturing as a whole, and where shareholders' investment has increased rapidly in response to this attractive rate of return. Meat packing and the miscellaneous foods group have had rates of return on investment higher than the remaining groups. In each of these three groups, the rate of return has not declined to any great extent over the period.

For each of the groups of food processors for which the Commission has information for firms of a comparable type, the average rates of return over the period are close to the average for food processors as a whole. In the case of one group, the fruit and vegetable processors, it is evident from looking at smaller groups of firms that the rate of return on investment varies considerably from year to year. It will also be apparent from the data on this type of processor in Table 16 that rates of return are not any higher for the larger firms.

The grain mill products group contains firms varying widely in type, including flour mills, breakfast food firms, and firms producing animal feeds. We have separate data for several firms in each of the first two categories and their rates of return differ greatly, averaging 29.2% over the period for the three breakfast food firms and 6.4% for the three flour mills. There has been no tendency for the rates of return for the three breakfast food firms to decline; the shareholders' investment in these companies has increased only 18% over the period. As we have noted in Part II,¹ however, a new firm has begun activities in this field in Canada in recent years. We have referred already to the high degree of promotional activity in this industry.

The miscellaneous foods industry covers a wide range; we have information only for firms of one type—sugar refineries. The rates of return on investment did not decline over the period for either the overall group or for the sugar refineries, and the average for each group was between 8% and 9%.

We have compared rates of return on investment for various groups of corporations, taking net profits after taxes in relation to shareholders' investment. In many corporations, including those engaged in the processing and distribution of food, part of the earnings are retained and re-invested, with the increase in value of the firm accruing to the shareholders. However, this is an alternative rather than an additional return to the receipt of dividends.

4. Changes in Returns to Resources in Food Marketing and Agriculture

We have noted earlier in this part that the real earnings of employees in food marketing increased by about 23% over the period 1949 to 1957; in terms of actual dollars the increase was spread over the period.

For most groups of corporations engaged in food marketing, the rates of return on investment either have declined from relatively high levels or have not increased since the early years of the period; the dairy products group in retailing is an exception to this generalization.

¹ See p. 77.

Gross Margins and Returns to Labour and Capital

In considering changes in the income position of farmers in Part I, we noted that the net farm operating income¹ per farm increased by 14% between 1949 and 1958; in real terms it declined 8%. In looking at the return to resources in agriculture, we should, however, look at changes in the returns to workers and other resources employed in agriculture.

The average net farm operating income per non-paid farm worker in 1958 was \$2,582 and represents a 21% increase over 1949. (In real terms there was no increase.) If we use the income measure of net farm income, the average per non-paid farm worker was \$1,973 in 1958, 11% higher than in 1949. (In real terms there was a decrease of 9%.) For hired farm labour, we turn to information on farm wage rates. Based upon a monthly wage of \$74.87, including the value of room and board, paid farm labour had an annual income of \$898 in 1949. By 1958, the monthly wage on the same basis as the foregoing had risen to \$101.00, or an annual rate of \$1,212, representing an increase of 35%. (In terms of real income, however, the paid farm labourer realized only an 8% increase in this period.)

In the income of the non-paid farm workers referred to above, are included the returns to the farm operator and his family for labour and for their capital investment in farming. While the total investment in agriculture has not increased during the period in real terms, there has been a sharp decline in the number of workers. As a result, the investment per worker has increased considerably. Thus, it is apparent that the returns per unit of labour and capital engaged in agriculture have not increased during the period.

¹ "Net Farm Operating Income" is the sum of cash income from the sale of farm products, income in kind and supplementary payments *less* cash expenses. It does *not* allow for depreciation. If we had used "net farm income" per farm, where an allowance is made for depreciation and in addition account is taken of inventory changes, the changes in the income position of farmers would have appeared to be even worse.

PART IV

FOOD EXPENDITURES, FARM RECEIPTS AND THE "MARKETING BILL"

Our main purpose in this part is to measure the aggregate food marketing bill which is the difference between the total expenditures of consumers on Canadian-produced food at retail and the total receipts of farmers from the sale of the food materials. To calculate the food marketing bill we need first to determine consumer expenditures at retail. Reference to consumer food expenditures provides the opportunity to present some analysis of the relation between incomes and food expenditures and consumption, which are relevant to our inquiry. Our second calculation necessary to arrive at estimates of the marketing bill requires the determination of the farm value of food consumed. Reference to farm receipts provides the opportunity to call attention to some changes in the relative quantities of particular farm products entering into domestic Canadian consumption. Having arrived at a measure of the marketing bill for the period 1949 to 1958, we discuss the factors responsible for the observed increase. We then report on the increases in certain components of the total bill.

CHAPTER 1

CONSUMER INCOME AND FOOD EXPENDITURES

1. Personal Disposable Income

In Part I we introduced a measure of consumers' income referred to as Personal Disposable Income.¹ The Aggregate Personal Disposable Income is a measure of the total amount of money available to Canadian consumers to be spent or saved largely as they choose. In Table 18 we repeat the annual values of disposable incomes given in Table 1, Part I, and show for the same years the estimated food expenditures per person in dollars and as a per cent of income per person. The increase in aggregate disposable income, 1949 to 1958, amounted to 91%. This increase was associated with an increase in population of 27%, and a rise in prices as measured by the consumer price index of 22%. We noted in Part I that consumers' disposable real income per capita increased during this period. Money income increased at a rate 17% faster than the prices of goods and services.

2. Distribution of Consumers' Income and Proportion Spent on Food

Referring again to Table 18, we see that disposable income per person increased by about \$450 from 1949 to 1958. This increased income was distributed among various forms of expenditure.² The increases in expenditure per capita on various classes of consumers' goods are reflected in Chart 13. It will be seen that the rate of increase in per capita expenditures on food was less than for other classes of goods with the exception of tobacco and alcoholic beverages

Year	Aggregate Disposable Income	Population	Disposable Income per Person	Food Expenditure per Person	Food Expenditure as a Per Cent of Income per Person
	(\$ million)	(thousands)	(\$)	(\$)	(%)
1949	11.849	13.447	881	215	24.4
1950	12,688	13,712	925	229	24.8
1951	14.794	14.009	1.056	258	24.4
1952	16.072	14.459	1,112	263	23.6
1953	16,904	14.845	1,139	262	23.0
1954	16,984	15.287	1.111	264	23.8
1955	18,329	15.698	1,168	270	23.1
1956	20,153	16.081	1,253	284	22.7
1957	21,107	16,589	1,272	296	23.3
1958	22,600	17,048	1,326	303	22.8

Table 18-The Relation Between Income and Food Expenditure per Person, 1949 to 1958

SOURCE: D.B.S. National Accounts, Income and Expenditure, various issues.

1 See footnote 2, p. 8 (Part I) for a definition of personal disposable income. 2 For a detailed treatment of long-run trends, see the special study *Consumption Expenditures in Canada* by David W. Slater, Royal Commission on Canada's Economic Prospects, May, 1957.

and clothing and personal furnishing.¹ Food expenditures per person advanced from \$215 in 1949 to \$303 in 1958, an increase of 41%. However, expenditures on food, which in 1949 accounted for 24.4% of income, by 1958 accounted for only 22.8% of the average Canadian budget.²

In Part II we examined the impact of population increases, changes in standards and conditions of living, including suburban development and the increase in automobile ownership and other matters upon the retail food trade, with particular reference to the chain supermarket. And in Part I we pointed to the disparity in rates of change in income over the period among groups of producers and consumers.

Our reference above to the proportion of income spent on food is a generalization drawn from national aggregates. We would be concerned if readers of this report took this to be either a representative or an ideal figure, particularly as a guide to apportionment of the family income. Because this figure is calculated from an aggregate, it represents a wide range of different experiences with all possible variations in geographic and social and economic conditions.

Unfortunately, we are limited in studying changes in income flows among occupational categories in the population, as explained in Part I. From income tax data, we can, however, derive some indications about the distribution of income to the population generally. We are interested in changes in income distribution because of their effect on the level of expenditures on foods and in the distribution of those expenditures over various kinds or groups of foods and the services associated with food.

Our analysis of data on income distribution leads us to the conclusion that there has been little, if any, change over the 1949 to 1958 period. To put it in another way, both at the beginning and end of the period, the lower 50% of the income earners receive less than 30% of the total personal income, and the upper 12% of income earners about the same proportion.

The relevance of this stability in income distribution to changes in food expenditures is that the proportion of income spent on food differs between the lower and the higher income groups. In the lowest income groups, a high proportion of income is spent on food and this proportion declines progressively for the higher income groups. However, total expenditures on food, although a smaller proportion of income, increase as incomes rise. Thus, had there been a significant shift in income distribution from higher to lower earners during this period, it is quite possible that food expenditures as a proportion of income would not have fallen and might even have increased. Further, the distribution of food expenditures among types or kinds of food might have yielded rather different results in consumption from those presented in a later section.

The importance of income distribution in relation to food purchases is substantiated in the urban family expenditures surveys of the Dominion Bureau of Statistics. For example, in the 1955 survey it was found that families with incomes of less than \$2,500 a year spent on the average \$271 a year per person on food, and \$817 a year per family; families with incomes over \$6,000 spent on the

¹ See Chart 4, Part I, for changes in relative prices.

² National Accounts. The food component includes retail sales and the value of food sold in restaurants after an adjustment to eliminate the service portion. It also includes the self-supplied farm portion valued at farm prices.

Royal Commission on Price Spreads of Food Products



Source: D.B.S. National Accounts, Income and Expenditure.

average \$405 per person on food, and \$1,344 per family. The proportion of family income spent on food in the \$2,500 income group was 37%, and for the over \$6,000 group, 19%.

While food expenditures in the aggregate and as a proportion of income are affected by changes in income, changes in social conditions also play a part. Many of the changes in social conditions are the result of or are associated with income increases. If more married women are working, then the types and kinds of food and services associated with the food purchased will be different. The number and kinds of food preparation and storage facilities in the home will also affect food expenditures, both in total and in kinds or types of food and the services bought with the food.

In Part II, among other things, we mentioned that during and following World War II women generally had found opportunities in employment in Canada and that, particularly, more married women were in the labour force. In some of the evidence presented at the hearings,¹ we were told that the demand for more food services was partly, or even in good measure, attributable to the "working wives". While this may have been a factor prior to 1949, we have been unable to establish evidence which would support this as a new or an increasingly important factor in the period from 1949 to date. While there have been changes in the number of married women of different age groups employed during this period, there has been no overall increase in the proportion of married women employed. Some changes in food spending habits in the 1949 to 1958 period may have been the result of an increase in the proportion of working married women of the middle-age group and a decline in the number of younger married women working.

Important changes in meal preparation facilities have been the increase in modern-type cooking equipment, (oil, gas and electric) and in storage and preservation equipment such as mechanical refrigerators and deep-freeze cabinets. These have brought in their train some of the changes in the amounts and kinds of services incorporated in or associated with the food items.

Returning to the consideration of aggregate food expenditures, we find that changes of the kind just described have caused changes in the kinds of food purchased in recent years. Their effects show up in the Canadian food budget. As the direction of change has been from the less expensive to the more expensive foods at retail, the shift has contributed to maintaining the proportion of income spent on food. If consumers in 1958 had bought the same market basket of foods as they purchased in 1949, it would have taken 19.8% of their income instead of 22.8%; to express it another way, food expenditures per person in 1958 were 19% higher than in 1949 because of changes in the items in the total Canadian food budget. The relations between income and food expenditures, and the effects of the shift to higher-priced foods are shown in Table 19 and Chart 14.

As we have occasion to stress at various points in our report, food expenditures of consumers are not payments for food materials only. Consumer expenditures on food are, in part, payments for services which become associated with food materials, and, as we show presently, the amount of services in the food marketing bill has increased significantly over the period. It follows that the per cent of income spent on food materials is substantially less than 22.8% and ŧ

¹ See Proceedings, Vol. 28, p. 4543.

that, only insofar as there has been an increase in services between 1949 and 1958, expenditures as a per cent of income appear to have been maintained. We proceed to show that the per capita consumption of food materials has not increased at all.

From detailed estimates of rates of food consumption, we have assembled the data in Table 20. Total food materials consumed per capita, as measured at retail, averaged 1,445 pounds per year in the three years 1948 to 1950, and 1,426 pounds in the years 1955 to 1957. Thus, over the period there was virtually no change in the total weight of food materials purchased per person.

We do not wish to imply that every Canadian is receiving an adequate supply of the right kinds of food, whatever the right kinds may be. Some recent findings of nutritionists suggest that the number of underfed and undernourished are about balanced by the number of overfed people in Canada.¹ The Canadian evidence, which is supported by evidence from the United States and elsewhere,² is that once consumers have reached a relatively satisfactory level of diet, there are but slight variations from year to year in the average weight of food consumed per person. As we have noted above, this does not, of course, rule out a continuous adjustment in the rates at which different types or kinds of food are purchased.



^{1 &}quot;Report of Canadian Average Weights, Heights and Skinfolds", Canadian Bulletin on Nutrition, Vol. V, No. 1, September, 1957.

² Food Consumption Levels in Canada, the United Kingdom and the United States, Report of a Special Joint Committee set up by the Combined Food Board, King's Printer, Ottawa, 1944.

Year	Retail Cost of 1949 Basket	Per Cent of Disposable Income
	(\$)	(%)
1949	215	24 4
1950	221	23.0
1951	252	22.0
1952	251	40.0 99 g
1953	249	24.0
1954	244	21.2
1955	241	21.7
1056	241	20.6
1057	244	19.5
1050	255	20.0
1990	262	19.8

Table 19-Estimates of Retail Cost of 1949 per Capita Food Basket

• Estimated retail value of the per capita consumption of food in 1949 based on 1949 food expenditures and the retail price index for food.

Table 20-Changes in the Consumption of Food per Capita by Food Groups: Total in Pounds at Retail 1948-50 and 1955-57^a

Food Groups	Average 1948–50	Average 1955–57	Per Cent Change
· · · · · · · · · · · · · · · · · · ·	(lb.)	(lb.)	(%)
Meats (excl. Poultry & Fish)	135.8	145 6	+ 7 2
Poultry	15 4	25.3	164.3
Fish	12.8	13.5	- 5 5
Eggs	34.3	36.8	1 7 3
Dairy Products (excl. Butter)	446 7	436.2	- 2.4
Cereal Products	169 3	160.0	_ 5.5
Potatoes (White & Sweet)	217 2	154 0	- 9.9
Vegetables	86 R	07.5	20.1 8 8
Tomatoes & Citrus Fruit	71 8	82.J	
Other Fruit	71 5	06.9	111.0
Sugars & Syrups	110.2	110 6	+ 0 4
Pulses & Nuts	12 2	10.0	19 1
Starch	10.0	10.9	-10.1
Oils & Fata (incl. Butter)	48 7	49.4	0.0
Tea & Coffee	10.0	10.1	- U.O
Total Retail Weight Equivalent	1,445.2	1.425.6	-1.5

•Expressed in terms of retail weight equivalent except for meats which are in terms of carcass weight; poultry on an eviscerated basis and tea and coffee in terms of primary distribution weight.

Source: D.B.S. Apparent Per Capita Domestic Disappearance of Food in Canada, Annual Statements.

From Table 20, as well as from longer-run comparison,¹ we observe that consumption per person of potatoes, pulses and nuts and all cereal products has been declining. Excluding butter, because of the shifting from butter to margarine which has taken place in the 1949 to 1957 period, the consumption of dairy products has remained relatively constant. Fats and oils, sugar and starch also have shown little change. In general, consumption of beef, pork, and poultry meats has been rising. These changes reflect the tendency with increasing incomes to shift towards the consumption of more expensive foods. Divergence from the normal effects of income occurs when, for particular reasons, food price relationships

¹ See W. M. Drummond and W. MacKenzie, Progress and Prospects of Canadian Agriculture, Queen's Printer, Ottawa, 1957, p. 32.

change. In the decade just past, chicken meat has been much less expensive. Between the periods 1948 to 1950 and 1955 to 1957, consumption of chicken, turkeys and other poultry meats rose by 64%.

The data we presented in Table 20 are average rates of consumption, as measured in terms of weight at retail, for food groups classified in most instances by the origin of the raw materials. Therefore, these data do not reveal some of the changes in rates of consumption taking place among forms or types of food products.

In Table 21 we have drawn together available information covering certain broad groups of processed food products. For two of the groups, canned foods and frozen foods, the increases in rates of consumption have been substantial; for two others, breakfast foods and dried fruits, there has been a decline.

The commodity studies in Part V deal in more detail with changes in the rates of consumption of specific foods. The purpose of the discussion at this point in the report is to draw attention to the changes that have been taking place in rates of consumption for different food products, and to emphasize that these changes are mainly the result of increased real consumer incomes together with shifting price relationships among various food products.

In summary, the evidence we have drawn from Canadian experience over the past 10 years indicates the following important relations. First, as real incomes of consumers increase, there is a tendency for expenditure on food to rise as consumers shift towards the purchase of more expensive food materials and more services, although, as real incomes increase, the per cent of income spent on food tends to decline. Second, as incomes generally increase, there is little or no change in the consumption of physical food materials per capita. Third, changes in the prices of particular foods result in shifts in consumption to those foods which become relatively low in price.

Period	Canned Foods	Frozen Fruits and Vegetables	Dried Fruits	Breakfast* Foods
		(pounds)		
1949-50 1955-57	104. 3 122.8	0.8 3.4	6.9 6.0	12.4 11.6

Table 21-Per Capita Consumption of Certain Types of Processed Foods in Canada, Average 1948-50 and 1955-57

•No adjustments have been made for stocks in estimating domestic disappearance. Includes all prepared breakfast foods, e.g., products made from corn, wheat and bran, etc., and unprepared breakfast cereals (i.e., hot cereals) including ontmeal and rolled onts.

SOURCE: D.B.S. Apparent Per Capita Domestic Disappearance of Food in Canada and the Canaed Foods Summary, Annuals.

The persistence of these relations, and the regularities in consumer behaviour which they reflect, is attested to by numerous studies of family food expenditures and of national expenditures in other countries as well as in Canada. The universality of the income-expenditure relations is evident from Chart 15. The stability of food expenditure and consumption in relation to incomes and prices has important implications with respect to the effects of the promotional activities of food merchandising firms. (See Part II.)





Relevant to this discussion is the statistical evidence we have presented in the preceding tables on rates of consumption. For example, we referred to the large proportion of total expenditures devoted to promotional efforts by cereal product manufacturers. These efforts do not appear to have materially affected the rates of consumption of breakfast cereals in total. The promotions may have influenced the consumer to switch purchases from porridge to dry breakfast cereals, but, over the period we have examined, the annual rates of consumption for all breakfast cereals declined. This decline, moreover, is only a part of a larger decline exhibited in the rates of consumption of all products made from cereal grains. Consumption of all cereal products averaged 202 pounds per person per year for the period 1945-47, dropped to an average of 169 pounds for the years 1948-50, and decreased further to an average of 160 pounds for 1955-57.

3. Retail Food Expenditures for Canadian Farm Products

Our discussion to this point has had reference to total food expenditures in Canada, regardless of the origin of the food or of the outlet through which it was purchased by the consumer. We were directed, however, to look into the spread in prices between Canadian commodities at the farm and food products in the domestic market. To arrive at the measure of consumer expenditures required for our study of the Canadian food marketing bill, we have had to work from the greater to the lesser, i.e., from total food expenditures to expenditures on food of Canadian origin only. By value at retail, about one-fifth of the food supplies of the Canadian farm-produced food, which follows, we are dealing only with about four-fifths of the total food supply of the Canadian people.

The Retail Value of Domestic Farm Foods (Table 22) differs from the estimate of Personal Expenditures on Food in the following respects: the value of imported food sold in Canada has been eliminated; the value of fishery products has been eliminated;¹ the value of food consumed on farms where produced, i.e., which does not enter the marketing system, has been taken out; and the value of food served in public eating places has been adjusted to an equivalent value in the retail store.

From Table 22, it can be seen that expenditures on food of farm origin increased by \$2,275 million between 1949 and 1958. Of this increase, \$1,846 million was spent on food of Canadian farm origin and \$429 million on imported food. Over the period prices of imported foods rose more than prices of food of domestic farm origin. Increases in imported food prices occurring in 1954 (coffee) and 1958 (citrus fruits, vegetables) were the cause of most of the general price increase. While by value, suppliers of Canadian food products got about the same proportion (80%) of the Canadian retail food dollar, by volume, Canadian suppliers obtained 81% of the Canadian food intake in 1958 as against 79% in 1949. The impact on the income position of the Canadian farmer and the effect on exports of Canadian farm products are discussed in Chapter 2 of this part.

¹ For a similar analysis of retail value of fisheries products, see Part VI.

Retail Imported Value of Retail Retail Domestic Personal* Farm Foods Value of Foods as Value of Foods as a Per Cent a Per Cent Expenditure Consumed Imported Domestic Year on Food off Farms Farm Foods of Total Farm Foods of Total (\$ million) (\$ million) (\$ million) (%) (\$ million) (%) 2.887 2,718 543 20.0 2,175 1949..... 80.0 2,979 1950..... 3,140 682 22.9 2,297 77.1 3,619 3,440 736 21.4 2,703 78.6 1951..... 1952..... 3,804 3,610 758 21.0 2,851 79.0 3,708 1953..... 3,884 756 20.4 2,952 79.6 4,030 3,854 78.8 1954..... 819 21,2 3,035 1955..... 4,236 4,064 836 20.6 3,228 79.4 4,409 1956..... 4,571 934 21.2 3,475 78.8 1957..... 4.920 4,758 959 20.2 3,799 79.8 1958..... 5.167 4,993 972 19.5 4.020 80.5

Table 22—Personal Expenditure on Food and Retail Expenditure on Farm Foods of Domestic Origin as Related to Total Retail Expenditure on All Farm Food Products, 1949 to 1958

*D.B.S. National Accounts, Income and Expenditure.

Part of the increase of over \$1.8 billion spent at retail on Canadian-produced foods represents a shift in sources of supply in Canada itself. As farming has become more specialized, farmers are now buying more of their food at retail rather than producing it themselves. Many persons on small holdings do not grow as much or as wide a range of products as previously, and are, therefore, buying more of their supply of food through the marketing system.

CHAPTER 2

FARM RECEIPTS

Farmers and their families get their incomes from a number of sources, but mainly from the sale of farm products. In our inquiry we are concerned with receipts from farming operations, that is to say, with the money that farmers realize from the sale of farm products and from other returns, such as government support payments and subsidies of various kinds, which are related to the production and sale of farm commodities. More particularly, we are concerned with receipts from sales of farm food products for use in the domestic market. We need this measure of farm receipts in order to obtain a "total spread" between what the farmer receives for the food materials he sells and what the Canadian consumer spends for the food products derived from these same materials.

We begin with an official series entitled "Cash Receipts from the Sale of Farm Products". This represents receipts from sales of all products, whether for domestic use or export, and whether for food or non-food purposes. Consequently, we eliminate the sales of all non-food materials and those sales of food materials destined for export. This leaves us with receipts from sales of farm raw materials produced mainly for human food use in Canada. However, very few farm commodities are consumed at retail in the total volume in which they leave the farm. Farm food commodities have three possible end uses: first, as human food, second, as animal food, and the third as a non-food. The portions not utilized for human food are referred to here as by-products; later, in Part V, we deal at greater length with the importance of by-products. In order, however, to arrive at our estimate of farmers' receipts from the sale of food materials *only*, our last step must be to deduct the estimated value of the by-product portion of the raw material.

The estimates of aggregate farm receipts are given in Table 23. Between 1949 and 1958, cash receipts of farmers from sales of food for use in the domestic market increased by \$495 million. There was a sharp increase in aggregate receipts to 1951, and then a decline to 1954. Beginning in 1955, receipts from the domestic market again climbed sharply so that the value in 1958 exceeded the previous peak in 1951. The increased proportion of receipts from all sales off Canadian farms attributable to food products sold to Canadian consumers is the result of the expansion of the domestic market both in numbers of people and in their buying power. From 1949 to 1951 inclusive, 60% of the Canadian farmer's cash receipts came from the home market; from 1955 to 1958 almost 65% came from this source. To this extent Canadian consumers have, in the latter part of the period, literally nibbled away the exports of certain farm products.

The relative changes in the volumes of the main groups of food items are shown in Table 24 and Chart 16. The increase in population was 27%. As we have seen previously, the per capita consumption has remained stable. Nevertheless. because of the shift in consumption to Canadian products, the total amount of



all farm products rose by 36% from 1949 to 1958. Poultry meat and eggs more than doubled. Livestock products (mainly the red meats) rose by a little over 30%; dairy products, with a rise of just over 25%, and fruits with an increase of 23%, were just short of the population increase; grains showed only a moderate increase of 15%. Vegetables were the only group with little or no change. This was partly due to a continuation of the long-term downward trend in potato consumption.

Table 23—Farm Cash Receipts From Sales of Food Products to the Domestic Market as Related to Total Farm Cash Receipts, 1949 to 1958

Year	Cash Receipts ^a from Sales of all Farm Products	Cash Receipts ^b from Sales of Food to Domestic Market	Domestic Sales as a Per Cent of Total
	(\$ million)	(\$ million)	(%)
1949	2,413	1,333	55
1950	2,144	1,403	65
1951	2,783	1,651	59
1952	2,859	1,557	54
1953	2,786	1.516	54
1954	2,375	1,503	63
1955	2.350	1.550	66
1956	2,642	1.644	62
1957	2,575	1.715	67
1958	2,787	1.828	66
Average 1949-51	2.447	1.462	60
Average 1952-54	2.673	1,525	57
Average 1955-58	2,588	1,684	65

*Does not include supplementary payments. See "Farm Income 1926-57", D.B.S. Reference Paper No. 25, (Part II) and Farm Net Income 1958, Annual.

"Gross" receipts unadjusted for the farm value of non-food by-products.

Table 24-Relative Changes in the Volume' of Various Groups of Farm Food Products Produced in Canada for Domestic Consumption, 1949 to 1958 (1949=100)

Year	Total ^b Farm Food Products	Livestock	Dairy Products	Poultry & Eggs	Grains & Pulses	Vegetables	Fruit
1949	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1950	101.9	97.4	103.4	106.5	107.3	109.4	92.6
1951	103.3	98.9	101.1	116.9	109.6	106.9	98.6
1952	111.7	114.0	101.4	145.2	99.8	82.0	104.8
1953	111.5	111.0	107.3	145.5	98.5	86.2	104.0
1954	115.5	114.8	110.4	162.3	92.2	80.5	106.2
1955	122.5	121.9	114.9	173.4	101.0	84.7	124.5
956	127.9	128.9	120.4	183.0	102.9	87.7	92.2
1957	133.2	130.2	124.9	199.0	109.6	97.7	110.7
1958	135.5	130.5	125.1	205.5	115.1	103.9	123.4

• Valued at 1949 farm prices.

Includes other products such as honey, maple products and sugar beets, in addition to the six groups shows.

CHAPTER 3

THE MARKETING BILL

In Table 22 we have estimates of the total amount, in terms of retail purchases, spent by Canadians on food of domestic origin each year from 1949 to 1958. In Table 25 we have, for the same period of years, cash receipts of Canadian farmers from the sale of that portion of the raw food materials which has moved through the marketing system to be purchased as food by Canadian consumers. By deduction we arrive at the Marketing Bill. We reproduce the arithmetic in Table 25 and give for each of the years 1949 to 1958 our estimates of the Marketing Bill. To provide a ready comparison of the relative changes of the several values involved in the estimates of the Marketing Bill, the index numbers are shown in Table 26.

We note (Table 26) that the Marketing Bill has more than doubled in the period 1949 to 1958—a rise of 149%. We note also (Table 24) that during the period there was an increase of 36% in the volume of food materials sold by farmers for use in the domestic market. By dividing the index of the Marketing Bill (249.2) by the index of volume of food entering the marketing system (135.5), we arrive at an estimate that the cost of marketing the basket of food, including the services associated with it, increased by 84% from 1949 to 1958.

As we have made clear earlier, the market basket of food and related services bought by the consumer in 1958 was not the same as in 1949. The basket itself was about the same size, i.e., the weight of food consumed per person was approximately the same. But, while our market basket has not increased in weight of contents and, therefore, is no more difficult to push along the aisle and lift off the cart at the check-out counter, the *kinds* of food in the basket have changed. Part of this change has been to larger quantities of certain more expensive food items, which, even if prices had not changed, would make the total amount of the cash register higher by perhaps 7%. There are certain other

	(1)	(2) Aggregate Farm Value	(3)	(4)	(5)	(6)
Year	Aggregate Retail Value	of Raw Materials Food & Non-food By-products	Farm Value of Non-food By-products	Farm Value of Raw Food Materials Only (2) — (3)	Farm-Retail Marketing Bill (1) — (4)	Farm Value as a Per Cent of Retail Value (4) + (1)
	(\$ million)	(\$ million)	(\$ million)	(\$ million)	(\$ million)	(%)
1949	2.173	1.333	58	1.275	900	59
1950	2,297	1.403	63	1.340	957	58
1951	2,703	1.651	77	1.574	1.129	58
1952	2.851	1.557	53	1.504	1.347	53
1953	2,952	1.516	45	1,471	1,481	50
1954	3,035	1.503	43	1,460	1.575	48
1955	3,228	1,550	47	1,503	1,725	47
1958	3.475	1.644	50	1,594	1,881	46
1957	3,799	1.715	48	1,667	2,132	44
1958	4,020	1,828	51	1,777	2,243	44

Table 25-Estimates of the Farm-Retail Marketing Bill, Canada, 1949 to 1958

Year	Aggregate Retail Value	Aggregate Farm Value of Raw Materials Food & Non-food By-products	Farm Value of Non-food By-products	Farm Value of Raw Food Materials Only	Farm-Retail Marketing Bill	Farm Value as a Proportion of Retail Value
		(1949 == 100)			
1949	100.0	100.0	100.0	100.0	100.0	100.0
1950	105.6	105.2	108.6	105.1	106.3	99.5
1951	124.3	123.8	132.8	123.4	125.4	99.3
1952.	131.1	116.8	91.4	118.0	149.7	90.1
1953	135.7	113.7	77.6	115.4	164.6	85.0
1954	139.5	112.8	74.1	114.5	175.0	82.1
1955	148.4	116.3	81.0	117.9	191.7	79.5
1958	159.8	123.3	86.2	125.0	209.0	78.3
1957	174.7	128.6	82.8	130.7	236.9	74.9
1958	184.8	137.1	87.9	139.4	249.2	75.4

Table 26-Relative Changes in Aggregate Retail Value, Farm Value, Marketing Bill and Farm Value as a Proportion of Retail Value, Canada, 1949 to 1958

differences in the basket and in its contents. We are buying a greater amount of services provided in the marketing system. These services include more parking space, more lights and better lights in the store and parking lot, carts for the children, frozen food cabinets, better preservation facilities for food in the whole-sale or cold storage warehouse, more care in the processing of the food, convenient packages, less wastage and so on. With our market basket of 1958, we have about 28% more of these services than we had in the basket of 1949.¹

We have estimated above that the cost of marketing the consumer's basket of food, including the services associated with the food materials, increased by 84% from 1949 to 1958. We have ascribed 28% of the increased cost to more services associated with the food material all the way from the farm to final purchase at retail. It is clear then that the marketing services by themselves cost more in 1958 than in 1949. The increased cost per unit of service is estimated at 43%.²

The indexes of volume of food and services at retail, raw food materials at the farm, and marketing services were calculated after adjustment of the actual dollar figures given in Table 25 to a 1957 dollar basis. These indexes are brought together in Table 27.

1 Index of volume of marketing services == 173.9 Index of volume of food materials == 135.5
Index of marketing services per unit of food materials = $\frac{173.9 \times 100}{115.5}$
² Index of marketing cost per unit of food = 183.9
Index of quantity of marketing services
per unit of food $= 128.3$
Index of cost of marketing services per unit = $183.9 \times 100 = 143.3$
128.3
We can arrive at the same measure in the following way:
Index of total marketing bill in 1957 = 249.2
Index of volume of marketing services $= 173.9$
Index of cost of marketing services per unit = $249.2 \times 100 = 143.3$
173.9

When dealing with prices and incomes in Part I, we drew attention particularly to the timing in price and income movements over the period under review. Our analysis of both farm and personal incomes generally in that part referred to averages.

We desire to return in this part of the report to the matter of timing because here, by the use of aggregate statistics, we are able to pick up the net effects of changes in both prices and quantity of food commodities in relation to changes in personal disposable income, retail cost of Canadian farm food products, the marketing bill and aggregate gross receipts of farmers from the sales of food materials for Canadian consumption.

Table 27-Index Numbers of Volume of Food and Services at Retail, Raw Food Materials at Farm and Marketing Services Between Farm and Retail, 1949 to 1958^a

Year	Volume of Food and Services at Retail	Volume of Raw Food Materials at Farm	Volume of Marketing Services
		1949 - 100)	
1949	100.0	100.0	100.0
1950	104.1	104.7	103 3
1951	106.3	104 2	109.9
1952	112.6	103 8	125 1
1953	121.2	113.8	131 7
1954	126.4	117 6	138 0
1955	134.5	122.8	151 1
1956	143.8	120 4	164 9
1957	149.5	134 1	171 3
1958	153.7	139.5	173.9

^aVolume of food and services at retail was derived by deflating the aggregate retail value by a retail price index of foods of domestic origin. Volume of food raw materials at the farm was estimated by deflating aggregate farm value by a farm price index for farm food products retained in Canada for domestic comsumption. Volume of marketing services is equal to volume of food and services at retail (i.e., the deflated retail value) minus the volume of food raw materials at the farm (i.e., the deflated farm value).

In Table 28 we have reduced the aggregates to plus and minus changes from one year to the next. This provides for a direct comparison of year-to-year changes and their timing. While generally the year-to-year changes are reasonably reliable in reflecting the actual sequence of events, we are aware that economic processes flow through time and that arbitrary selection of periods such as calendar years may cut across developments in the flow of income and conditions of supply and demand. Also, we must recognize that some of the differences in the sequence of events between our analysis of the Marketing Bill and the approach to "The Problem" in Part I are associated with differences in our measurements. For example, the farm incomes in Part I represent cash receipts from all sales of farm products minus operating expenses, while here we are dealing with receipts from sales of food products for the domestic market only.

We have attached considerable importance to the strength of demand during the period and, in this connection, we have used "Personal Disposable Income" as the measure of aggregate consumer demand. In looking at Table 28, we draw attention to the changes in Personal Disposable Income and note that these were positive for every year of the period with the greatest increase from 1950 to 1951, a large increase from 1951 to 1952, another from 1954 to 1955.

Years	Aggregate Farm Value	Marketing Bill	Aggregate Retail Value	Personal Disposable Income
	(\$ million)	(\$ million)	(\$ million)	(\$ million)
1949 to 1950	+ 65	+ 57	+ 122	+ 839
1950 to 1951	+ 234	+ 172	+ 406	+ 2,106
1951 to 1952	- 70	+ 218	+ 148	+ 1,278
1952 to 1953	33	+ 134	+ 101	+ 832
1953 to 1954	- 11	+ 94	+ 83	+ 80
1954 to 1955	+ 43	+ 150	+ 193	+ 1,345
1955 to 1956	÷ 91	+ 156	+ 247	+ 1,824
1956 to 1957	+ 73	+ 251	+ 324	+ 954
1957 to 1958	+ 110	+ 111	+ 221	+ 1,493
Total 1949 to 1958	+ 502	+ 1.343	+ 1,845	+10,751

Table 28-Yearly Changes in Aggregate Farm Value, Marketing Bill, Retail Value and Consumer Incomes, 1949 to 1958

and large ones successively from 1955 to 1958. In general, these large increases in aggregate demand for all consumer goods and services are in part reflected in the demand for food as is shown in the column headed "Aggregate Retail Value". We note a correlation between income changes and food expenditures, with substantial increases in income reflected generally in substantial increases in "Aggregate Retail Value". As we observed earlier the calendar year may cut across a flow pattern and result in a spill-over of demand from one calendar year into the next. Thus, we find in some instances, from 1956 to 1957, for example, that food expenditures at retail showed a greater increase than in the previous year, although aggregate demand increased at a slower rate.

The impact of demand in relation to timing of changes is likewise reflected back through the marketing system and the farm receipts, although, as we pointed out in Part I, other factors disrupting the normal sequence enter into the situation at times through the period. Substantial increases in both the Marketing Bill and the "Aggregate Farm Value" took place from 1950 to 1951, which, as we pointed out above, was the period of the greatest increase in demand. However, from 1951 to 1954, while increases were taking place in demand and in the marketing bill, farm receipts were declining. We observed in Part I that the substantial increase in farm production became a dominant factor during this period, in Canada as well as abroad.

The fall in farm prices, through 1952 to 1955, would, if no other factors were operative in these years, have caused a decline in farm incomes. But the analysis of the marketing bill suggests, insofar as the domestic market for food is concerned, that the strength of aggregate demand after 1954 gave rise to increases in the total quantity of food taken and that this more than offset the fall in prices. Referring to Table 24, we draw attention to a considerable increase in quantities of products taken by the domestic market beginning in 1954 and continuing through 1958, particularly in meats, poultry and eggs and dairy products. Hence, insofar as gross receipts of farmers from sales to the domestic market were involved, increases started on a modest scale in 1955 and continued through to 1958. In 1957 and 1958, of course, price increases again became a factor.

To summarize: we estimate the increase in the Marketing Bill (1949 to 1958) to be of the order of 149%; and that the volume of food entering the marketing system increased by 36%. It follows that the marketing cost per unit of food increased by 84%. This increase in cost of marketing per unit of food was due to both an increase in the quantity of services associated with each unit of food (28%); and an increase in the cost per unit of the services (43%).

Some Components of the Marketing Bill

There are several ways in which the analysis of the Marketing Bill could be developed. In Part II we described and illustrated the functional components referring to transportation, financing, storing, buying, selling and so on. We also dealt with the structural arrangement in the marketing system and described the present-day organization of the institutions comprising this structure, such as the retailing and wholesaling trade, and the food processing industry. In Part III we examined within the marketing system changes in returns to labour (wages), to management (salaries) and to capital (profits). We also gave attention to changes in tax rates.

We proceed in this section, following consideration of the elements entering into cost of marketing services, to report upon changes occurring over the period in aggregate costs for four functional components; transportation, advertising, cold storage and packaging. We were able to carry out an analysis for these particular components because of the availability of certain basic statistics relative to them. These four components themselves comprise a relatively small part of the marketing bill. The balance consists in large part of labour, profits and taxes which we have discussed in Part III.

In Chapters 1 and 2 we have given attention mainly to those changes in food purchasing habits which in themselves would be expected to result in increases in retail food costs and in a higher marketing cost even if all prices of goods and services had remained the same throughout the period. The changes in question were the change in the kinds of food in the market basket and changes in the amount and kinds of marketing services associated with the food.

In the preceding section, we concluded that the cost of a unit of marketing services had increased by 43%. Marketing services consist of the quantities of capital and labour required to take raw food materials from the farm, and process, store and distribute the food products to the consumer. Capital is represented in the primary assembling facilities (warehouses, sheds, grain elevators, cold storages and so forth), the processing plants, wholesale warehouses and retail stores, as well as some other facilities owned or rented by individuals and firms engaged in food marketing. In addition, there is the labour and management required to operate these facilities—the livestock buyers, the butchers, the flour mill employees, the canning plant foreman, the wholesale clerk and the store owner, to mention but a few of the persons engaged in various marketing activities. But we must have more than facilities and employees. In Chapter 2 we established measurements of the quantity and value of the materials obtained from the farmer. In addition, other materials are needed, such as chemicals for use as preservatives, coal, oil and electricity for operating the machinery and providing light and heat.

Machinery requires repairs; office supplies and equipment are essential for business dealings, and a long list of many kinds of goods and services enter into the expenses of marketing. For example, railroads and trucking firms are paid for carrying and transferring materials and products. Advertising and packaging materials also appear as expense items in the accounts of marketing firms.

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All these goods and services used in marketing must be paid for. In addition, marketing firms have to pay their employees, pay interest on money borrowed to erect buildings, and make provision for depreciation of buildings, equipment and so forth.

When we refer, therefore, to the increase of 43% as the increase in the cost of a unit of marketing services, our concern is directed only to the changes in *prices* of units of goods and services used in marketing. Explicitly these would be prices of items such as transporting a ton of freight one mile, an hour of labour, a kilowatt hour of electricity, a ton of coal, a gallon of gasoline, a long distance telephone call between Winnipeg and Toronto, an investment of \$100 of capital and so forth through thousands of items. If we had the quantities of each of these items used and the 1949 and 1958 prices, we could construct an independent index, which presumably would show an overall increase of about 43%.

We do not have this sort of price index, but, as indicated at the beginning of this section, we have developed estimates of aggregate costs for transportation, advertising, cold storage and packaging, which show some of the changes that have been taking place over the period 1949 to 1957.

In Table 29 we have brought together the aggregates and indexes for each of the above-mentioned components. The following sections are devoted to an analysis of the changes in these between 1949 and 1957.

Transportation

Aggregate costs of moving food materials and food products in Canada rose from \$109 million in 1949 to \$245 million in 1957. Thus, total transportation costs more than doubled. In this same period there was an increase of one-third in the quantity of food materials moving through the marketing system. Thus, if haulage rates and distances hauled remained unchanged during the period, we could expect the transportation bill for food to have been at least a third greater by 1957 on the basis of volume increase alone.

But neither haulage rates nor distances hauled have remained unchanged. Transportation costs for moving a ton of food have risen sharply from 1949 to 1957. Several increases in railway freight rates have been put into effect since 1949. There have been accompanying increases in truck rates and in rates for other forms of transportation service such as water and air. But the significant and substantial change in recent years has been the switch in the proportion of food shipped by truck rather than by rail. Table 30 gives the per cent distribution of revenue accruing to the various forms of transportation from hauling food commodities and products from Canadian farms to Canadian retail stores.

The growth in importance of the truck, both absolutely and relatively, as a means of transporting domestic foods to the Canadian consumer has been a factor

contributing to the increases in the aggregate marketing bill. Because this statement is suceptible to misrepresentation, we interject qualification. We are concerned here with the measurement of aggregate costs of transportation as such and have no means of striking a balance sheet to show compensatory savings along with absolute increases in aggregate costs. As we will point out in the ensuing paragraph, costs per unit of moving food by truck appear to have increased somewhat more than costs by rail. But we cannot say to what extent savings in such matters as the amount of handling, convenience, elimination of waste or loss have been realized as offsetting factors to the higher unit cost and higher aggregate expenditure for trucking.

Table 29(a)—Changes in Various Cost Components of the Farm-Retail Marketing Bill, 1949 to 1957

Year	Transportation*	Advertising	Cold Storage ^b	Packaging Materials*
1949	. 109	21	5	97
1950	. 112	26	6	110
1951	. 134	32	6	126
1952	. 171	41	6	147
1953	. 197	51	8	147
1954	. 190	61	8	160
1955	. 219	74	9	174
1956	. 254	90	. 9	188
1957	. 245	106	10	211

(Million	Dol	lars)
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•Total revenues of railways, truckers, air and water transport for farm food products produced and consumed in Canada.

^bCold storage costs include costs of handling, freesing and storage. Does not include the cost of storing foods in freeser cabinets in retail stores, etc.

*Packaging materials and containers only.

Source: Various Research Studies-for details see Volume III.

Table 29(b)-Relative Changes in Various Cost Components of the Farm-Retail Marketing Bill, 1949 to 1957

(1949 = 10)	20 }
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)'ear	Transportation	Advertising	Cold Storage	Packaging Materials
1949	100.0	100.0	100.0	100.0
1950	103.1	120.2	113.6	112.9
1951	123.6	151.7	102.0	130.4
1952	157.3	190.8	116.9	151.4
1953	181.4	240.6	139.3	151.3
1954	174.5	285.7	146.5	165.3
1955	201.1	347.2	159.3	179.1
1956	232.7	420.6	162.6	193.4
1957	224.9	497.0	175.6	217.8

Nors: These index numbers were calculated from unrounded data.

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Year	Rail	Truck	Air	Water	Total
1949	53.6	43.1	1.1	2.2	100.0
1950	51.6	45.3	.9	2.2	100.0
1951	49.6	47.4	1.0	2.0	100.0
1952	44.5	52.0	1.8	1.7	100.0
1953	38.3	57.6	2.7	1.4	100.0
1954	37.5	59.3	1.8	1.4	100.0
1955	31.9	63.1	3.7	1.3	100.0
1956	31.1	65.3	2.3	1.2	100.0
1957	31.8	64.9	2.1	1.3	100.0

Table 30-Per Cent Distribution of Total Food Transportation Costs for Farm Products Produced and Consumed in Canada, 1949 to 1957

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From Table 31 we observe that the increase in truck revenues per ton was greater than for rail, about 110% as compared to 67%. This increase in rates (as expressed by per-ton revenue changes), coupled with an estimated increase in the volume of domestically produced and consumed food carried by truck, pushed total truck revenues upwards to a level at which they accounted for about 65% of total transportation costs against only 43% of the total in 1949. Food shipments by rail did not change in volume to any extent and hence the aggregate cost attributable to the use of rail transportation for food rose only moderately over the period. To the extent that truck transportation has replaced rail and water, total transportation costs and, in turn, the farm-retail marketing bill, have been increased by this shift in types of carrier.

A more recent development in transportation service, which appears to be of some significance to the food industry, is the combination truck-rail ("piggy-back") service. We have been unable to assess the extent of the growth of this type of service in relation to foods only, much less to make detailed measurements of the overall effect on costs. It would appear, however, that the service offers speed, convenience and flexibility which have effected overall savings in per unit costs of moving food, particularly in traffic between major urban centres.

Year	Average Rail Revenue per Ton	Average Truck Revenue per Ton	Total Transportation Costs per Uait of Farm Food Marketed*
1949	100.0	100.0	100.0
1950	107.1	97.1	101.2
1951	123.6	107.9	119.7
1952	132.4	135.2	140.8
1953	130.3	161.1	162.7
1954	151.0	151.7	151.1
1955	139.2	175.2	164.2
1956	151.9	203.7	181.9
1957	167.3	209.6	163.8

Table 31-Relative Changes in Unit Transportation Costs, 1949 to 1957 (1949=100)

• Derived by dividing the "value-volume" index of farm marketings (Table 24) into the index of total transportation costs, (Table 29 (b)).

When dealing with changes between 1949 and 1957 in the cost of transportation of food, we face a complex of changes in the elements from which the total costs are built up. These are:

- (1) Changes in per unit rates for transportation of food materials and food products.¹
- (2) Changes in the type or kind of transportation used. Change to a proportionately greater use of a lower or higher rate-per-unit type of transportation would affect the total cost.¹
- (3) Changes in the total volume of food moved. These would result from population increases and from changes in the amount of food consumed per person.
- (4) Within the volume of food moved, changes in the kinds of food being moved. We noted certain shifts in food consumption in Chapter 1. If these shifts are from food materials or food products bearing low transportation rates per unit to those bearing higher rates, then total transportation costs would be increased.
- (5) Changes in the distances which the food materials or food products are shipped. These changes could result both from changes in population location and from changes in the location of food production (in processing as well as in primary production).

Because changes of the above nature are taking place continuously, it is impossible to unravel with any certainty the net contribution of each to the total increase in the food transportation bill.

Looking again at Table 31, we draw attention to the index of the costs of transportation per unit of farm food marketed for each of the years 1949 to 1957. This index embodies a complex of elements which change transportation costs per unit of food marketed and, since it is expressed in terms of a unit of food, eliminates

	3-Year Averages			
-	1949-51	1955-57	% Increase	
Cattle & Calves	(miles) 468 223 267 805 1,252	(miles) 787 389 676 1,213 1,262	68 74 153 51 1	

Table 32.—Changes in Average Rail Hauls Per Ton For Selected Farm Food Products: Three-Year Averages, 1949-51 and 1955-57.

SOURCE: Based on data in Annual Waybill Analysis of Carload Traffic, Board of Transport Commissioners, Ottawa, annuals 1949 to 1957 inclusive.

¹ During this period considerable use has been made of the provision in the Canada Transport Act permitting "Agreed charge contracts". These contracts are an agreement between a shipper and a rail carrier or carriers for a rate to the shipper lower than otherwise would be available for which in exchange the shipper gives a guaranteed high per cent of the traffic Agreed charge contracts have to be filed with the Transport Board and are available to the public It is difficult to make a statistical assessment of their significance and effect upon the general level of transportation rates for food. However, their effects have been in the direction of keeping the general level of transportation rates for food lower than would be the case in the absence of this type of contract.

the 33% increase in the aggregate which is attributable to food volume (see Table 24). It does, however, include a reflection of the change in volume of transportation per unit of product. The increase of from 70% to 80% per unit of food is greater than the increase in rail rates per ton and somewhat less than the increase in truck rates per ton.

A factor contributing to the increased amount of transportation per unit of food is the distance of haul. There is considerable evidence of increases in distance hauled.¹ The important commodities and products in terms of impact on transportation costs for all-Canadian operations are livestock (cattle, hogs and sheep) and meats of these animals, and dairy and poultry products. Changes in average rail hauls for some of these commodities and products are shown in Table 32.

To summarize our analysis of the aggregate of transportation costs in relation to increases in the marketing bill, the following conclusions are presented:

- (1) The overall increase in the aggregate cost of transportation in marketing food over the 1949 to 1957 period is attributable mainly to a rise of 69% in the cost of transportation per unit of farm food commodity marketed.
- (2) In part, the higher per unit costs reflects a shift in the type of transportation, that is a shift to moving more of the food by truck. (This statement is qualified by our previous remarks regarding possible offsetting savings.)
- (3) There has been an increase in the amount of transportation per unit of product. This is due in part to greater amounts of food being moved longer distances to meet requirements arising out of concentration (urbanization) of the population.

In connection with the increase in the use of trucks for moving food, the Commission draws attention to the general growth in traffic congestion as an increasingly important element in the rise in trucking costs. The increasingly large amount of food moved through and within the high traffic density areas bears a proportionate or possibly more than proportionate part of the heavy costs of traffic slow-down. Improvement of traffic conditions and establishment of welllocated traffic terminals adequately serviced by roads and highways, and wholesale food market areas would limit increasing transportation costs for food products.

Advertising

We have touched upon the subject of advertising in earlier parts of this report. In Table 29 we noted that during the period 1949 to 1957 advertising increased in aggregate cost from \$21 million to \$106 million, a rise of 397%. This was by far the greatest per cent increase in any of the functional components of the food marketing bill which we have examined. On the other hand, despite

¹ See Proceedings. The representative of Burns and Company referred to the increase in livestock production in the Prairie Provinces and the increase in population in Central Canada and the Pacific Coast as factors contributing to increases in the distance products had to be transported (Vol. 24, p. 3853, et seq.). The representative of Canada Packers put it succinctly as follows: "... the centre of gravity of production has moved West, and the centre of gravity of consumption has moved East" (Vol. 26, p. 4081).

the proportionately large increase in the aggregate, advertising appears to account for only about 5% of the marketing bill in 1957, although this is more than double the 1949 proportion. Changes in the distribution of aggregate advertising costs for food are given in Table 33.

The proportion of the total advertising bill spent by processors has been increasing steadily, reaching 80%—by far the largest part—of total advertising expenditures in 1957. (The amount increased from \$15 million in 1949 to \$85 million in 1957.) This reflects a continuation of the trend to what is known in the trade as "national" advertising. As noted in Part II, a high proportion of this national advertising of food products, as in the case of many other lines of merchandise, is carried out by or an behalf of processing and manufacturing firms. Meanwhile, the relative importance of advertising by both wholesalers and retailers has diminished. Although expenditures by retail outlets as a proportion of the total have declined, changes in retail food marketing during the period are reflected in the estimate of advertising expenditure. Corporate chain expenditures on advertising have increased relative to those of the independent retailers but not relative to those of processors. (The chains' expenditures increased from \$2 million to \$11 million and the independents' expenditures from \$3 million to \$8 million between 1949 and 1957.)

		_	Retailers			
Year	Processors	Wholesalers	Total	Inde- pendent	Corporate Chains	Total
			(Pe	r Cent)		
1949	72.5	4.9	22.6	12.8	9.8	100.0
950	73.7	4.3	22.0	12.3	9.7	100.0
951	76.0	3.4	20.6	11.1	9.5	100.0
952	76.7	3.9	19.4	8.9	10.6	100.0
953	77.0	3.9	19.1	8.3	10.8	100.0
954	77.3	2.9	19.8	8.9	10.8	100.0
955	77.8	2.2	20.0	8.0	12.0	100.0
956	79.0	21	18 0	7 9	11 1	100.0
957	79.7	2.3	18.0	7.5	10.5	100.0

Table 33-Changes in the Distribution of Advertising Expenditures Among Institutional Groups of the Food Industry, 1949 to 1957

In considering the growth of advertising in connection with the food industries, we have been impressed with the expansion of advertising by television, particularly for the promotion of national brands. Television is also being used to some extent by national and regional food retail chains to promote customer patronage. Sometimes this latter use is combined with brand promotion under arrangements between national processors and chain retail organizations. Because television was only introduced in Canada in the early '50's, the increase in advertising is partly a growth phenomenon associated with innovation. The new medium provides for visual demonstration of food uses and an appeal to the palate by the same means. More advertising and increases in advertising rates

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over the period have contributed to the overall increase in aggregate food advertising expenditures. Our examination of rates charged for advertising in newspapers, popular magazines and business publications revealed rather moderate increases from 1949 to 1957. A larger part of the increase in the aggregate advertising bill is attributable to the introduction and development of television advertising and to a considerable increase in the volume of food advertising placed in publications.

Cold Storage

Practically all food commodities in their movement from the farm to the consumer undergo some form of storage for periods of shorter or longer duration. It may be only a matter of hours or again it may be a matter of months depending upon the nature of the food products and the marketing conditions. There can be wide variations in the duration of the storage period even for a given commodity, as the marketing conditions vary.

The Commission confined its investigation of change in storage costs to those involved in keeping food commodities and food products under controlled temperatures in public and private commercial cold storage warehouses.¹ There has been a considerable increase in food freezing as a means of preserving products (especially fruits and vegetables), and the Federal Government has assisted in the development of adequate cold storage facilities, which has had its effect on rates for cold storage. There are other important factors which lead us to consider cold storage in particular. Statistics on cold storage holdings are readily available, relatively accurate and complete, and the various series are published monthly in considerable detail and are reasonably consistent for a period of years. Cold storage is the most expensive type of storage per unit of product. In the estimates for cold storage given in Table 29, the costs of freezing or putting products into storage are taken into account along with the monthly rates for storage.

Year	Dairy Products	Frozen Meats	Fresh Apples	Fresh & Frozen Eggs	Frosen Fruits	Frozen Vegetables	Total
·				(Per Cent)			
1949	28.0	23.8	22.3	13.4	9.1	3.4	100.0
1950	27.0	20.4	30.0	11.2	7.3	4.1	100.0
1951	24.2	23.6	29.6	6.9	10.0	5.7	100.0
1952	25.1	\$2.5	18.9	10.0	9.1	4.4	100.0
953	29.3	32.2	20.0	5.9	7.7	4.9	100.0
954	33.4	22.2	21.6	7.1	9.0	6.7	100.
955	25.7	18.9	21.6	8.0	9.4	6.4	100.1
956	34.5	23.0	21.3	3.8	8.3	9.1	100.1
1957	27.3	22.0	22.0	9.8	8.3	10.6	100.0

Table 34—Changes in the Per Cent Distribution of Cold Storage Costs Among Various Groups of Food Products, 1949 to 1957

1 See D.B.S. reports on Stocks of Food Commodities in Cold Storage and Other Warehouses for kinds of commodities and types of storage included.

The cost of cold storage for farm products produced in Canada and bought by domestic consumers increased only 76% between 1949 and 1957. This relatively low rate of increase is attributable partly to government assistance in the construction of facilities, which has affected rates, and also to an increased degree of utilization of space. Table 34 below shows the per cent distribution of total cold storage costs among various groups of farm products.

In 1957, cold storage costs for meats, frozen fruits and eggs were a smaller proportion of the total than in 1949. Frozen vegetables were the only group with a higher proportion in 1957. With the exception of frozen vegetables and fresh apples, there has been no marked trend in the quantities of other commodities placed in cold storage over the period. The volume tends to fluctuate with production for most commodities. The total cost of cold storage for frozen vegetables increased 445% and was chiefly a result of the 414% rise in storage volume.¹ A substantial portion of the increase in total cold storage was a direct result of the marked increase in the storage of frozen vegetables.

Storage costs vary with both volume and unit charges but, generally, there were only moderate changes in the rates of handling and freezing and storage. Volume was the chief factor contributing to the increase in total cold storage costs over the period.

We cannot close our discussion of storage costs without further reference to the costs arising out of the increase in volume of frozen foods during the 1949 to 1957 period. Insofar as frozen foods are to be held at low temperatures during their movement through the marketing system prior to retail, the costs are for the most part taken into account in the estimates in Table 29. For the further period of storage and display at retail, there has been a major development in frozen food cabinets. The expenses of buying and operating these, of course, show up in the debit column of the retail store. The importance of the frozen food business and its rate of growth are shown by the results of a recent survey² which yielded a count of 421 different frozen food items in Toronto chain stores. This count showed the number of items to be 40% higher than the year before.

At the beginning of this chapter we referred to the shifting of functions and services back and forth within the marketing system and the resultant difficulties this created in measuring the incidence of where or on whom the costs actually fell. In Chapter 1, we mentioned the increase in mechanical refrigeration in the home. Some part of this is attributable to the availability of frozen foods and on this account part of the cost incurred in the home for purchase and operation of cold storage cabinets can be regarded in fact as a transfer of that cost out of the marketing system to the consumer.

Packaging

Packaging of food products takes many forms, and requires many methods of enclosure. It takes place at all stages within the marketing system and outside the marketing system proper as was described in Part II. Some products are wrapped or packaged before leaving the farm. On the other hand, the consumer

¹ Measured in pound-months.

² Canadian Grocer, April 25, 1959, p. 30.
may undertake certain packaging operations when the products are brought home from the retail store. For example, food may be packaged after purchase for storage in a home freezer. While on this subject we digress to pay a compliment to nature for many excellent packaging accomplishments in the form of outer protective coverings such as the shell on eggs, the hide on the steer, or the skins on many fruits and vegetables.

There are three principal functions of packaging. These are:

- (1) To protect the product against deterioration or contamination. Insulated containers for ice cream and fresh fruits are examples. Milk cartons and bottles are sealed against dust and bacteria.
- (2) To provide convenience in transporting, storing and using the article throughout marketing and to consumption. Size, shape and strength of container enter into consideration here.
- (3) To provide the information to the buyers and users of the product necessary to informed and intelligent purchasing and use. This information may be printed as an integral part of the package or separately attached to the package by a label. This aspect of packaging has assumed greater importance as the retailer-consumer relationship has become less personal. In this conveying of information to the purchaser, the essentials are:
 - (i) The kind, composition and quality of the product;
 - (ii) The net quantity in accurate and meaningful measurements;
 - (iii) Its uses and how it may be prepared or served for various uses;
 - (iv) Any particular instructions required in handling or storage to protect the contents;
 - (v) Where feasible, the contents visible in their natural appearance;
 - (vi) Last, but not least, wherever possible, provision for a write-in or stamp-in (at the end of the marketing chain) of the unit or package price.

While we have restricted the above classifications to the essential functions of packaging, and have in this way narrowly defined the information aspects, we find it difficult to deal with this subject in a realistic way without reference to the promotional aspects of packaging. The transition stages from informational services to promotional activities in packaging leave a wide area in which we have found classification most perplexing.

In connection with the use of packaging as a means of promotion, regard must be given to (1), (2) and (3) above, but, in addition, other factors rank high in importance. These include appeals to the consumer through package design, including shape and embellishment by colour, decoration, lettering, and also and not infrequently, through the utility of the package for other things after the food contents have served their purpose. Promotion by means of packaging employs many devices, some of them bordering upon deception, including use of optical illusion, both as to quality and quantity of contents, inclusion of "gimmicks" along with the food, and so forth.

We have directed this special attention to the packaging function because of the numerous complaints about packaging costs, promotions, "gimmicks" and

Food Expenditures, Farm Receipts and the "Marketing Bill"

inconveniences, especially from representatives of consumers.¹ While no direct evidence was submitted by these representatives on the extent to which increased packaging and increased costs of packaging had increased the marketing costs and hence the price spread, certainly the inference that costs had been increased was intended. It remained, however, for particular industries and notably that of cereal products to provide an outright admission that their costs had increased because of the increase in packaging costs.² The expansion of competition into this particular form of promotional activity is viewed by the Commission, therefor, as one of the causes of increases in marketing costs and thereby a contribution to the widening of the spread.

Before discussing our measurements of the aggregate of packaging costs in the marketing bill, we comment upon some of the components entering into total costs of packaging and consider certain economies associated with packaging. Packaging operations in general require materials, labour on the packaging line or in the packaging operation, packaging machinery, power, light, and other items of operating expenses as well as a share of general overhead arising from the utilization of plant space, fire protection and so forth. When packaging operations are segregated from the production and assembly lines, total packaging costs can perhaps be measured fairly accurately. In many instances, however, the packaging job has become an integral part of the production line; sometimes the package-making or package-assembling machine itself is part of this line.

In recent years packaging machinery has become more intricate and more expensive. In addition, when packaging becomes enmeshed in promotional activities, changes in package size and design make obsolescence a major factor in the depreciation rate of packaging machines and equipment.³

To this point, our qualifying comments on the measurement of packaging costs have dwelt upon the problem of obtaining inclusive coverage of all costs associated with the operation. But we must give regard to the other side of the coin, that is to the savings effected, not only to the consumer but throughout the marketing system in waste reduction, convenience in handling and storage, and quality maintenance. Certainly changes in packaging which have permitted mechanization in the handling and assembling of materials in processing, wholesaling and retailing have contributed to reduced labour and other costs per unit of product. Once again all we can do is recognize these qualitatively—the net effects of increases and decreases in cost attributable to packaging are incorporated in the total mix of costs represented by the aggregate marketing bill.

In our measurement of the costs of packaging we have restricted our consideration to the costs for materials and containers. Statistics on expenditures for these are collected annually by the Dominion Bureau of Statistics from the food processing industries, and, using these data together with other information, we arrived at the aggregate figures given in Table 29. We repeat that these estimates

¹ See Proceedings, submissions by National Council of Women and Canadian Association of Consumers, Vol. 2, pp. 277 and 298; Vol. 13, p. 2170; Vol. 15, p. 2388; Vol. 26, pp. 4124 and 4312. ² See Proceedings. A representative of the Prepared Breakfast Food Section of the Quaker Oats Company of Canada, Limited, said: "Packaging costs from 1949 to 1957 have advanced approximately 52%". (Vol. 28, p. 4456.) Also see our reference on p. 138 to statement by a representative of Burns and Company on this point.

⁸ For further comments on the factor of obsolescence see Proceedings, Vol. 28, p. 4459.

Royal Commission on Price Spreads of Food Products

do not include labour, machinery expense and so forth. Although an increase of 118% between 1949 and 1957 is indicated, this increase in total cost of packaging materials is less than the rise in the total marketing bill (Table 26). Related to our measure of the increase in amount of food put through, the increase in cost of packaging materials per unit of food over the same period was 64%.¹ Price increases in materials and containers and increases in the volume of food put through have played major roles in the increasing aggregate cost of food packaging materials and containers.

The amount of packaging per unit of farm product has increased. At the same time, the volume of food products requiring some amount of packaging has also increased. Most of the expenditure on packaging materials and containers has been incurred by food manufacturers (processors) although there might, with the growth of the chain store, have been an increase in the amount of packaging performed at retail since 1949. As an offset to this, however, the decline in movement of many food materials in large containers (bags, barrels) through to retail has eliminated much repackaging that used to take place at retail. The ladle, scoop, and grocery store scale, together with wrapping papers, string and various sized paper bags no longer clutter the grocery store counters and shelves.

In summarizing our review of increases in packaging costs as a factor in the increasing marketing bill, we conclude that, on balance, the attention directed to this matter as a highly significant contributor to the overall rise in aggregate marketing costs tends to be exaggerated in the views expressed to the Commission. But we do not dismiss increased packaging as a reason for sharp increases in marketing costs for certain items, or alternatively for the failure of consumer prices to fall in certain lines of food commodities, and especially where raw food materials prices have declined. For some commodities, the marketing behaviour of processing and distributing industries and firms has been characterized by substantial amounts of promotional activity in which packaging and the promotional devices associated with it have been prominent.

¹A representative of Burns and Company stated in regard to their experience: "From 1949 to 1957 the increase in cost of packaging materials has risen by some 49% per pound of product sold". *Proceedings*, Vol. 24, p. 3841.

CHAPTER 4

GOVERNMENT SERVICES AND FOOD MARKETING

Government activities have been an influence upon all sectors of the Canadian economy. In the food marketing system particularly, government activities and assistance have a considerable bearing upon operations at all levels, from the farm to retail. The activities of governments in the food marketing sector reflect in large part the concern of the public which arose initially out of the desire for an assured and safe food supply.

Farmers, business operators and consumers pay taxes; in return they receive services provided by governments. These range across a wide variety of activities. Many of them, although general to the whole economy, may be regarded as contributing in one way or another to improving efficiency and lowering costs in the food marketing system. We could not possibly extract the portions of the many multiple-purpose services such as those to transport (roads, policing), to communication, to education and technological development which aid food marketing in the course of their general performance.

We suggested that, in return for taxes paid, the community received services from governments. This statement can be accepted to a greater or lesser extent depending upon the reservations and qualifications which each of the readers may wish to attach to it based on their own experiences, satisfactory or otherwise. In referring to services there are two general groupings of government activities. The first group involves the making and enforcement of laws and regulations which, in general, facilitate the functioning of the economy and social order. The second grouping of government services includes direct assistance by way of matters like market information, research and actual participation in such matters as inspection and grading. Inasmuch as these activities are necessary, they would, if not provided by governments, be reflected in increased costs in food production and marketing, to be borne directly by the consumer.

There are many activities and services which, we can say with some assurance, are developed with the direct object of assisting food marketing. As a general rule, these are provided by governments and, in most instances, revenues are incidental and fail by a considerable margin to cover the costs of the activity. For example, local governments often provide and supervise farmers' market areas. For the use of these facilities, only nominal rentals are collected.

While practically all governments, municipal, provincial and federal, are engaged in some form or other of assistance to food marketing, segregation of expenditures for these purposes in their financial statements varies considerably. Certainly, it becomes more difficult to segregate special categories of expenditure, proceeding from senior to junior levels of government. At the lower end, the village constable may enforce retail store or market by-laws, while at the senior level an employee's only duty may be daily inspection of a particular farm product.

We find, furthermore, that the food marketing system benefits from a number of governmental activities generally available to producers, marketing firms and

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Royal Commission on Price Spreads of Food Products

consumers. These include regulations under which the whole economy is carried on, and of paramount importance are those laws and regulations designed to preserve freedom of competition.

Most certainly, governmental contributions by way of assistance in all its many forms would amount to a substantial sum. This is covered, in part of course, by way of property, income and other taxes raised by various levels of government from tax levies on persons and firms. Insofar as our marketing bill estimate reflects these taxes, it includes a portion of the marketing services provided by governments. We are unable to strike a balance on the net benefit of government services to food marketing; similarly we are unable to estimate the actual cost based upon the difference between government tax levies and incidental receipts from services provided in respect to food marketing.