Working Papers Series
Cahiers de recherche

Regulation Reference
Mandat sur la réglementation

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WORKING PAPER NO. 25

GOVERNMENT REGULATION OF THE CANADIAN DAIRY PROCESSING, DISTRIBUTING AND RETAILING SECTOR

by

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ISSN-0225-8013

September 1981

PREFACE

This paper analyzes government regulation of the Canadian dairy processing, distributing and retailing (PDR) sector. It focusses especially on Federal, Province of Ontario and City of Ottawa "social" regulation - i.e., regulation affecting sanitation conditions, product safety, product content, product quality, measurement and packaging and labelling of dairy products. It deliberately excludes consideration of direct economic regulation of supply, price and entry conditions, and especially the role of milk marketing boards. However, this important aspect of dairy industry regulation is examined in another study prepared for the Regulation Reference, namely R. Barichello, The Economics of Canadian Dair Industry Regulation (Economic Council of Canada and the Institute for Research on Public Policy, Technical Report, 1981).

The author is now an analyst in the Saskatchewan Department of Finance, but this paper was written before he assumed that position. He is grateful to Mitchell Cogan for enthusiastic research assistance during the summer of 1980. Preliminary field work and research by Brian Owen of the University of Manitoba is greatly appreciated. Roslyn Raskin provided prompt and efficient word-processing, and Dawn Murphy provided valuable assistance with last minute revisions and processing. Special thanks to A. Goll, P.K. Gorecki, R.A. Jenness and W.T. Stanbury for thoughtful advice and comments, and to José Herran-Lima, Glenn McCurdy and Ruth Taylor for their valuable encouragement.

In the preparation of this paper, information was solicited from a large number of dairy industry executives and government officials. In addition, in depth interviews involving five industry representatives and five government officials were instrumental in focussing the author's attention on specific issues for detailed analysis. The co-operation and assistance of these individuals is gratefully acknowledged. None, I suspect, will agree with every conclusion in the paper, but without their help it could not have been completed. Kempton Matte of the National Dairy Council was especially helpful in providing contacts within the industry. Of course, responsibility for the opinions and any errors contained herein rests solely with the author.

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RÉSUMÉ

Dans le présent document, l'auteur analyse la réglementation publique régissant le conditionnement, la distribution et le commerce de détail des produits laitiers au Canada. Il exclut délibérément la question de la réglementation économique directe par les offices de commercialisation du lait, mais il traite d'une vaste gamme de sujets, y compris la réglementation sur la composition des produits, l'emballage et l'étiquetage, les normes micro-biologiques et les barrières réglementaires au commerce interprovincial.

Au chapitre 2, il analyse la structure et l'organisation des secteurs du traitement, de la distribution et du commerce de détail des produits laitiers, et fait remarquer, entre autres choses, le niveau relativement élevé de concentration du marché local. Le chapitre 3 contient, outre un historique, un examen de la législation pertinente et du fondement constitutionnel de la réglementation relative aux produits laitiers au Canada. Une importante caractéristique de cet historique réside dans le grand nombre de cas où certaines formes de réglementations publiques ont été activement sollicitées par l'industrie pour son propre avantage.

Les principales raisons d'être de la réglementation des produits laitiers sont examinées au chapitre 4, de même que les responsabilités qui échoient, dans le concret, aux divers ministères des gouvernements fédéral, provinciaux et locaux. Il est question également de l'inspection des usines de conditionnement par le gouvernement. Des études de cas sont ensuite présentées, illustrant des aspects particuliers de la réglementation. L'auteur y examine enfin le problème des barrières réglementaires au commerce interprovincial, de même que les effets des dernières modifications du droit constitutionnel.

Il en vient à la conclusion que la plupart des aspects de la réglementation des produits laitiers sont socialement bénéfiques, étant donné surtout qu'ils corrigent les faiblesses du marché attribuables à une insuffisance d'information. (Cette conclusion ne s'applique pas nécessairement à la réglementation économique directe par les offices de commercialisation, lesquels ne sont pas inclus dans l'étude.) Cependant, il y a encore matière à amélioration dans la mosaïque des règlements. L'auteur recommande notamment (a) que la brèche laissée dans le système de réglementation par le cas de la Brasserie Labatt soit refermée par un nouvel ensemble de normes visant la composition des aliments qui soient cohérentes d'une province à l'autre; (b) que, lorsque c'est possible, la réglementation visant les produits laitiers fasse appel à des normes de performance plutôt qu'à des normes techniques; (c) que les gouvernements fédéral et provinciaux continuent de travailler ensemble afin de réduire le chevauchement et le double emploi dans la réglementation et l'inspection des produits laitiers; et (d) que les récentes propositions de réforme des procédures exigeant qu'une évaluation des coûts économiques soient effectuée avant l'adoption de certains règlements particuliers soient retenues, que ces réformes fassent l'objet de plus de publicité et qu'on sollicite davantage la participation de groupes non gouvernementaux.

SUMMARY

This paper analyzes government regulation of the processing, distributing and retailing of dairy products in Canada. Direct economic regulation by milk marketing boards is deliberately excluded, but a broad range of topics is considered, including regulation of product composition, packaging and labelling, micro-biological standards and regulatory barriers to interprovincial trade.

Chapter II examines the structure and organization of dairy products processing, distributing and retailing, noting, among other things, the relatively high level of local market concentration. Chapter III surveys the relevant legislation; and in the process considers both the history and constitutional basis of dairy products regulation in Canada. An important feature of that history is the extent to which some forms of government regulation have been actively solicited by the industry for its own benefit.

Chapter IV considers the basic economic rationales for dairy products regulation, and the de facto responsibilities of various departments at the federal, provincial and local levels of government. There is some discussion of government inspection of dairy plants. The Chapter then focuses on case studies of individual aspects of regulation. Finally, it examines the problem of regulatory barriers to interprovincial trade, and considers the implications of recent developments in constitutional law.

The paper concludes that most aspects of existing dairy products regulation are socially desirable, especially in correcting market failure due to inadequate information. (This conclusion does not necessarily apply to direct economic regulation by milk marketing boards, which is excluded from the study.) There is, however, still some room for improvement in the regulatory mosaic. In particular, it is recommended (a) that the 'regulatory gap' left by the Labatt Breweries case should be filled through a new set of interprovincially consistent food product composition standards; (b) that wherever possible dairy products regulation should employ 'performance' rather than 'engineering' standards; (c) that both the federal and provincial governments should continue to work together to reduce overlap and duplication in regulation and inspection of dairy products; and (d) that recent procedural reforms requiring ex ante economic evaluation of certain individual regulations should be retained, with greater publicity and more active solicitation of inputs from non-government groups.

Chapter I

INTRODUCTION

The Canadian dairy industry is thoroughly regulated from the initial production of raw milk on farms to the final retail marketing of processed dairy products.[1] Indeed, Parliament passed the first Dairy Products Act in 1893.[2] (Citations for all statutes and regulations mentioned in this paper are given in Appendix I, rather than in footnotes.) Federal and/or provincial regulation of price, output, international trade, interprovincial trade, plant sanitation conditions, product health standards, product composition, product quality, transportation, packaging and labelling now pervades the industry. But the growth of government regulation of dairy products processing, distributing and retailing - and especially the proliferation of regulations during the past two decades - has been criticized by both industry and consumer spokesmen.[3] Further, in discussing the food and beverage industry as a whole, a recent federal Sector Task Force composed of industry, trade union and both federal and provincial government representatives has alleged that government regulations constitute "a major constraint on profitable growth."[4] In view of these complaints, and of the Economic Council of Canada's broad mandate to study regulation,[5] it is desirable to analyze government regulation of the dairy industry.

This paper undertakes part of the task - specifically, an analysis of regulation of the dairy processing, distributing and retailing (PDR) sector. Because the production sector (i.e., dairy farming) is deliberately excluded, there will be no consideration of the purpose and economic effects of milk marketing boards. Of course, price determination and price discrimination by marketing boards do affect supply conditions in the PDR sector, but these effects are not considered in this paper. (The effects of milk marketing boards are analyzed in another study

prepared for the Regulation Reference.[6]) Rather, this study concentrates on (i) 'social' regulation of dairy PDR - i.e., government rules regarding sanitation, health standards, product quality, 'legal recipes', packaging, transportation conditions and information disclosure;[7] and (ii) actual and potential barriers to interprovincial trade.

Much of the analysis in Chapters II, III and IV concerns three specific dairy products - fluid (fresh) milk, butter and cheese. We concentrate on these products for the following reasons: First, they constitute the three most economically important final products within the dairy industry.[8] Second, they are extremely important from a nutritional standpoint.[9] Third, and perhaps most important, these products together represent both of the two broad categories of dairy production: fluid milk sold for immediate consumption in that form and industrial milk used to produce processed dairy products. Each of these is subject to a different kind of regulation. In particular, because of transportation costs and perishability, markets for fresh milk tend to be local. They are therefore primarily subject to provincial and municipal regulation and inspection. In contrast, dairy products manufactured from industrial milk are extensively traded, both interprovincially and internationally. Since international and interprovincial trade fall within federal jurisdiction under section 91(2) of the British North America Act, such products are primarily subject to federal regulation.[10] Further, fluid milk PDR obviously involves considerably less 'processing' than cheese, butter and other manufactured dairy products. This, too, entails differences in regulation. In sum, regulation of fluid milk, butter and cheese can be expected to raise a broad range of issues representative of the whole field of dairy products regulation.

Industry Attitudes Toward Regulation

Industry attitudes toward dairy regulation vary greatly. Some executives interviewed for this study viewed it primarily as an outrageous nuisance, while others recognized aspects of it as socially beneficial. When questioned closely most industry representatives conceded that some regulation is helpful, at least in maintaining health standards and protecting consumers from less ethical members of the industry. A few welcomed government inspection of processing plants as a valuable complement to their own internal quality control systems. Almost without exception, however, the executives interviewed insisted their self-imposed plant sanitation, health, and accuracy in measurement standards are higher than those mandated by the government. Strong industry concern about such standards is not surprising, given that a reputation for high standards is obviously in the firm's own best interest. Finally, a few executives also recognized that much dairy regulation - especially regulation initiated prior to the "Consumer Movement" of the 1970s - was deliberately sought by the industry for its own benefit.[11] None asserted that regulation constitutes an absolutely crushing burden.

In general, however, industry representatives did express objection to key aspects of dairy regulation. Concern centered especially on recently established regulations in areas such as packaging, labelling, control of additives, and microbiological standards. (These areas are considered in the regulatory case studies in Chapter IV of this paper.) In addition, a common view is that which was expressed by the Canadian Food Processors Association in a recent brief:

> The duplication of services [in plant inspection, food health and quality standards] constitutes a waste of taxpayers' money and an expense to the food system. There is a need for much more co-ordination and co-operation.[12]

With this allegation in mind, the issue of overlap and duplication is extensively considered in this paper.

Structure of the Study

The approach of this paper is as follows: Chapter 2 presents a brief analysis of the basic industrial characteristics of dairy processing, distributing and retailing in Canada. This includes a look at the physical process of dairy PDR and an examination of such key economic variables as outputs, regional distribution, market concentration, price and income elasticities, and the importance of demographic variables.

Chapter 3 provides an overview of all of the relevant enabling statutes and regulations. (This chapter will mention the enabling statutes of provincial milk marketing boards, but as explained above, their activities in setting prices and outputs will not be further analyzed.) There will be no running commentary on the statutes and regulations. Rather, a preliminary section explains the traditional constitutional basis and historical development of dairy regulation in Canada. A comprehensive table is then used to explain how federal, provincial and local government rules affect dairy PDR. The following jurisdictions are examined in detail: Federal, Ontario, and the City of Ottawa. (This means that all three levels of government, federal, provincial and municipal, are studied. During 1978, 33.7% of the value of shipments from Canadian dairy manufacturing originated in Ontario.[13]) A quantitative measure (the number of pages of regulations in given years) is used to measure the growth of regulation during the recent past. Special features of other jurisdictions are also briefly noted. General rules with no special impact on dairy PDR - eg., land use zoning or income tax laws - are ignored. Finally, the extent of de jure federal-provincial overlap and duplication is noted.

Chapter IV first considers the basic economic rationales for regulation of dairy PDR in Canada. A second part of Chapter IV considers the de facto incidence of federal-provincial and inter-agency overlap and duplication. This section focuses on the issue of on-site inspection of dairy processing plants. Existing delegation of administrative authority to lessen the extent of overlap and duplication is discussed. Some empirical evidence on the frequency of inspection by various government departments is presented. The effects and imperfections of various aspects of the regulatory mosaic described in Chapter III are then considered in five brief regulatory case studies. A comprehensive benefit-cost or cost-effectiveness analysis is not attempted. Rather, we employ economic theory and some rather impressionistic empirical evidence to illustrate the effects of regulation and the policy issues involved. The analysis is highly selective.[14] The lack of rigorous benefit and cost estimates means that we cannot prove that specific regulations are inefficient. We can, however, identify specific problem areas, consider alternatives (such as more information disclosure requirements rather than 'legal recipes' or product quality requirements), and form an intuitive judgement as to the desirability of a broad range of aspects of regulation. Finally, a fourth part of the Chapter considers the problem of regulatory barriers to interprovincial trade. Existing administrative arrangements to surmount regulatory barriers are discussed, and the potential implications of an important recent developent in Canadian constitutional law are noted.

Chapter V presents conclusions and considers policy alternatives. An attempt is made to determine how recent procedural reforms affect dairy regulation, rather than merely to reiterate calls for such reform.[15] The argument of the paper as a whole is: (a) that industry has itself initiated many aspects of government regulation; (b) that most existing dairy regulation is socially valuable, especially in correcting market failure due to imperfect information; (c) that a few individual

regulations examined in Part IV should be re-considered; (d) that procedural reforms such as increased use of socio-economic impact analysis are helpful; and (e) that especially in view of recent constitutional developments, improved co-ordination between levels of government and among departments is necessary to to minimize the potential negative impact of regulation on inter-provincial trade.

Chapter II

STRUCTURAL CHARACTERISTICS OF CANADIAN DAIRY PROCESSING, DISTRIBUTING AND RETAILING

Before examining the impact of regulation on dairy PDR in Canada, it is important to be aware of the basic structure and organization of the industry. Such an awareness places the role of regulation in proper perspective. Accordingly, this section of the paper first reviews the physical steps of dairy PDR, and its economic and nutritional importance in Canada. We then focus on regional distribution of the industry, industrial organization, price trends, price and income elasticities and their implications.[16] At the end of this chapter, a summary notes the significance of this basic economic data for our study of dairy regulation.

(1) Physical Processes

Figures 1, 2 and 3 present the basic physical steps involved in the processing, distributing and retailing of fluid milk, butter and cheddar cheese. Each of these charts shows only the most basic elements of the process. Details are omitted for the sake of simplicity.[17]

(2) Size and Growth Trends of the Canadian Dairy Industry

Table 1 illustrates the value of shipments from the Canadian dairy manufacturing sector.[18] The total value of $3.3 billion in 1978 represents 15.5% of the value of shipments from the food and beverage industry and 2.6% of the value of shipments from the manufacturing sector as a whole.

Figure 1

FLUID MILK: PHYSICAL STEPS

PRODUCTION

- Dairy farmers produce milk which is then stored at a temperature no higher than 10°C (50°F).

PROCESSING

- Milk is clarified by a high powered centrifuge.
- Cream is separated from the milk by a high powered centrifuge.
- Milk is pasteurized by being heated rapidly to a temperature of 72°C (162°F) for 16 seconds, or up to 85°C (105°F) for no holding time.
- The milk is then homogenized by being forced through very small holes in order to break up fat globules, with the result being a consistent liquid.
- Milk is stored at a temperature of 1°C (33°F) - 7°C (45°F), with a storage life up to 15-30 days.

DISTRIBUTION

- Most wholesale distribution is done by the milk processors - i.e., dairies

RETAILING

- Most retail sales are made by supermarkets and convenience stores. The frequency of door to door delivery by dairies has decreased in recent years.

Figure 2

BUTTER: Physical Steps

PRODUCTION

- Butter is made from pasteurized, separated fresh cream, typically 30-40% butterfat.

PROCESSING

- Butter is mechanically churned, usually in a rotating cylinder for approximately 45 minutes.
- Butter is washed and "worked" into a soft mass.
- Butter is graded, measured and packaged, in parchment or other wrap.

DISTRIBUTION

- Most wholesale distribution is done by the processors themselves - i.e., the dairies.
- Some processors sell to other processors that distribute the butter under their own lables.

RETAILING

- Butter is sold in supermarkets, convenience stores and, with decreasing frequency, by door to door delivery.

Figure 3

CHEDDAR CHEESE: Physical Steps

PRODUCTION

- Dairy farmers produce milk which is then stored at a temperature no higher than 10°C (55°F).

PROCESSING

- Starter, rennet, and colour are added to pasteurized and homogenized milk, and allowed to set to a firm curd for 30 minutes.
- Curd is cut into small cubes, then warmed and stirred until it reaches 38°C (100°F).
- Whey is removed and curds left to fuse together.
- Curd is "cheddared" by being cut into slabs to be turned and piled into layers.
- Slabs are cut in a curd mill, salted, drained, and placed in cloth lined metal hoops, and then pressed.
- Cheese is dressed and dried for 3-4 days at 55°C (130°F).
- Cheese is dipped or wrapped in a plastic film.
- Cheese is cured at 7°C (45°F) for several months or even up to a year.

DISTRIBUTION

- Large processors distribute directly.
- Small processors often sell to larger processors who may distribute the cheese under their own label, e.g., Kraft.

RETAILING

- Most cheese is sold in supermarkets, convenience stores and (ocassionally) direct retail outlets established by processors.

Table 1

Value of Dairy Processing Industry Shipments, 1978

	$'000	% of total
Fluid milk and cream	1,169,353	34.4
Creamery butter	328,833	9.7
Cheddar cheese	292,690	8.6
Ice cream related products	237,000	7.0
Skim milk powder	197,817	5.8
Cheese other than Cheddar	138,771	4.1
Condensed and evaporated whole milk	135,362	4.0
Yogurt	56,311	1.6
Cottage cheese	43,630	1.3
Miscellaneous products	389,071	11.4
All others*	411,000	12.1
Total	3,399,838	100.0

* All Others:
1) Products produced by small establishments, (approximately 1% of total value).
2) Process cheese - not included separately to meet requirements of the Statistics Act.

Source: Statistics Canada, Dairy Products Industry, Catalogue No. 32-209, 1978.

To determine the real rate of growth of the Canadian dairy industry, we now consider the change in the physical quantities of production and domestic disappearance (apparent consumption) over time. These are shown in Table 2. As the Table indicates, production of fluid milk and cream actually decreased by approximately 450 million lbs. between 1958 and 1978. During this period per capita domestic disappearance of fluid milk and cream decreased from 385 lbs. to 232 lbs. - ie., by 39.7%. Production of butter has decreased even more significantly, largely as a result of consumer substitution of margarine for butter. (Presumably there has also been a general change in consumer tastes away from both butter and its substitute, since in 1950 per capita consumption of butter and margarine as an aggregate was 26.9 lbs./yr., while in 1978 it was 23.0 lbs./yr). In contrast to butter and milk, production of cheddar cheese increased by 67% between 1958 and 1978. (Per capita

Table 2

SUPPLY AND DOMESTIC DISAPPEARANCE OF IMPORTANT DAIRY PRODUCTS, CANADA, 1958, 1968, 1973, 1978

	1958	1968	1973	1978
		('000 LBS.)		
Fluid Milk*				
Supply	7,239,667	6,660,834	6,626,405	6,793,528
Domestic Disappearance	6,578,928	5,971,478	5,510,056	5,469,381
Per Capita Dom. Dis. (lbs.)	385	288	250	232
Cheddar Cheese				
Supply	143,351	255,028	260,984	239,281
Domestic Disappearance	47,162	69,192	108,935	69,257
Per Capita Dom. Dis. (lbs.)	2.76	3.34	4.94	2.98
Processed Cheese				
Supply	53,733	99,295	132,060	163,211
Domestic Disappearance	50,214	90,164	121,836	154,261
Per Capita Dom. Dis. (lbs.)	2.93	4.35	5.52	6.56
Other Cheese				
Supply	23,486	63,491	110,222	191,903
Domestic Disappearance	19,615	55,402	88,393	168,690
Per Capita Dom. Dis. (lbs.)	1.14	2.67	4.01	7.2
Creamery Butter				
Supply	405,967	395,606	344,201	299,660
Domestic Disappearance	312,255	333,110	293,277	234,784
Per Capita Dom. Dis. (lbs.)	18.3	16.09	13.3	10.0

* Represents milk and cream in milk equivalent, sold off farms for fluid purposes and milk and cream consumed on farms.

Sources: (1) Statistics Canada, The Dairy Review, Jan. 1979, Catalogue No. 23-001.

(2) Agriculture Canada, Handbook at Food Expenditures Prices and Consumption, 1979, Catalogue No. 79-2.

(3) Statistics Canada, Estimates of Population for Canada and Provinces, June 1, 1979, Catalogue No. 91-201.

consumption of cheddar rose by 8.4%.) A huge increase in the demand for yogurt - the "yogurt boom" - has increased Canadian yogurt production by almost 400% between 1968 and 1978. But, yogurt shipments in 1978 still represented only 1.6% of the value of total dairy manufacturing shipments.[19] Finally, a potentially very important development not noted in the Table is the recent marketing of sterilized milk, which can be stored at room temperature for long periods of time. On balance, however, it is clear that major segments of the Canadian dairy industry are subject to decline or only slow long term real growth.

(3) The Nutritional Importance of the Dairy Industry

In addition to its economic importance, the dairy industry is significant for nutritional reasons. The contribution of dairy products to human nutrition is, of course, widely acknowledged. In particular, milk and milk products supply significant quantities of protein, calcium, phosphorous, magnesium and food energy (calories). There is no need to specify the details of this contribution here.[20]

There are two reasons why a study of dairy regulation should note this nutritional importance. First, some regulation is at least ostensibly designed for the specific purpose of preventing "adulteration" of the nutritional value of dairy products.[21] Nutritional (or more generally economic) adulteration as a rationale for regulation is discussed in Chapter IV of this paper. Second, in addition to justifying regulations designed to prevent adulteration, the nutritional importance of dairy products has been used to justify a broader range of government intervention, including economic regulation and direct subsidies, where such intervention is not justifiable on grounds of economic efficiency.[22]

(4) The Regional Distribution of the Dairy Industry

Table 3 shows provincial shares in dairy production, manufacturing establishments and value of manufacturing shipments. As indicated, dairy manufacturing is heavily concentrated

Table 3

DAIRY INDUSTRY STRUCTURE; CANADA, PROVINCES, 1968 AND 1978

	Population ('000)		Total Milk Production ('000lbs.)		Manufacturing Establishments		Current Value of Shipments ('ooo$)	
	1968	1978	1968	1978	1968	1978	1968	1978
P.E.I.	110.0	122.0	203,449	207,054	21	14	9,930	36,068
N.S.	767.0	841.0	324,732	377,348	32	15	31,614	95,987
N.B.	625.0	694.9	283,202	247,932	39	17	23,161	52,715
Que.	5928.0	6283.0	6,678,960	6,591.168	304	135	483,962	1,357,298
Ont.	7262.0	8445.0	6,603,774	5,832,229	406	174	475,176	1,144,748
Man.	971.0	1032.8	840,293	712,076	54	36	43,953	118,654
Sask.	960.0	947.5	758,905	592,970	47	15	38,661	--
Alta.	1524.0	1952.1	1,532,902	1,272,706	104	44	84,406	232,364
B.C.	2003.0	2530.1	926,319	1,024,268	31	27	85,541	257,806
Nfld.	506.0	568.9	...	...	7	--	--	--
Can.*	20,701.0	23,482.6	18,152,536	16,787,746	1,046	485	1,281,470	3,399.838

Percentages

	Population		Total Milk Production		Manufacturing Establishments		Value of Shipments	
	1968	1978	1968	1978	1968	1978	1968	1978
P.E.I.	0.53%	0.51%	1.12%	1.23%	2.00%	2.88%	0.77%	1.06%
N.S.	3.70	3.58	1.78	2.24	3.05	3.09	2.46	2.82
N.B.	3.01	2.95	1.56	1.47	3.72	3.50	1.80	1.55
Que.	28.63	26.75	36.79	39.26	29.06	27.83	37.76	39.92
Ont.	35.08	35.96	36.37	34.74	38.81	35.87	37.08	33.67
Man.	4.69	4.39	4.62	4.24	5.16	7.42	3.42	3.48
Sask.	4.63	4.03	4.18	3.11	4.49	3.09	3.01	--
Alta.	7.36	8.31	8.44	7.58	9.94	9.07	6.58	6.83
B.C.	9.67	10.77	5.10	6.10	2.96	5.56	6.67	7.58
Nfld.	2.44	2.42	--	--	.66	--	--	--
Can.*	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

* Except for population data and number of manufacturing establishments in 1968, the total figures for "Canada" do not include Newfoundland.

... unavailable
- Confidential to meet requirements of the Statistics Act.

Note: When discrepancies in data using similar sources exist, the most recent source has been used.

Sources: Statistics Canada,

1) Estimates of Population for Canada and Provinces, June 1, 1979, Catalogue No. 91-201.
2) Dairy Products Industry, 1969, 1979, Catalogue No. 32-209.
3) The Dairy Review, Jan. 1979, Catalogue No. 23-001.
4) Handbook of Agricultural Statistics, 1920-1973 part vii, Catalogue No. 21-515.

in Ontario and Quebec. Quebec produces proportionately more than Ontario - i.e., with 26.8% of the population in 1978 it was responsible for 39.9% of the value of manufacturing shipments. The corresponding figures for Ontario are 36.0% and 33.7%. Indeed, Quebec's market share has been growing. From 1968 to 1978 it increased by more than 2 percentage points of the Canadian total, while Ontario's decreased by approximately 3.5 percentage points of the total.[23]

Finally, it is interesting to compare the data on milk production and manufacturing establishments in 1978 with the 1968 data. Such a comparison suggests a strong trend to market concentration in dairy manufacturing. In particular, though total milk production in Canada decreased by only 7.5% during that decade, the number of manufacturing establishments decreased from 1,046 to 485 - i.e., by 53.6%. Market concentration and its implications are discussed in the following pages.

(5) Industrial Organization

(a) Vertical Integration

There is significant integration between primary producers (farmers) and processors of dairy products, though quantitative evidence on this subject is incomplete. First, in most provinces producer organized cooperatives have traditionally played an important role in processing and distributing fluid milk, cream, butter and cheese.[24] Indeed, producer owned cooperatives constitute 60% of the members of the National Dairy Council (an organization of dairy processors).[25] (However, the significance of the smaller rural cheese factories has declined as larger multi-product dairy manufacturing firms such as Kraft have increased their market share.[26]) In addition, some of the large firms themselves own significant interests in 'corporate' dairy fams.[27]

Within the PDR sector itself, there is also significant vertical integration. In particular, some of the larger dairy processing firms also have major interests in the distributing and retailing of both fluid milk and manufactured dairy products. (The processing of fluid milk and manufactured dairy products are frequently integrated through common ownership, though separate processing plants are maintained.) For example, the Kraft conglomerate distributes dairy products under the Sealtest label through Dominion Dairies Limited of Canada, a subsidiary of Kraft Corporation. Indeed, virtually all wholesale distributing of fluid milk is carried out by the processor. Silverwood Industries not only processes and distributes both fluid milk and manufactured dairy products, but also owns interests at the retail level - in Mac's Milk Convenience Stores.[28]

(b) Market Concentration

It is important to consider the degree of market concentration in Canadian dairy PDR, because such concentration is alleged to cause allocative technical and/or dynamic inefficiency.[29] The presence of high market concentration in dairy manufacturing and the apparent long term trend toward greater concentration raise the question of whether government regulation has facilitated concentration. It might have done this by raising operating costs so as to "squeeze out" marginal firms.[30] It is extremely difficult to determine whether it has done so, but Chapter V will comment briefly on the issue.

A standard procedure for measuring concentration in individual markets is to examine the percentage of total industry sales or assets controlled by the largest four or eight firms in an industry.[31] (These percentages are known as sales or asset "concentration ratios.") Table 4 presents both sales and asset concentration ratios for the dairy products manufacturing sector, the food and beverage industry, and the Canadian manu-

Table 4

CONCENTRATION OF SALES AND ASSETS BY THE TOP 4 AND TOP 8 ENTERPRISES, DAIRY PRODUCTS MANUFACTURING, FOOD MANUFACTURING, ALL MANUFACTURING, 1975-77*

DAIRY PRODUCTS MANUFACTURING

Sales

Year	Top 4	Top 8
1977	39.28%	53.81%
1976	38.27	52.48
1975	37.18	53.09

Assets

Year	Top 4	Top 8
1977	36.71%	50.37%
1976	34.21	47.83
1975	42.68	57.12

FOOD MANUFACTURING

Sales

Year	Top 4	Top 8
1977	29.27%	40.96%
1976	29.14	40.89
1975	28.84	42.98

Assets

Year	Top 4	Top 8
1977	26.33%	38.49%
1976	27.73	37.40
1975	27.11	37.88

ALL MANUFACTURING

Sales

Year	Top 4	Top 8
1977	20.96%	27.75%
1976	19.02	26.94
1975	18.57	26.81

Assets

Year	Top 4	Top 8
1977	13.82%	24.56%
1976	13.82	24.32
1975	13.76	23.27

*Note: For a reason given in the text, the data on Dairy Products Manufacturing significantly underestimate the true level of market concentration.

Source: Derived from Statistics Canada, Corporations and Labour Unions Returns Act (CALURA) Reports, Cansim Data System, Matrix 9013.

facturing industry as a whole, as compiled by Statistics Canada pursuant to the Corporations and Labour Unions Returns Act (CALURA).[32] The ratios show that dairy manufacturing is more highly concentrated than the categories of "food manufacturing" and "all manufacturing."

There is, however, an important reason why even these ratios will significantly underestimate the true level of market concentration in individual areas of the country, especially in the case of fluid milk. As indicated in Chapter I, high transport costs and perishability dictate that most fluid milk markets are local.

In view of this problem, it would be desirable to measure market concentration ratios in dairy processing at the local market level. Unfortunately, such data is not currently available. However, some indication of the true extent of concentration may be obtained simply by considering the number of dairy processing plants in individual counties. Of course, this method is far from being precise, since the boundaries of a local fluid milk market need not conform to county lines. It should therefore be applied with caution. Nevertheless, it offers some interesting insight into the true extent of market concentration.

Table 5 presents such information on concentration of dairy processing, by county, for Ontario. (Note that this data concerns federally registered dairy processing operations. It therefore excludes some small non-federally registered plants processing fluid milk only. However, the number of plants excluded is small, because the vast majority of all fluid milk processors also manufacture at least a few basic industrial dairy products such as cottage cheese.) The Table indicates the small number of milk receiving plants located in counties such as Middlesex or Carleton, in which the major cities of London and Ottawa are located. Assuming that only intra-county plants serve

Table 5

CONCENTRATION OF FEDERALLY REGISTERED DAIRY PROCESSING PLANTS, BY COUNTY

Ontario 1979

Types of Dairy Processing

County	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Total No. of Plants
Algoma	1	0	0	0	1	0	0	0	0	1	0	1	0	0	2
Brant	2	0	1	1	1	0	0	0	0	0	0	1	0	0	3
Bruce	2	2	2	1	1	1	2	1	1	4	0	2	0	0	5
Carleton	0	0	0	0	4	0	0	0	1	4	0	0	0	0	4
Cochrane	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1
Dundas	1	2	1	1	0	1	1	0	0	2	0	0	0	0	4
Elgin	0	1	0	1	0	0	0	0	3	3	0	1	1	0	5
Essex	0	0	0	0	4	0	2	0	1	5	0	0	0	0	5
Frontenac	2	1	0	0	2	1	2	0	0	4	0	0	0	0	4
Glengarry	1	0	1	1	0	0	1	1	0	2	0	1	0	0	2
Grenville	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
Grey	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Haldimand	1	0	0	0	1	0	1	0	2	1	0	2	0	1	4
Halton	0	1	0	0	1	0	1	0	0	2	0	1	1	1	2
Hastings	2	7	0	0	1	5	7	1	0	8	1	1	0	0	10
Huron	1	0	0	0	1	0	0	0	0	1	0	0	0	0	2
Kenora	0	0	0	0	2	0	0	0	0	2	0	0	0	0	2
Lanark	0	1	0	0	0	1	1	0	1	3	0	0	0	0	4
Leeds	1	2	0	1	0	0	2	0	0	2	0	0	0	0	3
Lennox and Addington	0	2	1	1	0	0	1	1	0	2	0	0	0	0	2
Lincoln	0	0	0	0	1	0	0	1	1	1	0	0	0	0	2
Manitoulin	1	0	0	0	1	0	0	0	1	1	0	1	0	0	1
Middlesex	1	2	0	0	3	0	1	0	5	4	0	4	0	1	9
Niagara	0	0	0	0	2	0	0	0	1	2	0	0	0	0	2
Nipissing	1	0	0	0	2	1	1	0	1	2	0	0	1	1	2
Norfolk	0	0	0	0	1	1	0	0	2	1	0	2	0	2	3
North-umberland	1	2	0	0	1	0	2	0	0	3	0	0	0	0	3
Ontario	1	0	0	0	1	0	0	0	0	2	0	1	0	0	2
Oxford	1	2	1	1	1	4	3	0	2	5	1	1	0	1	12
Parry Sound	1	0	0	0	1	0	0	0	0	1	0	1	0	0	1
Peel	0	0	0	0	1	0	2	0	0	3	0	0	0	0	4
Perth	2	2	1	1	0	2	3	1	0	4	3	2	0	1	6
Peterborough	0	1	0	1	2	0	1	0	3	3	0	0	0	0	5
Prince Edward	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
Rainy River	1	1	0	0	1	0	1	0	1	2	0	1	0	0	2
Renfrew	1	0	0	0	3	0	0	0	3	4	0	1	1	1	7
Russell	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
Simcoe	2	0	0	0	1	0	1	0	1	2	0	2	0	0	4
Stormont	0	1	2	0	1	0	1	0	0	2	0	0	0	0	3
Sudbury	0	0	0	0	5	0	0	0	2	5	0	0	0	0	5
Temiskaming	3	1	0	0	2	1	0	0	2	4	0	4	1	2	7
Thunder Bay	2	0	0	0	3	0	2	0	3	4	0	0	2	1	6
Victoria	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1
Waterloo	1	0	1	1	1	2	2	0	0	6	3	1	0	1	7
Welland	0	0	0	0	1	0	1	0	1	2	0	1	0	0	3
Wellington	3	0	2	1	1	0	0	1	4	5	0	3	0	1	5
Wentworth	0	0	0	0	2	0	2	0	1	4	0	0	0	0	5
York	1	0	0	0	10	6	10	0	11	23	1	6	9	9	38
Total	37	34	13	12	70	27	57	6	56	147	9	41	16	24	215

Legend:
(A) Butter and/or Whey Butter
(B) Cheese
(C) Dry Milk
(D) Evaporated Milk
(E) Fluid Milk
(F) Cutting and Packaging of Butter and Cheese
(G) Variety Cheese
(H) Instant Dry Milk
(I) Ice Cream
(J) Milk Receiving
(K) Process Cheese
(L) Cream Receiving
(M) Cottage Cheese
(N) Yogurt

Source: Derived from Agriculture Canada (Dairy Division), Numeric Listing of Dairy Manufacturing Plants and Registration Numbers in Canada, "Ontario," August 1979.

Note: This table omits a small number of non-federally registered dairy plants processing fluid milk only.

a city market, a total of four plants would obviously mean a four firm concentration ratio for that market of fully 100%. It would seem that the true level of market concentration in Canadian dairy processing is even higher than the concentration ratios shown in Table 4 suggest.

The data presented in Tables 4 and 5 does not, by itself, reveal an unambiguous trend toward greater concentration in dairy manufacturing. (The four enterprise sales concentration ratio increased by approximately two percent of the total from 1975 to 1977, but the corresponding asset control ratio decreased by approximately six percent of the total.) Unfortunately similar data for earlier years appears to be unavailable. It is therefore impossible to determine the long-term trend on the basis of CALURA concentration ratios alone. However, it was seen in the preceding section of the paper that over the past 20 years the number of dairy manufacturing establishments in Canada has decreased at a much greater rate than physical production of milk. This would seem to indicate a long term trend toward larger plant size and greater concentration, in spite of the ambiguous short term CALURA data on enterprise concentration ratios. (Note that dairy manufacturing "establishments" and "enterprises" are not identical concepts.)[33]

(6) Price Trends in Dairy Products

In order to understand the pricing of Canadian dairy products, it is necessary at least to mention the role of direct economic regulation. As Loyns explains, the pricing of milk in Canada,

> is the most rigidly controlled administered pricing system in Canadian agriculture. There are two sets of marketing boards on the two institutionally defined milk markets. Provincial milk marketing agencies regulate the volume and prices of milk used for drinking in the fresh form - fluid milk. The Canadian Dairy Commission (CDC) establishes the price, regulates volume of production, administers import quotas on butter and

> cheese, and administers the federal subsidy on all milk used for manufacturing purposes ... industrial milk.[34]

Explaining how this system works, and quantifying any consequent efficiency loss, is, of course, outside the scope of this paper. We may, however, at least take note of the system's results.

Table 6 presents data on consumer price indices for fresh milk, cheddar cheese, dairy products as a whole, food products as a whole and all items. For ease of comparison the values for all years after 1972 are plotted above the table in Figure 3. Note that the values of these indices in any given year do not reflect the relative levels of commodity prices, since all the indices are arbitrarily set equal to 100 in 1971. But the indices do show which prices have risen relatively more rapidly. (On Figure 3 this is shown by the slopes of the curves.)

Comparing the indices on this basis reveals the following facts: The price of dairy products as a whole has more than doubled since 1971. Among dairy products, the price of fresh milk has risen relatively more slowly,[35] whereas the price of cheddar cheese has risen more quickly - in fact, since 1971 it has risen by 130%. The prices of dairy products as a whole have risen <u>less</u> rapidly than the prices of food products generally, but still considerably more rapidly than all items generally. (Loyns points out that in recent years the retail prices of Canadian dairy products have risen much more than in the U.S.[36]) This high rate of increase of prices has important implications for the dairy manufacturing industry. In particular, rapid price increases, encouraged by the supply manuagement programs may themselves be responsible for the decline in demand for physical production of dairy products. But to fully understand these implications we must first consider the relevant price and income elasticities of demand.

TABLE 6

CONSUMER PRICE INDEX

Years	Fresh Milk	Cheddar Cheese	Total Dairy	Total Food	All Items
1979	209.3	230.0	215.8	235.4	191.2
1978	194.3	209.9	197.9	208.0	175.2
1977	183.9	195.5	184.5	180.1	160.8
1976	172.5	180.4	171.6	166.2	148.9
1975	166.2	167.2	163.9	161.9	138.5
1974	129.0	138.4	129.0	143.4	125.0
1973	114.2	116.7	113.3	123.3	112.7
1972	104.1	114.0	105.5	107.6	104.8
1971	100.0	100.0	100.0	100.0	100.0

Source: 1) Agriculture Canada, Handbook of Food Expenditures, Prices and Consumption 1979, Catalogue No. 79-2.

2) Statistics Canada, Consumer Prices and Price Indexes, Oct.-Dec. 1979, Catalogue No. 62-010.

(7) Price and Income Elasticities of Demand

It is useful to consider the price and income elasticities of demand for dairy products, to see how price and income increases have affected industry growth. To simplify, we consider only the price elasticity of demand for fluid milk. Table 7 presents short and long run price and income elasticities as estimated for the Food Prices Review Board (FPRB) in 1975.[37] (FPRB's analysis worked with fluid milk in total - i.e., whole milk plus 2% milk - and considered powdered skim milk as a substitute.) These estimates indicate that in general the demand for fluid milk is quite inelastic with respect to price. This means, of course, that within a given time frame an increase in the price of milk will normally induce only a relatively small decrease in quantity demanded. Indeed, the FPRB study concludes that, in response to higher milk prices, on average "consumers do tend to maintain more or less the quantity of milk purchased even though this means a greater total expenditure outlay for the product."[38] The finding of price inelasticity means that manufacturers can pass on to consumers a relatively high proportion of costs imposed by regulation.[39]

It may be tempting to conclude that a low average price elasticity of demand also implies low prices are not necessary to ensure a nutritionally adequate level of milk consumption. Such a conclusion is not warranted on the evidence. First, the FPRB estimates demonstrate at least some sensitivity to price, especially in the long run. Second, as the authors of the study themselves emphasize, the response of consumers to price increases may depend on their incomes. The relative share of income spent on basic food items such as bread and milk is greatest for low income families, and hence these families are "hit hardest" by rapid milk price increases. For families on fixed incomes, maintaining consumption of milk when its price rises requires cutting back on other items. But, the FPRB points out, for low income families that cannot cut back on other expen-

ditures, there may be "no alternative but to curtail consumption of even the most basic foods."[40]

Table 7

Estimated Price and Income Elasticities of the Demand for Fluid Milk in Canada

	Price Elasticities		Income Elasticities	
	Range	Mid-Value	Range	Mid-Value
Short Run	-0.13 to -0.17	-0.15	0.12 to 0.41	0.23
Long Run	-0.28 to -0.32	-0.30	0.20 to 0.75	0.44

Source: Food Prices Review Board, The Consumption of Bread and Fluid Milk in Canada (Ottawa, July 1975), p. 17.

The estimates also suggest that the demand for milk is inelastic with respect to income. Like the finding of price inelasticity, this is precisely what we would expect for a commodity widely regarded as a "necessity". Income inelasticity of demand means that as real income increases, a less (in this case much less) than proportional amount of the increase is spent on milk. This in itself could help to explain the slow growth experienced by the dairy industry.

Finally, we should emphasize the extent to which the demand for milk depends on demographic variables. The FPRB Study notes that the demand is "much more responsive to changes in the age distribution of the population than to price or income changes," and in particular a one percent increase in the proportion of the population aged 15 and over will cause a per capita reduction in milk sales of approximately 0.2 quarts per month.[41] Given the secular decrease in the under 15 proportion of the population since the end of the post war baby boom, this finding also helps to explain recent slow growth in the dairy industry.

(8) Summary

This chapter has reviewed key economic aspects of Canadian dairy PDR. This survey of the sector raises important issues to be considered in this paper. In particular, the nutritional importance of the dairy industry compels examination of the existing information disclosure rules, health and sanitation standards and regulation designed to prevent adulteration of dairy products. The purpose and effects of these important aspects of dairy regulation are considered in Chapter IV.

In addition, the changing regional distribution of dairy manufacturing raises the issue of constraints on interprovincial trade in dairy products. The evidence of high concentration in dairy manufacturing, relative to food manufacturing in general or the manufacturing sector as a whole, raises the issue of whether regulation has encouraged concentration.

The presence of slow growth and even some actual decline in production of key dairy products raises the issue of whether government regulation has indeed hampered growth. (Recall the allegation of the Task Force on the Food and Beverage Industry that regulation constitutes "a major constraint on profitable growth.")

But the evidence of rapidly rising prices and low price and income elasticities of demand helps to place this allegation in proper perspective. In particular, increasing prices and low income elasticity, especially coupled with demographic changes reducing per capita demand for fluid milk, offer an alternative explanation to regulation as a cause of slow growth - namely, that for economic reasons unrelated to regulation, the demand for dairy products has grown very slowly.[42] In addition, the low price elasticity of demand suggests that manufacturers can readily pass on a high proportion of their compliance costs.

Before we can analyze the effects of regulation, it is necessary to describe the relevant statutes and delegated legislation. This task is undertaken in the next chapter of this paper.

Chapter III

OVERVIEW OF THE LEGISLATION

Government regulation of the Canadian dairy industry is authorized by a complex network of federal, provincial and municipal legislation. This legislation includes statutes, 'regulations' (i.e., delegated legislation) and municipal by-laws.[43] This section of the paper analyzes the network. As indicated in Chapter I, we focus on the following three jurisdictions: Federal, Ontario and the City of Ottawa. Important features of some other jurisdictions are also noted.

It should be emphasized at the outset that we consider only the following types of legislation: (i) dairy industry specific statutes, regulations and by-laws; and (ii) general statutes, regulations and by-laws that affect the dairy industry significantly more than most other industries. In other words, we focus on those aspects of government regulation that have special impact on the dairy industry.

Statutes such as the Consumer Packaging and Labelling Act and the Weights and Measures Act are considered because of their special impact on most aspects of the food industry, including dairy PDR. However, we deliberately exclude general statutes such as the federal Combines Investigation Act, or the Ontario Business Corporations Act, which may affect the dairy industry significantly, but no more so than other industries. Even general federal and provincial environmental protection legislation is excluded, since it does not appear that this affects the dairy industry significantly more than it affects many other industries. (Environmental regulation regarding phosphate discharge does affect dairy manufacturing to an unusual degree, because of the high phosphorous content of milk and milk products. However, many other manufacturing industries are

uniquely affected by individual environmental standards.[44] On balance, it is not clear that the general field of environmental regulation affects dairy manufacturing significantly more than it affects other manufacturing industries.) Restricting the scope of the analysis in this way will enable us to focus on the special regulatory problems of the dairy industry.

The structure of this Chapter is as follows. Part I examines the traditional constitutional basis of dairy regulation in Canada, and reviews the historical development of dairy regulation. Part 2 analyzes the law itself, focussing on the types of regulation authorized by all three levels of government, and the growth of regulation during the past two decades. A table is employed to illustrate the main types of regulation implemented pursuant to the relevant legislation, and to classify the legislation according to its stages of major impact (i.e., Production, Processing, Distributing or Retailing). Regulation primarily directed at the production sector will, of course, not be further discussed in this paper. Part 3 considers the extent of de jure overlap and duplication, and the implications for dairy regulation of important recent developments in Canadian constitutional law.

(1) Traditional Constitutional Basis

Regulatory authority over the dairy industry has traditionally been split between the federal and provincial levels of government, with provincial governments possessing primary jurisdiction over fluid milk, and sharing jurisdiction over industrial milk products with the federal government. This bifurcation has occurred because of the constitutional allocation of powers and the underlying nature of the markets in question. Specifically, high transportation costs and perishability dictate that markets for fluid milk must be local. In most cases this means that fluid milk is produced, processed, distributed and consumed within a single province. The local nature of fluid

milk markets gives constitutional authority over them to the provinces (and municipalities).[45] (Administrative arrangements allowing interprovincial trade in fluid milk - and especially the important exception of the Eastern Ontario dairy farmers who have traditionally supplied a large portion of the Montreal milk market - are discussed below in Chapter IV.) In contrast, industrial dairy products, being less perishable and more easily transported, are subject to extensive interprovincial and (to a lesser extent) international trade. They are therefore primarily subject to federal regulation.[46]

The allocation of constitutional authority to regulate the dairy industry is, however, not so straightforward as the foregoing discussion suggests. In particular, federal authority, traditionally based on federal jurisdiction over criminal law and trade and commerce, has recently been significantly narrowed by the decisions of the Supreme Court of Canada in the recent cases of Dominion Stores and, especially, Labatt Breweries.[47] The specific implications of Labatt Breweries are discussed more closely in Chapter IV, Part 4 below, but at a minimum the case clearly rejects the notion that national food product composition standards applicable to intraprovincial as well as interprovincial trade are valid aspects of any "general" federal power over trade and commerce. It also demonstrates that such generally applicable food standards cannot be upheld merely on the basis that the food products in question are subject to some interprovincial or export trade.[48]

Second, and perhaps more important, the Labatt Breweries case also drastically narrows the traditional federal authority to enact food regulation of general applicability pursuant to the federal jurisdiction over criminal law. This power can support regulation controlling the use of food additives, prescribing product health and safety standards, controlling fraudulent or deceptive trade practices, and preventing adulteration of food

products by specific contaminants. The validity of all of these aspects of federal regulation was affirmed in the Labatt Breweries decision.[49] But the Labatt Breweries decision clearly holds that neither the criminal law power nor any other federal heads of power can support existing federal regulation with respect to food quality or composition standards.[50] The implications of Labatt Breweries and Dominion Stores are noted more specifically in the analysis of regulatory legislation in this Chapter, Part 3 below. The policy implications of the resulting regulatory gap, and its potential impact on interprovincial trade are considered in Chapter IV. But first, to better understand the role of government regulation in the dairy industry, we consider its history.

(2) The Historical Development of Dairy Regulation[51]

It is useful to review the history of Canadian dairy regulation, because such a review sheds light on current issues and attitudes. First of all, as indicated in Chapter I, that history shows that much dairy regulation serves the important social purpose of remedying market failure due to imperfect information. [For example, even before any actual legislation regulating the dairy industry was enacted, English common law (applicable in Canada) prohibited the watering of milk.[52] This prohibition was presumably established because of the consumer's difficulty in determining whether milk had been slightly watered (i.e., imperfect information). By remedying this failure, the common law could improve economic efficiency.[53]] The history also demonstrates the traditional bifurcation of regulatory authority, with the provincial government having almost exclusive jurisdiction over fluid milk, and the federal government having primary jurisdiction over industrial dairy products. Finally, perhaps the most important benefit of reviewing this history is to permanently dispel any notion that dairy products regulation was initially established against the will of the industry.

The history of dairy industry specific legislation begins with the federal Dairy Products Act of 1893. Its ostensible purpose was to prevent the manufacture of imitation cheese and to control the labelling of cheese. But as Carman Baggaley states:

> Unless one reads the discussion in the House of Commons which preceded the passage of the act, one could easily assume that it was passed to protect the Canadian consumer. In fact, (like much other regulation which was to come) it was passed to protect Canadian producers [i.e., industrial milk processors].[54]

Preventing the manufacture of imitation cheese, of course, prevented such substitute products from reducing the demand for real cheese. The Act's labelling requirements made it necessary to mark any cheese made in Canada and destined for export as Canadian, and prohibited such labelling of any cheese not made in Canada. This effectively protected Canadian cheese-makers from United States cheese which at the time was being imported into Canada and then re-exported as a Canadian-made product, thereby benefitting from the superior international reputation of Canadian cheese (especially cheddar).[55]

The subsequent history of dairy legislation included the Dairy Industry Act of 1914, which continued the existing prohibition of the manufacture, importation or sale of oleo margarine. (This was first introduced in 1886, as an amendment to the Inland Revenue Act.) Federal grading of dairy products bound for export was established by the Dairy Produce Act of 1921. (As we shall see in Chapter 4, grading is an aspect of regulation that can benefit producers by reducing transactions costs.) During the same Parliamentary session the government backed down from its announced intention of permitting the sale of oleo margarine.[56]

Throughout this period, provincial government intervention in the dairy industry was also growing. The Ontario Dairy Branch was established in 1904, partly to supervise the work of

provincial dairy instructors. The first Provincial Butter Grader was employed in 1916. Legislation to improve dairy products quality and to require province-wide use of the Babcock test so that milk producers were individually paid on the basis of butterfat content was enacted in 1920 and enforced in 1922.[57]

The Ontario Milk, Cheese and Butter Act of 1927 provides a good example of provincial regulatory legislation designed to benefit industrial dairy products manufacturers. This Act authorized factory owners and their representatives to enter upon the farm of any of their suppliers to spot test the quality of milk from any cow. The Milk and Cream Act of 1927 delegated legal authority to municipal councils to enact by-laws regulating the sale of milk or cream within the municipality.[58]

Representatives of the dairy manufacturers were closely involved in the actual solicitation of government intervention from the very beginning. For example, during the Parliamentary debate over the first federal Dairy Products Act (of 1893), one Member rose in the House of Commons and read a letter from the Ganonoque Board of Trade asking for government intervention on behalf of Canadian cheese-makers.[59] Federal grading under the Dairy Produce Act of 1921 (mentioned above) was instigated at the express request of the Eastern and Western Ontario Dairymen's Associations and the then newly established National Dairy Council.[60] Instigation of regulatory legislation at the request of the dairy industry itself has not been confined to the federal level of government. Indeed, the Ontario government, for example, has traditionally consulted with provincial dairy manufacturers at least as closely as the federal government.[61]

But the long standing federal ban on the sale of oleo margarine is probably the most salient example of regulation solicited by dairy processors and producers for their own protection. As Veronica McCormick states:

> Perhaps the most important role the National Dairy Council was to play in its early history was the pressure it applied to government in 1923 opposing a permanent suspension of the ban on oleo margarine.[62]

The ban remained in force until as late as 1951 when the Supreme Court of Canada declared it ultra vires in the case of the Margarine Reference.[63] Thereafter processors succeeded in obtaining various provincial limits on the use of oleo margarine, and to this day many provinces retain statutes such as the Ontario Edible Oil Products Act, which controls the manufacture and sale of vegetable oil products, and the blending of vegetable oils with dairy products to produce imitation dairy products. All of this legislation helps to preserve the market for industrial dairy products - especially butter - by suppressing the use of its substitutes, though we have already seen in Chapter 2 that it has not met with complete success. Indeed, domestic consumption of margarine is now significantly greater than domestic consumption of butter.[64]

None of the foregoing is intended to suggest that most aspects of currently existing dairy regulation are against the interests of the public, and still less that the industry always gets the legislation it wants. Indeed, as will be explained in Chapter V, I believe that most aspects of dairy regulation are socially valuable. Government consultation with industry is a desirable feature of the regulatory process. Furthermore, as we saw in the Introduction to this paper, many members of the industry object to key aspects of existing dairy regulation, especially recently enacted packaging and labelling requirements and microbiological standards. (These regulations may be viewed as resulting in part from the "consumer movement" in social regulation.) But the history of dairy regulation - and of industry solicitation of regulation - helps to put current complaints in perspective. In particular, it is the industry, not consumers or the government itself, that has initiated many aspects of gov-

ernment involvement.[65] This fact should be kept in mind as we explore the details of the law.

(3) Analysis of the Legislation

Table 8 presents the relevant statutes, regulations and by-laws, and summarizes many of their key features, including the main types of regulation enacted and the responsible administering authorities. Before discussing individual aspects of the legislation, and the meaning of this table, we should note two qualifications. First, the table identifies the main types of regulation actually carried out under the statute, not the complete list of all types of regulation that the enabling statute can be argued to authorize. (The functional allocation of authority for the enforcement of regulatory legislation is discussed below in Chapter IV.) Second, the mere fact that two statutes both enact a certain type of regulation does not necessarily mean that they overlap in practice; in fact, as we shall see, one may apply to interprovincially traded products while the other applies only to intraprovincially traded products. We now analyze the legislation item by item. Once this is done, legislation primarily concerned with direct economic regulation will not be further discussed.

(A) Federal Dairy Industry Specific Statutes and Their Regulations

- The Canadian Dairy Commission Act and Regulations

As indicated by the Table, this legislation is mainly concerned with direct economic, not social regulation. Canadian Dairy Commission (CDC) does have some jurisdiction over the licensing of industrial dairy products plants, but its primary concern is with the administration of the national industrial milk subsidy and supply management quota system. The CDC chairs the Canadian Milk Supply Management Committee - the

liason organ between the CDC and the provincial supply management authorities. This Act also authorizes the Governor in Council to place dairy products on the federal Import Control List. In this way direct quotas on imports of dairy products can help to protect the domestic dairy industry from foreign competition.

- The Cheese and Cheese Factory Improvement Act and Regulations

This legislation, administered by Agriculture Canada, does authorize standards regarding health and other conditions in cheese factories receiving federal improvement grants. However, the Act is no longer extensively used, and is currently slated for repeal.

- The Milk Test Act and Regulations

This legislation concerns the testing of glassware used in the measurement of dairy products. It, too, is currently slated for repeal and should be considered effectively 'dead'.

(B) General Federal Statutes with Dairy Industry Specific Regulations and/or Special Impact on the Dairy Industry

- The Canadian Agricultural Products Marketing Act and Milk Marketing Orders

This legislation, concerned with direct economic regulation, effectively inter-delegates to provincial milk marketing boards the authority to extend the application of their provincially authorized powers to cover fluid milk subject to interprovincial trade.

Table 8

FEDERAL, ONTARIO AND CITY OF OTTAWA LEGISLATION AUTHORIZING REGULATION OF THE DAIRY INDUSTRY; ADMINISTERING AUTHORITIES, TYPES OF REGULATION AUTHORIZED, PRODUCTS AFFECTS, STAGES OF MAJOR IMPACT, INSPECTION POWERS, NO. OF PAGES (1980), AND NO. OF PAGES (1960)

TYPE OF LEGISLATION	LEGISLATION	ADMINISTERING AUTHORITIES	MAIN TYPES OF REGULATION	PRODUCTS AFFECTED	STAGE(S) OF PRIMARY IMPACT	Authorizes On-Site Inspection
(A) Federal Dairy Industry Specific Statutes and Their Regulations	(1) Canadian Dairy Commission Act and regulations	AC and CDC (CDC established by the Act)	L/R, S/P, GA	IDP	Prod	X
	(2) Cheese and Cheese Factory Improvement Act and regulations[1]	AC	PDS, GA	IDP	Proc	X
	(3) Milk Test Act and regulations[2]	AC	M, GA	FM + IDP	Proc	
(B) General Federal Statutes with Dairy Industry Specific Regulations and/or Special Impact on the Dairy Industry	(1) Canadian Agricultural Products Marketing Act and Milk Marketing Orders made thereunder	AC and provincial milk marketing boards (authorized by Act)	S/P, GA	FM	Prod	
	(2) Canada Agricultural Products Standards Act and Dairy Products Regulations" made thereunder	DA	L/R, PDS, S, PS, PC, A/G, P/L, GA	Mainly IDP but some FM: IP/IN[3]	Proc	X
	(3) Consumer Packaging and Labelling Act and regulations	DCCA	P/L, GA	FM + IDP	Proc, Dist, Ret	X
	(4) Food and Drugs Act and regulations, especially Division 8, "Dairy Products"	DNHW and DCCA	S, PS, PC, P/L, GA[4]	FM + IDP	Proc, Dist, Ret	X
	(5) Weights and Measures Act and regulations	DCCA	M, GA	FM + IDP	Proc, Dist, Ret	X
(C) Ontario Dairy Industry Specific Statutes and their Regulations	(1) Milk Act and regulations	OMAF, OMC and OMMB (OMC and OMMB authorized by Act)	L/R, PDS, S, PC, Q/G, P/L, S/R, GA	FM + IDP	Prod, Proc, Dist, Ret	X
(D) General Ontario Statutes with Dairy Industry Specific Regulations and/or Special Impact on the Dairy Industry	(1) Ontario Edible Oil Products Act and Regulations	OMAF	PC, GA	Edible Oil Products	Proc	
	(2) Farm Products Grades and Sales Act and Regulation 291, "Dairy Products" made thereunder	OMAF	PC, Q/G, GA	IDP	Proc	X
	(3) Public Health Act and regulations	OMH/RMHO	S, GA	FM	Proc, Dist, Ret	X
(E) City of Ottawa Municipal By-Laws with Special Impact on the Dairy Industry	(1) By-law 9915, Regulating the Licensing of Milk Vendors and the Production for Sale and the Sale of Milk within the City of Ottawa	C of O/RMHO	L/R, S, GA	FM	Proc, Dist, Ret	X
	(2) By-law 268-56, Respecting Noises and Public Nuisances	C of O/RMHO	GA	FM + IDP	Ret	

LEGEND

(a) Administrative Authorities
- AC - Agriculture Canada
- CDC - Canadian Dairy Commission
- DCCA - Department of Consumer and Corporate Affairs
- DNHW - Department of National Health and Welfare
- OMAF - Ontario Ministry of Agriculture and Food
- OMC - Ontario Milk Commission
- OMMB - Ontario Milk Marketing Board
- RMHO - Regional Medical Health Officer
- C of O - City of Ottawa

(b) Main Types of Regulation
- L/R - Licensing/Plant Registration
- PDS - Plant Design Standards
- S - Sanitation
- PS - Product Safety
- PC - Product Composition
- Q/G - Quality/Grading
- P/L - Packaging/Labelling
- M - Measurement
- S/P - Supply/Price
- GA - General Administration

(c) Products Affected
- FM - Fluid Milk
- IDP - Industrial Dairy Products
- IP/IN - Inter-provincially or Inter-nationally Traded Products (only)

(d) Stage(s) of Primary Impact
- Prod - Production (of raw milk on farms)
- Proc - Processing
- Dist - Distributing
- Ret - Retailing

NOTES
1. No longer in extensive use.
2. No longer in extensive use.
3. In view of the Dominion Store case, Part I of this Act is ultra vires. Part II applies only to interprovincially or internationally traded goods.
4. In view of the Labatt Breweries case, food product composition standards (PC) under this Act are ultra vires.

- The Canadian Agricultural Products Standards (CAPS) Act and "Dairy Products Regulations" made thereunder

Part II of this important legislation, administered primarily by Agriculture Canada, regulates plant registration, plant design standards, sanitation conditions, product safety, product composition ("legal recipes"), product quality (grading) and packaging and labelling of food products subject to interprovincial and/or international trade. The "Dairy Products Regulations" were enacted thereunder to replace the "Dairy Products Regulations" under the old federal Dairy Products Standards Act. (Part I of this Act, which required manufacturers of intraprovincially traded goods to meet the federal standards if they employed federal grade names, was declared ultra vires by the Supreme Court of Canada in the recent Dominion Stores case.[66]) There is extensive overlap between this Act and other federal legislation, especially the Food and Drugs Act, in the sense that both Acts prescribe specific standards regarding many of the same products (including dairy products). The difference is that the Food and Drugs Act purports to apply to all goods sold in Canada, whereas the CAPS Act now applies only to goods involved in interprovincial or export trade.

- Consumer Packaging and Labelling Act and Regulations

This legislation, administered by the Department of Consumer and Corporate Affairs, is the primary federal legislation governing net weight and bilingual labelling.

- Food and Drugs Act and Regulations, especially Division 8, "Dairy Products"

As indicated by the Table, this legislation sets standards for both fluid milk and (especially) industrial milk products. Administered jointly by the Department of National Health and

Welfare and the Department of Consumer and Corporate Affairs, this legislation affects, among other areas, sanitation, product safety, product content ("legal recipes" or composition standards designed to prevent consumer fraud) and packaging and labelling. In view of the recent Labatt's case, many of these standards, long assumed to be valid under the federal jurisdiction over criminal law, may now be ultra vires. (This problem is discussed in Chapter IV below.)

- The Weights and Measures Act and Regulations

As suggested by the title, this legislation, administered by the Department of Consumer and Corporate Affairs Canada, concerns the regulation of accuracy of the weighing and measuring of food products.

(C) Ontario Dairy Industry Specific Statutes and Their Regulations

Milk Act and Regulations

This is the basic and most important Ontario legislation regulating the dairy industry. It concerns plant design standards, sanitation, product content and packaging and labelling for intraprovincially produced fluid milk and industrial milk products. In addition, in the area of direct economic regulation, it authorizes provincial supply management of fluid milk. Different parts of the legislation are administered by Ontario Ministry of Agriculture and Food, the Ontario Milk Commission and the Ontario Milk Marketing Board. (The latter two authorities are established by the legislation.)

(D) General Ontario Statutes With Dairy Industry Specific Regulations and/or Special Impact on the Dairy Industry

- Ontario Edible Oil Products Act

  This legislation, administered by the Ontario Ministry of Agriculture and Food, controls the manufacture, sale and labelling of vegetable oil and the blending of vegetable oil products with dairy products to produce imitation dairy products - a less expensive substitute for 100% dairy products.

- The Farm Products Grades and Sales Act and Regulations

  This legislation, administered by the Ontario Ministry of Agriculture and Food, contains provisions regulating product content and grading of intraprovincial industrial dairy products. Many of the grade and product standards are directly based on federal ones, thereby authorizing similar grading where no interprovincial or international trade in involved. These regulations are now being revised, updated and consolidated, partly in order to correct a gap perceived as a result of the Labatt Breweries case.

- The Public Health Act (currently being revised as the Health Protection Act) and Regulations

  In addition to important general provisions regulating sanitation in the manufacturing, processing and sale of food products, this legislation contains the formal legal requirement for pasteurization of fluid milk. It is administered by the Ontario Ministry of Health and by authorized Regional Medical Health Officers.

(E) City of Ottawa Municipal By-laws with Special Impact on the Dairy Industry

- By-law 9915, Regulating the Licensing of Milk Vendors and the Production for Sale and the Sale of Milk Within the City of Ottawa

This by-law regulates municipal licensing of milk vendors and provides for municipal inspection of milk containers, storage and retailing. It also provides for municipal enforcement of provincial dairy legislation.

- By-law 268-56, Respecting Noises and Public Nuisances

This by-law has limited retail delivery of milk before 7:00 a.m. Obviously, with the decreasing availability of home delivery, this has become less significant.

(4) Growth of Regulation

A rough measure of the growth of government regulation of the dairy industry can be obtained by comparing the number of pages of regulations pursuant to each statute in 1960 and 1980. Two points regarding this measure should be emphasized: First, page length does not in itself indicate the effects of regulation. It is at best a crude measure of the growth in scope and complexity of government regulation.[67] Second, the actual number of pages will depend on the counting method employed. The method used for the following comparisons was to count the number of pages in the most recent applicable consolidation plus the number of pages of subsequent additions or amendments, up to August 1980.

Notwithstanding these caveats, the data demonstrate a significant growth in government regulation of the dairy industry. For example, there has been a 76% increase in pages of

regulations under the Ontario Milk Act (previously the Milk Industry Act). There are 54 pages of regulations pursuant to the Canadian Dairy Commission Act, which was non-existent in 1960. There has also been an increase in the number of pages of regulations that are of general applicability, but are important to the dairy industry. For example, there has been a 246% increase in the pages of regulations pursuant to the Weights and Measures Act, and the regulations made under the Weights and Measures Act are all new. With exceptions in certain particular areas, the degree of government intervention has clearly grown during the past twenty years.

(5) Extent of De Jure Overlap/Duplication

It should be apparent from Table 7 and the description of regulatory statutes that in many cases a particular aspect of dairy regulation is addressed by two or more statutes, and often at more than one level of government. For example, the Canada Agricultural Products Standards (CAPS) Act, the Consumer Packaging and Labelling Act, the Food and Drugs Act, and the Ontario Milk Act all contain provisions that can affect the packaging and/or labelling of industrial dairy products. In addition, the CAPS Act, the Food and Drug Act, the Ontario Milk Act and the Ontario Farm Products Grades and Sales Act each contain provisions respecting composition of industrial dairy products. The CAPS Act, the Food and Drugs Act, the Milk Act, the Public Health Act, and City of Ottawa By-Law 9915, Regulating the Licensing of Milk Vendors and the Production for Sale and Sale of Milk within the City of Ottawa all contain provisions that in some way can affect sanitation in the processing or marketing of fluid milk.

It should be emphasized, however, that this amounts to "overlap" or "duplication" only in the very broadest sense. There are two reasons why the true extent of overlap/duplication is considerably less than a casual examination of Table 7 sug-

gests. First, as pointed out above, because of the constitutional division of powers, much of the federal regulation affects only interprovincially traded dairy products (mainly industrial dairy products). Provincial regulation can of course affect all goods processed or sold within the province. (Where both federal and provincial standards purport to apply, the constitutional doctrine of paramountcy ensures that federal standards will prevail over less stringent provincial standards. This means that, to be effective, a provincial standard must be higher than a federal one.[68])

Second, within each of the main types of regulation shown in Table 7, there is room for the various statutes to serve different functions. In fact, as we shall see, each of the regulatory authorities involved has its own traditional concerns. Furthermore, in many cases formal and/or informal agreements between the various departments help to eliminate overlap and duplication in the enforcement of regulation.

To understand the true extent of overlap/duplication in dairy regulation, we need to examine the de facto responsibilities of each of the departments involved. This task is undertaken in Chapter IV, part 2. But first, to understand the nature of dairy regulation, we examine its basic economic rationales. This will better enable us to evaluate imperfections in the regulatory system.

Chapter IV

REGULATORY EFFECTS AND IMPERFECTIONS

At the outset it is worth considering the basic rationales for government regulation of dairy products processing, distributing and retailing. Of course, as is emphasized by modern theory of economic policy ("welfare economics"), under certain conditions (primarily adequate information and "internalization" of all social costs) the free operation of the market automatically achieves the optimal allocation of social resources.[69] Assuming the conditions were met, this would apply even to such sensitive matters as the optimal trade-off between economy and nutritional value or sanitarion in consumer food sales. To an economist, the case for social regulation normally rests on a perceived "failure" of the market to achieve socially optimal results. Such failure can occur for several reasons.[70] The following section discusses those which seem most applicable to the case of dairy regulation.

(1) Rationales for Regulation of Dairy PDR

(a) Inadequate Provision of Information

Market failure can occur if the individuals making decisions in the marketplace possess inadequate or incorrect information, since this may prevent them from making rational decisions in light of their preferences.[71] This would appear to be an important rationale for many aspects of existing dairy regulation. In the area of product safety, for example, federal regulation of coliform content in dairy products under the Food and Drugs Act may be viewed as correcting for the consumer's presumed inability to perceive fecal contamination or its possible detrimental effects.[72] Similarly, one function of regulation prohibiting deceptive packaging is to prevent the

information failure that such practices cause. Labelling requirements regarding food additives are justifiable because without such requirements most consumers would be unable to detect the presence of additives, still less to gauge correctly any possible consequent threat to health. Indeed, even with full disclosure of additives, direct regulation may be required because of the consumer's inability to correctly judge the threat posed by them. In many cases, the long-term biochemical effects of additives are fully understood, if at all, only by trained experts.

The case for government intervention to correct market failure due to inadequate information should not be restricted to problems involving complex health hazards, nutritional problems or outright consumer fraud. The argument for free operation of the market depends on the assumption of adequate knowledge of all the benefits and costs of goods and services in the economy. This assumption is a reasonable first approximation in a market of homogeneous goods, but it may not hold at all for a market of subtly differentiated products.[73] In particular, inadequate information on the part of consumers can facilitate 'economic adulteration' of dairy and other food products - i.e., degradation of product quality. This problem gives the justification for the government mandated product composition standards ("legal recipes") contained in the federal Food and Drug Regulations, the Dairy Products Regulations, and various provincial regulations. (These require, for example, minimum butterfat contents for a wide variety of dairy products.)[74] In addition, federal or provincial grading provides useful information on the quality of dairy products. This reduces "transactions costs" for both buyers and sellers. Indeed, most industry representatives interviewed for this study viewed grading as a desirable aspect of government intervention.

(b) Externalities

Another reason for market failure that offers additional justification for aspects of dairy regulation is the existence of externalities. (Technically, these occur when there is a divergence between private and social costs or private and social benefits.[75]) These are important in the area of dairy products health regulation (including regulation and inspection of sanitation conditions in dairy plants), since, as in most public health issues, the full costs of health care are not borne by the individual.

The foregoing discussion of rationales for dairy regulation does not preclude the possibility that the immediate cause of government intervention may be political pressure from a special interest group. Rather, it explains what sorts of problems dairy regulation should seek to remedy. It should be emphasized, however, that the existence of inadequate information or externalities raises only a prima facie case for government intervention. As in all areas of regulation, government intervention in dairy PDR should not be viewed as costless. While it may not be possible in all cases to rigorously estimate the economic benefits and costs of a proposed regulation, in general a decision to intervene should be based on a perception that the benefits (broadly defined) outweigh the costs. (The applicability and value of prior economic evaluation in the specific field of dairy regulation is considered more extensively in Chapter V.)

A Special Problem

In the field of dairy regulation (and food regulation in general), however, government intervention to correct for a perceived inadequacy of information is fraught with a special problem. A common concern raised by dairy industry representatives interviewed for this study was that mere provision of technical information (through government mandated labelling

requirements) can lead to perverse results. Specifically, it was alleged that some consumers may fail to interpret factual information rationally.[76] For example, a few industry representatives suggested that stamping dairy products with a "best before" date, as required by the federal Food and Drug Regulations, might cause irrational waste of good dairy products. Consumers could allegedly interpret "best before" as meaning "unsafe after", and therefore leave safe products on store shelves.

The issue of best before dating is more complex than this, and accordingly is treated more extensively in one of the five case studies presented below. The concern about information being misinterpreted is, however, a legitimate one. A second example concerns disclósing the ingredients in food, as is also required by federal labelling regulations. It is argued that consumers may be irrationally disturbed by learning that cheese contains rennet or bacterial culture, not knowing that these items, far from being artificial modern additives, are classic ingredients in cheese. Exasperation with this problem caused one executive to exclaim during an interview that, "cheese should be called cheese." This issue - when information can be misinterpreted - is further explored in some of the case studies in Part 3 below. But first, to better understand what kinds of regulation are actually being carried out, we examine the specific responsibilities of various government departments.

(2) De Facto Responsibilities of Government Departments

As indicated by Table 6 and the discussion in Chapter III, there is a considerable amount of overlap and duplication in government regulation of the dairy industry.[77] But the extent of de facto overlap and duplication in the administration and enforcement of regulation is considerably less than the de jure overlap and duplication in enabling legislation, partly because of traditions and inter-departmental agreements that limit

the scope of the various departments' regulatory activities. In addition, as emphasized in Chapter IV, the constitutional division of powers also affects the allocation of regulatory authority. To facilitate a better understanding of the true extent of overlap and duplication, this Chapter first examines the actual responsibilities of the relevant government departments.[78] It would also be desirable to present disaggregate data on the administration costs of different regulatory activities, but such data is generally unavailable.

The discussion is confined to "social" regulation of dairy PDR, deliberately excluding responsibilities for direct economic regulation of price, output and entry to the industry. To examine the interaction between the different levels of Government, we focus again on the same three jurisdictions: Federal, Ontario and the City of Ottawa. It should be understood that the division of regulatory authority may be different in other provinces - for example, in Quebec and especially the City of Montreal local authorities appear to have assumed a more prominent role.

(A) Government of Canada

(i) Department of Agriculture Canada

As indicated by Table 8 in Chapter III, this department is responsible for the administration of the Cheese and Cheese Factory Improvement Act, the Milk Test Act, and, most importantly, the Canada Agricultural Products Standards (CAPS) Act and the "Dairy Products Regulations" made thereunder. In this regard, a primary concern of Agriculture Canada is the regulation and inspection of industrial dairy plants processing dairy products for interprovincial or export trade. However, much of the actual inspection function in enforcing the Act and "Dairy Products Regulations" is formally delegated to the provinces. Agriculture Canada designs the inspection system and provides the manual and

forms, but in many cases the inspection itself is performed by provincial authorities. (As explained below, in Ontario this function is carried out by the Ministry of Food and Agriculture.) While inspecting on behalf of Agriculture Canada, provincial authorities may also enforce their own regulatory legislation. In this way, some duplication of effort is prevented. Provincial inspection is of course done in consultation with Agriculture Canada, and provincial authorities forward inspection reports to Ottawa, where the data they contain are computerized for the purpose of providing permanent records, statistical analysis and reporting, etc.

(ii) Department of Consumer and Corporate Affairs (CCA)

This Department administers those provisions of the Food and Drugs Act and Regulations regarding economic fraud and information disclosure in food - for example, food composition standards and deceptive advertising, packaging and labelling. (As explained below, other provisions of the legislation are enforced by the Department of National Health and Welfare.) Since the Food and Drugs Act was long thought to be upheld by the federal power over criminal law, it was believed to be enforceable against all commercial transactions, whether or not they involved interprovincial or international trade. As a result of the recent Labatt Breweries case, however, this may no longer be true (see Part IV(b)(ii) below). The Department also has primary responsibilities in enforcing the Consumer Packaging and Labelling Act and the Weights and Measures Act. Finally, especially in enforcing the Food and Drugs Act and Regulations, CCA's inspection activities are normally restricted to the retail level. Because of its extensive involvement at this level, the Department also assists in enforcing provincial health and dairy regulations in retail outlets.

(iii) Department of National Health and Welfare (DNHW)

The Health Protection Branch of this Department has responsibility for all matters concerning the safety and healthfulness of food, including toxicology, additives, pesticides, disinfectants and sanitizers in dairy and other food processing plants. The Department's jurisdiction over the nutritional aspects of food regulation also gives it a primary responsibility for developing food composition and labelling requirements, though this is done in close consultation with the Department of Consumer and Corporate Affairs, which takes responsibility for enforcing these requirements, as an area of economic fraud. It is interesting to note that certain provincial officials interviewed for this study alleged that DNHW has not been as willing as other federal departments to reduce duplication of effort by sharing or delegating the inspection function to provincial authorities. However, as these same officials noted, this may be because DNHW's mandate does not coincide as closely with the provincial authorities as do those of other departments. In any event, as in the case of the Department of Consumer and Corporate Affairs, much of DNHW's regulatory activities have been called into question by the Labatt Breweries decision.

(B) The Government of Ontario

(i) Ministry of Food and Agriculture

As suggested by its name, this Ministry retains primary responsibility for provincial regulation of agriculture and food processing. In this regard it administers and enforces provisions of the Ontario Milk Act and the Farm Products Grades and Sales Act. As noted above, many of the functions of this Ministry are similar to those of Agriculture Canada, and in fact the Ministry undertakes extensive inspection of Ontario dairy plants in co-operation with the federal Department. In cooperation with the Ontario Milk Commission (a closely integrated agency with

responsibilities for developing and advising on dairy policy matters and supervising the Ontario Milk Marketing Board), the Ministry is currently revising and consolidating the numerous regulations under the Milk Act. However, contrary to fears expressed by certain dairy company executives, Ministry officials assert that this revision and consolidation of regulation is not intended to dramatically extend the Ministry's authority. In many cases Ontario regulations are based on federal standards, and are enacted to ensure that these standards apply to intraprovincially traded products, as well as to those traded interprovincially or internationally. Regulations under the Ontario Farm Products Grades and Sales Act are also being revised. Apparently this revision will help enable the Province to assume some of the functions of certain provisions of current federal legislation (i.e., the Food and Drugs Act and Regulations) in the event that, as the Labatt Breweries case suggests, such legislation is ultra vires in respect of intra-provincial commerce.

(ii) Ministry of Health

This Ministry of course retains responsibility for the administration of the Ontario Public Health Act and Regulations. Much responsibility for actual enforcement of the regulations is formally delegated to Regional Medical Health Officers established by local authorities.

(C) Regional Medical Health Officers

Regional Medical Health Officers share responsibility for enforcing provincial regulation. They may also assist in enforcing federal regulations, especially when acting on complaints. Finally, they may help to enforce municipal by-laws.

(3) Dairy Plant Inspection and Regulatory Enforcement Policy

(a) The Inspection Problem

It is not the necessity of some occasional government inspection visits, but rather the alleged overlap and duplication in the inspection services of different government departments, that constitutes the primary concern of industry executives. Indeed, an individual inspection visit is generally seen as a relatively minor inconvenience. A typical individual visit might occupy any amount of time from ½ an hour to an entire day. It would normally require the attention of at least one employee, and occasionally more. Furthermore, some executives viewed even such a minor inconvenience as excessive, because in their view their own self-imposed plant sanitation and health standards are higher than government mandated standards.

When questioned closely, however, executives did not dispute the necessity of some government inspection, especially to supervise any less ethical members of the industry. Rather, it was the frequency and duplication of government inspection that they viewed as excessive. In discussing food regulation in general, the Canadian Food Processors Association has alleged that "the duplication of services constitutes a waste of taxpayers money and an expense to the food system. There is a need for much more co-ordination and co-operation."[79] Most executives would agree that this applies a fortiori to plant inspection.

It is extremely difficult for an outsider to evaluate this claim, but some indication of its validity may be obtained by considering the data presented in Table 9. This table certainly indicates that plants are subject to inspection by a number of different regulatory authorities. On the other hand, it is not immediately clear that the frequency of visits from

Table 9

FREQUENCY OF VISITS BY GOVERNMENT INSPECTORS AT FIVE CANADIAN INDUSTRIAL DAIRY PROCESSING PLANTS, JANUARY-JUNE 30, 1980

	Plant "A"	Plant "B"	Plant "C"	Plant "D"
Agriculture Canada				
Dairy	4	6	1	3
*Other Agriculture Canada	5			
National Health and Welfare	6			
Consumer and Corporate Affairs			1	1
Provincial	8	5	2	7
Municipal	4			
Total	27	12	4	11

* Figures in this row represent visits to inspect non-dairy products processed at the same plant.

the various authorities is unduly onerous. (The comparatively very high frequency of visits at Plant "A" reflects this plant's large size and broad range of products, including some non-dairy products.) Note, however, that in spite of Agriculture Canada's general delegation of much of the dairy plant inspection function to various provinces (referred to above),

Agriculture Canada dairy inspectors paid a total of 14 visits to plant A, C, D and E. It would appear that there is still room for greater co-ordination to reduce duplication of effort. The Canadian Food Processors Association's proposed solution - namely, consolidation of all regulatory authority within a single national agency - is considered in Chapter V.

Note that all four plants represented in Table 8 are processors of industrial dairy products. Fluid milk processors are apparently subject to much more frequent inspection -- one fluid milk plant manager stated that a regional health inspector visited his plant as often as 1-3 times per week. This manager also expressed an unusually favourable view of the inspection process, explaining that it was closely integrated with the plant's internal quality control system, and indeed was of significant assistance to his company.

(b) Regulatory Enforcement Policy

Enforcement policy of course varies from department to department and jurisdiction to jurisdiction, but as a general proposition, enforcement of dairy regulation in Canada is carried out through discretionary administrative procedures. As Dr. A.B. Morrison, Assistant Deputy Minister of the Department of National Health and Welfare has stated:

> We prefer to work co-operatively with responsible manufacturers and to encourage voluntary compliance by industry. We try to avoid unnecessary confrontation and adversary proceedings insofar as possible. "Come let us reason together," Isaiah said. That sums up what we try to do.[80]

Though Morrison was speaking only for the Health Protection Branch, and some dairy executives would certainly question whether HPB is quite so flexible as Morrison asserts, his remarks exemplify the generally co-operative attitude of many departments involved in dairy regulation. The Ontario Ministry of Agri-

culture and Food, for example, actually assists in providing a training centre for company officials involved in regulatory compliance. The centre, which also performs other, related functions, is located at the University of Guelph. The intent of regulatory authorities is clearly to foster voluntary compliance.

(c) Administrative Inter-delegation to Reduce Overlap and Duplication

We have already seen that there is a considerable amount of consultation and inter-delegation between departments both within and between levels of government. Of course, a major benefit of this can be a reduction in overlap and duplication. But such administrative inter-delegation entails problems as well as potential benefits. A good example is the recently initiated federal attempt to provide "one-stop labelling approval" to manufacturers of dairy and other food products.

As we have seen, labelling is an area of dairy regulation subject to extensive de jure overlap. In particular, at the federal level alone, the Canada Agricultural Products Standards Act, the Consumer Packaging and Labelling Act and the Food and Drugs Act all contain provisions that can affect the labelling of industrial dairy products. Without the advent of one-stop labelling approval system, the legal overlap could necessitate satisfying Agriculture Canada (which administers the CAPS Act) and the Department of Consumer and Corporate Affairs (which formally administers the labelling provisions of the Food and Drugs Act and the Consumer Packaging and Labelling Act). In addition, a company might feel obligated to consult the Department of National Health and Welfare, because of its related involvement in determining composition standards, permissible levels of additives, etc. It is easy to imagine the frustrations such a system might engender.

The new one stop procedure was designed to enable companies to obtain approval more simply and quickly. Under this system, a designated department - in the case of dairy products, Agriculture Canada - determines whether a proposed label meets its own and other federal departments' labelling requirements. This is of course done in consultation with other relevant departments and agencies. Dairy officials and executives interviewed for this study generally agreed that the new system constitutes a significant improvement.

The problem is that the designated department's approval may not be legally binding on the other departments and agencies. One executive interviewed actually expressed a concern that his firm might be legally challenged by CCA, even after obtaining approval from the designated department. This in itself seems an unlikely prospect, but even federal officials concede that less serious problems may occur. One official expressed concern that a company might obtain approval from one department in Ottawa, and then receive a request for additional modifications, perhaps from a regional office of CCA. A final evaluation would still be premature, but the one stop labelling system at least illustrates the potential limitations as well as the admitted important benefits of such administrative interdelegation.

(4) Regulatory Case Studies

Because of the very broad scope of government regulation of dairy PDR, it was considered desirable to identify a small number of individual problem areas for more intensive investigation. The following case studies were suggested by field interviews. Each study represents an area of concern to members of the industry, consumers and/or government officials. (None of the case studies concerns bilingual labelling or metriuication regulations) even though those are major areas of

concern to the industry, because of the availability of general studies on these subjects.[81] In most cases it proved impossible to obtain rigorous economic benefit or even cost data. As emphasized in the Introduction to this paper, this means that we cannot prove that specific regulations are economically inefficient. In an intuitive way, however, the studies illustrate the effects of controversial regulations, the policy issues involved, and the difficulties inherent in government intervention to correct for market failure due to inadequate information.

(a) Federal Regulation of Food Additives: The Case of Lipase in Cheese

The use of chemical food additives is strictly controlled by the Department of National Health and Welfare under the provisions of the Food and Drugs Act. The regulations are "strict" in the sense that, rather than merely prohibiting specified levels of certain additives in various products, and implicitly allowing use of all others, actual authorization is required for the use of additives. In other words, an additive must be "positively listed" within the Food and Drug Regulations. This of course begs the question of what constitutes a food "additive" - as opposed to a natural ingredient. The Regulations provide a detailed definition.[82]

This particular case involves a request by members of the industry to expand the allowable uses of the additive lipase. Lipase is an enzyme which breaks down "lipids" - i.e., in the making of cheese, butterfat. It is currently "positively listed" for romano cheese - indeed, it has been added to a number of specialty cheeses imported into Canada - but it is not positively listed for cheddar or the major kinds of domestically made specialty cheeses - colby, brick, edam, gouda, etc.[83] Lipase can be used to speed the ripening of cheese - in effect, it artificially accelerates the "aging" process.[84] It can also

restore certain "natural" flavour qualities that are diminished by modern manufacturing methods. Use of lipase in the United States is relatively more free - it can generally be used up to a Good Manufacturing Practice level. Some members of the industry would like to expand its use to facilitate lower cost production of ripened cheese in Canada.

Although some expanded use of lipase has now been approved by the Department of National Health and Welfare on an experimental basis, and some formal liberalization of the regulations now appears likely, great frustration was expressed by certain executives over the time and energy required to achieve these changes. The concern over extended use of lipase actually involves two underlying issues: (i) under what circumstances should use be allowed; and (ii) whether and how its use should be brought to the attention of the consumer. Most government officials as well as industry executives apparently agree that extended use does not pose a health hazard.[85] Given this fact, some industry representatives interviewed for this study argued there should be no restrictions on use. This certainly seems desirable, subject to the need for disclosure (discussed below).

Federal government officials argued in response that caution and reticence should guide decisions on authorizing use of additives, and one expressed a concern about the quality of artificially ripened cheese. In general, however, the officials did not seem adamantly opposed to the use of lipase. Their primary concern was that the alleged artificiality of lipase-induced ripening be brought to the attention of consumers, through explicit product labelling.

Precisely how much expanded use of lipase will be allowed, and under what circumstances, does not yet appear to have been resolved. As a step towards more liberalized use, the Department of National Health and Welfare has now granted at

least one company permission for expanded use on an experimental basis. A Department official interviewed for this study was still concerned about how lipase-ripened cheese should be labelled. An advocate of relative laissez-faire might argue that companies simply be allowed to market such a product as 'ripe', 'sharp' or 'mature' cheese. A more stringent disclosure standard could require a statement on the label to the effect that "this product has been artificially aged through addition of the enzyme lipase." A potential difficulty with such a requirement is that consumers may not know how to interpret it. The principle of consumer sovereignty, however, suggests that regulators should err on the side of requiring full disclosure. Whenever possible, the consumer should be the final judge.

(b) The New Federal Butter Packaging Standard

A key provision of the new federal Dairy Products Regulations (promulgated in late 1979 pursuant to the Canada Agricultural Products Standards Act) requires the use of improved butter wrappers.[86] The purpose of the improved wrappers is to impede the penetration of ultra-violet light, which is allowed by traditional parchment wrappers. Such ultra-violet penetration is generally agreed not to pose a serious health hazad; but it is now widely, if not universally, recognized to cause oxidation, resulting in a significant flavour defect.[87] The packaging regulation is designed to prevent this defect by setting a new ultra-violet light protection performance standard. At present it appears that aluminum foil constitutes the most economical method of meeting the standard.

Some members of the industry object strongly to this standard. They argue, first of all, that the government has no business intervening on a matter of taste. (Dairy officials as well as executives agree traditional packaging entails no problem of health.) Second, parchment wrappers have satisfied consumers for years. Third, it is argued that if consumers really desire

any taste improvement that foil wrap provides, firms will provide foil in their own economic self- interest. According to this reasoning, there should therefore be no need for regulation.

There are, however, some persuasive arguments in favour of the regulation. First, it can be argued that any lack of a consumer demand for foil wrap occurs precisely because of an information failure - i.e., consumers fail to associate the alleged 'cardboard' taste of oxidized butter with the parchment wrap. Furthermore, in the regulations's defence it should be emphasized that it does set a performance standard rather than an "engineering" standard - i.e., a specific material which must be used. Performance standards possess both immediate and, especially, "dynamic" advantages over engineering standards. In particular, they allow the industry to adopt the most economical means of compliance, and encourage development of less costly compliance technologies.[88] In addition, as will now be explained, there is some reason to believe that the regulation may serve the long run best interests of the industry itself. Specifically, it can be argued that the improved butter wrappers will strengthen butter's taste advantage over margarine, thereby preserving or even strengthening the demand for butter.

Of course, any argument to this effect must meet a strong prima facie case that butter producers would adopt the new wrappers voluntarily, if it were really in their best interest to do so. We would normally expect that the forces of the market-place would automatically induce such innovation as is beneficial to a producer. But in the case of butter, the normal signal of the competitive marketplace may be distorted by the market guarantees provided by the Canadian Dairy Commission's butter price support program. Indeed, this may be a classic example of how regulation begets more regulation - i.e., the price support program increases the need for other kinds of intervention.

In the case of the improved butter packaging regulation we are fortunate in having some information on the resulting incremental costs. This information was prepared for Agriculture Canada as a regulatory impact analysis in fulfillment of the requirements of the new federal Socio-economic Impact Analysis (SEIA) Policy for major new health, safety, fairness and environmental protection regulations.[89] (The analysis is also considered in Chapter V of this paper, as an example of the potential benefits of more widespread use of regulatory impact analysis.) The regulation was estimated to impose fixed costs of $2,500,000 during 1979, and a present value of $8,945,656 (in constant 1979 dollars, using a social discount rate of 10%) in variable costs over the 10 years beginning in 1979, for a 10 year present value total cost of $11,449,656. Combined with some much less significant changes in federal grading standards and a new moisture and fat content measuring requirement (estimated present value total costs of $3,416,771 and $3,293,444, respectively, over ten years), this represents a total present value of $18,906,959 in costs imposed by the new Agriculture Canada regulations.[90]

It should be emphasized that these amounts represent only the incremental costs of the changes - i.e., only those in excess of the costs imposed by pre-existing regulations. Under the SEIA Policy Directives, the total present value in costs of $18,906,959 qualifies the new regulations as 'minor' for the purposes of the policy.[91] This means that a more complete analysis, examining the benefit side of the regulatory impact, need not be undertaken.

The finding that the impact of the requirement for improved butter packaging is relatively minor should not obscure its cost significance to individual dairy processors. Furthermore, it should not obscure the question of whether any government intervention is justifiable, when its primary objective is merely a marginal improvement in the taste of a consumer commodity. However, as the foregoing analysis has pointed out, because of market distortions introduced by the CDC butter price

support program, government intervention to induce the change in packaging material may be more justifiable than it would be in a market not subject to price regulation.[92] Finally, perhaps the strongest argument in favour of the regulation is that without it Agriculture Canada cannot guarantee its butter grades. Butter that is top grade in the warehouse may deteriorate significantly when exposed to a supermarket's fluorescent lights for only a short period of time.

(c) The "Best Before" Dating System

The preceding case study examined a case in which the Government responded to a perceived market failure with direct regulation - i.e., the new-performance standard for butter packaging. In many cases, however, market failure due to inadequate information is best remedied by simply providing the missing information to consumers, or requiring that the industry provide it. This may be especially true where the market failure merely threatens to degrade the quality of the product, rather than causing serious hazard to health. But to fully correct the market failure, it is not sufficient merely to provide technical information. In addition to this, the consumer must understand the significance of the information. This case study underscores that point.

The existing "Best Before" Dating System was developed in the early 1970's in response to consumer demands for better information respecting the freshness and quality of perishable foods. Following an international conference on "Food Stability and Open Dating" at Rutgers University in October 1971 and extensive subsequent consultation with food processors, distributors and retailers, regulations were promulgated in March 1974.[93] The current system requires that perishable foods, including dairy products, be stamped with a date indicating the termination of its expected 'durable life'. This period, to be determined by the manufacturer, was intended to indicate how long

the product would remain at maximum freshness and wholesomeness. It was not intended to mean that a product is necessarily unsafe after its 'Best Before' date.[94]

One possible problem is that some consumers may interpret it this way. It can be difficult to sell a product which is even approaching its Best Before date. Retailers are instructed to rotate dairy products on their shelves, so that products stamped with the most imminent dates are placed at the front of the shelf. It is apparently common, however, for consumers to search through a shelf to find the product with the longest remaining life. Furthermore, even when products are discounted it may be difficult to sell them as they approach their best before date. The result, it is suggested, may be that the Best Before dating system causes dairy and other food products to go needlessly unsold. Unsold products are usually returned to the manufacturer. There may be some opportunity to use the product by reprocessing it, but in some cases products may be discarded. Some increase in inventory costs would appear to be inevitable.

To be sure, there are persuasive arguments in favour of the system. Milk which has reached the end of its maximum freshness period is simply not the same as a product which has not, and to market it on the same basis, especially given the retailers' practice of rotating the oldest cartons to the front of their shelves, would be misleading. It may be unfortunate that some manufacturers must discard safe products that have passed their maximum freshness lives, but this is surely no worse than the consumer having to discard the product.

Furthermore, as one senior executive explained, especially in industrial dairy products PDR, good organization should be sufficient to prevent accumulation of outdated stock and to re-process any that does arise.[95] (It may be more difficult to reprocess outdated fluid milk.) As some executives themselves pointed out, an open dating system can serve the best interests

of the manufacturer. The manufacturer's reputation could suffer if, for example, its cheese was left on store shelves long after its period of maximum freshness.

Nevertheless, the Best Before dating system at least demonstrates the potential limitations of consumer information disclosure requirements in any kind of food processing, distributing and retailing. So long as any healthful dairy products are being discarded because consumers believe 'best before' means 'unsafe after,' this constitutes a real cost of the system. The point is not the size of the problem - which on balance appears to be small - but the possibility that mere provision of information may cause perverse results, if misunderstood. What is needed is to explain to consumers the meaning of the technical information provided. Consumer education - by government and industry - is needed to ensure maximum benefit from Best Before dating and similar government mandated information disclosure requirements.

(d) Dairy Product Labelling and Advertising: Use of the Term "Natural"

As the above study of the best before dating system has shown, the objectives of regulation may be frustrated if information is disclosed but misinterpreted by consumers. The possibility of misinterpretation, however, "cuts both ways." In recent months both the Consumers Association of Canada and the federal Government have become concerned that certain terms used in advertising and labelling dairy products are stimulating demand by misleading consumers. In particular, both the Department of Consumer and Corporate Affairs and the Department of National Health and Welfare are concerned that indiscriminate application of the term 'natural' to yogurt, ice cream, butter and other dairy food products is inducing consumers to purchase these products under false assumptions. The Food and Drugs Act does not explicitly control the use of this term at present, although the

Act's general provisions against misleading advertising could be argued to apply. The concern has raised the prospect of imminent regulation. In the words of the Globe and Mail, the Government is worried that consumers are being led down "the organic garden path."[96]

The Government's concern is to prevent consumer fraud - another example of market failure due to poor information. The terms 'natural', 'organic' and 'pure' are used because they attract buyers. A survey conducted by the Consumers Association has determined that consumers assume that 'natural' products contain no additives and that natural or 'health' foods are significantly more nutritious then others.[97] These beliefs may sometimes be false. As Dr. A.B. Morrison, Assistant Deputy Minister in charge of the Department of National Health and Welfare's Health Protection Branch has stated,

> There's no proof that everything natural is better for your health and foods made with additives are inherently bad.... You could say that all foods are made up of chemicals - some are made by man and others produced by nature. But neither type is necessarily better or safe.[98]

It is not yet clear how this problem will be resolved. Radio and Television advertisements must be approved by the Canadian Radio-television and Telecommunications Commission (CRTC) before they can be aired.[99] On the advice of the Department of Consumer and Corporate Affairs, the CRTC has often rejected commercials claiming a product is 'natural'.[100] Controlling labelling and print advertising may prove more difficult. One approach would be for CCA to use the Food and Drug Regulations to provide legal definitions of the terms in question. There is some evidence that members of the dairy industry would value some control over these terms, provided all companies were uniformly regulated. Indeed, one senior dairy executive has publicly stated, "We were willing to refrain from stating that our yogurt was a natural food so long as other companies followed a similar policy with their products."[101]

There is clearly a need for some form of control. At the same time, properly controlled use of the term 'natural' could offer the consumer valuable information. It is desirable that consumers be able to determine readily which foods are additive free - if only because scientific opinions on the dangers of additives often disagree, and the government has not always successfully controlled all dangerous additives.[102]

(e) Federal and Quebec Coliform Standards for Cheese

In addition to general laws requiring sanitary conditions in food processing plants and prohibiting sale of filthy or contaminated food, the federal Government and some provinces now prescribe specific microbiological standards. In this case study we consider the example of coliform bacteria content standards prescribed for cheese by the federal Government and the Government of Quebec. The presence of some coliform organisms is not in itself necessarily dangerous to health. Rather, a coliform count serves as a standard index of fecal contamination - i.e., quantity of fecal matter present in the food product. Coliform standards therefore constitute still another response to market failure due to inadequate information - specifically, the inability of the unaided consumer to detect fecal contamination.

It is interesting to compare the federal and Quebec standards, because the Quebec standard is radically more stringent than the federal one. The basic federal standard prescribes that cheese made from pasteurized milk may contain no more than 500 coliforms per gram.[103] The Quebec standard specifies no more than 500 coliforms per 500 grams.[104] Quebec dairy executives interviewed for this paper described the federal standard as reasonable and stated it was attainable 95-98% of the time. In contrast, they characterized the Quebec standard as "absolutely ridiculous" and alleged that, according to this standard, the vast majority of cheese in Montreal is technically illegal.

Quebec officials realize that at present the standard is difficult to attain. They emphasize that it is enforced with substantial administrative discretion, and some apparently view it as a goal or ideal, rather than a rigid requirement. Apart from the possibility that excessive reliance on administrative discretion might result in unfairness to individual companies, this fact, and the standard itself raise a substantive policy issue. As mentioned above, though detrimental to quality, the mere presence of a small number of coliform organisms is not in itself necessarily dangerous to health.[105] A final answer cannot be given, but it is important at least to pose the question: Beyond the level required for health reasons, is further reduction in coliforms worth the costs it entails?

Even medically harmless filth is said to cause 'aesthetic contamination' - i.e., degradation in the quality of the product.[106] There is no doubt that cleanliness is an important value to consumers, going beyond its value in eliminating health hazards. Furthermore, because of the inability of the average consumer to accurately measure the number of coliforms present, some level of government regulation is surely justifiable on the basis of the information failure rationale. But reducing aesthetic contamination is far from costless.[107] Furthermore, it is possible that radically different standards in individual provinces will affect the inter-provincial distribution of Canadian dairy manufacturing, or the actual flow of interprovincial trade. Senior executives of one major Quebec dairy processing firm alleged the Quebec coliform standard has already threatened to disrupt cheese production, possibly forcing a transfer of operations to another province. The potential problem of barriers to interprovincial trade is discussed more extensively in the following section of the paper.

(5) Regulatory Barriers to Interprovincial Trade

Since regulation affects interprovincial trade of fluid milk and industrial dairy products in radically different ways, these two categories of dairy production are examined separately.

(a) Fluid Milk

In Ontario and most other provinces, provincial dairy legislation prevents interprovincial trade in fluid milk except insofar as it is expressly permitted. That is, each province is a separate unit, but some interconnections are allowed. This is one aspect of the provinces' general control over entry to the industry through the use of provincial fluid milk production quotas. (Legislative jurisdiction over interprovincial trade belongs to the federal government under section 91(2) of the British North America Act. However, the federal Agricultural Products Marketing Act enables the Governor in Council to authorize provincially established marketing boards to exercise their powers in relation to goods subject to interprovincial and international trade. Pursuant to this authority, the Governor in Council has promulgated federal Milk Marketing Orders which effectively delegate control of interprovincial trade in fluid milk to milk marketing boards established by all provinces except Newfoundland.)[108] These barriers to interprovincial trade can, of course, cause inconvenience to both suppliers and consumers of processed fluid milk. More formally, economic theory suggests that such barriers deprive society of the benefits of specialization and exchange.

To be sure, the provinces have made exceptions in some cases where it is sensible to do so. This appears to be the case regarding the interprovincial boundary between Ontario and Quebec. Two examples will suffice. First, the two provinces have a useful co-operative arrangement regarding the adjoining cities of Ottawa and Hull. Since there are no fluid milk

processors in Hull, raw milk is allowed to be shipped by Quebec farmers to Ottawa for processing and then returned to serve the retail market in Hull. Second, since the 1920's a large part of the Montreal milk market has been served by dairy farmers located in Eastern Ontario. These producers actually form part of the Quebec fluid milk pool. (Currently they number about 140 farmers.) They hold Quebec supply quotas and are subject to inspection by the Montreal Urban Community (MUC). In this connection, Ontario Ministry of Agriculture and Food apparently maintains close liaison with its Quebec counterpart.

But the existence of some useful exceptions to the rule should not obscure the undesirable effects of any regulatory barriers to interprovincial trade. As is emphasized in the following section of the paper, these undesirable effects include political costs as well as the classic economic costs of protectionism.

(b) Indirect Barriers to Interprovincial Trade in Industrial Dairy Products

(i) The Problem of Differential Regulatory Standards

Canada's regulatory barriers to interprovincial trade in processed industrial dairy products take a less direct form than the barriers to interprovincial trade in fluid milk. There are, of course, controls on the production of industrial milk - i.e., controls at the basic input stage. Each province is allocated a total production quota by the Canadian Milk Supply Management Committee, chaired by the Canadian Dairy Commission. We are speaking here, however, of processed industrial dairy products, which are restricted by indirect trade barriers. The "indirect barriers" are the existence of differing provincial regulatory standards among different provinces.

Differing provincial standards may occur in two ways. First, in areas where the provinces have sole jurisdiction, they are of course free to do as they see fit. Second, under the constitutional doctrine of concurrent powers, provinces may set standards governing dairy products (or other goods) consumed within the province even where valid federal standards exist. However, to have any legal effect, a provincial standard must be higher than a corresponding federal standard. In other words, a province may enforce a higher standard if it chooses to do so.[109]

Why is there concern over differing standards? As Pattison states,

> Lack of uniformity is not only a barrier to mobility within the confederation but it also raises costs of doing business and reduce the general publics understanding of legal rights and obligations.[110]

Barriers to interprovincial trade threaten to deprive Canadians of the benefits of the Canadian economic union. Pattison's concerns are echoed by the Economic Council of Canada, which has declared that economic union is a "sine qua non" of Confederation.[111]

There is little evidence to date that differing provincial standards have caused any serious disruptions within the dairy industry. Interviews with industry executives did, however, reveal two potential problems. The first is the alleged possible reduction in Quebec cheese production due to the stringent provincial coliform standard described in case (e) above. The second is the threat to dairy products manufacturers posed by liberalization of provincial legislation controlling the blending of pure dairy products with edible oil products, thereby creating lower priced dairy substitutes. Control of such blends has already been liberalized in at least two provinces. However, this example begs the question of whether such blending should ever have been prohibited. (Certainly there is no evidence that

blending is harmful to health.) Still, it is clear that differing provincial regulatory standards have at least the potential to disrupt interprovincial trade.

The problem is the more serious in view of a recent development in Canadian constitutional law that drastically limits the federal government's constitutional authority to set food standards. We have referred to that development, the Labatt Breweries case, above. We now consider it more closely.

(ii) Meaning and Implications of the Labatt Breweries Case

The Labatt Breweries[112] case is significant because it invalidates the traditional federal authority to enact national food composition standards ('legal recipes'), and raises doubts concerning federal authority in related areas. As explained in Chapter III, it was long believed that food composition standards were valid under the federal government's constitutional authority over criminal law,[113] and therefore could apply to all food products sold in Canada, regardless of whether they are subject to interprovincial or international trade. Indeed, in 1975, Dr. A.B. Morrison, Assistant Deputy Minister in charge of the Department of National Health and Welfare, stated

> Most importantly, the Food and Drug Act is criminal law.... Control over [food, drugs, cosmetics and devices has] been determined to be a matter of federal law and therefore within federal jurisdiction.... Hence, it is possible for us to legislate and regulate in these areas whether or not the subject matter is one which remains within a province or crosses provincial boundaries[114]

The Labatt Breweries case changes all of this, and therefore carries important potential implications for the dairy manufacturing industry.

The specific constitutional issue in the case was whether section 6 of the Food and Drug Act and regulation B.02.134 (and section 25(1)(c) to the extent that it authorizes such regulation) are ultra vires (i.e., beyond the constitutional powers of) the federal Parliament. (Regulation B.02.134, authorized by section 25(1)(c), prescribed that "light beer" shall contain no less than 1.2% alcohol by volume and no more than 2.5%. Section 6 requires that food sold in Canada must conform to such standards, whether or not it is involved in interprovincial or export trade.) In addition to the federal power over criminal law, the Supreme Court of Canada considered two other alleged bases for food composition regulation: The 'general' branch of the federal power over trade and commerce; and the federal authority to make laws in relation to health for the peace, order and good government (POGG) of Canada.[115] After considering the constitutional limits to these powers, it concluded that none could support the provisions in question, and they were, therefore, ultra vires.[116]

The full implications of this finding are not yet clear, but at a minimum it seems to mean that all federally mandated 'legal recipes' enacted in the Food and Drug Regulations - including the dairy products composition standards found in Part B, Division 8 - are ultra vires in regard to intra-provincial trade. In the words of Professor Jacob Ziegel,

> The Supreme Court thus invalidated a vital feature of the Food and Drugs Act - the power of the federal government to adopt compositional standards for food ... presumably all of them are equally open to attack on constitutional grounds.[117]

There is no doubt that federal and provincial dairy officials view the Labatt Breweries case as a very serious development. Its effect has been to curtail the activities of the federal government in food regulation. The development of new food standards and the enforcement of some existing regulations.[118]

The Supreme Court's decision is unfortunate because of the gap it creates in the regulatory mosaic, and because it raises the possibility that the invalidated national food composition standards will be replaced by provincial standards that may differ from province to province. Of course, this assertion raises the issue of whether food composition standards are necessary at all. Interestingly, a senior federal official interviewed for this study suggested the Labatt Breweries decision might benefit both the food industry and Canadian consumers if it resulted in the replacement of most composition standards with much more rigorous product composition disclosure requirements. In other words, manufacturers would have considerably more freedom to determine the proportions of various ingredients in specific products, but the ingredients, their proportion and their nutritive value would be disclosed in fine detail. However, as we have already seen, mere information disclosure is an adequate response to a market failure due to poor information only where the consumer can be expected to read and understand the information disclosed. Furthermore, some composition requirements will remain necesssary if only to maintain basic health and nutritional standards.

After Labatt Breweries, the necessity (political, if not economic) of even some food composition standards raises the real possibility of standards that differ from province to province. As we have already seen, differing standards can impose unnecessary costs and may even pose an obstacle to interprovincial trade. Interviews with dairy officials suggested that some provincial governments are already planning to fill the vacuum left by the Labatt Breweries decision. Indeed, the Ontario Government's current revision of the Ontario Farm Products Grades and Sales Act will apparently help to serve this purpose. Of course, replacement of federal standards with provincial ones will cause fewer adjustment problems if provinces enact standards that are not radically inconsistent. Possible solutions to the potential problems caused by the Court's ruling are considered in Chapter V.

Chapter V

CONCLUSIONS AND RECOMMENDATIONS

(1) Overall Assessment

The preceding chapters have surveyed various aspects of government regulation of dairy processing, distributing and retailing. At the risk of oversimplification, the following generalizations can be made: First, while some dairy executives object strenuously to individual regulations, and are especially concerned about the problem of overlap and duplication, regulation does not appear to constititute a crushing burden. Industry representatives acknowledged that many aspects of regulation are socially desirable, and some clearly considered it necessary to police new entrants and/or less quality-conscious members of the industry. Indeed, in considering the history of dairy regulation, we saw that much early government involvement was actually initiated at the request of the industry. There was little evidence to suggest that, as the Task Force on the Food and Beverage Industry asserted, regulation constitutes "a major constraint on profitable growth". However, much more quantitative evidence on costs would be required to fully examine this issue. Similarly, though several aspects of the regulatory mosaic could clearly serve as indirect barriers to entry, there is little direct evidence that regulation has encouraged the relatively high levels of market concentration documented in Chaper II.

Second, whether initiated by the industry, the Consumer Movement or the government itself, much "social" regulation of the dairy industry serves the useful purpose of remedying market failure due to inadequate information. Corrective intervention often takes the form of simply requiring information disclosure. Where mere disclosure would be inadequate, perhaps because of the consumer's inability to 'correctly' interpret information, direct

regulation may be required. Indeed, the case studies on the additive lipase, the best before dating system and the use of the term "natural" in dairy products advertising underscored the need for consumers to understand the information disclosed. More consumer education by governments and industry is needed to supplement information disclosure.

Third, members of the industry do have real grievances regarding some specific aspects of dairy regulation. These include frustration over time required to obtain approval for use of additives such as lipase, and the Quebec coliform standard, both discussed in Chapter IV. Without presuming to make a final judgement, each of these aspects of dairy products regulation should be re-examined by the departments concerned. Indeed, dairy officials are currently considering expanded use of lipase.

Fourth, overlap and duplication in regulation and inspection persists. To be sure, for a variety of reasons, including administrative inter-delegation both within and between levels of government, the extent of de facto overlap and duplication is not nearly so great as the tabulation of statutory regulatory powers in Table 7 suggests. Indeed, in Chapter IV we considered two examples of useful inter-delegation: provincial inspection of industrial dairy plants in co-operation with Agriculture Canada, and the "one stop" federal labelling approval service. But the inspection data in Table 8 demonstrate that plants are still subject to inspection by different departments, and we saw that even the one-step labelling system may not work perfectly. Dairy executives still feel that they are regulated and inspected by too many different authorities.

Fifth, though useful administrative arrangements have prevented some serious inconvenience, regulatory barriers to

interprovincial trade still constitute a potentially serious problem. By invalidating federal food composition standards, the Labatt Breweries decision has opened the door to food composition standards that differ from province to province. Care must be taken to ensure that differing standards in the various provinces do not become a barrier to trade. Finally, the decision is also important per se, because of the gap it creates in the regulatory mosaic. Since filling this gap and preventing the development of differing provincial composition standards is the most pressing substantive issue currently facing dairy industry regulatory authorities, we consider this problem before turning to institutional and procedural possibilities for reform.

(2) The Need for Uniform National Food Product Composition Standards

We have already considered the implications of the Labatt Breweries case and noted the gap the case creates in the regulatory mosaic. In addition, we have noted the undesirability of differing provincial composition standards. In considering the implications of Labatt Breweries for the food industry as a whole, Professor MacPherson has noted:

> following Labatts the provincial and federal governments have been subjected to strong lobbying efforts by consumers - and food and alcoholic beverage manufactures! Their joint message has been quite blunt: "Give us national standards. Whether you achieve it by new federal laws, uniform provincial laws, delegation, co-operation or constitutional amendment is not important. But achieve it - and fast."[119]

The question then becomes how best to achieve uniform national standards. MacPherson points out that the provinces do not regard themselves as "winners" in the Labatt Breweries case.[120] The optimal solution would be a constitutional amendment specifying that the federal government has jurisdiction over commodity standards.[121] This is not such a far-fetched

possibility as one might think. Indeed, at the September 1980 constitutional conference, one of the federal government's proposals was to amend section 91(2) of the British North America Act to expressly include jurisdiction over commodity standards. This was one of the very few federal proposals to receive nearly unanimous provincial agreement.[122]

In the interim, pending a constitutional solution, it would be desirable for the federal government to initiate an inter-provincial conference leading to uniform national standards. Most of the provinces already have statutes such as the Ontario Farm Products Grades and Sales Act or the Ontario Milk Act which could authorize dairy product composition standards. In principle, the provinces could all incorporate by reference the federal standards enacted pursuant to the Food and Drugs Act. (Indeed, such incorporation of federal standards is already widespread among the provinces.) Failing that, adequate interprovincial negotiation could prevent excessive development of differing interprovincial standards. As MacPherson states, "if the provinces legislate competitively [a food products manufacturer] may have to comply with up to ten standards if he wants to market his goods on a national basis."[123] Such a situation is to be avoided if at all possible.

(3) A Single National Food P.D.R. Regulatory Agency?

The foregoing discussion of the need for a national consensus on dairy products composition standards begs the question of whether Canada needs a single national agency to carry sole responsibility for all regulatory development and enforcement activity in the area of food PDR. Such an all-embracing regulatory agency is advocated by one organization which represents dairy products manufacturers - the Canadian Food processors Association (CFPA). This organization has stated:

> The Canadian Food Processors Association would favour changing the name of Agriculture

> Canada to Food and Agriculture Canada and suggests that all governmental services related to food production, marketing and distribution should be transferred to this Department. This would include:
>
> 1. Programs and policies designed to stimulate primary production of agricultural products.
>
> 2. A co-ordination of all regulations related to food. This would include regulations now administered by Agriculture Canada, Health and Welfare and Consumer and Corporate Affairs.
>
> 3. All inspection services including those administered and enforced by Agriculture Canada, Health and Welfare and Consumer and Corporate Affairs.
>
> 4. All national programs designed to stimulate the sale and consumption of Canadian food products.[124]

As emphasized by the CFPA, such a unified food regulatory department might have the salient virtue of eliminating overlap and duplication. There would be, however, some serious obstacles to achieving such a unified approach to food regulation. First, while it is not clear whether the CFPA proposal for consolidation extends to provincial as well as federal regulatory authorities, any such attempt would face major constitutional obstacles. These would go far beyond the split jurisdiction brought on by the Labatt Breweries case in the restricted area of food composition standards. Some inter-delegation of regulatory authority between levels of government is possible, but it is hardly likely that provincial governments would give up their regulatory primacy in fluid milk regulation, still less their traditional concurrent jurisdiction in the field of public health. (As emphasized in Chapter III, provincial and local inspection pursuant to provincial public health acts constitutes an important aspect of dairy foods regulation, especially at the retail level.) In sum, pending radical re-alignment of constitutional and de facto responsibilities, consolidation of all

federal and provincial food regulatory authority is virtually impossible.

Even at the federal level alone, consolidation would be difficult to achieve. The main reason is that the three federal departments involved in food regulation and inspection - Agriculture Canada, National Health and Welfare and Consumer and Corporate Affairs - have evolved to serve a variety of objectives. For example, federal officials interviewed for this study argued that Agriculture Canada is primarily oriented towards serving farmers and processors, while National Health and Welfare is concerned with protecting consumers from dangers to health and Consumer and Corporate Affairs seeks to prevent economic fraud. The multiplicity of government policy objectives is perhaps the most important underlying reason for what is perceived by the industry as "overlap and duplication". Consolidating all federal food regulatory authority is unlikely to eliminate the differing objectives.

Finally, it should be emphasized that sharing regulatory and even inspection authority among various departments may confer some social benefits as well as costs. In particular, a degree of competition among regulatory authorities may help to preserve high standards and integrity among regulators, as well as members of the industry. In other words, some minimal level of competition among regulators, and especially inspectors, may help to form a desirable system of "checks and balances". Without the actual or potential presence of other regulatory authorities, there might be a tendency for a single authority to become unduly sympathetic to the problems of the regulated industry.[125]

On balance, the case for consolidating all food regulatory and inspection authority within a single agency is not persuasive. Indeed, as was emphasized in Chapter IV, the actual extent of <u>de facto</u> overlap and duplication is considerably less

than the tabulation of de jure regulatory powers in Table 7 suggests. However, it is still important to reduce overlap and duplication wherever it causes unnecessary inconvenience. We have already considered two examples of how interdepartmental co-operation can simplify regulation. Despite the criticisms noted in Chapter IV, these two measures constitute valuable innovations.

(4) Reforming the Regulatory Process

Finally, at the conclusion of studies such as this it is customary to recommend a series of procedural reforms. It is argued that "rationalizing" the regulatory process will result in substantively better individual regulations. Two of the most common recommendations are (i) more extensive consultation with affected parties prior to promulgation of regulations; and (ii) economic evaluation of regulations prior to promulgation.[126] Indeed, I would favour implementation of both of these recommendations at all possible levels of government. It should not be overlooked, however, that some important consultation and prior evaluation requirements are already in effect within many government departments and agencies. Rather than merely reiterating the need for such procedures, we now consider some existing procedures applicable to the field of dairy regulation.

(a) The Need for More Widespread Prior Consultation

Consultation between government officials and members of the dairy industry prior to promulgation of regulations has been a part of the regulatory process for many years.[127] This applies to the food industry as a whole, and is true at both the federal and provincial levels of government. Nevertheless, some dairy executives interviewed for this study viewed existing consultation mechanisms as inadequate. They agreed that consultation takes place, but claimed it has little influence in determining which regulations are eventually enacted. Furthermore, as has been alleged regarding government regulation in

general, it is not clear that non-government parties other than the industry itself are adequately consulted.[128]

Thus, in evaluating existing consultation procedures we should ask at least two questions: (i) are interested parties consulted sufficiently early in the process, in order that they may express their views before the regulatory authority becomes committed to a specific regulation; and (ii) is a sufficiently broad range of parties consulted? It is not possible in this paper to give definitive answers to these questions, but we may at least note one important recent step twoards more systematic and earlier consultation of a broader range of interested parties. Article 2.2.1 of the new federal Socio-economic Impact Analysis Policy requires that federal departments and agencies implement consultation at the "problem definition stage" of the regulation-making process - i.e., the stage at which government intervention is first being considered.[129] Initial consultation need only involve "directly affected parties," but subsequent comments are to be considered from "all interested parties."[130]

Though overlooked in some current discussion of regulatory reform, this Directive is one of the most important requirements in the SEIA Policy. (The role of the SEIA Policy in requiring prior economic impact evaluation - as distinct from mere consultation - is discussed below in part (b).) It may take some time to achieve full compliance, but federal dairy officials interviewed for this paper were certainly aware of the Policy.

Some indication of the actual effectiveness of the SEIA policy in promoting consultation may be obtained from the recent statement of Peter Meyboom before the current Parliamentary Task Force on Regulatory Reform.[131] (Meyboom is Deputy Secretary of the Branch responsible for co-ordinating the implementation of the SEIA POlicy.) So far, the policy appears to have been only partly successful. Indeed, after affirming the importance of

widespread public participation, Meyboom himself notes there is "scope to improve" departmental efforts towards achieving such participation. Still, he points out that non-governmental parties contacted by his Branch do report an impression that their participation influences the development of proposed regulations.[132]

A major problem appears to be that the SEIA Policy has not been adequately publicized by the Departments concerned. Regarding private industry in general, Meyboom notes that several non-governmental parties contacted by his Branch "were altogether unaware of the SEIA Policy prior to their participation in its evaluation." This corresponds to my own impression from interviewing dairy industry executives. In particular, although most dairy executives acknowledged that industry-government consultation does take place, very few were aware of the specific opportunities offered by the SEIA Policy. If the Policy is to fulfill its potential for increasing public participation in the regulatory process, greater publicity and perhaps more direct solicitation of comments from outside parties is required.

(b) Prior Economic Evaluation in the Field of Dairy Regulation

In addition to increased prior consultation, a second major current proposal for regulatory reform is evaluation of the socio-economic impact of regulations prior to enactment. Such prior evaluation has actually been required at the federal level since August 1, 1978, for all major new regulations in the areas of health, safety, fairness and environmental protection. The requirement is embodied in the new federal Socio-economic Impact Analysis (SEIA) Policy.[133] The Economic Council of Canada has recommended substantially broadening the scope of the Policy to include "direct economic regulation" (i.e., price, rates of return, and entry conditions in specific industries.)[134] Subsequent to the Council's recommendation, the Parliamentary Task Force on Regulatory Reform has also endorsed broadening the

Policy's scope, while supporting the existing Policy and recognizing the methodological difficulties inherent in measuring the economic value of intangibles such as human health or safety.[135] Since at least at the federal level most of the dairy regulation considered in this paper falls within the scope of the existing Policy, there is no need to consider the proposed extension to direct economic regulation. However, it is useful to review recent experience with the SEIA Policy, to determine the value of prior economic evaluation.

In evaluating the SEIA Policy, we are fortunate in having an example in the specific field of dairy regulation. This is Agriculture Canada's analysis of the incremental social costs imposed by the new federal "Dairy Products Regulations" promulgated on November 28, 1979, pursuant to the Canada Agricultural Products Standards Act.[136] We referred to this evaluation above, in discussing the most costly aspect of the new regulations: the proposed new butter packaging standards. The other regulations prescribe minor changes, including marginal changes in dairy product grading standards and a new moisture and butterfat disclosure requirement for cheese.

The Agriculture Canada cost evaluation clearly demonstrates that the socio-economic costs of dairy regulation can be evaluated and presented in a technically rigorous yet readily comprehensible manner. The analysis achieves a high standard of technical competence. This finding is important in itself, in view of questions that have been raised regarding the ability of line departments to perform sophisticated socio-economic impact analysis.[137]

Two limits on the scope of the Agriculture Canada analysis should be noted. First, like all analyses performed under the SEIA Policy, this cost evaluation measures only the incremental costs of the regulations. This qualification is especially important where, as in the present case, many of the

new regulations replace pre-existing regulations. It means that the analysis does cover the full (i.e., incremental plus pre-existing) costs of compliance.

Second, as pointed out in the case study on the new butter wrapping standard, the total incremental costs are sufficiently low to qualify the new regulations as "minor" for the purposes of SEIA Policy. This means that the economic benefits of the regulation, which might have been significantly more difficult to estimate, need not be evaluated at all. However, the characterization of the regulations as minor follows directly from the social cost estimates, and is perfectly sensible given the criteria specified in the policy manual.[138]

In spite of these limitations on its scope, the Agriculture Canada cost evaluation is clearly a valuable input into the regulatory decision-making process. The incremental cost information is itself valuable, though the full benefit of the SEIA Policy cannot be separated from the benefits incurred by increased consultation both within and outside the Department. In the words of the analyst who prepared the cost evaluation for the Department of Agriculture,

> Implementing the policy has required the involvement and cooperation of a wider variety of departmental officials than would otherwise be involved in promulgating a given regulation. Such involvement means that a regulation is examined from a broader perspective than that of drafting officers and subject-area specialists in isolation, and increases the probability that all of the implications of the regulation (and any possible alternatives to the regulation) are considered and evaluated.[139]

(5) Summary of General Recommendations

(a) Substantive Recommendations

(i) Massive deregulation is not desirable in the field of dairy products regulation. As noted above, most aspects of dairy regulation serve the socially valuable purpose of

correcting market failure due to inadequate information. (Note that this comment does not necessarily apply to direct economic regulation of supply, price and entry conditions by milk marketing boards. This aspect of dairy regulation was deliberately excluded from the study.) As emphasized by the regulatory case studies in Chapter IV, however, mere disclosure of technical information is not always sufficient. Disclosure requirements must seek to educate the consumer, and indeed direct consumer education by government and industry may be required to ensure that technical information is interpreted meaningfully.

(ii) The gap left by the Labatt Breweries case should be filled with a new set of nationally consistent food product composition standards. The need is to prevent differing provincial standards from becoming an indirect barrier to trade. This may be accomplished through a constitutional amendment authorizing the federal government to set the standards, or through inter-provincial negotiation to ensure uniformity.

(iii) As was done in the case of the new federal butter packaging standard, wherever possible regulation should employ "performance" rather than "engineering" standards. In other words, regulations should specify the standard to be achieved, rather than how to achieve it. This allows the industry to adopt the most economical means of compliance, and indeed encourages development of less costly compliance procedures.

(iv) Both the federal and provincial governments should attempt to further reduce overlap and duplication in regulation and inspection of dairy processing, distributing and retailing. This may be accomplished through additional inter-delegation of the inspection function and closer inter-departmental consultation. There may be a need for

greater formalization of existing inter- delegation.

(b) Procedural Recommendation

(i) Both the prior economic evaluation and consultation requirements of the federal SEIA Policy should be retained, with much greater publicity and more active solicitation of inputs from non-government groups. Some "tightening" of the Policy may be required to ensure that all closely related new regulations are examined together, to assess their cumulative impact.[140] To the extent that resources permit, provincial governments are urged to implement similar prior evaluation programs.[141] Some funding of "public interest" intervenors may be necessary to ensure that the regulatory process is not dominated by industry representatives, to the detriment of the consumer interest.[142] It is vital that the consumer interest be adequately represented.

NOTES

1. For the purposes of this study 'regulation' is defined as "the imposition of rules by a government, backed by the use of penalties, that are intended specifically to modify the economic behaviour of individuals and firms in the private sector." [See Margot Priest, W.T. Stanbury and Fred Thompson, "On the Definition of Economic Regulation," in W.T. Stanbury, ed., Government Regulation: Scope, Growth, Process, (Montreal: Institute for Research on Public Policy, 1980), p. 5.] Consequently, regulation may be embodied in statutes or in 'regulations' - i.e., delegated legislation.

2. This Act sought to prevent the manufacture of imitation cheese and to control cheese labelling. On the early history of regulation of the Canadian dairy industry, see Chapter III, below, and and references cited therein.

3. Chapter 3 will present quantitative measures of the growth of regulation affecting dairy PDR. For some of the industry's concerns, see, for example, "Dairy Men Watch New Ontario System," Financial Post, Vol. 64, No. 39, April 4, 1970. For a different viewpoint, see "The Question of Milk," Canadian Consumer, Vol. 4, No. 35, December, 1974. Of course, in many cases business and consumer interests are directly opposed.

4. See P. Wygant et al, A Report by the Sector Task Force on the Canadian Food and Beverage Industry, (Ottawa: June, 1978), p. 5. The Task Force further argues that needless proliferation of regulations, compounded by overlapping jurisdictions, has significantly eroded business confidence. No evidence is offered in support of this assertion. However, the problem of federal-provincial overlap/duplication is extensively considered in Chapter IV of this paper.

5. See the text of the Prime Minister's letter to the Chairman of the Economic Council, July 12, 1978, and an excerpt from the original First Ministers' Communiqué, reprinted as Appendix 1 in Economic Council of Canada, Regulation Reference: A Preliminary Report to First Ministers, (Ottawa: Supply and Services Canada, November, 1978), at pp. 78-80.

6. See Richard Barichello, The Economics of Canadian Dairy Industry Regulation (Economic Council of Canada, Regulation Reference and the Institute for Research on Public Policy, Technical Report, 1981). See also Broadwith, Hughes and Associates, "The Ontario Milk Marketing Board: An Economic Analysis," in Ontario Economic Council, Government Regulation: Issues and Alternatives, (Toronto: 1978), at pp. 67-102, and H. Grubel and R. Schwindt, The Real Cost of the B.C. Milk Marketing Board (Vancouver: The Fraser Institute, 1979). For comparable U.S. studies, see Tanya

Roberts, "An Evaluation of Federal Milk Price Regulation: History, Impact and Options for Reform," in United States Senate, Committee on Governmental Affairs [Ribicoff Committee] Appendix to Volume VI, Framework for Regulation, Study on Regulation, (Washington, D.C.: December 1978), at pp. 486-585, or Paul W. MacAvoy, ed., Federal Milk Marketing Orders and Price Supports (Washington, D.C.: American Enterprise Institute for Public Policy Research 1977.)

7. The use of the term 'social regulation' in this context needs to be qualified. Most dairy regulation is not new - i.e., we are not referring to recent environmental or occupational health and safety regulations such as those discussed by William Lilley III and James C. Miller III, in "The New 'Social Regulation'," The Public Interest, Spring 1977, pp. 49-61. Indeed, as explained in Chapter 3, dairy regulation - even regulation of health and quality standards - has a long history in Canada.

8. See the data presented in Chapter 2, infra.

9. See the brief discussion in Chapter 2, infra, p. 10 and references cited therein.

10. For useful discussion of the limits to the federal power to regulate trade and commerce, Peter Hogg, Constitutional Law of Canada (Toronto: Carswell, 1977), pp. 266-275, and especially, on the power over interprovincial trade and commerce, pp. 268-272. The traditional allocation of constitutional jurisdiction over the dairy industry is discussed more extensively in Chapter III of this paper. Recent developments - especially the Labatt Breweries case - are analyzed in Chapter V.

11. See "The Historical Development of Dairy Regulation," Chapter IV, Part 1, infra.

12. See Canadian Food Processors Association, A Food Strategy for Canada (Ottawa, November 1977), p. 5.

13. See Table 3, Chapter 2 infra.

14. As Hartle has stated, "The volume of regulations extant is overwhelmingly large - so large in fact that if all the competent analysts in the world were to work diligently for a decade, they could not seriously consider them all .... A highly selective research approach is therefore imperative." See Douglas Hartle, Public Policy Decision Making and Regulation, (Montreal: Institute for Research on Public Policy, 1979), p. 143.

15. Specifically, the results of a recent highly competent incremental cost evaluation exercise carried out under the

new Federal Socio-economic Impact Analysis (SEIA) Policy are considered.

16. This Chapter is not intended as a comprehensive industry study. For additional information, see Chapter 7, "Dairy," in D.R. Campbell et al, Canadian Agriculture in the Seventies: A Report by the Federal Task Force on Agriculture (Ottawa: Queen's Printer, 1969), at 179-212. Though primarily concerned with the production sector, this chapter also provides useful discussion of PDR and the potential impact of fluid milk substitutes. See also the background paper upon which the Task Force's discussion is based, B.B. Perkins, J.H. Clark and R.G. Marshall, Canadian Dairy Policies, Task Force Working Paper, Ottawa 1969. Food Prices Review Board, Canadian Dairy Industry: Short Term Perspectives (Ottawa: March 1974) provides useful, though still somewhat dated, background. For recent developments in cheese processing and marketing, see V. McCormick, "The Cheese Industry in Canada, "Canadian Journal of Farm Economics, Vol. 14, No. 4, August 1979, pp. 3-7. Don Mitchell, The Politics of Food (Toronto: James Lorimer and Company, 1975), Chapter VI, "Milk, Butter and Cheese," pp. 115-144 presents an interesting analysis of the effects of corporate concentration in the industry. Unfortunately, he offers little evidence to support his conclusions. See also David Lees and James Lawrence, "Red Tape Does Not a Fine Cheddar Make," Harrowsmith, Vol. 111:3, No. 15, 1979, pp. 36-49 and the accompanying editorial by Lawrence on page 4. This article is primarily concerned with the effects of manipulation of industrial milk supply and price by the Ontario Milk Marketing Board in association with the Canadian Milk Supply Management Committee. These subjects are, of course, outside the scope of this paper. However, Lees and Lawrence also provide an interesting discussion of the trend towards concentration in cheese PDR. They suggest that government regulation has encouraged this trend. For historical background on the dairy industry, see V. McCormick, A Hundred Years in the Dairy Industry, supra note 2, and Harold A. Innis, ed., The Dairy Industry in Canada (Toronto: Ryerson Press for the Carnegie Endowment for International Peace, Division of Economics and History, 1937).

17. For additional background on the physical process, see Carl W. Hall and James W. Harper, Dairy Technology and Engineering (Westport, Connecticut: A.V.I. Publishing Co., 1976), or Lincoln Maximillian Lampert, Modern Dairy Products: Composition, Food Value, Processing, Chemistry, Bacteriology, Testing, Imitation Dairy Products (New York: Chemical Publishing Company, 3rd ed., 1975).

18. Of course, dairy "manufacturing" does not include all of dairy PDR. In fact, "manufacturing" corresponds roughly to the processing sector alone. But disaggregated data on value added in dairy distributing and retailing are not

available. For the precise definition of dairy products manufacturing, see Statistics Canada, Dairy Products Industry, Catalogue No. 32-209.

19. Source: Statistics Canada, Dairy Products Industry, 1979, Catalogue No. 32-209.

20. See Department of National Health and Welfare, Dietary Standard for Canada, (Ottawa: Information Canada, Revised ed., 1975), especially pp. 9-18, 19-23, 52-54, 55. More generally, see also Food Prices Review Board, What Price Nutrition (Ottawa: Information Canada, February 1975), and Stanislaw Kon, Milk and Milk Products in Human Nutrition Rome: United Nations, Food and Agriculture Organization, 1972).

21. See the discussion of rationales for dairy products regulation at the beginning of Chapter IV. This is not to preclude the possiblity that such regulation may also serve the underlying purpose of producer protection.

22. See, for example, Food Prices Review Board, Dairy Foods I: Prices (Ottawa, December 1975), especially pp. 1, 2, 14-23 and the summary at pp. vi-vii. The Board calls on Canadian governments to ensure low milk prices, arguing that "the retail price of milk products will be a major factor in determining the nutritional adequacy of Canadian, and particularly low income Canadian diets" (p. vi).

23. There is some question as to the reason for Quebec's greater than proportional share. Lees and Lawrence, supra note 13 at 41, suggest that the Canadian Milk Supply Management Committee has deliberately encouraged this trend, seemingly for political reasons. However, they offer no evidence to support this assertion. Quebec's greater share may reflect a true comparative advantage in production or processing.

24. On the role of the small rural cheese factories, see Lees and Lawrence, supra note 14.

25. Interviews. For additional background on the role of dairy co-operatives, see the interesting discussion in McCormick, supra note 2, at 124-142.

26. See Lees and Lawrence, supra note 14 and Mitchell, supra note 14. Note, however, that the larger firms' share in actual cheese production is not quite so large as it may seem. In some cases cheese marketed under the label of larger firms is actually produced by one of the smaller rural factories.

27. For example, Mitchell reports that Silverwood Industries owns important interests in Jersey Farms and Highland Dairy

Farms, Inc. (See the useful discussion in Mitchell, supra note 16.)

28. For useful general discussion and further details, see Mitchell, supra note 14. Ault Foods, owned by Labatt's, has recently purchased Dominion Dairies.

29. Allocative efficiency denotes a state in which society's scarce resources are optimally allocated among competing uses so as to maximize social welfare. Allocative inefficiency will arise where a firm charges a price in excess of marginal social cost. X-efficiency refers to efficiency in the production process; X-inefficiency occurs when a firm fails to produce on the efficient production function surface. (See Harvey Liebenstein, "Allocative Efficiency vs. X-Efficiency," American Economic Review, June 1966, pp. 392-415. Liebenstein suggests that in practice X-inefficiency causes more significant welfare losses than allocative inefficiency.) Finally, dynamic efficiency refers to efficiency in technical innovation - i.e., development and implementation of more efficient manufacturing processes. On economic inefficiency resulting from market concentration, see, generally F.M. Scherer, Industrial Market Structure and Economic Performance (Chicago: Rand McNally and Company, 1970), especially Chapter 2, pp. 8-38, Chapter 15, pp. 346-378 and Chapter 17, pp. 400-411.

30. Preventing regulations from encouraging such "undesirable effects on market structure" is one objective of the federal government's new Socio-Economic Impact Analysis (SEIA) Policy. See Treasury Board Canada, Administrative Policy Manual, Chapter 490, "Socio-economic Impact Analysis of Major New Health Safety and Fairness Regulations," p. 1.

31. See F.M. Scherer, Industrial Market Structure and Economic Performance, supra note 29, pp. 50-51.

32. For additional background on concentration and competition policy in food PDR, see R.M.A. Loyns and R.L. Louks, ed., Competition and Public Policy on Competition in the Canadian Food Industry (Winnipeg: University of Manitoba, Department of Agricultural Economics and Farm Management, Occassional Series, No. 7), May, 1977, and W. T. Stanbury, The Role of Competition Policy in a National Food Policy, Paper prepared for the Fourth Agricultural and Food Marketing Forum, "National Food Policy," Department of Agricultural Economics and Farm Management, University of Manitoba, January 16, 17, 1978. Stanbury states, at p. 37c:

> The absence of any effective review of marketing boards, together with current tariffs, quotas and inspection/grading regulations against imports (often heavily influenced, occasionally unconstitutionally, by the producer-dominated marketing boards), means

> that the scope for competition policy is more limited that it should be. In the food industries in particular, our competition policy may be something of a sheep in wolves clothing!

33. We must take care to distinguish between different kinds of concentration. The CALURA data measure control by "enterprises" - meaning corporations or groups of corporations under common control. Table 3 presents data on the number of manufacturing "establishments". For the precise definitions of these terms, see Statistics Canada, Corporations and Labour Unions Returns Act (CALURA) Reports, Part 1: Corporations, 1976, p. 34, and Statistics Canada, Dairy Products Industry, 1976, p. 3, respectively.

34. See R.M.A. Loyns, Farm to Food Prices (Economic Council of Canada, The Centre for the Study of Inflation and Productivity, Discussion Paper No. 157, January 1980), p. 61. Loyns further explains:

> The system of pricing under the CDC is as much political as it is economic, depending on the support price of butter and skim milk powder (determined by the Federal Cabinet), the amount of the [industrial milk] subsidy (also dependent on Cabinet), and the size of the export levy (dependent upon the volume of skim for subsidized export and the export price). (also p. 61).

35. The slower rise in the consumer price of fresh milk as compared with other dairy products is partly the result of deliberate government policy. For example, from the fall of 1973 to the fall of 1974, the federal government paid a $.05 per quart consumer subsidy on fluid milk. See, generally, Food Prices Review Board, supra note 22, and Food Prices Review Board, Dairy Foods II: Policy (Ottawa: February 1976). For a more current analysis of government price setting policies in the dairy industry see D. Peter Stonehouse, "Government Policies for the Canadian Dairy Industry," Canadian Farm Economics, Vol. 14, No. 1-2, February-April 1979. (Stonehouse does not analyze the "social" regulation studied in this paper.) See also Barrichello, supra note 7.

36. See Loyns, Farm to Food Prices, supra note 34, at p. 18.

37. For detailed information on functional form and estimation procedures, see Byron G. Spencer and Christine H. Feaver, The Consumption of Bread and Fluid Milk in Canada (Ottawa: Food Prices Review Board, July 1975), pp. 8-16. The estimates quoted are based on separately estimated single logarithmic demand equations. Because this approach makes no allowance for the simultaneous determination of demand and

supply, the estimates may be "biased". (See J. Johnston, Econometric Methods, New York: McGraw Hill, 2nd. ed., 1972, pp. 341-355.) These estimates are, however, in substantial agreement with those in W.F. Lu and R.G. Marshall, A Demand Analysis for Fluid Milk in Ontario, Ontario Agricultural College, University of Guelph, 1974, at least in the general conclusion that the demand for milk is both price and income inelastic.

38. See the foreword by the FPRB in Spencer and Feaver, id., p. iv.

39. Of course, the extent to which manufacturers will pass on cost increases to consumers also depends on the elasticity of supply. Unfortunately, no estimate of this is available. But it is still true that the less price elastic the demand for a commodity, the more manufacturers will be able to pass on costs imposed by regulation. The reasoning is analagous to the incidence of an ad valorem excise tax. On that subject, see Jack Hirschleifer, Price Theory and Applications (Englewood Cliffs, N.J.: Prentice-Hall, 1976), pp. 31-33.

40. See supra note 37.

41. See supra note 37.

42. It would, of course, be outside the scope of this paper to consider this hypothesis more thoroughly.

43. It is important to distinguish between the legal term 'regulations' and the more general term 'regulation'. 'Regulation' i.e., government imposition of rules modifying economic behaviour - may of course be enacted by issuing legal regulations. But regulation may also be embodied in statutes or other government rules such as municipal by-laws. (Formally speaking, municipal by-laws are delegated legislation, since the legal authority of a municipality is derived from the constitutional authority of the province in which it is situated.) On the legal meaning of the term regulation, see Robert D. Anderson, "The Federal Regulation-making Process and Regulatory Reform, 1969-1979," in W.T. Stanbury, ed., Government Regulation: Scope, Growth, Process (Montreal: Institute for Research on Public Policy, 1980), pp. 151-191, at 157-159. For a useful analysis of the general term 'regulation', see Margot Priest, W.T. Stanbury and Fred Thompson, "On the Definition of Economic Regulation," supra note 1.

44. For example, as is well-known, sulphur dioxide emission standards pose a special problem for non-ferrous metal smelters.

45. Section 92(13) of the British North America (B.N.A.) Act gives the provinces jurisdiction over 'Property and Civil

Rights in the Province'. Since 'civil rights' is deemed to include contractual rights, this gives the provinces authority over intra-provincial trade and commerce. In addition, section 92(16) gives the provinces authority over "Generally all Matters of a merely local or private Nature in the Province." For discussion, see Peter Hogg, Constitutional Law of Canada, supra note 10, at 295-320.

46. Section 91(2) of the B.N.A. Act gives the federal government exclusive authority to regulate interprovincial (and international) trade and commerce. (See Hogg, supra note 10, at 267-275.) But note the discussion that follows below.

47. See the judgement of Mr. Justice Estey for the majority in Labatt Breweries of Canada Limited v. Attorney General of Canada, (1980) 30 N.R. 496 and Dominion Stores v. the Queen (1980) 30 N.R. 399. The specific implications of these important cases for regulation of the dairy industry are discussed below much more extensively in Chapter III, part 2 and Chapter IV, below.

48. A federal regulatory scheme whose main purpose is the direct economic regulation of a commodity subject to interprovincial or international trade may validly "incidentally affect" intraprovincial trade where the incidental effect is essential to the efficient functioning of the regulatory scheme: Caloil v. Attorney-General for Canada [1971] S.C.R. 543 (Supreme Court of Canada). In this context "direct economic regulation" means regulation of prices, outputs, rates of return and conditions of entry. The Supreme Court's holding in the Caloil case may be distinguished from the case of federal food composition standards on the ground that unlike the case of food standards, in Caloil the intraprovincial regulation at issue was an essential aspect of the inter-provincial regulatory scheme. Furthermore, it is not clear that the reasoning in Caloil could ever extend to cover federal "social" regulation.

49. In addition, in the Labatt Breweries case, Mr. Justice Estey expressly declined to consider the validity of federal labelling laws. See Labatt Breweries, id., at p. 21.

50. See Labatt Breweries, id., the discussion in Chapter IV below, and references cited therein.

51. In keeping with the focus of this paper, this review does not consider the history of milk supply/return management. On that subject, see V. McCormick, A Hundred Years in the Dairy Industry, (Ottawa: Dollco, 1970) especially pp. 55-61, 71-123, and 160-181, and V. McCormick, "Dairy Price Support in Canada, 1962-1972, "Canadian Farm Economics, Vol. 7, October 1972, pp. 2-7.

52. See Melvin J. Hinich and Richard Staelin, "Regulation of the U.S. Food Industry," in United States Senate, Committee on Governmental Affairs [Ribicoff Committee], Appendix to Volume VI, Framework for Regulation, Study on Regulation (Washington, D.C.: December 1978), at p. 397, note 1. This informative study will be referred to more extensively in Chapter IV.

53. Richard A. Posner has argued extensively that economic efficiency is the underlying policy objective of the common law. See R.A. Posner, Economic Analysis of Law (Boston: Little, Brown and Co., 2nd edition, 1973).

54. See Carman Baggaley, The Emergence of the Regulatory State in Canada, 1890-1939, (Ottawa: Economic Council of Canada, Regulation Reference Working Paper), Chapter 4, at 10. Baggaley's paper constitutes an extremely interesting survey of the history of government intervention in the Canadian economy. Some of the historical discussion in this paper is drawn from Baggaley. For a more thorough chronology of events and useful description of legislation not mentioned in this paper or Baggaley's, see V. McCormick, A Hundred Years in the Dairy Industry, supra note 57, especially at p. 48-52, and, for Ontario legislation, pp. 77-81. For additional background, see also L.I. Pugsley, "The Administration and Development of Federal Statutes on Foods and Drugs in Canada," Medical Services Journal, Vol. 23, No. 3, March 1967, pp. 387-449, especially pp. 388-400, 423-426, and 428-429.

55. See Baggaley, supra note 54, Chapter 4, at 10.

56. The ban on oleo margarine was lifted in 1917 as a temporary response to the pressures of the war time economy. The government introduced legislation to lift the ban permanently in 1921, but backed down under pressure from the dairy industry, settling for a one and a half year extension period before the ban was re-imposed. See Canada, Parliament, House of Commons, Debates, 1921, pp. 3759-3760, 3850-3896, and 3905-3906.

57. See V. McCormick, supra note 51, at 78.

58. Amendments introduced in 1937 extended municipal authority to allow regulation of the quality of milk and cream, and licensing of vendors. The City of Ottawa by-laws considered in Part 2 below were originally enacted pursuant to the Milk and Cream Act of 1927, and continued pursuant to successor legislation.

59. See Canada, Parliament, House of Commons, Debates, 1893, pp. 2460-2562.

60. See Canada, Parliament, House of Commons, Debates, 1921, pp. 4437-4438.

61. Interviews.

62. See V. McCormick, supra note 51, p. 184.

63. See Canadian Federation of Agriculture v. Attorney General for Quebec (The Margarine Reference) [1951] A.C. 179. The Judicial Committee of the Privy Council, which heard the case on appeal from the Supreme Court of Canada, held that the economic objective of protecting an industry from its competitors could not be supported by federal authority over criminal law. This objective meant that in 'pith and substance' the law was in relation to property and civil rights in the province. Section 92(13) of the British North America Act gives jurisdiction over this field to the provinces.

64. As indicated in Table 2, annual per capita domestic disappearance of creamery butter decreased from 18.3 lbs. in 1958 to 10.0 lbs. in 1978. In contrast, annual per capita consumption of oleo margarine rose from 8.6 lbs. in 1958 to 13.0 lbs. in 1978. The attempt to control the use of oleo margarine can readily be interpreted in terms of George Hilton's theory of "The Basic Behaviour of Regulatory Commissions." Hilton hypothesizes that when economic regulation facilitates super-normal returns to protected products, substitutes will be produced in an attempt to 'skim off' profits from the protected products. This necessitates expanding the scope of regulation, to control the substitute. See George W. Hilton, "The Basic Behaviour of Regulatory Commissions," American Economic Review, Vol. 62, May 1972, pp. 47-54.

65. The proposition that much government regulation serves the interest of politically effective groups - most frequently, the established firms in a regulated industry - is consistent with a great deal of empirical evidence examined during the past decade. Most of the evidence, however, concerns direct economic regulaton (i.e., supply/return management) in the United States. [See W.A. Jordan, "Producer Protection, Prior Market Structure, and The Effects of Government Regulation," Journal of Law and Economics, April 1972, pp. 151-176, Richard A. Posner, "Theories of Economic Regulation," Bell Journal of Economics, Vol. 5, No. 2, Autumn 1974, pp. 335-358, and George Stigler, "The Theory of Economic Regulation," Bell Journal of Economics and Management Science, Vol. 2, No. 1, Spring 1971, pp. 3-21.] But in view of the strong historical evidence in Carman Baggaley, The Emergence of the Regulatory State in Canada, 1890-1939, supra note 2, and other sources, it should now be formally recognized that much 'social' regulation (i.e., health standards, product quality and composition standards etc.) can also be also solicited by the industry for its own benefit. For corresponding evidence from the U.S., see C.O. Jackson, Food and Drug Legislation in the New Deal (Princeton, N.J.: Princeton University Press, 1970) and

Gabriel Kolko, The Triumph of Conservatism (Chicago: Quadrangle Books, 1967, first published in 1963). Indeed, the role of quality, composition and sanitation standards as indirect barriers to entry is emphasized in Armen A. Alchian and W.R. Allen, Production and Exchange: Competition, Co-ordination and Control (Belmont, California: Wadsworth, 1973).

66. See Dominion Stores v. the Queen (1980) 30 N.R. 399.

67. As emphasized by Priest and Wohl, relatively short and uncomplicated legal drafting may yet create wide ranging regulatory authority. See Margot Priest and Aron Wohl, "The Growth of Federal and Provincial Regulation of Economic Activity, 1867- 1978," in W.T. Stanbury, ed., Government Regulation: Scope, Growth, Process (Montreal: Institute for Research on Public Policy, 1980), pp. 69-150, at pp. 83, 86.

68. For an explanation of the basis of and limits to this doctrine, and of the doctrine of "paramountcy" of federal standards in areas of concurrent jurisdiction, see Peter Hogg, Constitutional Law of Canada, supra note 10, at pp. 101-114.

69. See Jack Hirschleifer, Price Theory and Applications, supra note 41, ch. 9, and references cited therein.

70. Regulation can also be used as an instrument of redistribution of income, or to achieve cultural objectives. Most social regulation, however, is justified by an 'efficiency' rationale. For a complete list and explanation of such rationales, see Economic Council of Canada, Responsible Regulation [Interim Report on the Regulation Reference] (Ottawa: Minister of Supply and Services Canada, November 1979), pp. 46-50, from which some of the following discussion is drawn. See also H.G. Baumann and B. Montador, Government Intervention in the Marketplace and the Case for Social Regulation (Ottawa: Treasury Board Canada and Consumer and Corporate Affairs Canada, Series of Studies on Government Regulatory Activity, 1978).

71. As explained by Schultze,

> Market transactions cannot be an efficient method of organizing human activity unless both the buyer and the seller understand the full costs and benefits to them of the transaction they undertake, including any side effects that impinge on their own welfare.

See Charles L. Schultze, The Public Use of Private Interest (Washington, D.C.: The Brookings Institution, 1977), p. 36.

72. But we should not assume that in the absence of government intervention, there would be no limit on the amount of fecal contamination. In fact, however imperfectly, consumers demand for sanitariness would be felt in the market.

73. This point is emphasized by Hinich and Staelin, supra note 52, at pp. 402, 403.

74. See the federal Food and Drug Regulations, Part B, Division 8, "Dairy Products," and, for the Province of Ontario, the Milk Act and/or the Farm Products Grade and Sales Act. For example, Food and Drug Regulation B.08.01 requires that,

> Milk Powder, Whole Milk Powder, Dry Whole milk or Powdered Whole Milk
> (a) shall be dried milk;
> (b) shall contain not less than
> (i) 95 per cent milk solids, and
> (ii) 26 per cent milk fat; and
> (c) shall contain added vitamin D in such an amount that a reasonable daily intake of the milk contains not less than 300 International Units and not more than 400 International Units of vitamin D.

75. See Economic Council of Canada, Responsible Regulation, supra note 70, p. 47, and references cited therein.

76. This possibility is also raised by Hinich and Staelin, supra note 52, at pp. 410-413. They emphasize that the effects of information disclosure depend on the sophistication of the individual consumer.

77. For additional background on overlap and duplication in food PDR, see David R. Hughes and Robert G. Shapiro, Analysis of the Effects of Government Regulations on the Canadian Fruit and Vegetables Processing Industry (Ottawa: Economic Council of Canada, Regulation Reference Working Paper, November 1980) and Keith Leckie and John Morris, Study on Government Regulation in the Red Meat Industry (Ottawa: Economic Council of Canada, Regulation Reference Working Paper, October 1980).

78. The information in this section is taken from various statutes and regulations, interviews with dairy officials and executives, and five useful background papers, namely, A.B. Morrison, "The Canadian Approach to Food and Drug Regulations," Food Drug Cosmetic Law Journal, Vol. 30, No. 11, November 1975, pp. 631-643, Robert E. Curan," Canadian Regulation of Food, Drugs, Cosmetics and Devices - An Overview," Food Drug Cosmetic Law Journal, Vol. No. 11, November 1975, pp. 644-653, D.G. Chapman, "Current Topics in in Canadian Food Regulatory Affairs," Food Drug Cosmetic Law Journal, Vol. 30, No. 22, November 1975, pp. 654-658, James

A. Robb, "Comments and Views from the Perspective of Canadian Food Lawyer," Food Drug Cosmetic Law Journal, Vol. 30, No. 11, November 1975, pp. 659-664, and L.I. Pugsley, "The Administration and Development of Federal Statutes on Foods and Drugs in Canada," Medical Services Journal, supra note 54.

79. See Canadian Food Processors Association, A Food strategy for Canada (Ottawa: November 1977), p. 5.

80. See A.B. Morrison, "The Canadian Approach to Food and Drug Regulation," supra note 68, p. 642.

81. See, for example, M.D. Beckman and R.M. Knudson, Food Packaging and Labelling Costs and the Cost Effects of Recent Government Legislation (Ottawa: Department of Consumer and Corporate Affairs, 1977).

82. As Dr. D.G. Chapman, Director General of the Food Directorate of the Department of National Health and Welfare has stated,

> In Canada there is no generally recognized as safe (GRAS) list of food additives as there is in the United States. A chemical is either on the permitted list of food additives or it is not. Included in the list are the foods to which it may be added, together with the amount of the food additives which may be present. If the chemical is not on the permitted list, foods containing it are in violation of the Regulation.

See D.G. Chapman, "Current Topics in Canadian Food Regulatory Affairs, "supra note 78, p. 655. For the definition of a "food additive", see the Food and Drug Regulations, Consolidated Regulations of Canada, C.870, Part B, Division 1, B.01.001.

83. See the Food and Drug Regulations, id., Part B.

84. For useful technical background, see Lincoln Maximillian Lampert, Modern Dairy Products: Composition, Food Value, Processing, Testing, Imitation Dairy Products, supra note 17.

85. Interviews.

86. See SOR/79-80 (Canada Gazette, Part II, Vol. 113, No. 22, November 28, 1979, pp. 4260-4314). These regulations replace the old Canada Dairy Products Regulations under the Canada Dairy Products Standards Act.

87. For useful technical background, see J.M. deMan, T.S. Rajan and R. Pimental, Photochemical Oxidation of Butter, 1974, and "Better protection for dairy foods needed with reduced lighting in dairy cases and light resistant packaging," Modern Dairy, January/February 1978.

88. On the general advantages of performance over engineering standards, see Charles L. Schultze, The Public Use of Private Interest, supra note 71.

89. See Fred O'Riordan, "Assessing the Socio-economic Impact of Social Regulations: Dairy Products Regulations," in Agriculture Canada, Food Market Commentary, Vol. 2, June 1980, pp. 29-34. This short study represents an extremely useful contribution. However, it considers only a few select new regulations promulgated by Agriculture Canada. It does not deal with other aspects of the regulatory mosaic, or the overlap/duplication issue. For the SEIA Policy directives and guidelines, see Treasury Board Canada, Administrative Policy Manual (Ottawa: Supply and Services Canada, 1979), Chapter 490, "Socio-Economic Impact Analysis." For a review, see Robert D. Anderson, "The Federal Regulation-Making Process and Regulatory Reform, 1969-1979," supra note 43.

90. See O'Riordan, id., Table 2, p. 33. For a much more general analysis of the costs of compliance of federal regulation of food packaging and labelling, see M.D. Beckman and R.M. Knudson, Food Packaging and Labelling Costs and the Cost Effects of Recent Government Legislation (Ottawa: Department of Consumer and Corporate Affairs, 1977).

91. A proposed regulation qualifies as 'major' if it is anticipated to impose social costs in constant (1979) dollars exceeding: (1) $10 million in a single continuous period of twelve months; (2) $10 + 2X million when discounted at 10 percent over a period of X years; or (3) $35 million when discounted at 10 percent over the foreseeable future.

92. Some butter producers in Alberta and British Columba have voluntarily switched to foil wrappers, but there is some indication that this was done in anticipation of federal regulation. Quebec has already passed a new regulation similar to the federal one. See O'Riordan, supra note 89, p. 31.

93. For additional background, see Keith Leckie and John Morris, Study on Government Regulation in the Meat Industry, supra note 77, at pp. 90-91.

94. See Leckie and Morris, supra note 77, at p. 90.

95. As noted by Leckie and Morris, supra note 77, at p. 91, it would be useful to obtain detailed quantitative information on the effects of Best Before dating. Unfortunately, such information is generally unavailable.

96. See "Ottawa concerned that 'natural' foods may be misleading description", Globe and Mail, August 16, 1980, p. B1.

97. See Globe and Mail, id.

98. See Globe and Mail, id.

99. See Globe and Mail, id.

100. Statement of Ronald Siwicky, Consumer Fraud Protection Branch, Department of Consumer and Corporate Affairs, as reported in Globe and Mail, id.

101. Richard Benjamen, Director of Marketing, Dominion Dairies, has stated:

> We were willing to refrain from stating that our yogurt was a natural food so long as other companies followed a similar policy with their products.

See Globe and Mail, id.

102. Saccharine, which can cause cancer in laboratory animals, is a classic example.

103. See the Food and Drug Regulations, section B.08.048.

104. See Government of Quebec, Regulation Respecting Microbiological and Cleanliness Standards for Dairy Products, O.C. 3767-72.

105. This was acknowledged by both industry and government representatives interviewed for this study.

106. See Hinich and Staelin, "Regulation of the U.S. Food Industry," supra note 52, at pp. 395 and 399-401.

107. As Hinich and Staelin ask, "Can we afford to throw away food containing harmless filth in a time of drought and other agricultural calamities? How much are we willing to pay for very clean food?" (supra note 52, p. 401).

108. For useful background on the historical development of agricultural marketing boards and their legal powers, see Michele Dawe Veeman and Alwyn Loyns, "Agricultural Marketing Boards in Canada," in S. Hoos, ed., Agricultural Marketing Boards: An International Perspective (Cambridge, Mass.: Ballinger 1979), pp. 59-78. See also R.M.A. Loyns, "A Comparison of Legislative Aspects of Agricultural Market Regulation in Canada and the U.S.," Canadian Journal of Agricultural Economics, Vol. 19, No. 1, July 1971, pp. 35-46.

109. See Hogg, Constitutional Law of Canada, supra note 10, at pp. 101-114.

110. See John C. Pattison, "Dividing the Power to Regulate," in Michael Crommelin, ed., Canadian Confederation at the Crossroads (Vancouver: The Fraser Institute, 1980), pp. 109-141. Trebilcock et al assert, "Canada has an extremely weak record of commitment to uniformity of legislation relative to other federal states." See M. Trebilcock et al, "Restrictions on the Interprovincial Mobility of Resources: Goods, Labour and Capital, in Ontario Economic Council, Intergovernmental Relations (Toronto: 1977). For additional background, see A.E. Safarian, Canadian Federalism and Economic Integration (Ottawa: Information Canada, 1974).

111. See Economic Council of Canada, Responsible Regulation, supra note 70, at p. 23.

112. See Labatt Breweries of Canada Limited v. The Attorney General of Canada, Supreme Court of Canada, December 21, 1979.

113. See the British North America Act, s. 91(27).

114. See A.B. Morrison, "The Canadian Approach to Food and Drug Regulations," supra note 78, at pp. 635, 636.

115. See the British North America Act section 91(2) and the preamble to section 91, respectively. The power over trade and commerce has two branches: the general branch and the interprovincial and international trade branch. The general branch is very narrowly construed. In the words of Sir Montague Smith, it does not provide authority to prescribe "minute rules for regulating particular trades." [See Citizens Insurance Company of Canada v. Parsons (1881) 7 App. Cas. 96 (Judicial Committee of the Privy Council), at p. 112.] For additional background, see Hogg, Constitutional Law of Canada, supra note 10, pp. 267-276. On the limits to Parliament's power to make laws in relation to peace, order and good government, see Hogg, supra, note 10, pp. 241-266.

116. The Court's holding that food composition standards are not valid criminal law is puzzling, to say the least. I believe it rests on a failure to appreciate the purpose of food composition standards. The Court implicitly acknowledges that regulations designed to prevent food adulteration are valid criminal law, but its conception of the meaning of adulteration is artificially restricted to contamination by restricted substances. Thus, at p. 9, Mr. Justice Estey states;

> ... there are some regulations which deal in precise terms with the adulteration of all foods. These regulations include lists of substances prohibited in the production of food. No challenge is made with respect to these regulations.

But as the Court apparently failed to realize, most food composition standards are also designed to prevent a form of adulteration - namely "economic adulteration", or degradation of quality. Had the Court realized this, it might easily have held that the regulations in question were valid criminal law.

117. See Jacob S. Ziegel, "An Ominous Setback for Food Standards in Court Rulings," Globe and Mail, June 20, 1980, p. 7.

118. See "Legal confusion endangers health, says CAC," Montreal Gazette, May 15, 1980, p. 18.

119. See James C. MacPherson, "Economic Regulation and the British North America Act: Labatt Breweries and other Constitutional Imbroglios," Paper prepared for the 10th Annual Workshop on Commercial and Consumer Law, University of Toronto, October 17, 1980. Revised version published in Supreme Court Law Review, vol. 2, January 1981.

120. See MacPherson, supra note 119, pp. 40-41.

121. Such an amendment is favoured by both Professor Ziegel and Professor MacPherson. See Ziegel, supra note 117, and MacPherson, supra note 119, pp. 40-41.

122. See MacPherson, supra note 19, p. 40.

123. See MacPherson, supra note 19, p. 24.

124. See Canadian Food Processors Association, A Food Strategy for Canada, (Ottawa: November 18, 1977), p. 5. Leckie and Morris make a similar but not identical recommendation. They recommend a single unified federal inspection system for red meat. See Leckie and Morris, supra note 77. p. 115.

125. This point was stressed by one government participant at the Economic Council of Canada's Professional Conference on Regulation Research, April 1980.

126. See Economic Council of Canada, Responsible Regulation, supra note 70, Chapter 6, pp. 69-87, for useful analysis of these and other recommendations for improving the regulatory decision-making process. For subsequent discussion, see also House of Commons, Parliamentary Task Force on Regulatory Reform, Report, (Ottawa: December 1980), pp. 7-16; 19-21.

127. See A.B. Morrison, "The Canadian Approach to Food and Drug Regulations," supra note 78 and L.I. Pugsley, "The Administration and Development of Federal Statutes on Foods and Drugs in Canada," supra note 78.

128. As the Economic Council of Canada states, "Consumers and certain other interest groups believe they are inadequately represented in hearings...." See Economic Council of Canada, Responsible Regulation, supra note 70, at p. 4.

129. See Treasury Board Canada, Administrative Policy Manual, Chapter 490, "Socio-economic Impact Analysis," p. 10.

130. See Treasury Board Canada, id., pp. 10, and 11.

131. See "Statement by Peter Meyboom before the Parliamentary Task Force on Regulatory Reform," September 16, 1980.

132. See id., p. 8.

133. See Treasury Board Canada, "Socio-economic Impact Analysis," supra note 129.

134. See Economic Council of Canada, Responsible Regulation, supra note 70, pp. 76-77.

135. See House of Commons, Special Committee on Regulatory Reform, Report, supra note 126, pp. 14-16.

136. See Fred O'Riordan, "Assessing the Socio-economic Impact of Social Regulations: Dairy Products Regulations," supra note 89.

137. The Economic Council of Canada has suggested that the current SEIA requirements may be "too ambitious." See Economic Council of Canada, Responsible Regulation, supra note 70, at p. 113, note 20.

138. The criteria for determining whether a proposed regulation is "major" or "minor" are listed in Treasury Board Canada, "Socio-Economic Impact Analysis," supra note 129, Appendix B, pp. 23-24. The most important criterion - namely the one concerning social costs - is given in this paper, note 91 supra.

139. See Fred O'Riordan, "Assessing the Socio-economic Impact of Social Regulation: Dairy Products Regulations,"supra note 89, p. 34.

140. The SEIA Policy could be tightened in other ways. First, it may be necessary to give the Treasury Board a "veto" power to disallow regulations based on inadequate SEIAs. As a radical alternative, some observers of the U.S. regulatory process have proposed a legislated mandatory benefit-cost test subject to judicial review - i.e., a requirement that regulations must confer greater benefits than costs, if they are to be legally valid. See James C. Miller III, "Prepared Statement before the Subcommittee on Economic Stabilization of the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives," Washington, D.C., March 19, 1980.

141. For an overview of recent provincial initiatives toward reforming the regulatory process, see G. Bruce Doern, Rationalizing the Regulatory Decision-making Process: The Prospects for Reform, (Ottawa: Economic Council of Canada, Regulation Reference Working Paper, 1979), especially pp. 47-61.

142. On the need for funding public interest groups, see Economic Council of Canada, Responsible Regulation, supra note 70, p. 82. In addition, the Parliamentary Task Force on Regulatory Reform recommends expanding the practice of awarding costs to public interest intervenors in proceedings before federal regulatory agencies. See House of Commons, Task Force on Regulatory Reform, Report, supra note 126, pp. 49-51.

APPENDIX

A. CANADA 1980

(1) Canada Agricultural Products Marketing Act, R.S.C. 1970, c. A-7, as amended.

Regulations:
C.R.C., Vol. II., c. 131, 132, 143, 155, 156, 163, 214, 215, 216, 217, 245, 246, 247, 248, 249, as amended.*
SOR/78-788, SOR/80-90.

(2) Canada Agricultural Products Standards Act, R.S.C. 1970, c. A-8.

Regulations:
SOR/79-840, SOR/80-598.
(Replaces Dairy Products Regulations made pursuant to old Dairy Products Standards Act.)

(3) Canadian Dairy Commission Act, R.S.C., c. C-7, as amended.

Regulations:
C.R.C., Vol. II, c. 604.

(4) Cheese and Cheese Factory Improvement Act, R.S.C. 1970, c. C-17.

(5) Consumer Packaging and Labelling Act, S.C. 1970-71-72, c. 41, as amended.

Regulations:
C.R.C., Vol. IV, c. 417, as amended.

(6) Food and Drugs Act, R.S.C. 1970, c. F-27, as amended.

Regulations:
C.R.C., Vol. VIII, c. 870, as amended.

(7) Milk Test Act, R.S.C. 1970, c. M-13.

Regulations:
C.R.C., Vol. XI, c. 1037.

(8) Weights and Measures Act, S.C. 1970-71-72, c. 36, as amended.

Regulations:
C.R.C., Vol. XVIII, c. 166, as amended.

B. CANADA HISTORICAL

(1) Dairy Industry Act, 1914, 4-5 Geo. V, c. 7.

(2) Dairy Produce Act, 1921, 11-12 Geo. V, c. 28.

(3) Dairy Products Act, 1893, 56 Vic., c. 37.

(4) Inland Revenue Act of 1875, 37-38 Vic., c. 8, s. 1.

C. ONTARIO Current

(1) The Milk Act, R.S.O. 1970, c. 273, as amended.

Regulations:
R.R.O. 1970, Regulations 580-602, as amended.

(2) Farm Products Grades and Sales Act, R.S.O. 1970, c. 161.

Regulations:
R.R.O. 1970, Reg. 291*

(3) Public Health Act, R.S.O. 1970, c. 377, as amended.

Regulations:
R.R.O. 1970, Regs. 713 and 714, as amended.*

D. CITY OF OTTAWA

(1) By-law 9915, Regulating the Licensing of Milk Vendors and the Production for Sale and the Sale of Milk Within the City of Ottawa

(2) By-law 268-56, Respecting Noises and Public Nuisances (this by-law prohibits retail delivery of milk before 7:00 A.M.).

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* Dairy industry specific regulations only.