

CANADIAN MONOPOLIES AND COMBINATIONS

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by

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NOTE ON ACCOUNTING TERMINOLOGY

Net Worth is defined as capital, surplus and reserves out of surplus.

Net Operating Profit is defined as net earnings before taxes, depreciation, bond interest and premiums paid on share or bond redemption or profits made on sales of shares or bonds.

Net Operating and Other Income is defined as net income from all sources before taxes, depreciation and bond interest.

Net Profit Available for Dividends is self-explanatory. Sales in all cases are sales after deduction of returns and allowances.

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CHAPTER 1

THE RISE OF CONCENTRATION

Introduction

Monopoly is one of those economic terms that is widely misunderstood by laymen and diversely interpreted by experts. Because of this confusion, this thesis on Canadian Monopolies and Combinations begins with a discussion of terminology.

Monopoly, in the practical sense, refers to the single¹ control of the sources of supply of a commodity. In theory it also involves the absence of readily available substitutes and therefore a degree of price control. Because of the difficulty of evaluating this latter aspect, in this discussion the practical definition of monopoly will be used. Monopoly looks exclusively at the supply side of the market. There may be just as much limitation of competition on the buyers' side. Exclusive control of this aspect is termed monopsony. At the other extreme is pure competition which exists when all sellers offer an identical good and there are so many sellers that the amount offered by any one of them is too small a portion of the total supply to have any appreciable influence on the price.² On the buyers' side of the market

1 Bye, R.T., Principles of Economics, fourth edition. (New York, F.S. Croft & Co. 1945), Page 133.

2 Ibid., Page 347.

pure competition exists where there are so many buyers that the amount taken by any one of them is too small a portion of the total purchases to have any appreciable influence on the price. Both monopoly and pure competition, as defined, are rare. Diamonds and nickel are among the closest approximations to monopoly of a natural resource and the market for a common variety of wheat or cotton is traditionally an example of pure competition. Between these two extremes lie the great mass of economic activity under conditions of imperfect or monopolistic competition. The latter exists where sellers offer closely competing rather than identical goods and/or there are so few sellers (buyers) that the amount offered (taken) by any one of them is a sufficiently large proportion of the total purchases to have an appreciable influence on the price.¹ In the business world this condition includes, oligopoly where a small number of sellers control the total supply, follow-the-leader industries, where there are many firms but a few are predominantly large and control conditions in the industry, and product differentiation where the producer has some degree of monopoly through exclusive control of his own brand or trade-mark.

The terms "monopoly" and "monopolistic" carry bad implications. Pictures of the few profiting at the public expense and of exploitation and misery are brought to the minds of many readers. The latter fail to realize that monopolies are not necessarily evil per se. This error is readily under-

¹ Ibid., page 371.

standable. The history of the great majority of monopolies has provided adequate justification for these views. On the other hand, monopolies such as the post office, telephone and mint are in the public interest. The term "monopolistic" is so broad that it can well be applied to all but a few industries that approximate conditions of practical monopoly or of pure competition. The term "industrial combination" is equally broad. It may be defined as a method of economic organization by which a common control of greater or lesser completeness is exercised over a number of firms that hitherto have, or could operate independently.¹ This control may be permanent or temporary, for all or some purposes. Thus industrial combinations whether horizontal and/or vertical often involve monopolistic competition or monopoly.

Before we can pass judgment on any industry the conditions in that particular field should be examined and the standard of public interest should be applied. It is for this reason that the Canadian monopolies and combinations discussed in this thesis are treated individually, and then some general conclusions drawn as to results and remedies.

Before this analysis can be conducted intelligently it is necessary to outline the chief features of the Canadian economy. The reasons for the growth of monopolistic enterprise and the methods used therein must be examined. Certainly no intelligent remedies can be formulated without

1 MacGregor, D.H., Industrial Combination. (London, Geo. Bell & Sons, 1906), Page 1.

knowledge of these factors.

Factors in the Growth of Concentration

The tendency towards concentration in Canadian industry began with the rise of the corporation. In the early days Canadian law was English Common Law except where modified by statute. As early as 1834 the British Parliament gave the common law company, legal entity by Letters Patent. The first general companies legislation in the United Provinces of Canada, however, was not passed till 1849. At first the corporate form of enterprise was not particularly popular, as the simpler forms of organization could, in the main, obtain sufficient capital. The need for larger and larger amounts of capital was to be the outstanding basis for the development and growth of the corporation. It was not until the turn of the century that this form of enterprise came into its own¹ in Canada.

Technological developments had brought improvements in transportation. In Canada, the railway building boom of the "sixties" had linked the East and West. Wider markets were now open. Immigration and expansion in the Prairies during the wheat boom of the late nineteenth and early twentieth centuries provided added stimuli. Technological progress with its emphasis on machinery and steam had demonstrated the advantages of centralization and large-scale production. Improvement in transportation and growing markets brought

¹ Report of the Royal Commission on Price Spreads., (Ottawa Printer to the King's Most Excellent Majesty, 1937)

these benefits within reach. The corporate form of business organization provided the huge amounts of capital necessary. The latter also brought the division of ownership and control which proved to be so important in the building of large corporate empires.

The larger business units appeared to give general promise of lower cost production. Size became the measure of the success of an enterprise. Even where larger firms were unable to produce at a lower cost than their competitors, they could engage in ruthless price warfare. They were able to sell below cost and absorb losses out of their huge capital until smaller competitors were driven from the field. Cut-throat competition was self-annihilating. Only the strongest survived. The advantages of co-operation became obvious to the remaining firms. Many business men came to believe that the advantages of expansion were indefinitely cumulative. Here they were mistaken.

A growing body of evidence today supports the view that some of the largest firms have reached the point or passed the point of increasing returns to scale of plant.¹ It is obvious that the size, growth and efficiency of such corporate empires is limited, for example, by human managerial ability. Cumbersome production and administration, neglect of detail and extravagance result when this boundary is passed.

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- 1 Clark, J.M., "Towards a Concept of Workable Competition", American Economic Association, Readings in the Social Control of Industry. (Philadelphia, Blakiston Co. 1942), page 463.
 Simons, H.C., Economic Policy for Free Society. (Chicago, University of Chicago Press, 1948.), Pages 58-60.
 Stigler, G.J., Theory of Price. (New York, The MacMillan Co, 1947), page 138.

The stagnation argument provides another explanation for the growth of monopolistic enterprise. The rapid expansion of the last century was based upon the triple foundation of technological innovation, the opening of new territories and resources, and population growth. These factors made possible not only a rising real income but also a reasonably high level of employment of resources. They offered plenty of opportunities for profitable investment.

Today there are no more important areas to be opened and population growth has definitely slowed. As a result, we are more and more dependent on technology to provide the necessary opportunities for capital investment. Insofar as it fails to do so, increased competition, lower returns on investment, lower interest rates and profits are probable results possibly culminating in economic stagnation. The "stagnationists" do not deny rapid technological change but rather, believe that such change recently has been "capital-saving" rather than "capital-requiring". They point out that Kuznet's data of ten year averages shows a falling trend in the ratio of output of producer's goods to that of final products from 1919 to the beginning of World War II. They emphasized the fact that the larger the amount of capital in the country, the greater the depreciation reserves will be. Such allowances bear no relation to any specific worn-out machine. These reserves allow the modernizing and improving of capital equipment in line with new technology without tapping any new

1 Estey, J.A., Business Cycles. (New York, Prentiss-Hall, Inc. 1941.), Page 147.

¹
 savings. If recent technology is "capital-saving" it can hardly provide sufficient opportunities for new investment, in the face of the decline of the other two stimuli, population growth and territorial expansion. Large investors and ² management are probably already feeling the effects. The tendency towards increased concentration is the result as these people attempt to maintain the flow of profits by controlling the market.

From the foregoing summary, it would seem that the entrepreneur in many fields of endeavour was forced to combine in order to survive. In that case monopolistic tendencies would be the logical result of our economic development. The fact that many entrepreneurs did not combine and that independent, individual firms have successfully met the competition of combinations seems to invalidate this argument as a general explanation of the growth of concentration. Defenders of monopoly also argue that combinations brought great economies eliminating the wastes of competition and benefitting society. Even if it were established that combinations resulted in more economical production, it does not necessarily follow that the monopolistic producer would pass this saving on to the consumer and to society. Though there may be some truth in this viewpoint it is not the whole explanation. It overlooks the human element, the individual's freedom of choice, and the influence of the mores of society.

1 Terborg, G. . The Boxy of Economic Maturity, a Summary. Page 28.

2 Thompson, W.S., Population Problems, (New York and London, McGraw-Hill Book Co. Inc. 1942), page 307.

If the common and primary purpose of monopolies and combinations was the avoidance of the ruin and wastes of competition, then we should expect to find the greatest activity along these lines during depression. The time for salvation of an industry for continued public service is when markets are disorganized. If, on the other hand, the reaping of profits rather than the avoidance of losses was the chief motive, then we would expect the greatest activity along these lines during prosperity. Prospects of high gains are never so good that prospects of higher gains may not be more attractive to the business man. It is unlikely that any entrepreneur who is of necessity largely driven by economic motives, would pass up an opportunity to further augment his income. Because of the variety of forms which monopolistic organization takes, it is difficult to ascertain the relation between the combination movement and the business cycle. Looser forms of control such as pools, or gentlemen's agreements often remain secret. An analysis of Canadian consolidations shows that the majority of them occur in boom periods. In 1928, there were sixty-eight, in 1929, sixty-seven, but in 1933, only ¹ six. This is not to say that all of these consolidations were based upon gross, relentless searching for monopolistic advantages. Certainly some of them represented a judicious expansion of the existing facilities of a growing business, the dividing line is largely a matter of personal judgment. It is equally true that the search for profit was a dominant

¹ Report of the Royal Commission on Price Spreads., (Ottawa: Printer to the King's Most Excellent Majesty, 1937), page 28.

motive in the majority of cases. One might argue that this is as it should be, for is not the profit motive the incentive, the driving force of our economic system? In theoretical economic analysis do we not assume that the individual will attempt to maximize his income? Yes, we do but with growing reservations. When this is done at the expense of society as a whole through the monopolistic control of prices, it can not be condoned.

Here we might ask why the profit motive is dominant. In the period of extraordinary change which we term the industrial revolution, new techniques caused great changes in established habits of thought and action. Conventional norms of behaviour were swept away. A social philosophy of "sink or swim"¹ developed. Individual initiative and self-seeking were exalted. The growth of science made possible the satisfaction of so many more of mankind's wants and provided means to feed and clothe all mankind. It left the development of the humanities far behind. In such an environment, clever, ambitious men were able to engage in anti-social activities.

The process of institutional adjustment was slow. A legal frame-work based on the principles of laissez-faire (regarded by its supporters as a program of ideal government for a community and which was originally based on the simple handicraft industry) was enforced long after these conditions had largely disappeared. The results were injurious to public welfare and aided the growth of trusts. Even today, the problem of institutional lag is so serious, in the opinion of some

1 M.W.Watkins, Industrial Combinations and Public Policy.
(New York and Boston; Houghton, Mifflin Co., 1927),
p.30.

1
writers, that our whole economic system is endangered.

The attitude of brokers and promoters was another factor in part responsible for the tendency towards concentration and its relation to the business cycle. During prosperity it is relatively easy to sell securities to the public and the volume of flotations rises. Investment dealers hunt for issues to meet this demand. They know that the success of their investment house depends on turnover. Sales volume must be maintained to carry overhead expenses. The dealer is always looking for securities to sell, preferably good ones. These issues may come from new concerns or re-organized, established firms. This fact gives consolidation and re-financing operations further impetus. Dealers themselves, may attempt to promote such activities in order to be assured of securities to sell. The earning record of eighty-seven Canadian consolidations consummated between 1900 and 1920, and one hundred and thirty-one formed between 1921 and 1930, suggest that the mortality rate for such concerns is heavier than for business as a whole. This is due to the weakness of constituents, excessive capitalization, stock watering, and inferior management associated with sudden rather than gradual growth. With one exception the earnings of all these consolidations fall
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below the estimates given in the original prospectus.

It is clear then, that relentless and selfish profit-seeking was the dominant factor in the rise of monopolies and combinations. It is true that some forces in our economic

1 H.E. Barnes, Society in Transition, (New York, Prentice-Hall, Inc., 1939), p. 129-30.

2 Report of the Royal Commission on Price Spreads. (Ottawa; Printer to the King's Most Excellent Majesty, 1937), p. 32.

and social organization tended in this direction, but the defenders of monopolies and combination overstate their importance.

The Economies of Large Scale Production and of Combination

Now let us turn to the claim that combination and monopoly bring economies and eliminate the wastes of competition.

Large scale operations are said to be the basis for many economies in production. They allow greater specialization of labour and more extensive use of specialized machinery. Greater production at lower cost is said to result. Standardization is a necessary pre-requisite. It is obvious that labour which is highly specialized by task, can only be used where production can be broken down into a number of distinct steps on an assembly-line basis. Each process is standardized, as is the resultant product. Though this division is the basis of specialization it also has its limits and disadvantages.¹ On the market the demand for a standardized product may be limited by the desire on the part of certain consumers for different styles. Consumers vary mentally, physically and in their tastes. The further standardization proceeds, the greater is the opportunity for an enterprising competitor to arise and divert demand by offering an unique, non-standardized product. In addition, standardization brings with it uniformity in production methods. This often reduces the opportunities for improvement. Where a variety of methods are used

1 M.W.Watkins, op.cit., p.30.

comparisons as to their relative efficiency and productivity are possible. These often result in better techniques and lower costs.

Large-scale enterprise is said to reduce waste by making the fullest possible use of the various by-products. However if the by product is readily stored and shipped, if its use is in no way related to the manufacturing process from which it is derived, and if it requires a long process or special technique then it may be just as well utilized if it goes from several distinct organizations within an industry to independent processors.¹ When these conditions do not hold, the large-scale plant has a definite cost-advantage.

The greater continuity of operation characteristic of large-scale production also tends to reduce costs as less time is lost stopping and starting the various stages in the productive process. Though a number of ways of insuring continuous operations, such as foresight, the maintenance of good commercial relations and the support of tenacious demand can be used by both small concerns and large ones, it is true that the latter are better able to use the "reserve policy" method because of their large capital. However, this policy of building up inventories in the slack periods to meet demand in the busy ones involves the expense of storing and insuring as well as the risk of price change. Often these costs more than offset the saving of continuous production.

Another advantage attributed to large-scale enterprises

1 M.W. Watkins, Industrial Combinations & Public Policy, (New York and Boston: Houghton, Mifflin Co., 1927), p.60.

and to combinations is their ability to hire the most capable managers and specialists. The recent growth of associations of engineers, accountants and market analysts, etc., has reduced this advantage by making the services of such specialists available to smaller firms who could not afford to employ them full-time. It is true that large firms may be able to improve their position through patent holdings and technology by maintaining large private research laboratories which smaller firms can not afford.

We have discussed the chief advantages of the large-scale plant and its limitations. The economies exist whether or not such a plant is a unit in a combination. These can hardly be used as a defence of the growth of concentration which involves common ownership and management of a number of plants. Such savings are dependent upon the extent to which large-scale methods can be applied to the manufacture of a product. If the demand for the product is small, or the product is largely hand-made, large-scale production is inapplicable. Even where this technique can be used, recent developments have made the same benefits obtainable with a smaller-scale production. In other words, these new methods have tended to move the optimum plant and the point of diminishing returns towards smaller-scale operations.

In the past, steam power, specialized machinery, heavy metals (iron and steel) and railway transport were the bases of the growth of concentration begun in Canada at the turn of the

century.¹ Steam power could not be transmitted over long distances; it had to be used close to the place where it was produced. By its very nature, it was more economical when applied in rather large units to machines situated in a small area. The specialized machine driven by steam was limited in location by the system of belts and pulleys that transmitted the power to it. It was only useful for the specific purpose for which it was designed. These factors culminated in large-scale production.

The economies of increasing scale of plant were largely based on the lower cost associated with the specialization of labour and the use of complicated machinery. Large complex machines could only be utilized when production reached an accelerated pace. Smaller machines, particularly those associated with the production of heavy metal goods, were often impractical; they proved wasteful in their use of power and in their demands on labour both for construction and operation. Modern technological development has tended to overcome the disadvantages of the smaller machine and offer more opportunities to the medium or small-scale plant. Electricity can be transmitted hundreds of miles cheaply. Industry need no longer consider the proximity of coal supplies but can choose its location on other bases, such as proximity to markets. Along with electricity, the new independently-powered, multi-purpose machine was introduced. It embodied freedom of location and variable speed. Such machines with a set of

fixtures, for example, lathes, combined high speed and flexibility of product.

In addition to these developments materials, such as plastics, plywoods and light metals (aluminum and manganese) that are easier to work than iron and steel, have been introduced. The manufacture of goods from such materials requires less capital equipment to produce the same output. New techniques such as die-casting, spotwelding, stamping-forming have a similar effect, i.e. reducing the amount of capital equipment necessary to produce a given article.¹ The development of industrial measuring and controlling instruments also aids this tendency. Such devices ensure accuracy and quality at high speeds, increasing the effectiveness of existing capacity. They also improve the continuity of operation and reduce the number of break-downs, so that fewer stand-by machines are needed. Auto and truck transport as a substitute for rail transport have contributed to the growing efficiency of the smaller plant. It has transferred the inflow of raw goods and the outflow of finished goods from a national pattern to a local one.

Many of these aspects are still in their infancy and their advantages are just beginning to be realized. There is little tangible evidence of any movement towards mass decentralization as yet. However, there is little doubt that these developments bring the advantages formerly confined to large plants within the scope of smaller units.

1 J.M.Blair, "Does Large-Scale Enterprise Lower Cost", American Economic Review, papers and proceedings of the Sixtieth Annual Meeting. (May 1948), p. 132-139.

These innovations seem to support the "stagnation" argument that technology is "capital-saving". New methods have reduced the amount of capital equipment, measured in dollars, necessary to produce the same output; the production per dollar of investment has risen. On this basis the "stagnation" theorists, as we have seen, look forward to economic quiescence and the eventual dependence of the economy on government measures. However, no man knows the future. It may hold just as many epoch-making innovations as the past, all of which required large, new capital investments. In any case, who is to say with the rapidly broadening scope of human economic activity, that numerous small innovations may not provide just as many opportunities as the large ones of the past. Certainly there is plenty of room for improvement in the world's real income, and this may require expanded production facilities and proportionate capital investment.

Insofar as the economies resulting from the specialization of labour are concerned, the following statement of a prominent business man may be some indication that certain large firms have reached, or exceeded the limits of these economies. Perhaps a reversal of the trend towards larger plants is imminent. Wilson, the President of General Electric Corp., in the United States, sums up the experience of his firm in the following words: "Where fewer people work in a plant management has been better able to organize facilities and personnel so that lower costs and better production control have resulted"¹

1 Ibid., p.140.

Two important limits have come into play. In the first place the output of a labourer will generally increase more when he is reduced from three tasks to two, than when he is reduced from two to one. This is because the intensive utilization of the learning ability of man is subject to diminishing returns. Once the man is totally occupied with one task, further expansion of output will secure no further economies in that process. All it can accomplish is to place another man beside him performing an identical, specialized task. The benefits of managerial specialization are also limited. As a firm grows a heavier burden is placed upon management. The final authority to make decisions can only be subdivided or delegated at the expense of uniform and consistent policy. On the other hand, excessive centralization of authority brings bureaucracy and red-tape. Large firms attempt to steer a middle course between these two extremes, but never achieve the compactness, flexibility and singleness of purpose of medium-sized firms.¹

Now let us turn to the advantages which are said to accrue as a result of combination, that is to say, as a result of common ownership and control of a number of firms. In the field of production combination allows greater specialization and integration of plant. Over-all efficiency can be increased by shutting down inefficient plants, or by having each constituent produce what it can manufacture most cheaply. Integration of the various levels of production back to the

1 G.J. Stigler, op. cit., p. 138.

sources of materials and supplies is said to result in large economies due to the absorption of the numerous profit margins involved in the repeated handling of the unfinished materials by independent dealers. This view overlooks the economic legitimacy of competitive profits, the fact that they are earned profits.¹ Insofar as the successive steps in the processing of raw material are competitive and allow scope for specialization of productive services, the manufacturer who integrates back to his sources may be at a disadvantage. The pooling of the technical knowledge of the individual firms is cited as another advantage of combination. The greater bargaining power of the combination may bring lower material costs, though this is frequently overstated. Prices of raw material in almost every line are fixed in an open market where sizeable purchases may have little effect on the current quotation.²

Selling and distribution costs can also be lowered both in total and on a per unit basis. Savings in advertising costs which are so wasteful under competitive conditions, are emphasized by the defenders of combination. They ignore the fact that under pure competition there would be no advertising cost. Each individual firm could always increase its sales by lowering its price. Where competition is imperfect though severe, a certain amount of the advertising done, is useful in acquainting the consumer with the various products and enabling him to better satisfy his wants. Some advertising is necessary even for a monopoly in order to prevent the diversion

1 M.W. Watkins, op.cit., p. 64.

2 Ibid., p. 63.

of purchasing power to other industries. The savings in advertising costs can not be very large.

If combination brings certain economies it also brings offsetting disadvantages. The loss of personal contact between the worker and management, the lowering of incentives to efficient operation, and larger, more cumbersome administration may result in higher costs. Huge corporate organizations require expensive accounting and control devices. They experience difficulty in obtaining the quality of managerial ability necessary. All these factors contribute to the possibility of inefficiency.

The foregoing discussion has attempted to show that many of the economies of large-scale production have been over-emphasized and are subject to limitations. In addition, recent technological developments have made these economies available to smaller concerns. These advantages exist apart from any grouping of plants. So far as combinations are concerned, the savings claimed to result seem largely illusory. It would thus appear that combinations can not be defended on these grounds. Insofar as they are used as a means of restricting competition, fixing prices, etc., they are socially undesirable.

CHAPTER 2

THE FORMS OF MONOPOLISTIC ORGANIZATION

The term "Combination" simply means a union of persons, natural or corporate, to make a whole, or group for the prosecution of some common purpose. Thus, a classification of combinations must include two general types; first, the simple combination or association which involves the direct combination of natural persons, for example the various forms of business organization; and secondly, the compound or industrial combination which is a combination of simple associations.¹ The latter is of greater importance in the study of monopolistic organization. Hence, throughout this thesis the word "combination" is used to mean industrial combination. This² can be divided into three groups:

- (a) Association (the loosest agreement directly between individual members of different simple combinations; trade associations, and some simple agreements)
- (b) Federation (a combination of organizations which remain separate and retain considerable autonomy; most simple agreements, and pools)
- (c) Consolidation (a combination of business organizations in which, while the members

¹ See Chapter 1, p.3. line 8.

² L.H.Haney, Business Organization and Combination, (New York: The MacMillan Co. 1915), p.131.

may remain nominally separate, the direction of the whole is fused);

- 1 Partial Consolidation
(through holding securities)
- 2 Complete Consolidation
(by amalgamation or merger).

The first classification, a loose agreement between individual members of different associations, is of little importance as compared with combinations of organizations. Gentlemen's agreements, and Chambers of Commerce are good examples of simple agreements that fall into this category.

Federation, the next type of combination includes the majority of simple agreements. Such agreements express understanding between separate business units insofar as they do not consider any collective control of the output to be marketed. Prices or trade practices may be regulated, but supply and demand, the price-making conditions are not restricted. These arrangements may be local, national, or international in scope.

As we have seen, simple agreements are divided between federation and association. They include both gentlemen's agreements which trust to the spoken word of the parties for their enforcement, and written contracts which set down regulations and provide various devices for compulsion. Classified according to their purpose, there are two general types, the trade customs agreement, and the price agreement. The former makes no attempt to regulate prices. Chambers of Commerce quote prices, advertise, inspect shipments and supply

information. A trade association within a single industry may attempt to regulate discounts, shipping, methods of payment etc. Often its existence in no way affects the competitive conditions within the industry. It may have a political axe to grind, for example, the Canadian Manufacturers Association.

The history of this Association demonstrates that combination brings political as well as economic power which can be used for selfish ends. This organization had its beginning in the Association for the Promotion of Canadian Industry which was organized in Toronto, 1858, to recommend tariff adjustments. It was subsequently reorganized in 1875, as the Manufacturers Association of Ontario. In 1877, its name was changed to the Canadian Manufacturers Association. The latter played an important role in the framing of the tariff act of 1879, by voicing the needs of the then scattered and economically weak industrialists who lacked other means of making their requirements known. Though originally just a political pressure group, its activities steadily widened as manufacturing industry grew in Canada, at the beginning of this century. The Association in addition to maintaining professional lobbyists, assisted members in fighting trade union, recruiting skilled workers, and negotiating with railways or fire insurance companies. However, as industry expanded there were increasing conflicts of interest between the various members of the Association. This was especially true in the tariff field where manufacturers tended to ask for, and support tariff reductions on articles which were the finished product of a Can-

adian employer. In the face of these acute differences of opinion the Association had difficulty in formulating clear-cut policies, and virtually ceased to act as a unified pressure group. It tended to concentrate on professional services to members or on general considerations of tariffs, transportation or labour problems. The Association through vigorous propaganda campaigns still exercised considerable political influence and continues to do so. It played an important role in arousing attention and collecting data for the Imperial Conference of 1930, and the Imperial Economic Conference of 1932. However the growth of legislation affecting certain types of industry after World War I, led to the employment of professional lobbyists by particular industrial groups as well as by the Association. Large corporations such as General Motors, Steel Co. of Canada, and Canadian Industries Ltd., became important political constituencies with problems peculiar to themselves, and to present these at the seat of government required special spokesmen.¹ Thus, though the large manufacturing concerns retained membership in the Association it was chiefly for reasons of goodwill. The large corporations had the economic and political power to make their voices heard. It was the small concern which received the real benefit from the Association. Lacking the facilities themselves they obtained the advantages of the professional services supplied by the Association.

¹ S.D. Clark, The Canadian Manufacturers Association. (Toronto: University of Toronto Press, 1939), p. 71.

Price agreements, the other type of simple agreement can be subdivided into two groups. Some are for industrial purposes and attempt to maintain the price level as far as practicable above cost. Others are merely temporary, for purposes of speculation. The latter aim to affect the price of a certain commodity or security for a brief period, so the parties to the agreement can thereby benefit. Often this is done by gaining a temporary monopoly of the available supply, that is, by getting a "corner" on the market. Industrial price agreements may or may not involve a sales association. In some cases the individual members market their own production, while in other cases the entire output of all the members is disposed of by a sales manager or organization. The income is distributed according to the unrestrained output of the individual members, in this type.

Often price agreements are enforced by patent control or factors' agreements instead of, or as well as by contract stipulation. Since contracts in restraint of trade are illegal and unenforceable in court, these other methods of compulsion are necessary. Factors' agreements involve understanding between the various levels in the marketing of a commodity or service, that is to say, between manufacturers, wholesalers and retailers.

The investigation by the Combines Investigation Commission into Canadian dental supplies revealed the existence of such an agreement administered through the Canadian Dental Trade Association. The latter, formed in 1923, includes both

dealers and manufacturers. The dealers involved controlled 87% of the Canadian dental supplies business for 1945.

Membership in this organization, a branch of the American Dental Trade Association (A.D.T.A.), is strictly limited. No new dealer members have been admitted since 1928, and only two new manufacturers. To join, the applicant must be a member of the A.D.T.A. or a subsidiary of such a member. In addition his application for membership must be passed by a two-thirds majority vote of the present members.

Dealer members agree not to sell at the trade discount when the purchaser does not enjoy trade recognition from the manufacturer whose goods are being sold. They may only sell to individuals or corporations in the dental business, and may not sell dental supplies in quantities intended for resale. Independent dental firms are unable to obtain any standard dental goods from the association. Dealers must be members of that organization to obtain such supplies from it.

A universal price book is issued annually by the association which lists all the dental supplies sold by its dealers.¹ Prices, discounts, minimum sale prices for used equipment and maximum allowances for such equipment are all fixed by this book. The mark-up to the dealer is sixty-six and two-thirds percent on cost, or forty percent on selling price. On the large amount of dental supplies imported from the United States this mark-up is based upon the American resale price (which includes a similar mark-up)² plus duty and transportation costs.

1 Dental Supplies

2 Ibid p. 37

Report of commissioner, Combines Investigation Act, (Ottawa, King's Printer, 1947), p. 35

All calculations are made by the price book committee and members are notified of any price changes. Through factor agreement these prices are forced on all dealers. None dare violate the regulations of the association for fear of losing his trade recognition.

Patent control, another method of binding the members of a price agreement usually takes the form of a patent pool. All the patents of the various members are placed under the jurisdiction of the executive of the association. Through this control the members are "kept in line". The recent investigation into optical goods in Canada revealed a combination of patent control and factor agreement. The American Optical Company, through its Canadian subsidiary Consolidated Optical holds and administers key Canadian patents for frames and mountings and thus controls the manufacture of optical goods. About 90% of the frames and mountings sold in Canada are produced under these patents. By the Numont Ful-vue Plan which this corporation introduced in 1939, all manufacturers and wholesalers of optical goods making or using frames under these patents were licensed by this concern. Attached to these licenses were conditions and regulations that gave Consolidated Optical complete jurisdiction over prices, terms of sale and discounts. Wholesalers were only allowed to buy from licensed manufacturers and sell to licensed retailers. For any violation proved in Court the defendant would be required to pay \$1,000 damages per conviction, to this corporation. These licenses could be terminated on thirty days notice, with

or without cause. By this means the prices of optical goods in Canada were maintained at a high level and lower-priced lines removed from the market.¹

The simple agreement type of Federation has a number of important advantages. It can be used both on the buyers' and sellers' side of the market. It is easy to organize and involves no incorporation fees, taxes or increased financial liability. It gives the members a large degree of autonomy, and at the same time, may bring them the inconstant benefits associated with large-scale buying and selling. This type of organization is flexible and receives less publicity than consolidations. On the other hand, from the monopolist's standpoint this kind of association is unstable and temporary. It is true that boycotts, fines, forfeits of pledges, factors' agreements and patent control may make its regulations more effective. However, the simple agreement does not control the supply side of the market. There is a tendency towards overproduction, particularly where members are operating below existing capacity.

The industrial pool, the second form of Federation attempts to overcome some of these disadvantages by achieving greater centralization. It is a form of business organization established through federation of business units whose members seek a degree of control over price by combining some factor in the price-making process in a common aggregate and apportioning that aggregate among the members. The pool involves some degree of control of supply. Pooling agreements may or

¹ Optical Goods, Report of Commissioner, Combines Investigation Act, (Ottawa, King's Printer, 1948), p.98.

may not restrict aggregate output. They can be divided into three main groups, output or traffic pools, market or territorial pools and income or profit pools.

Output or traffic pools, as the name implies usually control competition on the supply side of the market by restricting aggregate output. They are also called traffic pools because they were commonly used by American railroads as a means of sharing the total freight traffic among the various members. The market or territorial pool involved pooling the market and dividing it amongst the various members. This insures a certain demand to each manufacturer. Through limitation of supply price may be maintained above the competitive level. The division of the market may be achieved directly by allocating certain areas to each member, or indirectly by the basing-point-price system.

The United States steel industry, until recently used a single basing-point-price system with Pittsburgh as the base point. The price of steel at any point in the United States was equal to the base-point-price plus the freight charges from Pittsburgh. As a result, the closer a mill was to the customer, the greater was the profit because transportation costs would be lower than the freight charge from Pittsburgh. A multiple-basing-point-price system is the same as a single basing-point-price method, except that several base points are used. The selling price is determined by the transportation costs from the nearest base point plus the base price at this point.

On April 26th., 1948, the Supreme Court of the United States handed down a decision in the case of the cement industry which vitally effected the basing-point-price method. The Federal Trade Commission charged that the Cement Institute and seventy-four cement manufacturers through the use of the multiple-basing-point-price method had conspired to eliminate price competition between them in violation of the Federal Trade Commission Act, and that their use of this system had resulted in systematic price discrimination between the customers of each, in violation of the Clayton Act. The Court upheld these charges on both counts. The effect of this case along with the earlier Corn Products and Stacey cases was to prohibit the adoption for sales purposes of any basing-point-price system. The Federal Trade Commission ordered the cement industry to stop this practice by July 9th., 1948. Two days before that deadline the United States Steel Corporation abandoned its basing-point-price method and replaced it by F.O.B. mill prices, a step which the rest of the industry subsequently followed.

There has been a great deal of misunderstanding as to the meaning and effect of the base-point-price decision. In the first place, the Federal Trade Commission's attack was not upon the basing-point-price system itself, but rather upon the price discrimination and elimination of competition that resulted from the concerted action of an entire industry. The decision prohibits the base-point-price system and the practice of matching delivered prices. The Supreme Court verdict did not

order producers to abandon any other price method but that of uniform mill nets, nor did it prohibit a firm selling at delivered prices such that its net return from one customer would be less than from another.

The decision does not prohibit the absorption of freight by the seller. Since the ruling, some producers have used compliance as an excuse to refuse to absorb any freight costs and have thus raised delivered prices. Other mills have not reduced mill prices even though they are rid of freight costs. The decision has been attacked as causing higher prices and putting the buyer at a greater disadvantage than before. Actually, only about 10% of the steel industry's total volume has been affected by higher prices, largely in the Detroit area.¹ In many other cases the buyer's position has improved. During these years of steel and cement shortage mills have refused to sell to distant customers because of freight costs. Now that the basing-point-price system has been outlawed, distant buyers can once again obtain supplies as they bear the freight charges.

The long-run effects are hard to predict because of the diversity of price systems that may be adopted by different firms. In general water and truck transportation should be encouraged because previously the price included railway freight charges from the base point regardless of how the steel was shipped. The average length of shipment, cross-freights

1 C.P. Edwards, "The Basing-Point System and Business Practices", American Economic Review, Dec. 1948, p. 839.

and transportation costs should decrease. The change should put a premium on location close to market. Small producers should be helped in their competition with large ones. Previously the big firms were usually the base points. This meant the base-point producer could compete with the small producer in the latter's home markets. On the other hand the small producer could not enter the markets near the base point because as he neared this point his freight costs rose and his selling price fell. Under this system Pittsburgh steel producers were greatly encouraged, and expanded while Western steel producers were thwarted.

The world tobacco industry provides a good example of the direct division of the market, the other form of market pool. In 1903, by agreement the Imperial Tobacco Co (Great Britain) was given exclusive rights in the British Isles, and the American Tobacco Co (United States) exclusive control in the United States, Cuba, Porto Rico, Hawaii and the Philippines. The export trade to the rest of the world was to be carried on by the British-American Tobacco Co. Ltd.

The income or profit pool is the third type of pooling agreement. In this case the excess of the selling price over costs is paid into the pool (profits pool) and the members share in it on a fixed basis. Overproduction is discouraged as any increase in sales beyond a certain point fails to augment the profits received by a member. It depends of course on the percentage of income that is pooled whether further expansion is profitable or not. Income pools, as opposed to profits pools involve the pooling of a larger part of the

members.

The pool provides an easy and secret means of combining to restrict competition. It may be formed with great facility and readily adjusted to varying conditions of territory, membership and business. Pooling requires no change in corporate organization or capitalization. However, there are important disadvantages. During the life of the pool the struggle for survival is softened. The members do not have to seek more efficient means of production or wider markets. The pool lacks perfect and complete combination. Separate interests of members may lead to disruption of the organization at any time. In this respect, the division of the pool factor is a "bone of contention". Another important disadvantage of the pool is its illegality. Pooling agreements are unenforceable in court. Of necessity, pools must work in devious ways and so beget evasions which are undesirable from the social point of view.

Some people believe for this and other reasons that the pool should be recognized and legalized. They argue that pooling is not necessarily monopoly, and monopoly not necessarily socially undesirable. Pools may be beneficial where they embrace businesses that are characterized by heavy fixed charges and increasing returns, and in which competition is normally impossible to maintain. By preventing price cutting, rate wars and cut-throat competition pools may bring lower average prices over a period of years than would exist ¹ under freely competitive conditions. Furthermore, pooling

1 L.H.Haney, op.cit., p.190.

Furthermore, pooling agreements may be the means of enabling small plants to compete with a great consolidation. Pooling retains individual control, ownership and the seeds of competition. Members have an interest in securing as favourable terms of membership as possible. This can be secured by gaining a large share of the market. Statutes against pooling have furthered the development of more powerful, compact forms of combination. Monopolistic elements introduced by pooling are not always bad. Fluctuating and unstable prices bring greater risk, higher interest and insurance rates, and retard industrial plans which may constitute social evils.

These arguments have some validity, but ignore the danger to society of allowing pools to determine prices or price-making conditions. Supporters of the pool claim the solution is some sort of public supervision. They emphasize the wastes of competition; the system under which the greatest rise, in recorded history, took place in living standards, technology and capital. Of course the economic organization is imperfect, there are socially undesirable repercussions, but, in the opinion of the writer taking decisions from the individual and giving them to an organization of entrepreneurs governed by selfish motives, will not solve anything. It means that Government must be invoked to protect the individual. The degree and effectiveness of Government control is certainly open to question in the light of past experience. Assuming the Government does protect what it considers are the individual's interests, then it is obvious that the Government and

organized entrepreneurs, not the individual, have control and make the economic decisions.

The third class of combination, Consolidation, takes a variety of forms. It is characterized by the complete identity of interest resulting. In some cases the firms involved are controlled through security holdings and thus are nominally or actually preserved, as in trusts or holding companies. In others they are completely combined as in mergers or consolidations.

Trusts were the first form of consolidation to become popular. Under a trust, the stockholders of all the constituent concerns turned in their stock to a group of trustees. The latter were given irrevocable power of attorney to vote the stock as they saw fit. In return the shareholders received trust certificates which entitled them to dividends if any, and to an accounting of the trust's activities. The Board of Trustees then had legal title and absolute control, both of administration and distribution of profits. The shareholders retained the equitable title and dividend rights. Profits from all the constituents were put into a common treasury. The fact that one constituent was running close to the line made no difference to the share of the total profits received by the shareholders of that company. This feature was a "bone of contention" which often led to the dissolution of the trust. Trusts were an obvious means of restricting competition and consequently aroused public indignation. Prosecutions followed and legal prohibition resulted. A good example of a Canadian trust was the Asbestos Corporation which was reorganized in 1932.

Under Supplementary Letters Patent of January 1932, the common stock voting rights were vested in a voting trust. The shareholders received trust certificates. These were listed on the Montreal Curb until the voting trust period stipulated under the reorganization plan, ended in July 1937, at which time the common stock was called for trading. From this example it is clear that the trust form of business reorganization was sometimes used for other purposes than restriction of competition. In the case of the Asbestos Corporation the voting trust insured continuity of management and policy in the critical period following reorganization.

Following the outlawing of trusts, monopolists had to turn to other forms of organization. One solution was the complete consolidation of the various member enterprises. Either a new company was formed to merge all the former trust members, or one of the existing firms was expanded to amalgamate the others. Financing was relatively easy. Upon the dissolution of the trust the trustees returned the share to the stockholders. The latter turned the share in for share in the new or enlarged firm, or had the option of receiving cash. The necessary cash to pay off those who did not want the new shares was borrowed from the bank, and the loan paid off by the sale of the refused shares to the public. The final result was a large corporation whose board of directors was probably the former trustees and whose shareholders predominantly the shareholders in the former trust. These now had direct voting control as well as dividend rights. This solution while it achieved the desired objective

tends to be expensive. The costs of incorporating a new company or changing the letters patent of an existing one, of dissolving or winding up the other firms, and of floating new security issues are high. The shareholders of all firms involved must be consulted and agreement reached, before consolidation can take place. Often it is difficult to obtain unanimity among the interested parties on problems of future policy, or on the basis for distribution of the new shares. Asbestos Corporation Ltd., was the result of a merger of seven operating asbestos mining companies in the Province of Quebec. Asbestos Corp. of Canada was the chief predecessor company. Holders of the preferred stock in that concern were offered a \$100, 6% general mortgage bond, $1\frac{1}{2}$ shares 7 $\frac{1}{2}$ % preferred and 1 $1/100$ common shares of the new organization, for each Asbestos Corp. of Canada share. For each share of common stock in the old company, shareholders were offered 1 $1/10$ shares of 7% preferred and 1 $1/10$ common shares of Asbestos Corp. Ltd.

The use of a "holding company" avoids some of the disadvantages obvious in the foregoing form of consolidation. Like the trust, the holding company is a partial consolidation. It is much easier and cheaper to organize, than amalgamations or mergers. There is no need to seek the agreement of the stockholders involved provided majority control is held. Obviously virtual control of each of the subsidiary concerns is thus vested in the holding company without complete ownership of the shares. By maintaining the identity of the firms involved this form of monopolistic organization may escape the

notice and censure of the public or of some of the minority stockholders.

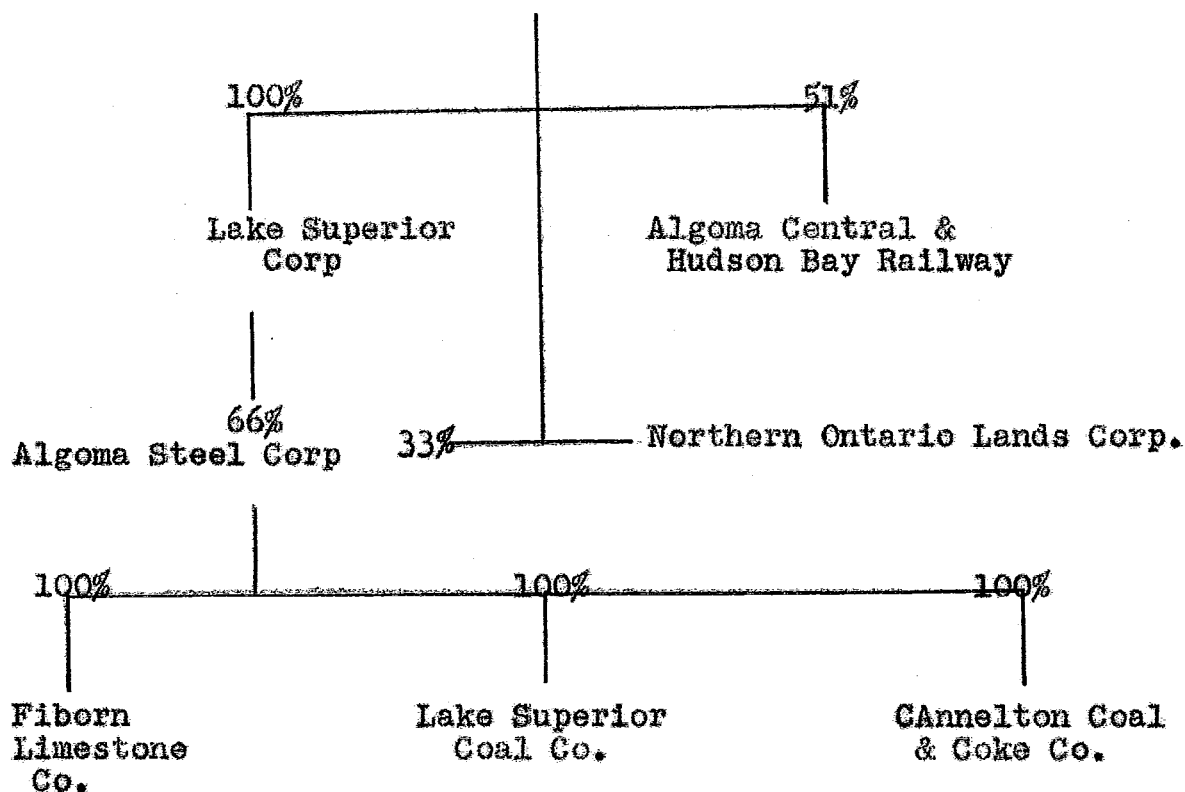
A holding corporation is just like any other corporation except that it has rights to acquire and hold stock. It may be a pure holding company or it may be an operating concern as well. It controls its subsidiaries by owning them outright or by merely holding a sufficiently large block of stock to dictate policy and elect the majority of the directors. The income and profits of the pure holding company are entirely dependent on the dividends paid by its subsidiaries. The holding corporation through control of the directorate of the subsidiaries may force them to pay unwarranted or unwise dividends in order to maintain its own profits. Often, because shareholders of each constituent are so numerous, disinterested, or divided in their opinions, the holding company may maintain absolute voting control without owning a majority of the voting stock.

Many great corporate empires have been built on such a basis through pyramiding holding and operating companies on top of one another. An individual or group at the top of the pyramid may wield absolute control with a relatively small capital investment. However, this is not always the case, for

example ,the Algoma Consolidated Corporation.

ILLUSTRATION 1

ALGOMA CONSOLIDATED CORP. x



x H.Marshall,F.A.Southard,and K.W.Taylor Canadian American Industry (Toronto: The Ryerson Press 1936) p.59.

CHAPTER 3

AN EXAMINATION OF CERTAIN CANADIAN MONOPOLIES AND COMBINATIONS

Introduction

This chapter is an examination of certain firms in basic Canadian industries and is undertaken with a view towards reaching valid generalizations concerning the effects of and remedies for restriction of competition, and has been limited to rigidities in basic industry. Furthest from the ultimate user these mean higher and/or more rigid costs which can affect the entire economy as these basic materials are turned into consumer goods.

Determination of the degree of competition within a given industry and the position of a firm within that industry presents a variety of problems. Merely "counting noses" to discover the number of Canadian producers of a certain good, or in a certain industry is not sufficient. The existence and effectiveness of foreign competition over the tariff wall and the availability of substitutes are important considerations. In the case of monopolistic competition, the various firms within the industry may be competing fiercely, maintaining prices and/or dividing markets by mutual consent. In the absence of formal agreement individual producers may decide that price warfare only brings retaliation, and refrain from price-cutting. One producer may have a dominant position in the industry and may dictate policy. Such restriction

of competition is difficult to expose. "Counting noses", together with production and sales figures where available, does however give a fair indication of competition with an industry, subject to the limitations aforementioned.

The next problem is to discover the effects of the restriction of competition. Monopolies and oligopolies are not necessarily evil in themselves. They may be in the public interest, although the weight of evidence suggests that to be true in only relatively few cases. Some "yardstick" is needed to determine whether or not society is being exploited. This "yardstick" is provided by net profit and its ratio to net worth.

Net profit available for dividends is the share of total receipts from operations of a firm, that remains after selling, administrative and manufacturing costs, interest, depreciation, depletion and all provisions for reserves and taxes have been deducted. As such it represents, first, a return to the shareholders of the concern who took the risk of investing in it, and secondly, it may contain an element over and above all costs, including capital costs, which is commonly termed rent. Monopolistic exploitation is characterized by very high rent which is reflected in net profit. This is expressed as a percentage of net worth (capital and surplus) in order that earnings for different years, and for different corporations can be compared in the light of the amount of shareholders' invested capital.

It should be pointed out that net profit or "accounting

net profit" is an imperfect measure of a firm's earnings. It is a relative rather than an absolute figure, based on the assumptions of accounting. The profit and loss statements from which net profit is determined includes the "cost of goods sold" as one of its chief items. This figure is influenced by the method used to evaluate inventory. The generally used method is "cost or market, whichever is lower". This gives different mathematical results depending on whether it is applied to individual or families of items, or whether it is applied when all the items in the inventory are valued in a single aggregate. Personal judgment must decide the method to be used. Inventory may also have different valuations depending on the method of computation used - first-in first-out, last-in first-out, average cost, retail cost or standard cost. Net profit is also affected by depreciation charges. The amount of such charges depend upon the rate and method of depreciation used and the valuation given to the assets being depreciated. Common accounting procedure is to value fixed assets on the basis of original cost, an amount often at variance with existing price levels in subsequent years.¹ Applied accountancy postulates continuously stable prices which do not exist in a free enterprise economy and have never existed for a substantial length of time in any economy as far as historical research has yet determined. The rate of depreciation depends on the "useful-life expectancy of the asset, often a matter of personal judgment. The method of depreciation selected may give the asset different mathematical values in different years.

1 N.S. Buchanan, Economics of Corporate Enterprise, (New York: Henry Holt & Co 1948), p.231.

These methods vary from straight-line depreciation to the sinking fund system, the fixed percentage of diminishing value method to the depreciation based upon output or hours of operation system. To sum up, "accounting net profit" is at best a general figure influenced by accounting practices and procedures maintained during the accounting period. It has no relevancy to current economic values or constantly changing economic values in the sense of "power of/in exchange"¹ of goods measured in money.

Nevertheless, no matter how imperfect a measure "accounting net profit" may be, valid comparisons can be drawn provided the accounting assumptions (underlying) are similar for different firms and from year to year. In this respect Canadian Income Tax legislation has standardized procedures to a considerable extent.

Comparison of net profit ratios, is one avenue of investigation of monopolistic exploitation. The problem is to find a "norm" with which to compare the earnings of the firm being examined. In the analysis that follows, the average of net profit as a percentage of net worth is computed for each firm and covers the periods 1930-47 and 1937-47. The former figure covers a period of depression and a period of prosperity and gives a fair picture of the firm's earning ability. The latter figure is used to obtain an average which may be compared with a similar average impartially compiled from aggreg-

1 R.A.Foulke, A Study in the Theory of Corporate Profits., (New York: Dun & Bradstreet, Inc. 1948), p.19.

ate data provided by the Bank of Canada Statistical Summary, on similar concerns, for the same period, i.e. 1937-47.

Using the information from the Bank of Canada Statistical Summary as a standard to determine the degree of exploitation, can be criticised on the grounds that this "norm" may reflect monopolistic profiteering. In addition a firm's earnings may be above or below the "norm" because of relative efficiency and costs. Efficiency is hard to measure in the absence of detailed, comparable cost data. There is reason to believe, as we have seen, that monopolistic firms are less efficient than firms in competitive industry. Though these criticisms are valid, the proposed comparison is of definite value where the difference between one firm's earnings, and the average for the group, is large. Where the results of this comparison are inconclusive, other criteria can be introduced for further clarification. The average net profit percentage can be compared to the corresponding figure for firm's that produce substitute commodities. Prevailing rates of interest, and earnings in unrelated but competitive industry may also be of value. Rigidity of price and profit margin is another criterion of monopolistic conditions. If these additional comparisons and data support the original one, then, there would seem to be evidence of unjustifiable profit at society's expense.

The World Aluminium Cartel

Aluminium ore forms almost 8% of the world's igneous

rock. It is more plentiful than iron and non-ferrous metals such as lead, zinc, nickel and copper are at present. Bauxite is only one of the aluminium-bearing rocks and clays that are used to produce aluminum. Though it is found throughout the entire world, particularly large and easily-worked deposits of bauxite are located in Hungary, France, British Guiana, Russia, Brazil and India. Because of this, production of aluminium in Switzerland, Germany, Great Britain, Norway, United States and Canada is materially dependent upon imported raw material.

Although aluminium is a plentiful resource and has been processed in many nations, the world market for, and the production of this metal has been closely controlled by a few dominant groups. The Aluminium Company of America (Alcoa) and its Canadian affiliate, Aluminium Ltd., of Canada (Alted) control over 50% of the world's aluminium production, and a similar percentage of world bauxite output.¹ In Western Europe Vereinigte Aluminiumwerke, in Germany, British Aluminium Co. Ltd., in Great Britain and L'Aluminium Francais, in France have virtual monopolies in their home markets.

Cartel agreements have existed between the dominant producers since 1901.² The latest and most effective, Alliance Aluminium Co of Basle, was set up by agreement in 1931, and renewed in 1936. Alted became a member with a quota of 28.58% of the world production. Alcoa was not a party to the agreement but it seemed understood that Alcoa would confine its activities within the United States. By three devices Alliance

1 F. Muller, Light Metals Monopoly, (New York: Columbia University Press, 1946), p.34.

2 Ibid., p.35.

was to achieve control of world aluminium prices. In the first place a "buying-price" was fixed at which Alliance would purchase aluminium from any member producing within its quota. In other words a "floor price" for aluminium was set. The second device was the power to regulate the production quotas, vested in the Alliance Co. By this method that company could protect itself against having to buy too much aluminium at the fixed buying price. The third device was an arrangement whereby Alliance took all surplus stocks in the hands of producers at a stated price. The Alliance Company continues in existence despite the fact that after 1938, war demands for aluminium exceeded existent capacity. However, on May 17th., 1945, Alted formally renounced agreements with the other shareholders of the Alliance Aluminium Co., and at date there is some evidence that steps are being taken to dissolve that concern.

Aluminium Ltd., and the North American Light Metals Monopoly

Alcoa monopolizes American aluminium production. It maintains this position by controlling bauxite deposits both at home and abroad. Alcoa owns all the high grade deposits in America and is strong enough to keep competitors out of this hemisphere. Its power has been further extended through patent control of various uses of aluminium. In 1928, Alted was incorporated to take over Alcoa's foreign holdings and thereby obtain the advantage of the Imperial Preference tariff. In return for these properties Alcoa received all of Alted's capital

stock. Alcoa then distributed these shares to its shareholders at the rate of one share of Alted for every three shares of Alcoa owned by the shareholder.

The result was that although Alcoa claimed complete severance of relations with Alted, both companies had the same shareholders. In 1937, nine years later, holders of 81.53% of Alcoa common held 83.93% of Alted common. The largest single shareholder in Alted, A.V. Davis, was the Chairman of the Board of Alcoa, and brother of E.K. Davis, the President of Alted. A small group of families exercise control of both firms.

There is evidence of close cooperation between the two concerns. Alcoa made large, unsecured advances to Alted when the latter was in its infancy. Alted relied on Alcoa for its supply of alumina and of many aluminium products which it did not fabricate. Alted received these advantages at a price reputedly below cost to Alcoa. Until 1937, Alted never exported aluminium to the United States even in the depression when Canadian operations were far below capacity, and Canadian costs lower than those in United States. Similarly, Alcoa did not enter the aluminium market outside the United States until 1937. The relations between Alcoa and Alted were subjected to exhaustive examination during the extended anti-trust proceedings brought against Alcoa in the United States. The final judgment of the U.S. Circuit Court of Appeals in March 1945, found that Alted had engaged in a cartel agreement limiting prices and dividing markets in a manner contrary to American law. Alted was enjoined from entering into any cartel agreement similar to

that of 1936, covering imports into the United States.

From the foregoing it is clear that Alted is a monopoly in the sense that it constitutes the sole source of the Canadian supply of many aluminium products. Though there have been some aluminium imports these have been chiefly fabricated forms not manufactured in sufficient quantities or at all in Canada. These imports have been small in relation to Canadian production and exports of aluminium and have come entirely from associated companies. Alted is largely an aluminium ingot producer, although it operates or owns three fabricating plants. It is dependent on the export market as Canadian use only a small percentage of its total output. Power plants and equipment necessary for production mean heavy fixed charges and make operations most efficient at a high level of production. Heavy overhead costs in relation to production-sales, along with the burden of funded debt resulted in losses during the early thirties. Perhaps the price maintenance policy had a bearing. The New York market price for aluminium ingots from 1931-1933 averaged $1\frac{1}{2}$ cents below the 1929 average price of 24.3¢ a lb. In this same period Canadian production fell to less than half the 1929 level. If the demand for aluminium was elastic, price maintenance was short-sighted for lower prices would have increased total sales, revenue and production and enabled a decreased cost per unit. The present high degree of substitutability between aluminium and the heavymetals, encouraged by the 25% fall in aluminium prices since 1939, together with the 40-60% rise in iron -steel prices in the same period, is perhaps some

indication that a more flexible price policy in the depression would have benefited both consumer and producer. In the past the high price of aluminium has been a considerable obstacle to its greater use. Aluminium combines lightness and strength, is ductile and easily worked. Any monopolistic price policy might well hold back the wheels of progress.

Now let us consider monopolistic price control and resultant profits. Though it is true some degree of substitutability of other metals limits the level of prices and profits, market control can be very effective within this limit. Over a fifty year period Alcoa's net earnings after depreciation have averaged 10.76% of net worth. Over a period of eighteen years, 1930 to 1947, Alcoa's net earnings available for dividends have averaged 9% of net worth. However, this figure is not a fair picture of its net profit ratio. Profits in 1930 were understated and losses in 1931 overstated because undistributed earnings of subsidiaries were not included. In addition, profits during the war period were understated due to the influence of accelerated depreciation. This is clearly seen in the divergence of the net operating profit and net profit percentages. The latter showed a general downward trend from 1939-1944; in the same period, the former rose steadily to a peak in 1943, and then, in 1944, fell back to slightly below the 1942 level. Despite the high net operating ratio, the net profit as a percentage of net worth remained below the 1939 level throughout the war, and even afterwards. This difference is explained by the steady rise in depreciation and depletion as a percentage of fixed

TABLE 1

ALUMINIUM LTD.
COMPARATIVE FIGURES 1930-1947. x
(in thousands of dollars)

(1) Year	(2) Net Worth	(3) Net Operat. Profit	(4) (3) as % of (2)	(5) NET PROFIT AVAIL. FOR DIVID.	(6) (5) as % of (2)	(7) Deprec. and Deplet.	(8) Fixed Assets	(9) (7) as % of (8)
30	\$41,306	\$2,748	6.66	\$968	2.34	\$1,625	\$34,359	4.72
31	40,062	631	1.58	-973	-2.43	1,466	36,137	4.06
32	38,676	2,131	5.51	-930	-2.40	1,469	36,079	4.07
33	38,487	2,900	7.54	131	.34	1,595	34,855	4.57
34	38,418	3,115	8.11	100	.26	1,458	34,800	4.19
35	39,076	3,672	9.39	839	2.15	1,562	34,127	4.58
36	42,383	5,604	13.22	2,321	5.48	1,815	34,355	5.28
37	47,702	14,481	30.36	5,030	10.54	2,139	40,505	5.28
38	58,664	18,824	32.09	10,743	18.31	3,180	42,704	7.45
39	70,323	26,196	37.25	15,800	22.47	3,300	46,443	7.11
40	77,201	41,543	53.81	12,462	16.14	3,919	59,642	6.57
41	87,056	70,956	81.51	16,014	18.40	17,276	133,793	12.91
42	93,933	78,891	83.99	15,244	16.23	46,899	227,488	20.62
43	97,784	101,939	104.25	11,707	11.97	70,366	237,663	29.61
44	103,326	85,643	82.89	11,005	10.65	58,626	175,658	33.37
45	124,270	29,983	24.13	11,999	9.66	5,691	118,967	4.78
46	123,996	30,786	24.83	12,120	9.77	6,104	124,825	4.89
47	132,666	45,756	34.45	16,024	12.08	7,135	133,022	5.36

x Compiled from Financial Post Survey of Corporate Securities.

assets from 6.57% in 1940, to 33.37% in 1944. Another factor was the increase, after 1939, in government taxes. In the period 1937-1947, Alted's average net profit percentage was 14.2%. Upon comparison with a similar figure for 18 non-ferrous metal companies for the same period, we find that Alted's earnings are 3.1% lower. However, Alted is a holding company and has other interests in addition to aluminium production. Because of this, an analysis of the figures for the Aluminium Co. of Canada, Alted's chief operating subsidiary, might provide a more accurate comparison.

TABLE 2

ALUMINIUM CO. OF CANADA LTD.*
 COMPARATIVE FIGURES 1942-1947.*
 (in thousands of dollars)

(1) Year	(2) Net Worth	(3) Net Operating Profit Available for Divid.	(4) (3) as a % of (2)	(5) Production of Alumin. in Tons	(6) Sales	(7) (3) as a % of (6)
42	\$ 44,054	\$ 13,924	31.61	340,956	\$	
43	61,321	11,815	19.27	495,749		
44	63,879	10,332	16.17	462,065		
45	70,053	11,592	16.55	215,712	113,998	10.17
46	68,704	11,581	16.86	194,117	110,698	10.46
47	70,456	17,856	25.34	299,066	153,431	11.64

* Compiled from the Financial Post Survey of Corporate Securities.

Its statements have only been available since 1942. In that period its net profit percentage has averaged 20.96% of net worth, 6.76% higher than the average for 18 non-ferrous metal companies. The average net profit percentage to net worth, of 49 iron and steel companies for the period 1937-1947, was 8%, 6.2% below the similar figure for Alted. Thus, though handicapped by less profitable other interests, Alted's profit percentage figures are almost double, and its aluminium-producing subsidiary almost $2\frac{1}{2}$ times those of 49 producers of iron and steel (substitute commodities). In addition, the Aluminium Co. of Canada Ltd., profit percentage figures are almost $1\frac{1}{2}$ times those of the 18 non-ferrous metals producers. Hence, it would appear that the profits from aluminium production are excessive. The few scattered references to sales and cost data made pub-

lie appear to confirm the foregoing. Early in the late War, Price Waterhouse and Company stated that the factory cost of aluminium per pound was 8.31¢, at a time when Britain was paying 20¢ per lb. In 1942, an investigation committee of the House of Commons reported that the profit on sales of aluminium to Britain was 1.93¢ a pound, about 10% of sales. In 1945, 1946, and 1947, Aluminium Co. of Can. Ltd., made a net profit of about 10% on a turnover of \$100,000,000 to \$150,000,000 a year - a very high net ratio to volume of sales.

The Magnesium Cartel and Canadian Production

Alcoa was vitally interested in magnesium, an even lighter metal than aluminium. If the price of this product fell below 150% of that of aluminium, the aluminium market would be threatened. Only two American producers of magnesium had survived World War I, the American Magnesium Co., and Dow Chemical Co. Alcoa obtained control of the former concern, but was still faced with the problem of checking Dow Chemical, and also I.G. Farben Industries, of Germany, the dominant foreign magnesium producer.

In 1931, Alcoa and I.G. Farben agreed to a pooling of patents covering the fabrication and production of magnesium. A new firm, the Magnesium Development Corp was formed, controlled by both. It entered into patent cross-licensing agreements with the American Magnesium Corp., an Alcoa subsidiary. In 1934, Dow joined the patent pool. This organization (Dow) was given the only other license to manufacture magnesium

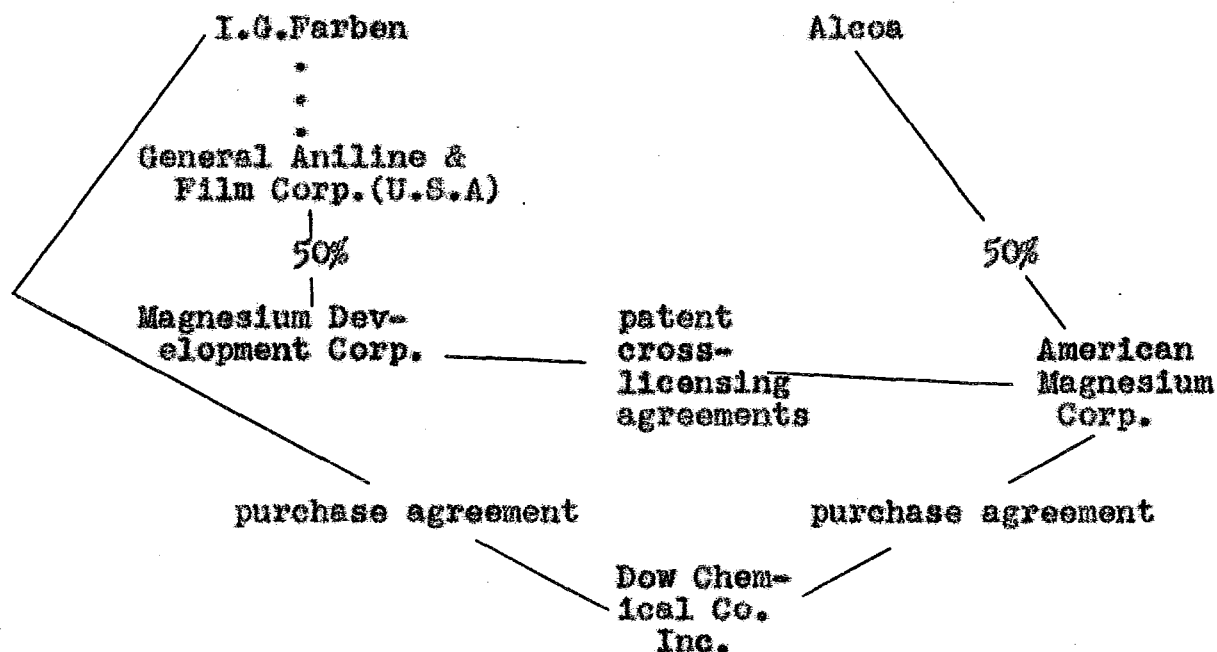
in the United States, outside of Alcoa. In return Dow Chemical agreed to furnish magnesium to Alcoa on a sliding preferential scale (an advantage of 5¢ to 10¢ a pound). Hence Alcoa held a club over all magnesium fabricators as it could undersell them. Dow Chemical had a definite cost advantage over the American Magnesium Corp and were the sole American magnesium producers until 1941. Alcoa through its subsidiary American Magnesium no longer actually produced magnesium as it was cheaper to buy it from Dow under the aforementioned agreement. Under the patent pool arrangement, I.G. Farben, Alcoa and Dow agreed to restrict production and leave each others markets alone.

This cartel extended into Canada when Dow Chemicals of Canada Ltd., came into existence to market American-produced magnesium, and other products. Until 1941, there were no Canadian magnesium producers. In that year Dominion Magnesium Corp., Haley, Ontario, was incorporated. This firm holds the Snyder patents for the extraction of magnesium from ore previously not commercially valuable. It has such ore reserves on a property at that point, but in 1947, did not produce the metal but confined its operations to selling from previously-accumulated stocks. In 1947, Aluminium Company of Canada Ltd., began producing magnesium by electrolysis in a plant with a rated capacity of one thousand tons per annum. This plant was

the sole Canadian producer of magnesium in 1947.

ILLUSTRATION 2

PRE-1941, MAGNESIUM CARTEL



International Nickel Co. of Canada Ltd

The first International Nickel Co., was an American corporation established in 1902. In 1916, this firm formed the International Nickel Co. of Canada Ltd., to obtain assets and carry on operations in Canada. In 1918, this subsidiary acquired the assets of the Canadian Copper Co., which had operated nickel mines and smelters in the Sudbury area, and in 1925, it also took over the assets of the Anglo-Canadian Milling and Refining Co. In 1928, the Canadian International Nickel Co., by an exchange of stock, became holding company for its parent concern, the International Nickel Co. of

New Jersey. A new company, the International Nickel Co., of Delaware, was formed to acquire all the assets of the New Jersey corporation except its holdings of International Nickel Co. of Canada Ltd., and Huronian Co. Ltd., stock. The New Jersey Corporation then became a pure holding company and changed its name to Nickel Holding Corporation.

In February 1929, International Nickel Co. of Canada Ltd., and Mond Nickel Co. Ltd (England), who until then had divided the natural monopoly of the Sudbury Basin between them, were merged into the International Nickel Co. of Canada Ltd. The Canadian assets of Mond Nickel Co., were conveyed to International Nickel Co. of Canada Ltd., while English assets of the Mond Co., continued to be owned by it and its subsidiaries. However, over 99½% of the Mond Nickel Co. Ltd stock was held by the International Nickel Co. of Canada Ltd., (Inco).

Inco has maintained a fixed price for nickel in American funds. Its sales and distribution policies appear to have been followed by the few minor nickel producers. Inco supplies 80 to 90% of the world's demand for nickel. The only other nickel producer, of any consequence, in Canada is Falconbridge Nickel Mines Ltd., which began production in 1931. Its nickel output is much smaller, and has been sold mainly to European customers, outside of the arrangements established by Inco. Falconbridge could rely upon the price-maintenance policy of Inco. The latter has held the price of nickel in the United States at 35¢ a pound during boom and depression

TABLE 3

INTERNATIONAL NICKEL CO. OF CANADA LTD.
COMPARATIVE FIGURES 1930-1947. ^x
(in thousands of dollars)

(1) Ye- ar	(2) Net Worth	(3) Net Operat. Profit	(4) (3) as % of (2)	(5) Net Profit Avail. for Divid.	(6) (5) as % of (2)	(7) Net Sales	(8) (5) as % of (7)
30	\$169,123	\$16,838	9.95	\$11,770	6.96		
31	170,494	9,228	5.41	5,094	2.99		
32	168,411	3,467	2.06	- 135	-.08		
33	178,616	15,536	8.70	9,663	5.41		
34	187,537	26,287	14.02	18,487	9.86		
35	201,001	36,658	18.24	26,087	12.97		
36	218,281	52,821	24.20	36,866	16.89		
37	235,675	68,873	29.22	50,300	21.34	\$134,500	37.40
38	237,441	46,684	19.66	32,299	13.64	107,200	30.22
39	241,947	58,266	24.08	36,847	15.23	126,505	29.13
40	250,567	68,741	27.43	35,545	14.19	143,703	24.73
41	259,285	78,473	30.27	34,356	13.25	169,723	20.24
42	264,297	75,903	28.72	32,702	12.37	169,600	19.28
43	263,641	67,540	25.62	30,827	11.69	170,531	18.08
44	278,089	62,130	22.34	26,528	9.54	170,002	15.60
45	275,613	53,800	19.52	25,011	9.07	148,056	16.89
46	284,388	48,317	16.99	29,681	10.44	133,115	22.98
47	286,847	63,442	21.12	33,503	11.68	166,363	20.14

^x Compiled from Financial Post Survey of Corporate Securities.
Net Sales Figures 1930-36 not available.

since 1926. It has maintained a somewhat higher sales price in Europe. As the Falconbridge Company disposed of almost all its production in Europe, it secured the advantage of this price differential.

In 1945, the "anti-trust" suit against the International Nickel Company, filed by the United States Department of Justice, was terminated by mutual agreement without finding that this concern had violated any law. It was agreed that Inco would supply any rolling mill in the United States

on as favourable terms as those given its Huntington, W. Va., subsidiary. Inco also agreed that it would not sell nickel to foreign producers or fabricators on the condition that the purchaser promise not to sell his product in the United States.

Over the past eighteen years, Inco's net profit available for dividends has averaged 10.96% of its net worth. For the period 1937-1947, it was slightly higher, 12.94%. This is considerably below the corresponding figure, 17.3% for 18 non-ferrous metal producers. Inco has not been quite as profitable as some concerns in the same general field. However, an average net profit of 23.15% on sales of \$100,000,000 to 170,000,000 dollars would appear virtually excessive. Assuming earnings are maintained, a dollar invested today would more than double itself in 8 years, providing earnings on that dollar were re-invested.

Consolidated Mining and Smelting Co., of Canada Ltd

This concern was incorporated under a Dominion of Canada charter in 1906, as a consolidation of four companies: the St. Eugene Consolidated Mining Co, the Centre Star Mining Co, the Eagle Consolidated Mining and Development Co., and the Rossland Power Co. In 1911, it acquired control of the Fort Steele Mining and Smelting Co. Ltd., which owned the Sullivan Mine in British Columbia. In the middle twenties, Consolidated also acquired interests in Henry Gardner & Co., its European sales representative, and in A. Cameron & Co. Ltd.,

its oriental sales representative. Since that time this concern has grown steadily. Today Consolidated owns all the voting stock of the West Kootenay Power and Light Co.Ltd., the Consolidated Mining and Smelting Co.of Quebec,and the Solar Development Co.Ltd. It also holds a majority of the voting stock of the following companies: Buena Vista Mining Co.Ltd., Addington Mines Ltd.,Ptarmington Mines Ltd., Rycon Mines Ltd., Montana Phosphate Products Corp. (U.S.),Coast Copper Co.Ltd., (inactive), Sunloch Mines Ltd.,(inactive),Garmon Mines Ltd., (inactive),and Pacific Coast Terminals Co.Ltd.

The keynote of this rapid growth has been diversification. Though the Sullivan Mine,the most prolific zinc producer in the world,and one of the world's largest lead mines ,is foremost among the company's assets, Consolidated produces other non-ferrous metals,gold,silver,bismuth,cadmium, tin and mercury. Consolidated has become Canada's leading non-ferrous metal producer. In addition to mining,milling, smelting,and refining non-ferrous metals,Consolidated manufactures chemicals;notably ammonium phosphate,nitrate and sulphate (fertilizers),sulphuric acid and oleum. Its wholly-owned subsidiary, West Kootenay Power and Light Co.Ltd., is a substantial producer,transmitter and distributor of electric power. Another subsidiary,Pacific Coast Terminals Co. Ltd.,owns and operates storage warehouses,docks and terminal properties.

Before World War 11,Consolidated enjoyed the reputation of being one of the lowest-cost lead and zinc producers in the world. Costs,including write-offs and taxes ranged

TABLE 4

CONSOLIDATED MINING AND SMELTING CO. OF CANADA LTD.
COMPARATIVE FIGURES 1930-1947.^x
(in thousands of dollars)

(1) Year	(2) Net Worth	(3) Net Operat. and Other Income	(4) (3) as % of (2)	(5) Net Profit Avail. for Divid.	(6) (5) as & of (2)	(7) Net Sales	(8) (5) as & of (7)
30	\$ 46,880	\$ 5,969	12.73	\$ 2,378	5.07	\$ 21,613	11.00
31	44,074	2,032	4.61	- 800	-1.82	15,671	- 5.11
32	40,224	91	.23	-2,908	-7.23	11,272	-25.80
33	41,632	4,368	10.49	1,056	2.54	14,756	7.16
34	41,597	6,052	14.55	2,212	5.32	19,158	11.54
35	40,858	8,459	20.70	4,307	10.54	22,946	18.77
36	41,298	12,404	30.03	6,953	16.84	28,433	24.45
37	44,416	22,005	49.54	14,670	33.03	40,484	36.36
38	41,305	10,189	24.67	6,214	15.04	28,013	22.18
39	44,293	15,197	34.31	9,340	21.08	35,470	26.33
40	46,146	17,647	38.24	9,062	19.64		
41	50,172	22,157	44.16	12,200	24.32		
42	54,136	25,209	46.56	12,202	22.54		
43	55,071	21,859	39.69	9,070	16.47		
44	56,671	15,339	27.07	9,790	17.28	43,148	22.71
45	60,550	23,269	38.43	11,518	19.02	51,081	22.55
46	68,450	39,465	57.66	23,323	34.04	72,872	32.01
47	85,818	62,549	72.89	37,278	43.44	100,580	37.06

^x Compiled from Financial Post survey of Corporate Securities.
Net Sales figures 1940-43 not available.

between 2 and 2½¢ a pound in the years 1938-1939. Production costs had risen only 15% up to 1942. This low cost was possible because of the almost phenomenal lead zinc riches of the Sullivan Mine plus the selective flotation extracting process. Lead and zinc are the prime factors behind this company's earning power. Consolidated is Canada's sole producer of refined lead, and markets most of this country's lead and zinc production. In addition to handling its own ore, its refineries at

Trail, B.C. treat the ores of many smaller mines on a custom basis. The fact that two of this corporation's directors, A. L. Bishop and Thayer Lindsley are directors of a number of other non-ferrous mining companies, and three, R.H. McMaster, R.S. McLaughlin and G.W. Spinney are directors of International Nickel Co of Can. Ltd., would appear to indicate close relations with other organizations in the non-ferrous metal industry.

Annual earnings for the period 1930-1947 have averaged 16.51% of the company's net worth. In the period 1937-1947, net profit available for dividends averaged 25.17% of net worth as compared to 17.3% average for 18 non-ferrous metal companies listed in the Bank of Canada Statistical Review. In the same period net profit available for dividends has exceeded 22% of net sales, at least according to the figures available. Such substantial profit ratios appear high even in relation to other concerns in the same industry. The sizeable difference, 8%, can hardly be attributable to this company's cost advantage alone. And when the average profit for 49 iron and steel corporations for the same period was not quite 8%, there would appear to be more than adequate grounds for accusing Consolidated of monopolistic exploitation.

Asbestos Corporation

This organization was incorporated in 1925, as a merger of Asbestos Corp. of Can. Ltd., Consolidated Asbestos Corp. Ltd., Federal Asbestos Co., Thetford-Vimy Co., and Maple Leaf Asbestos

Corp. It also acquired the assets of Asbestos Mines Co, Black Lake Asbestos and Chrome Co. Ltd and Pennington Asbestos Co. In addition it acquired certain properties and plants at Thetford Mines, Quebec, and agreements to purchase other properties in that district.

From the beginning this corporation was saddled with a top heavy capitalization and funded debt. Preferred stock was \$7,500,000, common stock 200,000 shares, and bonded debt \$7,000,000. Following 1929, heavy losses were incurred because of the burden of fixed charges. In 1932, a reorganization took place, and the capital structure was thoroughly "de-watered". The new set-up eliminated the preferred stock, reduced the bonded debt to \$3,100,000, and the common stock to 101,779 shares. Subsequently, through sale of additional common stock, and from earnings, the funded debt was gradually reduced. In 1939, dividends were initiated on common stock, and in the same year there was a four-one split. By 1943, outstanding capital stock was 600,000 common shares, and the corporation had no funded debt. During the period 1937-1943, earnings had ranged between \$1.25 and \$1.55 per share. However, the squeeze between ceiling prices and higher costs had kept profits below the Excess Profits Tax level until 1944.

Canada produces about 50% of the world's asbestos - mostly in the Province of Quebec. The "long-fibre" asbestos deposits there are very valuable, and in many cases are easily worked by the open pit method. Included in the seven Canadian asbestos producers, is the largest single producer in the

TABLE 5

ASBESTOS CORP.
COMPARATIVE FIGURES 1930-1947.*
(in thousands of dollars)

(1) Year	(2) Net Worth	(3) Net Operat. and Other Income	(4) (3) as % of (2)	(5) Net Profit Avail. for Divid.	(6) (5) as % of (2)	(7) Cash and Gov't Bonds	(8) (7) as % of (2)
30	\$8,456	\$ - 89	- 1.05	\$-1,229	-14.53	\$	
31	2,275	- 150	- 6.61	- 880	-38.66		
32	1,705	- 429	-25.13	- 711	-41.47		
33	1,637	98	6.00	- 295	-18.04		
34	1,588	130	8.16	- 143	- 8.99		
35	1,674	322	19.21	15	.92		
36	1,928	776	40.25	221	11.42		
37	4,035	1,444	35.79	662	16.42		
38	4,353	2,323	53.37	1,189	27.31		
39	5,473	2,001	36.57	930	16.99		
40	5,478	1,570	28.66	725	13.23	1,527	25.79
41	5,504	1,626	29.53	747	13.57	2,141	34.53
42	5,649	2,088	36.95	920	16.28	1,808	29.69
43	8,453	1,597	18.89	857	10.14	2,584	29.23
44	8,492	1,246	14.67	640	7.53	2,454	27.49
45	8,739	2,073	23.72	1,087	12.43	3,403	35.63
46	8,972	1,974	22.00	953	10.62	4,055	41.40
47	9,033	2,310	25.57	1,250	13.83	3,875	37.72

* Compiled from Financial Post Survey of Corporate Securities.

world, Canadian Johns-Manville Co. Ltd an American subsidiary, which mines 19,000 tons of asbestos-bearing rock per day. The Asbestos Corp., the second largest Canadian producer, mines about 12,000 tons per day. It operates four "mines", the King, Beaver, British-Canadian and Vimy Ridge. The other five asbestos producers are relatively small, often operating only a single "mine". There is no Canadian asbestos monopoly but rather an oligopoly.

The Asbestos Corporation's average net profit available

for dividends over the past 18 years has been 2.74% of net worth. This is less than the average return on Government bonds for the same period. The reason lies in the original top-heavy capitalization and funded debt with attendant heavy fixed charges, augmented by declining sales brought about by the contraction of the export demand during the depression. Since 1940, profits have been somewhat affected by the large proportion of net worth represented by cash and Government bonds. At first glance this might suggest either an unwise dividend policy or over-capitalization. However, it was necessary that these funds be retained in the business in order to finance the \$4,000,000 expansion programme begun in 1946. Even at that, for the period 1937-1947, the average net profit percentage was 14.39%, a ratio larger than that of Alted or Inco for the same period, and this despite the fact that the Asbestos Corporation is not a monopoly, and asbestos prices have fluctuated considerably.

Steel Co. of Canada Ltd

This organization was incorporated in 1910, as a merger of virtually all the important hardware-producing firms in Canada, at that time, namely; Montreal Rolling Mills Co. Ltd., Canada Screw Co. Ltd., Dominion Wire Mfg Co. Ltd., and Canada Bolt and Nut Co. Ltd., and Hamilton Steel & Iron Co. Ltd. Later the Western Wire and Nail Co. Ltd., London, Ont., and others were acquired. At present the Steel Co. of Canada Ltd., (Steleco) directly operates ten plants all located in Ontario and Quebec and

producing a wide variety of iron and steel products. This diversity plus strategic locations in the heart of Eastern Canada's industrial belt have aided its climb to leadership in its field. Stelco's position close to the consumer, and to water transport has helped offset the high costs of bringing ore from the Mesaba range and coal from Pennsylvania, both vital to the manufacture of steel. Stelco holds important interests in twelve American coal and ore properties in Michigan, Pennsylvania and West Virginia.

Stelco is Canada's largest steel producer and the leader of the "big three" in the industry, Algoma Steel Corp. Ltd., the Dominion Steel and Coal Corp., and Stelco. Together, the foregoing concerns own 80% of Canada's "open-hearth capacity", and all of Canada's "blast-furnace capacity" with the exception of one furnace operated by the Canadian Furnace Ltd., the only other smelter of iron in the country. In 1943, the "big three" controlled only 28% of Canada's electric furnace capacity, being content to leave the field of special steels to small producers.

In the light of the foregoing there would seem to be a steel oligopoly. However, several factors make this classification inaccurate. Perhaps the most important of these is the competition of American steel producers due to the low tariff wall. In the War years particularly, greater emphasis was put on the importation of steel from the United States, notably rolling mill products, tools and vehicles. However, much of

this steel was re-exported, and consequently it is difficult to determine the net position with regard to American imports. In 1945, Canadian exports of iron and its products amounted to \$550,000,000, while imports were \$380,000,000. However, in 1946, imports were more than twice exports, and almost all of these imports were from the United States. In 1947, the American dollar problem resulted in the austerity programme, but nevertheless, iron and steel imports rose to a new high of \$762,500,000, compared to exports of \$273,600,000.

Another factor to be considered is the natural geographic division of Canada into four distinct regions. As a result many concerns have virtual monopoly in their own particular area. This is true of steel as well as other heavy industries. Evidence of a price agreement between the leading producers should also be considered. Steel prices move up and down in unison among the "big three". Everything considered there can be no doubt that competition in the basic steel industry is limited, but is there monopolistic exploitation?

Stelco has been the most successful of the "big three". Over the period 1921-1947, its annual profits have averaged slightly over 7% of invested capital. Since 1930, net profits available for dividends have averaged 7.77% of net worth and since 1937, 9.56% of net worth. This latter figure is 1.56% higher than the 8% average for 49 iron and steel products companies listed in the Bank of Canada Statistical Re-

view. Its operations have been more profitable than those of Algoma or Dominion, whose profit percentages are below the 8% average aforementioned. If monopolistic conditions prevailed amongst the "big three", one would logically expect that Algoma and Dominion would also have higher-than-the-8%-average profit. It would thus appear that Stelco's profit superiority is probably due to lower costs. There seems to be little basis for accusing these firms of monopolistic profiteering.

TABLE 6

STEEL CO. OF CANADA LTD.
COMPARATIVE FIGURES 1930-1947. X
(in thousands of dollars)

(1) Year	(2) Net Worth	(3) Net Profit Avail. for Divid.	(4) (3) as % of (2)
30	\$ 32,499	\$ 1,741	5.36
31	31,792	599	1.88
32	30,750	217	.71
33	30,419	676	2.22
34	30,880	2,021	6.54
35	31,051	2,385	7.68
36	31,457	2,887	9.18
37	33,158	4,180	12.61
38	33,832	3,054	9.03
39	36,647	4,687	12.79
40	38,871	4,264	10.97
41	40,851	4,440	10.87
42	43,784	4,806	10.98
43	46,316	4,177	9.02
44	48,816	4,659	9.54
45	57,901	4,159	7.18
46	58,182	2,450	4.21
47	61,466	5,568	9.06

X Compiled from Financial Post Survey of Corporate Securities.

World War II and prosperity has brought a 97% increase in Canadian steel capacity; annual Canadian production of finished iron and steel has reached 2,500,000 tons. This high level has been achieved only through expensive diversions (excess steel is sent from Algoma to Dominion Foundries and Steel Co.Ltd., at Hamilton, Ont., so that the latter can fully utilize its steel finishing facilities. Similarly excess steel of certain types at Dofasco is shipped to Stelco but there is still insufficient steel to keep Stelco's new hot and cold strip mills going all out.) Nevertheless the demand exceeds production and over 1,000,000 tons must be imported annually. These facts, together with the prospect of continued defence needs, have been used as a basis for recommending: first, an expansion of blast furnace capacity by the construction of a plant of the most efficient size (1000 tons daily) which would add 400-500,000 tons to the annual production; secondly, the construction of a new, large plate mill. It has been suggested that the Government make loans to the industry to help finance the wanted capacity, since the companies are unwilling or unable to expand because of the present high costs.

At first this proposed expansion was greeted enthusiastically but later criticism arose. In the first place, the cost of the new capacity would be so high that the capital overhead on it would be four or five times that on existing capacity resulting in higher steel costs and prices. Secondly, the diversion from the consumer of steel for construct-

ion would be bad politically. Thirdly, doubt was expressed whether commercial demand warranted the additional capacity, as in the business cycle basic industry is subject to greater fluctuations in demand than consumer goods industry. There has been a marked tendency in basic industry to over-expand to meet the pressing needs of the moment in a boom, only to suffer disastrous consequences in a slump. Excess capacity which means heavy overhead costs results in an even greater economic fluctuation than would otherwise occur. Finally, it was suggested that the needs of the Armed Forces could be staggered to fill any decline in commercial demand. If there was any real need for the extra capacity for defence purposes, the Government should pay the extra cost rather than put it in the form of higher steel prices to the consumer.

Co-incident with the proposed loans, steel manufacturers were requested to file their plans for future expansion with the Dominion Government. To date, Dominion Foundries and Steel Ltd., (Dofasco), is the only one among the larger firms to do so. Other steel producers have been cool towards the Government proposal. However, early in 1949, Dofasco announced plans to construct a 500 ton blast furnace, and associated coke-oven facilities, with the Dominion Government bearing half of the cost. This new capacity would be in operation by 1950-51, and would constitute Dofasco's first attempt at pig-iron production. Until this is done Dofasco will continue to be dependent upon others for pig-iron and scrap.

Page-Hersey Tubes Ltd.

The above concern was established in 1902, as the Page Hersey Iron and Tube Co. Ltd., and was reincorporated under the same name in 1906. The present corporate style was adopted in 1920. As the scope of operations expanded the present company was incorporated under Dominion Laws in 1926.

In 1912, a rolling mill was purchased at Cohoes, N.Y., and a subsidiary company, the Cohoes Rolling Mill Co., was formed. In 1925, another mill was built there and the Mohawk Tube Co., Inc., was formed as a wholly-owned subsidiary of Cohoes Rolling Mill Co. These two firms operated continuously and were sold in 1942, to permit the subject concern to confine its operations to Canada. As export markets developed after World War I, two subsidiaries were formed in 1920, to handle export sales on a commission basis, i.e. Page-Hersey Export Co. Ltd., Toronto, and Page-Hersey Trading Inc., New York City, N.Y.

At present Page-Hersey Tubes Ltd., operates five well-equipped mills at Crowland, a section of Welland, Ont., and one at Guelph, Ont. In addition expenditures have been approved for the construction of a specially designed electric-weld pipe mill at Welland, to replace the present lap-weld mill. This company is the sole Canadian producer of seamless wrought iron and steel tubing.

Its average net profit percentage for the period 1930-1947 was 8.84%, and for the period 1937-1947, was 9.24%. Both

TABLE 7

PAGE-HERSEY TUBES LTD.
COMPARATIVE FIGURES 1930-1947 x
(in thousands of dollars)

(1) Ye- ar	(2) Net Worth	(3) Net Profit Avail. for Divid.	(4) (3) as % of (2)
30	\$ 9,668	\$1,802	18.64
31	9,824	1,014	10.32
32	9,490	343	3.61
33	9,177	318	3.46
34	9,292	620	6.67
35	9,403	643	6.84
36	9,564	742	7.75
37	9,849	1,033	10.49
38	9,895	737	7.45
39	10,439	1,127	10.79
40	10,505	942	8.97
41	10,559	917	8.69
42	10,771	943	8.76
43	10,797	896	8.30
44	10,881	958	8.8
45	11,029	1,005	9.12
46	11,197	1,061	9.48
47	11,452	1,259	10.99

x Compiled from Financial Post Survey of Corporate Securities.

these figures are above the 1937-1947, average of 8% for the 49 iron and steel product concerns. This suggests some degree of price control, as does the fact that profits were earned at the height of the depression.

Massey-Harris Co. Ltd

This company was formed the amalgamate the Massey Manufacturing Co., started in 1847, by the late Daniel Massey, with A. Harris, Son and Co., of Beamsville, started in 1857, by the late Alanson Harris. It was incorporated in 1891, and at

that time became the largest manufacturer of harvesting machinery in Canada. Subsequently it acquired the assets of Paterson-Wismer, and the Verity Plow Co. In 1893, through affiliation with the Bain Wagon Co., of Brantford, activities were expanded to manufacture farm wagons. Long before 1900, Massey-Harris was exporting its machines to different parts of the world.

In 1910, Massey-Harris expanded into the United States by purchasing the Johnston Harvester Co., of Batavia, New York. Later the Deyo-Macy Engine Co., and the J.I. Case Plow Works Inc., were acquired. The latter firm was merged with the Massey-Harris Harvesting Co. Inc., Batavia, N.Y. under the style of Massey-Harris Co., headquarters at Racine, Wis. The most recent acquisition was the Goble Disc Works, Inc., Fowler, Cal. which took place in May 1948.

Massey-Harris has manufacturing subsidiaries in France, England and Germany, and sales organizations in Argentina, Brazil, Uruguay, Denmark, Belgium and South Africa. It also has a substantial minority interest in South African Implements Mfg. Ltd., the largest South African implement manufacturer; in H.V. MacKay, Massey-Harris Proprietary Ltd., Melbourne, Australia; and in H.V. MacKay Massey-Harris (Queensland) Proprietary Ltd., Brisbane, Australia.

Though started in a small way in 1847, this concern progressed, and reached its most prosperous era following the turn of the century. By 1928, the company was the leading manufacturer and distributor of farm implements in the world. It

TABLE 8

MASSEY-HARRIS LTD.
COMPARATIVE FIGURES 1930-1947.^x
(in thousands of dollars)

(1) Ye- ar	(2) Net Worth	(3) Net Operat. & Other Income	(4) (3) as % of (2)	(5) Net Prof. Avail. for Divid.	(6) (5) as % of (2)	(7) Net Sales	(8) (5) as % of (7)
30	\$39,035	\$ 896	2.30	\$-2,247	-5.76		
31	32,678	-1,523	-4.66	-4,043	-12.37		
32	26,091	-1,788	-6.85	-3,828	-14.67		
33	22,795	-1,421	-6.23	-3,306	-14.50		
34	18,085	181	1.00	-2,210	-12.22		
35	16,664	915	5.49	-1,421	-8.53		
36	16,606	2,534	15.26	58	.35		
37	17,682	3,339	18.88	1,043	5.90		
38	18,786	3,505	18.66	1,066	5.67		
39	18,145	2,471	13.62	705	3.89		
40	17,600	3,132	17.79	806	4.58		
41	17,820	4,759	26.71	974	5.47	\$34,614	2.81
42	18,724	8,204	43.81	1,564	8.35	58,243	2.69
43	19,442	8,927	45.92	1,322	6.80	92,267	1.43
44	20,251	7,803	38.53	1,413	6.98	90,973	1.55
45	27,409	7,091	25.87	1,588	5.80	115,764	1.37
46	27,884	6,354	22.79	2,126	7.62	83,834	2.54
47	30,706	10,422	33.94	4,084	13.30	70,084	5.83

^x Compiled from Financial Post Survey of Corporate Securities.

was one of the "big three" of Canadian farm implement manufacturers. Massey-Harris, International Harvester and Cockshutt Plow had 75% of the total sales of agricultural implements in the period 1929-1933, and even today they still dominate the industry. After 1929, Massey-Harris suffered substantial losses for several years as a result of the depressed conditions affecting the grain-growing areas of United States and Canada. The ratio of annual losses to net worth ranged from .35% to 14.67%. Before the downward trend was arrested in 1937, the acc-

unulated deficit was well over \$20,000,000.

A number of factors contributed to the severe losses suffered during the depression. In the first place, following 1929, the "big three" of the Canadian implement industry held to a policy of adjusting production to sales and maintaining prices.¹ The farmer was compelled to pay high prices at a time he could least afford it. Overhead costs rose as there were fewer sales to carry an expense that could not be reduced. This was further aggravated by a severe decline in the formerly substantial export business. However, it cannot be said that the industry's capacity had been expanded beyond normal requirements during the prosperity of the twenties.

Another factor was the method of sale and distribution of farm implements. Canadian manufacturers maintained, and still maintain branches and warehouses with inventories and necessary staffs to supply local selling agents. This meant a degree of inflexibility of selling expense in periods of restricted sales. The obligation to maintain inventories of parts, replacements and machinery not only in Canadian warehouses but also in those of subsidiaries and sales agencies throughout the world meant that Massey-Harris' inventories represented very large sums of money with consequent inflexible cost, and a proportionate risk of loss.

The extension of credit to farmers, in the twenties, was another factor contributing to the severe losses. By 1930, Massey-Harris farm paper reached a total of \$26,000,000. This

1 Report of the Royal Commission on Price Spreads. (Ottawa: Printer to the King's Most Excellent Majesty, 1935), p.62

amount was reduced \$11,000,000 during the next 7 years. Adjustments under Farmers' Creditors Arrangement Acts, discounts granted to farmers in all countries, and uncollectable accounts constituted the major portion of the total.

In 1938, and 1939, operations were once again profitable as those were the best crop years the West had experienced for some time. Since that date the trend of profits has been steadily upward. The increase in the deficit shown in 1939, and 1940, was largely due to the writing off of \$1,349,505, reducing the net assets of subsidiaries in enemy-controlled countries to the nominal sum of \$4. With the reorganization of Feb. 23rd 1942, the deficit and arrears of dividends were wiped out by reducing the outstanding capital \$24,431,430, and a capital surplus of \$2,206,206 was created. Since that time the earned surplus has increased each year. Though dividends have been paid regularly, the major portion of profits has been retained in the business, thereby increasing net working capital and net worth.

While operations have been increasingly profitable in recent years, the average ratio of net profit available for dividends, to net worth, over the past eighteen years has been slightly more than one-quarter of one percent - an extremely low figure which could hardly be termed a reasonable rate of return on capital. Substantial profits would seem to be required in good years for the purpose of absorbing and carrying the losses of the lean years. Stability of price, and price maintenance policies have been justified on these grounds.

1 Report of the Royal Commission on Price Spreads. (Ottawa: Printer to the King's Most Excellent Majesty, 1935), p. 63.

If Massey-Harris can be considered as representative of the Canadian farm implement industry, there is no basis for accusing the farm implement oligopoly of monopolistic exploitation. However, it is true that a greater degree of price flexibility would benefit the farmer, and if the demand for implements is elastic would benefit the manufacturer, during depression.

Canadian Celanese Ltd

This company was incorporated in 1926, to acquire the sole Canadian rights to the Dreyfus patents and processes for manufacture of cellulose acetate, artificial silks, non-inflammable celluloids and photographic films, artificial wools, etc. The business has three branches; yarns, finished fabrics and production of chemicals. The manufacture of finished fabrics provides the main source of revenue.

Dr. Henri Dreyfus, holder of the cellulose acetate patents, was one of the founders of the British Cellulose and Chemical Mfg Co. Ltd., incorporated in 1916, and which later became British Celanese Ltd. In 1918, the American Cellulose and Chemical Mfg Co. Ltd., was established, the forerunner of the Celanese Corporation of America. The relations between these two companies and Canadian Celanese have been very close. Though there are no inter-company share holdings between American, British or Canadian Celanese, some of the members of the Board of Directors of the former two organizations, are also members of the Board of Canadian Celanese Ltd. Camille and Henri Dreyfus, G.H. Whigman and Sir William Alexander are on

TABLE 9

CANADIAN CELLANESSE LTD.
COMPARATIVE FIGURES 1930-1947. x
(in thousands of dollars)

(1) Year	(2) Net Worth	(3) Net Operat. Profit	(4) (3) as % of (2)	(5) Net Profit Avail. for Divid.	(6) (5) as % of (2)	(7) Net Sales	(8) (5) as % of (7)
30	\$11,795	\$1,255	10.64	\$ 812	6.88		
31	11,962	1,260	10.54	805	6.73		
32	10,984	1,301	11.85	719	6.54		
33	10,864	1,858	17.10	1,261	11.61		
34	12,253	2,038	16.63	1,505	12.28		
35	12,937	2,255	17.43	1,603	12.39		
36	14,095	2,121	15.04	1,520	10.78	7,628	27.80
37	14,110	2,230	15.81	1,489	10.55	8,074	27.66
38	14,291	2,062	14.43	1,317	9.22	7,771	27.67
39	14,626	2,930	20.03	1,999	13.67	8,809	33.86
40	14,114	2,730	19.34	1,464	10.37	8,045	34.08
41	15,247	4,393	28.81	1,975	12.96	11,240	39.31
42	15,765	5,023	31.86	1,747	11.08	12,116	41.70
43	16,126	5,049	31.31	1,369	8.49	12,261	41.01
44	16,442	4,853	29.51	1,394	8.48	12,795	37.44
45	18,067	4,906	27.15	1,390	7.69	12,932	37.24
46	17,129	4,643	27.10	2,027	11.83	13,923	32.89
47	19,613	6,624	33.77	3,025	15.43	17,522	37.84

x Compiled from Financial Post Survey of Corporate Securities.
Net sales figures 1930-1935, not available.

the Boards of all three concerns. These firms all produce cellulose acetate under the Dreyfus patent. British Celanese has the sole rights within the British Empire outside of Canada, and the Celanese Corp. of America the sole rights in the United States, its dependencies, and Central and South America. All three manufacturers were closely related to the International Rayon Cartel which was investigated by the United States Department of Commerce, before the World War II. The cartel agreement included

Courtaulds Ltd.,(Br). Glanzstoff,(Ger) and Snia Visiosa,(Italy).

There are only two Canadian rayon producers, Canadian Celanese Ltd., and Courtaulds Canada Ltd., a subsidiary of the British firm. In 1935, Courtaulds produced 59%, and Celanese 41% of the total Canadian rayon production.² In the same year Canadian Celanese produced 47% of Canadian rayon and silk fabrics. Over the past eighteen years net profits available for dividends have averaged 10.39% of net worth. Over the period 1937-1947, net profit averaged 10.9% as compared with 6.9% for twenty-seven primary textile firms listed in the Bank of Canada Statistical Summary. Though it is true that the Canadian textile industry was excessively depressed during the early 30's, this difference in net profit ratios of 4% is some evidence of monopolistic exploitation. This is more evident when the ratio of net profit to sales for the period 1936-47 is considered. Canadian Celanese has been clearing 16¢ on every sales dollar.

TABLE 10

CANADIAN CELANESE LTD
SALES DOLLAR BREAKDOWN

	AV. 1936-39	AV. 1942-47	1ST. QUARTER 1948
Raw materials	\$.213	\$.160	\$.137
Labour	.315	.315	.340
Overhead	.243	.201	.194
Operating Income (before taxes and financial charges)	.229	.324	.329

On the basis of this evidence the recent Price Committee failed to understand why rayon prices had not been lowered. Actually there was a 3% rise in price to meet a 14% wage increase.

1 Royal Commission on Textiles, (Ottawa: Printer to the Kings Most Excellent Majesty, 1938), p.97.

2 Ibid., p.96.

Canadian Celanese argued that they were an integrated firm carrying on four different processes and hence the ratio of operating profit to sales was naturally higher. This reasoning ignores the fact that the ratio of net profit to net worth has also been very high compared to other textile firms. This condition would seem to be the result of monopolistic conditions within the industry.

Goodyear Tire and Rubber Ltd

This company was incorporated under Ontario laws, March 30th., 1927, to succeed a company of similar name which was formed under Ontario laws in December, 1919. The latter was a successor of a business started in 1910, by interests associated with Goodyear Tire and Rubber Co., Akron, Ohio.

Since its inception this business has expanded with branch plants being erected or acquired. In 1924, a subsidiary company, the Goodyear Improvement Company Ltd., was formed as a realty holding company. In March 1926, the Goodyear Cotton Company of Canada Ltd., was formed to acquire the business of the Canadian Manhasset Cotton Co. Ltd., St. Hyacinthe, Que. During 1946, two new factories were constructed at New Toronto, to expand facilities and produce new lines. Late in 1946, this company purchased a building at St. Malo, Quebec, and proceeded to equip it with machinery to produce moulded rubber goods. In 1947, another subsidiary, St. Malo Heating Ltd., was formed at St. Malo, Que.

This firm is an important subsidiary of Goodyear Tire and

Rubber Co., of Akron, Ohio. It is controlled through ownership of 78.8% of the common (voting) stock. The parent company is the leading rubber manufacturer in the United States and has fifty-seven identified subsidiaries both domestic and foreign.

The Canadian firm is the leading producer of automobile tires in Canada, and until recently had refused to enter the rubber footwear or specialty fields. Its New Toronto plant is capable of producing over two million tires a year. Its net profits available for dividends have averaged 10.93% for the

TABLE 11

GOODYEAR TIRE AND RUBBER LTD.
COMPARATIVE FIGURES 1930-1947. *
(in thousands of dollars)

(1) Year	(2) Net Worth	(3) Net Profit Avail. for Divid.	(4) (3) as % of (2)
30	\$15,421	\$1,550	10.05
31	15,603	1,703	10.91
32	15,083	718	4.76
33	15,579	1,377	8.84
34	15,600	1,429	9.16
35	14,059	1,445	10.28
36	14,622	1,516	10.37
37	14,401	1,364	9.47
38	14,400	2,229	15.48
39	14,453	1,653	11.43
40	14,870	1,392	9.36
41	14,350	1,603	11.17
42	14,789	2,024	13.69
43	15,067	1,725	11.45
44	15,020	1,581	10.53
45	15,433	1,386	8.98
46	16,269	1,660	10.21
47	19,930	3,931	19.73

* Compiled from Financial Post Survey of Corporate Securities.

period 1930-1947, and 11.96% for 1937-1947. Both of these fig-

compare favourably with the earnings of other oligopolistic firms examined. Its net profit average for 1930-1947, is higher than any of them with the exception of Imperial Oil Ltd

Canadian Industries Limited

In the period between the two World Wars, combines in the chemical industry developed in practically all industrial nations. In Germany, I.G. Farben was reorganized in 1925, combining into one organization the major chemical firms in that country. In 1926, Imperial Chemical Industries Limited (I.C.I.) was formed in Britain to acquire Brunner Mond and Company, United Alkali Company, British Dyestuffs Corporation, and Nobel Industries Ltd., four firms which had dominated the British soda, dyestuffs and explosives fields. In the United States, the du Pont Company and other firms were branching out into diversified lines of production. In 1929, a patents and processes agreement was reached between I.C.I. and du Pont which covered virtually all the chemical products made by the two firms. This agreement was revised and extended in 1939. Under it, the British Empire with the exception of Canada and Newfoundland became I.C.I.'s exclusive territory, and the United States and Central America became du Pont's exclusive territory. Each agreed to grant the other exclusive licenses under existing and future patents in the territories exclusively assigned. As to the balance of the world not allocated exclusively to either firm, I.C.I. and du Pont decided to explore the possibility of using joint companies to eliminate compet-

ition between them.

The basis for this joint understanding had been laid in 1910, when du Pont and English Nobel Explosives Co., (one of I.C.I.'s predecessors) had merged several explosive companies, together with a Western concern making acids and fertilizers, and a sporting ammunition firm into a jointly-owned, Canadian company, Canadian Explosives Limited. After the formation of I.C.I. the operations of two other explosive manufacturers, the Canadian Giant Ltd., and the Northern Giant Explosives Ltd., were

TABLE 12

CANADIAN INDUSTRIES LTD.
COMPARATIVE FIGURES 1930-1947. ^x
(in thousands of dollars)

(1) Year	(2) Net Worth	(3) Net Profit Avail. for Divid.	(4) (3) as % of (2)
30	\$35,653	\$3,677	10.31
31	34,695	3,406	9.82
32	34,717	2,773	7.99
33	34,844	3,476	9.97
34	35,375	4,664	13.18
35	35,685	4,299	12.05
36	35,276	4,729	13.41
37	36,946	5,722	15.49
38	37,568	4,517	12.02
39	38,688	6,232	16.11
40	39,411	5,396	13.69
41	40,630	5,383	13.25
42	40,966	4,611	11.26
43	41,276	4,445	10.77
44	41,868	4,556	10.88
45	42,619	4,929	11.57
46	44,256	6,225	14.07
47	45,936	7,163	15.59

^x Compiled from Financial Post Survey of Corporate Securities.

consolidated with Canadian Explosives Ltd., which then became

the sole Canadian producer of dynamite. On June 20th., 1927, the present corporate style was adopted and the operations of these chemical and explosive firms were more closely integrated.

Since then Canadian Industries Ltd., (C.I.L.) has grown to become one of the largest industrial undertakings in Canada. It is the largest Canadian manufacturer of chemicals and chemical by-products. It has 11 operating divisions which are grouped as follows:

- (1) Agricultural chemicals and salt group.
- (2) "Cellophane" and Nylon group.
- (3) Chemical group -organic and inorganic .
- (4) Explosives and ammunition group.
- (5) Fabrics, paints and plastics group.

This corporation is closely associated with its two chief stockholders, E.I. du Pont de Nemours & Co., U.S.A., and Imperial Chemical Industries Ltd., of Britain. The remaining interests are almost entirely in the hands of Canadians.

Over the period 1930-1947, its net profit available for dividends has averaged 12.3% of its net worth. For the period 1937-1947, this figure was 13.15%, as compared with 11.76% for thirty chemical firms given in the Bank of Canada Statistical Summary. This increase of only 1.39% compared with the industry as a whole, is hardly sufficient to be indicative of monopolistic exploitation, particularly in view of the wide diversification of the company's activities.

Imperial Oil Ltd

This company was incorporated Sept. 8th., 1880, as The Imperial Oil Co. Ltd. In 1919, Supplementary Letters changed its name to the above corporate style. In 1932, the company acquired control of Domestic Storage and Forwarding Co., which added substantially to Imperial's chain of gasoline service stations. In 1933, the company erected a small refinery at Fort Norman, and in 1947, purchased a refinery at Whitehorse, N.W.T., which was dismantled and moved to Edmonton.

Imperial Oil Ltd., is one of 260 subsidiaries of Standard Oil Co., of New Jersey, which concern owns 70.08% of its outstanding capital stock. Imperial Oil Ltd., is both a holding and an operating company. As a holding company it controls a large number of subsidiaries which carry on the production and/or transportation of crude oil, as well as refinery and exploration activities. In that connection it operates about 5,000 tank cars, more than 7 ocean-going tankers, and lake tankers which alone have a capacity of 230,000 barrels. It also operates 8 oil refineries, the latest, recently completed being near Edmonton. The refineries with location, capacity and supply source are as follows:

Location	Capacity	Supply Source
Sarnia	54,000 bls. dly.	Mid-continent and South America
Montreal	39,000 " "	S.A. and Gulf Coast
Halifax	24,000 " "	" " " " "
Ioco	12,000 " "	California
Calgary	10,000 " "	Turner Valley
Regina	10,000 " "	Oklahoma, Texas, Colorado

Edmonton	4-6,000 bls.dly.	Leduc Field.
Norman Wells	1,100 " "	Norman Wells.

Imperial Oil Ltd., has twenty-five direct subsidiaries and approximately forty indirect subsidiaries. These are controlled through ownership of at least 51% of the outstanding capital stock. Through its subsidiaries this company owns large oil-producing acreages with refineries in Columbia and Peru; a scrubbing plant; 62 absorption plants in the Turner Valley; a pipeline to Calgary; and controls or has a participating interest in 184 gas and/or oil wells in the Turner Valley, 46 wells elsewhere in Alberta, 24 oil and gas wells in Ontario, and 63 oil wells in the Norman Wells field. In its sixty-eight years of operations Imperial Oil Ltd., has attained leadership in the Canadian oil and petroleum industry. It heads Canada's petroleum oligopoly with a total refinery capacity of 138,000 barrels per day as compared with 40,500 barrels a day for British American Oil Ltd., 32,000 barrels a day for McCall Frontenac Oil Co. Ltd., 3,300 barrels a day for Canadian Oil Ltd., and 1,600 barrels a day for North Star Oil Ltd. Shell Oil Co., of Canada Ltd., Trinidad Leaseholds (Canada) Ltd., and three or four small Western concerns also operate refineries in Canada but on relatively negligible scales.

Over the period 1930-1947, this company's net profit available for dividends has averaged 12.86% of its net worth. The similar figure for 1937-1947, was 13.56% as compared with a 10.96% average for eleven petroleum concerns listed in the Bank of Canada Statistical Summary. Though the profit per gal-

TABLE 13

IMPERIAL OIL LTD.
COMPARATIVE FIGURES 1930-1947. ^x
(in thousands of dollars)

(1) Ye- ar	(2) Net Worth	(3) Net Profit Avail. for Divid.	(4) (3) as % of (2)	(5) Total Sales	(6) (3) as % of (5)
30	\$171,186	\$18,020	11.11	\$	
31	183,970	18,227	9.91		
32	185,664	14,713	7.93		
33	187,062	14,102	7.54		
34	174,942	25,772	14.73		
35	167,186	25,230	15.09		
36	159,108	25,628	16.11		
37	151,854	26,452	17.42		
38	139,178	25,960	18.65		
39	127,911	19,250	15.05		
40	128,697	17,639	13.71		
41	131,358	16,144	12.29		
42	131,996	14,663	11.11		
43	134,320	15,549	11.58		
44	137,417	16,193	11.78		
45	137,262	16,617	12.11	174,102	9.54
46	143,524	17,326	12.07	195,872	8.85
47	152,019	20,464	13.46	200,602	7.85

^x Compiled from Financial Post Survey of Corporate Securities.
Sales figures 1930-1944 not available.

TABLE 14

IMPERIAL OIL LTD.
CANADIAN SALES DOLLAR BREAKDOWN. ^x

	1945	1946	1947
Raw materials	53.00¢	52.28¢	54.78¢
Freight	11.26	11.46	11.30
Manufacturing	12.40	11.03	10.33
Marketing	9.26	9.66	9.42
Taxes	8.13	8.96	8.07
Profits	5.95	6.61	6.10
Profit per gallon	.80	.94	.99
Gallons sold	1,291 million	1,380 million	1,662 million

^x Compiled from Imperial Oil Ltd., Annual Statements 1945-1947.

lon sold seems very small, one must consider the tremendous volume of sales, and the fact that volume of sales outside of Canada, are not included in Table 14. This also accounts for the difference between net profit as a percentage of total sales (see Table 13), and net profit as a percentage of the Canadian sales dollar. These figures are some indication of a degree of monopolistic control. Imperial Oil Ltd's price leadership and price discrimination policies were exposed in the British Columbia Petroleum Investigation.¹

1 L.G.Reynolds, Control of Competition in Canada, (Cambridge; Harvard University Press, 1940), p.12-13.

CHAPTER 4

CONCLUSIONS

The Level of Monopoly Profits

In Chapter 1, it was suggested that the main basis of the growth of concentration was the profit motive. Once a monopolistic position is attained, the monopolist is able to charge a price high enough to yield him the greatest possible profit.¹ In practice, the possibility of protests from customers, and public investigation dictates a price high enough to yield substantial profits but not so high as to draw public censure. However, methods of profit concealment by charging unduly large amounts to depreciation, charging new investment to operations, setting up needlessly large contingency reserves, and by other means have developed, although Income Tax legislation has limited such abuses. In addition, Parliament has allowed net profits of 15% to 20% to be earned with complete respectability.

If profit-seeking is the prime cause, then one would expect to find that the Canadian monopolies and oligopolies examined in this thesis have enjoyed large profits. The average ratio of net profit available for dividends to net worth for the eleven concerns analysed over the period 1937-1947, was 12.99%. The average net profit ratio for the three firms that are sole Canadian producers and that approach practical

1 J.M.Clark, Social Control of Business., (Chicago: University of Chicago Press, 1925), p.434-435.

monopoly, Page-Hersey Tubes Ltd., Aluminium Ltd., Consolidated Mining and Smelting Co., of Canada Ltd., was 16.07% as compared with 11.65% for the members of the oligopolies, Steel Co., of Canada Ltd., Asbestos Corporation, Goodyear Tire and Rubber Ltd., Imperial Oil Ltd., International Nickel Co., of Canada, Ltd., Canadian Industries Ltd., Massey-Harris Ltd., and Canadian Celanese Ltd. These three profit figures are considerably above the corresponding figure, 7.52%, for 665 corporations listed in the Bank of Canada Statistical Summary. The average net profit ratio for ten of the companies examined (Goodyear Tire and Rubber Ltd., was left out as comparable figures were not available for the rubber industry) was 12.98%. This is almost one-third larger than the weighted average for 135¹ companies in the same lines of business, 10.1%. Taking as representative these eleven companies which include a number of Canada's most important corporations, it is clear that selfish profit-seeking is the chief basis of monopolies and oligopolies.

One result of monopoly prices and profits is a maldistribution of productive resources. Our "free-enterprise" economy relies on the price system as the indicator of the sum total of individual consumer decisions as to which of his unlimited wants he desires to satisfy, and by what means. Naturally the consumer offers higher prices for what he most de-

1 Average net profit available for dividends as a percentage of net worth for 18 non-ferrous metal concerns, 27 primary textile firms, 49 iron and steel product companies, 11 petroleum concerns, and 30 chemical companies, 1937-1947, were weighted by the number of firms in each case and averaged. (Figures compiled from Bank of Canada Statistical Summary).

sires and lower prices for the things which yield him less satisfaction. With the price system as a guide productive services are allocated among alternative uses, to produce the goods and services the consumer desires. Under perfect competition the price offered by the consumer for the marginal product of a factor will be equal to the reward offered for the use of that factor. Heavy consumer demand for a good, results in high prices. This means high rewards to the factors producing it. More factors are attracted to the industry by the high returns, and production expands to meet the large consumer demand. Under monopoly the price offered for the marginal product of a factor exceeds the reward offered that factor, i.e. average revenue always exceeds marginal revenue. Under monopoly, a high price means large returns to the monopolist because the rewards to the factors of production are less than the price.¹ The result is that not enough factors are attracted to the industry to expand output to the point consumer demand warrants. Therefore productive resources are not properly allocated. This argument applies to monopoly, and in a lesser degree to any form of monopolistic competition. The effect in both cases is to distort the price system as a guide to production and resource allocation.

Here an important practical question arises as to whether the evils of monopoly would be mitigated by breaking up monopoly into several separate firms and creating oligopoly. Would the output and price be higher or lower? The

1 (J.S.Bain, Pricing, Distribution and Employment, (New York: Henry Holt and Co., 1948), p.153
 (J.E.Meade and C.J.Hitch, Economic Analysis and Policy, (New York: Oxford University Press, 1942), p.159-161.

result would depend on many factors. Each individual case would have to be examined on its own merits. Where production was carried on in a single plant because of a restricted market, a limited source of supply or the importance of the economies of large scale production, it would not be practicable to break up a monopoly, e.g. nickel. Where the good was produced in a chain of plants, e.g. gasoline, explosives and chemicals, each of these plants would probably be operated by a separate company with little change in production costs.¹ However, regional monopolies might develop because of the scattered location of the plants and long freight hauls between regions.

The attitude of the oligopolists towards one another is also important. There might be a formal or tacit agreement between them. In the absence of agreement each seller might determine his policy under the assumption that his rivals were unaffected by what he did. He might take into account the direct influence he had upon the price. In such a case the equilibrium price would be considerably lower than under monopoly and would approach the competitive figure as the number of sellers became larger. On the other hand, each seller might take into account the effect of his policy upon his rivals and thence upon himself again. He might consider his total influence on the price, direct and indirect. If each seller did this, the price would be the monopolistic one.² If each seller ignored both his direct and indirect influence on the

1 L.G.Reynolds, op.cit., p.63

2 Edward Chamberlin, Theory of Monopolistic Competition.
(Cambridge: Harvard University Press, 1935), p.54.

price, it would be the purely competitive price regardless of the number of sellers.

Though it is true that the profit ratio of the eight oligopolistic concerns was 4.42% below the average of the three practical monopolies, this is no proof that oligopolistic prices are lower and outputs higher than those of monopoly. This sort of reasoning ignores the fact that profits may be lower not because prices are lower, but rather because costs are too high. In this respect selling costs and the capacity of the individual firm and of the industry are often important factors.

In the long run, under perfect competition all firms in an industry would be of optimum scale. Any firm which was not of this scale or did not operate at the optimum size of output (the lowest average cost) would be forced out of business. There would be no unused capacity (no plant would be used at less than the rate that would give lowest average costs). If there was excess capacity in the industry (i.e. when, if all plants operated at capacity profits would be reduced below those in other competitive industries) it would tend to correct itself.¹ Productive factors would shift to other industries, attracted by higher returns available elsewhere. Under oligopoly an individual firm may not expand its plant to optimum scale or produce its optimum size of output because though average unit costs would be lowered, the greater volume produced would cause a price decline that would offset the lower

1 L.G.Reynolds, op.cit., p.107.

¹
costs. Where excess capacity exists in an oligopolistic industry it is not self-correcting and may persist indefinitely. When firms do not operate at lowest cost society loses as scarce productive resources are not being most efficiently used to satisfy consumer needs. Therefore society's real income is lowered.

Selling and advertising expenses contribute to higher costs. Under perfect competition if each firm produces a standardized product and sells it in a perfect market, no firm will spend money on selling goods as any firm can increase sales by lowering its price slightly.² In the case of oligopoly fixed prices and unused capacity lead naturally to high selling costs. Producers do not desire to start price warfare or are forbidden by agreement to increase their sales by price-cutting. They are, therefore, forced to embark on sales campaigns so that overhead costs can be spread over a greater output. Each firm attempts to differentiate its products from those of its rivals by high-sounding names, lavish advertising or fancy packages. In addition, free premiums and credit terms are used to induce buyers. The object, of course, is to increase and hold demand for the products in the face of counter-attacks by rival firms. Viewed as a whole, these costly sales campaigns tend to neutralize each other. All the oligopolists have higher unit costs because of high sales expense, which are passed on to the consumer. Insofar as the

1 J.E.Meade and C.J.Hitch, op.cit., p.164.

2 Ibid., p.176-177.

advertising campaigns by inducing a change in consumers' tastes increase the market for the industry as a whole, and insofar as the campaigns keep the consumer informed of the technical properties of goods, and the terms on which they can be obtained, advertising is of value. Beyond this it is waste by employing resources which would increase society's real income more if utilized in alternative productive employments.

From the foregoing it is clear that costs and prices under oligopoly may be higher than under monopoly. However, oligopoly may still be preferable because there is always the possibility of price competition.¹ There may also be more rapid technical progress and an opportunity for new producers to gain a foothold.

Price Rigidity and Economic Stability

In periods of depression some prices fall very little and other prices fall a great deal. There is wide price dispersion. Though it does not follow that prices which fall little are controlled, while those which fall greatly are competitively determined there is little doubt that monopoly and oligopoly prices fall less than they would under conditions of competition.² Hence greater burden of adjustment is thrown on the flexible price area.

What are the effects of this situation on the depth and duration of depression? It has been argued that deficiency of effective demand, unemployment and under-utilization of resources are caused or at least intensified by the depression

1 L.G.Reynolds, op.cit., p.63.

2 Ibid., p.71-74.

insensitivity of the prices of an important group of commodities.¹ The divergence of sensitive and insensitive prices is said to cause the fluctuation of the business cycle. It is suggested that a high degree of cyclical price flexibility would help sustain effective demand and prevent fluctuations in output and employment.

Professor Reynolds note that many of the controlled articles in Canada are basic raw materials, iron and steel, chemicals, asbestos and non-ferrous metals which have a considerable influence on the cost and price-level of producers' goods. The manufacturers of these basic goods argue that the demand for their products is markedly inelastic, and the decline in output during depression is due entirely to the decline in quantity taken by processors/users; and that price has little to do with it. The demand for capital goods in depression and prosperity becomes especially inelastic because of the bias of producers' anticipations. Any price reduction would decrease the total revenue of the producers of these goods and have little effect on their physical volume of sales. If, however, the prices of all materials (including wages) in capital-goods industries could be reduced during a recession as rapidly as sensitive prices, the decline in investment that leads to depression might be checked. If such prices were reduced in the early stages of recession while business was still optimistic, fresh investments might be induced. This increased spending would help make anticipations become reality.

1 A.H.Hansen, Fiscal Policy and Business Cycles, (New York: W.W.Norton and Co.Inc., 1941), p.315-316.

If the capital goods producers cut prices by cutting wages and disbursements the result might be a decline in consumer spending which would have an adverse affect on business anticipations. Professor Reynolds concludes that greater flexibility of producers' goods' prices, while it would not alter the general outline of the business cycle, would have an alleviating influence.

Professor Hansen take a more pessimistic view. He believes that in most cases prosperity dies a "natural death" because of temporary saturation of available outlets for investment in plant and equipment. When all the new developments made available by the progress of science, technology, and the growth of population have been fully exploited and utilized, there is a sharp reduction of investment. The resulting fall in income brings widening price divergence between sensitive and insensitive prices. This dispersion is a result rather than a cause of the cycle. No price reduction commensurate with price-sensitive goods would bring a recovery in investment expenditure, according to Hansen, because of the fact of temporary stagnation. However, he admits that when sufficient time had elapsed for new technology and the need of replacement to provide outlets for investment, a reduction in the cost of capital goods would be favourable to expansion providing income and effective demand was maintained. In the latter respect both Prof. Hansen and Prof. Reynolds are in agreement. There is little doubt that price rigidity characteristic of monopoly and oligopoly, particularly in the capital

goods field,intensifies the depth and duration of depression.

In a country such as Canada where a widely fluctuating export income forms a large part of the national income, the problem of price rigidity is particularly serious. Canada is still dominantly a raw material exporter,although the importance of exports of manufactured and finished goods has grown in recent years. In depression the producers of the staple exports such as wheat,newsprint,lumber,etc.,are "squeezed" between the flexible prices of their products and the relatively rigid costs (prices) of manufactured goods often produced under conditions of monopolistic competition. The policy of controlled supply and price maintenance followed by monopolistic competition,in industry,can well be contrasted to conditions in staple production where supply (production) has remained fairly stable,or has even increased in the face of falling prices,thus accentuating the price decline. A fall in the world price of our export staples reduces the standard of living of all Canadians. In the long run,the brunt of this fall has been borne in the past by those engaged in,or associated with the production of staples. On the bases of both justice and expediency there is a strong case for State interference to spread the burden.¹ A discussion of possible remedies for monopolistic competition logically follows.

The Canadian Combines Investigation Act

One of the major functions of the above Act is to

1 H.A.Innis and A.F.W.Plumtre, Canadian Economy and Its Problems.,(Toronto: Canadian Institute for International Affairs,1934), p.135.

protect the Canadian Consumer against unjustifiably high prices and monopolistic exploitation. It does not provide the direct approach to which we have been accustomed during the War years, e.g. price ceilings, quotas, etc. This Act does not give the administering agency, the Combines Investigation Commission, any authority to fix prices or to decide that prices or profits in any particular case are excessive. Rather it seeks to maintain what might be termed indirect control or control by competition in the belief that the best check to high prices is the existence of a competitor selling at a lower price. The principal point of combine investigation is not the fairness or unfairness of the price, but rather the element of agreement determining whether there has been an undue lessening in competition. Indications that prices are unjustifiably high may, however, prompt investigation to see if there is an element of restrictive competition at its source.

The present Combines Investigation Act which was amended in 1935, 1937, and 1946 defines "combines" in the broadest sense to include all the various forms discussed earlier. Trade combinations (Associations and Federations), trusts, mergers (Consolidation), and monopolies which have operated to the detriment of the public through limiting production, fixing or enhancing prices, preventing competition or otherwise monopolizing or restraining trade are defined as "combines" within the meaning of the Act. Participation in the formation or operation of such combines is an indictable offence.

A preliminary inquiry into an alleged combine can be made, in the first place on a complaint from the public, secondly at the instance of the Minister of Justice and thirdly, on the initiative of the Commissioner of the Combines Investigation Commission. If this discloses sufficient evidence to justify a more extended examination, a formal inquiry is then undertaken. When an investigation is completed, the Commissioner reports his conclusions to the Minister of Justice. The Act requires that such reports be made public. If, in the opinion of the Commissioner an offence has been committed, the report and evidence may be sent to the Attorney General in whose Province the combine has been found, or reference may be made to the Attorney General of Canada for such action as the conditions disclosed may appear to warrant. Prosecution for offences under the Combines Investigation Act follows the regular procedure under the authority of the Provincial or Dominion Attorney General.

In some cases, particularly tacit agreements, it is difficult to establish an agreement giving presumption of detriment, and the prosecution must attempt to prove public detriment by arguing the propriety of prices, e.g. the recent Dental Supplies Case. However, the law refuses rightly, to dabble in economics and pass judgment on the fairness of prices. Any price is reasonable insofar as buyer and seller mutually agree to it without compulsion. Where the court establishes the existence of a "combine" several remedies are available. In the first place everyone is guilty of an indictable offence, under the Act, and is liable to a fine not exce-

eding \$10,000, or to two years imprisonment, or if a corporation to a penalty not exceeding twenty-five thousand dollars, who is a party or privy to or knowingly assists in the formation or operation of a combine within the meaning of the Act. In addition to the penalty the Governor-in-Council may direct the reduction or removal of customs duties in order that the public will recieve the benefit of reasonable competition. Up to 1944, this remedy had only been used once in it forty-five years of existence. Its effectiveness, of course, is limited by international cartels. The latter divide the world market among the members and agree to refrain from competition regardless of tariffs. In cases where patents or trade-marks have been used to unduly limit production or restrain trade the Exchequer Court may declare void any agreement, license or arrangement relating to such use; restrain any person from carrying out all or any provisions of such agreement; direct the grant of licenses under any such patent to such persons and on such terms and conditions as the court may deem proper; direct that the registration of a trade-mark in the register of trade-marks be expunged or amended; and direct that such other acts be done or omitted as the court may deem necessary to prevent any such use; provided that no order shall be made under this section which is at variance with any treaty, convention, arrangement or engagement respecting patents or trade-marks with any other country to which Canada is a party. The widespread publicity given the reports of the Combines Investigation Commission is another important factor in the enforcement of the Act, and in

the maintenance of competition.

The effectiveness of the legislation against undue restraints of trade cannot be measured by the number of investigations conducted under it, or by the number of prosecutions for alleged offences. It is nevertheless true that a statute lives largely by appropriations and these until recently have been grossly inadequate.¹ (In 1941, the Combines Investigation Commission had a staff of eight, and an appropriation of \$62,000.) But there is some evidence that the very existence of the Act and the possibility of investigation has led to the abandonment of proposed agreements which might have been brought into question.² While indirect control by maintenance of competition can never be completely effective, neither can a system of direct control, as our wartime experience showed. However, a consistent policy of investigation and prosecution protects the consumer, and has and will produce results which extend beyond the particular fields to which attention may be drawn through publicity and the imposition of penalties.

It is clear from the foregoing that the Combines Investigation Act approach to the problem of undue trade restraints is essentially a negative one; it does not strike at the roots of the problem but rather by investigation and prosecution seems "to bolt the door after the horse is stolen".
Once an agreement or monopoly is in existence, it is very

1 V.W. Bladen, "Combines Investigation Commission and Post War Reconstruction", C.J.E.P.S., Vol. 10, 1945, p. 350.

2 Special Committee on Prices, Minutes of proceedings and Evidence, (Ottawa: Printer to the King's Most Excellent Majesty, 1948), p. 166.

difficult to restore competition. The best approach is to make the formation of a monopoly or agreement difficult to consummate. As indicated in the foregoing, the present Act has helped in this regard but it could be made considerably more effective by supplementary legislation in related fields.

Proposals

In the Chapter 2 analysis of Canadian firms, the importance of patent control in relation to monopoly and restriction of competition was evident. As, for example, the Dreyfus patents held by Canadian Celanese Ltd. The Patent Act of 1935, allows patents on any new, useful process, machine, manufacture or composition of material, or any improvement thereon which was the result of invention rather than mechanical skill. The Act requires that the application for a patent must contain a clear, complete description of the item to be patented. A patent gives the original inventor or his legal representatives exclusive rights for seventeen years, subject to adjudication in respect thereof before any court of competent jurisdiction. If these rights are invaded the inventor or his legal representatives can collect damages. Any person, however, can attack the patent on the grounds that it is not new, useful or the result of inventive ingenuity; that the description in the application is not full, clear, or exact enough to distinguish it; or that the alleged inventor is not the ¹ true or original inventor. A person who is planning to man-

1 H.G.Fox, "Patents in Relation to Monopoly", C.J.E.P.S. Vol.11 1946., p.330.

ufacture an object, or use a process similar to one covered by a patent may seek a court order for a declaration that the process he desires to use, or the object he desires to manufacture is not an infringement of an existing patent.

In addition, the Patent Act provides that the Attorney General of Canada, or any interested person may at any time after three years from the date of the grant of the patent, apply to the Commissioner alleging, in the case of that patent that there has been an abuse of the exclusive rights granted thereunder and asking for relief under the Act. The following constitute an abuse of such rights:

- (a) Failure to work or make the patented invention;
- (b) Importation to the detriment of home manufacturers;
- (c) Failure to meet demand in an adequate way or on reasonable terms;
- (d) Prejudicing the country's trade or industry or that of particular firms, contrary to public interest by refusing reasonable license to others;
- (e) Attaching unfair conditions to acquisition, use, or working of the patented article or process;
- (f) Using a patent or a process to prejudice the manufacture, the sale, or use of materials used in that process.

The Commissioner of Patents is given the right at any time to require a patentee to provide evidence that commercial scale use of his process, or production of his product was be-

ing undertaken, or of not, why not. Where the Commissioner of Patents is satisfied an abuse exists, he may revoke the patent or grant compulsory license on application under a royalty he decides is fair and reasonable.

On the surface this would seem to provide adequate protection against the misuse of patent rights. However, the remedies provided are slow and expensive. It takes an average of two years for the disposition of an application concerning patents, and the cost is high. The collection of evidence to prove inadequate supply, or unreasonable price is a difficult and costly task even for Government agencies. The Act seems, in practice, to be only effective in cases of simple non-use¹ of patents. It is true that the Statute of Monopolies supplements the provision of the Patent Act providing treble damages for persons "hindered, grieved, disturbed or disquieted" by the abuse of monopolies or patents, but this statute is subject to the criticisms just outlined. In addition, its legal and constitutional position is in doubt. The court has interpreted it as applying only to improper and invalid exercise of Royal prerogative, and not to Letters Patent which are perfectly legitimate and protected by law. No action has ever been brought under this Statute.

None of these safeguards provides adequate protection against various types of patent policy and restrictive licensing that are used as a shield for monopoly, e.g. patent pools and cross-licensing agreements. In the radio field, for

1 I.M. MacKelgan, "Notes on Patents in Relation to Monopoly", C.J.E.P.S. Vol. 11. 1946., p. 475.

example, patents relating to radio tubes have been concentrated in Thermionics Ltd. This corporation was formed in 1932, and under agreements made in 1936, with shareholder companies, it renewed licenses under patents held by Canadian Marconi Co., Canadian General Electric Co. Ltd., Canadian Westinghouse Co. Ltd., Northern Electric Co. Ltd., and Rogers-Majestic Ltd. Then Thermionics Ltd., licensed each shareholder company with full rights to operate under the patents rights assigned by all of them to Thermionics Ltd. The licensees are permitted to sell radio tubes only in accordance with a schedule of prices, terms and considerations established by Thermionics Ltd. Each licensee adopted a standard form of jobber contract prepared by Thermionics Ltd., which required the jobbers to maintain the list prices and discounts fixed by each manufacturer.¹

Patents perform a valuable service in providing adequate incentive and reward to the inventor whose work increases the income of society as a whole. Some people argue that the criticism of monopoly fades before the benefits bestowed by invention. The fact that patents encourage invention is not disputed here, but rather the form the reward takes. If the basis of patents is to promote as large and rapid an increase as possible, in society's real income, the widest possible use of and fastest improvement of an invention is desirable. Patent laws which give the inventor or his legal representatives monopoly privileges thwart these ends and lay the basis

1 Canada and International Cartels, Report of the Commissioner, Combines Investigation Act, (Ottawa: Printer to the King's Most Excellent Majesty, 1945), p.48.

for exploitation.

For this reason, no one should be given the exclusive right to manufacture any product or use any process. The inventor, recognized as such and his rights protected by the Government, should be given a royalty of 2% or 3%, or even more if¹ justice warrants, on the cost of producing the patented article. This plan combines adequate incentive and protection for the inventor, and at the same time avoids the evils inherent in monopoly privileges. It is true of course that such a sweeping change would only affect Canadian Patents. Nevertheless, such action would be a step in the right direction and would help relieve the burden thrust upon the Combines Investigation Commission. It would provide other nations with an example to follow and might clear the way for International Patent Reform and ultimately might mean the elimination of International Cartels.

Corporation law is another field in which legislation would be invaluable. In the preceding chapters we have seen how the rise of concentration and monopoly was based on the corporation, and particularly on various kinds of Consolidation, i.e. mergers, amalgamations and holding companies. While a Consolidation which has operated or is likely to operate to the detriment of, or against the public interest, is included in the definition of "combine", the Combines Investigation Act² does not deter the formation of this type of concentration. The latter have been the chief means used to gain monopolistic

1 Dr. Philippe Hamel, Abuses of Capitalism, (Quebec: 1945), p.15.

2 V.W. Bladen, op.cit., p.357.

control of markets and prices. Where consolidations now exist any attempt to unscramble them presents difficult problems in equity. Innocent shareholders may be hurt. However, in the case of proposed consolidations, "an ounce of prevention is worth a pound of cure". Action should be taken to prevent their formation.

How is this to be done? There seems to be two schools of thought. One group emphasizes the fact that mergers, amalgamations and holding companies may be, in some cases, justified on economic grounds; where production, distribution or management costs are lowered and greater efficiency obtained. Therefore, consolidations should be allowed subject to administrative supervision.¹ Each proposal for consolidation should be examined on its own merits and decision reached by some supervisory agency. Professor Milton Handler would include the following clauses in a revised Corporation Act.

(1) Prohibit acquisition of stock in and holding company control of competing companies in the case of corporations with a net worth of over \$1,000,000, with suitable exceptions for bona fide investments and control of true subsidiaries by parent corporations.

(2) The acquisition of assets and property of competing firms would be subject to administrative supervision in the case of a corporation with a net worth of over \$5,000,000. Such acquisition would be approved if:

(a) It resulted in greater efficiency and economy in production distribution and management, in the public interest.

(b) It does not result in any substantial restraint of trade or lessening of competition.

(c) The corporations involved do not include one or more of the ten leading concerns in the trade or industry as determined by sales, output or capacity.

(d) It does not reduce the number of competitors within the trade or industry so as to materially les-

1 R.E.Curtis, Trusts and Economic Control, (New York: McGraw-Hill Book Co., Inc., 1931), p.496.

sen the effectiveness or vigour of competition.

(e) The size, strength and position of the acquiring company will not enable it to fix or maintain prices by reason of administrative action apart from competition.

(f) The acquiring company, to induce acquisition has not engaged in unfair or deceptive methods or violated anti-trust legislation.

The other school of thought suggests that certain kinds of consolidations should be banned entirely. This would greatly simplify administration. Trying each merger or amalgamation on its own merits as Professor Handler suggests is rather clumsy and may leave loop-holes through which real culprits may escape. Were a ban placed on a certain type of consolidation all the court would have to determine would be whether or not a given consolidation fell within that category, rather than whether or not it was detrimental to the public interest. This latter is more simple and more effective. The following are some of the prohibitions that have been suggested:

By V.W. Bladen:

- (1) Prohibit the holding of stock of a competitor.
- (2) Prohibit the acquisition of the assets or property of a competitor where such acquisition gives the acquiring company more than a certain percentage of the capacity, sales or output in that industry or trade.

By H.C. Simons:

- (1) Prohibit any corporation which manufactures or merchandises goods, from owning securities of any other such corporation.
- (2) Place a limitation on the total amount of property a single corporation may own.
 - (a) A general limit on all corporations.
 - (b) A specific limit within an industry to stop any firm from dominating an industry.
- (3) Prohibit any person from serving as an officer in any two corporations in the same line of business,

or in an investment corporation and an operating company. (This clause abolishes the inter-locking directorates which were one method of monopolistic control, e.g. British, Canadian and American Celanese).

(4) Investment corporations which hold stock in operating companies shall be prohibited from exercising influence over such companies with respect to management, and shall hold such stock without voting rights.

(5) Incorporate investment corporations under separate laws designed to preclude their becoming holding companies or agencies of monopoly control and place limitations on their total property, their percentage holdings of securities of any single operating company and on their total investment in any industry.

(6) Allow corporations to issue securities only in a small number of simple forms prescribed by law and prohibit any single corporation from using more than two or three different forms.

The foregoing suggestions regardless of the approach taken would do much to combat the rise of concentration and accompanying restriction of competition. These would be in the nature of preventatives rather than cures.

To sum up, we have seen that the attainment of greater-than-average, relatively secure profits is the basis of the growth of concentration; that monopoly, oligopoly and restriction of competition bring rigid prices, inefficient use and maldistribution of productive resources, the loss of consumer sovereignty, and in addition contribute to economic instability. Society can not be expected to suffer such abuse indefinitely. Unless immediate and effective steps are taken to stop the trend towards concentration and to restore competition, society may force the abandonment of the enterprise system in favour of State Socialism.

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