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STUDY NO. 32

Conglomerate Mergers in Canada

A Background Report

Study No. 32

Conglomerate Mergers in Canada

by

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of

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FOREWORD

In April 1973, the Royal Commission on Corporate Concentration was appointed to "inquire into, report upon, and make recommendations concerning:

- (a) the nature and role of major concentrations of corporate power in Canada;
- (b) the economic and social implications for the public interest of such concentrations; and,
- (c) whether safeguards exist or may be required to protect the public interest in the presence of such concentrations."

To gather informed opinion, the Commission invited briefs from interested persons and organizations and held hearings across Canada beginning in November 1975. In addition, the Commission organized a number of research projects relevant to its inquiry.

This study on the conglomerate or diversified enterprise in Canada was prepared by Donald Lecraw of The University of Western Ontario, and Donald N. Thompson of York University. The study covers an area central to the mandate and interests of the Commission, and many of the issues covered in our hearings and in related research. In focusing on the structure, strategy, and performance of conglomerate firms in Canada it complements the study on Mergers and Acquisitions in Canada which is being published as Study No. 34 by this Royal Commission.

Dr. Lecraw is the author of several articles on theoretical economics, and of 25 cases in business administration. He is Assistant Professor of Business Administration at The University of Western Ontario and served as Chief Economist for the Commission. Dr. Thompson is Professor of Administrative Studies at York University. He is the author of several books in the area of economic regulation and marketing, and served as Director of Research for the Commission.

The Commission is publishing this and other background studies in the public interest. We emphasize, however, that the analyses presented and conclusions reached are those of the authors and do not necessarily reflect the views of the Commission.

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INTRODUCTION

Conglomerate firms, particularly those in the United States, have been studied extensively since the early 1960s. Despite formidable theoretical, methodological, and data collection problems, a clearer picture of the conglomerate firm beyond that given in the popular press has begun to emerge. As yet, however, no consensus has been reached about the motivations for conglomerate diversification or the performance of conglomerates in terms of their efficiency, growth, stability, and return to the investor, or about the impact of conglomerates on competition in the industries in which they operate.

In the United States, much of the public interest aroused by the rise of the acquisitive conglomerate in the 1960s has subsided with the financial decline of many of the firms in the late 1960s. As yet public policy (for example, antitrust laws and regulations) in the United States has not dealt explicitly with conglomerate acquisitions except for selective application of the Sherman and Clayton Acts against relatively large acquisitions.

In part this lack of a clearly defined public policy toward conglomerates is a reflection of the lack of consensus concerning the actual or potential impact of conglomerates on competition. Also, over the period 1968 to 1976 the rate of conglomerate mergers and acquisitions subsided dramatically from preceding years, so that conglomerate diversification was a less visible and pressing concern.¹

As described in Globerman (1977a), Canada has experienced periodic merger and acquisition cycles over the past fifty years (Figure 1). Although the definitions, samples, and data collection techniques are not strictly comparable, and hence the figures should be viewed with caution, Figure 1 and Table 1 together indicate that both the number of conglomerate mergers and their proportion of total mergers rose during the 1960s in Canada. Not until the attempted acquisition of Argus Corporation Limited by Power Corporation of Canada, Limited, in 1975, however, was

public attention in Canada focused on conglomerate firms. With the Argus-Power proposal it was recognized that there was little systematic information on conglomerates available in Canada and that the Combines Investigation Act might be incapable of effectively dealing with conglomerate firms if remedial action were necessary.

The Royal Commission on Corporate Concentration (RCCC) funded several studies (see particularly Caves et al., 1977, and McFetridge and Weatherley, 1977) concerning conglomerate diversifications in Canada. The research for this monograph was initially undertaken to address specific questions which were not addressed in other research projects. The framework for analysis used in part of this research on the strategy and structure of firms, that of Wrigley (1970) and Rumelt (1974), is substantially different from that employed by other researchers and sometimes supports quite important conclusions. This aspect of the work was expanded in an attempt to extend its conclusions and bring as much light as possible into an inherently murky area of industrial organization.

Since this work was undertaken as part of the ongoing research of the RCCC, successive drafts have received extensive comments from those engaged in work for the Commission: in particular Richard Caves, David McQueen, Steven Globerman, Gilbert Reschenthaler, and William Stanbury are due our gratitude. We owe a special debt to Leonard Wrigley for use of his framework of analysis and for advice during preparation of this paper. Richard Caves and Jerome Baesel and Dwight Grant did additional work which contributed directly to the conclusions of our research. Quite obviously, however, many theoretical, methodological and data problems remain.

The monograph is divided into several sections: the process of conglomerate merging, timing, motives for diversification, the strategy and structure of firms, effects on competition, a discussion of two special cases of conglomerate diversification and the empirical evidence on the performance of diversified firms.

THE PROCESS OF CONGLOMERATE MERGING

Data Sources

In an early phase of our research we sought specific, detailed information on individual mergers in Canada, focusing on the period 1971-1975. We began with a list of 30 "significant" mergers during that period of which we had some prior knowledge. Information was solicited from intermediaries in the merger and acquisition process, including lawyers, merger brokers, chartered accountants, management consultants, bankers, and brokerage houses. For a few firms mergers and acquisitions are a continuing activity, but for most these activities are sporadic, and intermediaries and consultants are relied on in merger activities. Even when acquisitions are made regularly, the legal and tax aspects of mergers have become sufficiently complex that the assistance of one or more outside intermediaries is usually required. The intermediaries involved, and at a later stage the companies in the sample we approached, were promised confidentiality of the information supplied. Thus no specific transactions from this data base are discussed in this study, unless the facts involved have been made public in some other way.

We were able to obtain relatively complete access to information on 23 of our initial list of mergers. We followed this with a second round of questions on specific kinds of transactions, and obtained information on a further 21 merger transactions (of which 8 were identified to us by characteristics but not by name). During later RCCC research, including receipt of briefs and personal testimony, substantial information was received on an additional 9 mergers. Information on these 53 separate merger transactions (38 of which were conglomerate in nature) is referred to here as the "case study data". It must, however, be emphasized that the selection of these transactions in no way represents a random sample; if nothing else, it contains a bias towards larger and more visible mergers, and towards those that involved substantial use of one or more intermediaries. Even given these problems, we feel that the information produced is of value in describing aspects of the merger process and the motivation for particular mergers.

Merger Planning

About a third of the conglomerate mergers in our case studies - a far larger percentage than we would have expected - were initiated without systematic planning, but simply through fortuitous circumstances. One major merger was reportedly initiated during a pre-luncheon drink when one party indicated that he had recently been put in charge of corporate "acquisitions"; it was discussed over the main course, and apparently finalized (including the price) over dessert. A second major merger is reported to have been initiated by two Canadian chief executives - previously strangers to one another - who met in a U.S. airline terminal when their flight was delayed by a snowstorm.

At the other extreme, a considerable amount of research and objective planning took place before any contacts were made. We encountered a number of purchasers, and at least two sellers, who approached the merger-acquisition process as a formal problem in capital investment analysis, with sophisticated attempts to estimate maximum and minimum transaction prices based on cash flows, tax considerations, allowances for synergy, discounts for risk, and returns from alternative uses of capital. In the middle were buyers and sellers who seemed to have relatively well articulated objectives and criteria, often reflected in quite detailed financial, marketing, management, legal, and taxation checklists for examining and evaluating possible mergers.

Almost 80% of the firms in our case studies which used intermediaries to help identify merger partners desired to undertake conglomerate mergers. This is far higher than the roughly 23% of all mergers that are conglomerate in nature, as indicated in the data from the Department of Consumer and Corporate Affairs' record of mergers.² The finding is not unexpected: it is plausible that a firm looking for a partner in an unrelated field would be more likely to use outside assistance than one searching in a related industry or geographical area.

The principal sources of information and advice in identifying and contacting merger and acquisition partners appear to have been the five major chartered banks, management consultants, merger brokers, chartered accountants, and legal counsel. Sometimes contacts were made with firms which, it was felt, "might be interested in something like this". Often a firm undertook some effort to identify favourable characteristics of possible merger partners in terms of geographic location, management strength, stability of earnings, etc., and then asked an intermediary to help it in locating potential partners with these characteristics.

The major chartered banks became involved because of their possession of information about the aims and objectives of their clients. They acted as clearing houses for merger information, usually through their business development departments and without asking a fee, but with the expectation of increased banking business from the merged entity in the future. Management consultants, legal counsel, and chartered accountants became involved because of their range of confidential business relationships. Some management consultant and chartered accountant firms maintained formal acquisition and merger groups. These professionals generally did not charge finders' fees, but expected to be compensated for professional work done in connection with the merger, and through continuing professional relationships. Finally, there was a small but significant group of business brokers in Canada involved in "marrying" firms, often with the attempt made on their own initiative, sometimes on a brokerage basis and sometimes for a contingency fee, with fees either agreed to in advance or negotiated after the fact as a percentage of the price paid.

Competitive Negotiation

One characteristic of the merger and acquisition process, the lack of competitive negotiation, partially explains why there might tend to be "synergy" in the melding of two businesses, so that even in a competitive market, acquisitions are regularly "worth more" to purchasers than they are required to pay for them.

For example, an electronics manufacturer might wish to acquire a distributor of plastics products, in part because the latter has a particular competence in selling to markets that the electronics producer wishes to enter. One might argue that this particular competence would be included in the value of the business, and that it would not be available to the electronics manufacturer at a bargain price unless there were no other competitors needing such expertise to bid up the price to obtain it.

In fact, bidding seldom occurs in the acquisition process. Once a buyer and seller are in negotiation regarding a merger, it is generally considered unethical for the seller to approach another buyer during the period of negotiation. A number of acquiring firms (and merger brokers) claim to interpret this ethic so strictly that they will withdraw from a negotiation if the potential partner approaches another bidder. Acquiring firms indicate that they may themselves agree not to approach another potential seller in the same line of business while negotiations are in progress. This leads to the rather unusual claim that a selling firm that offers itself to a number of buyers will decrease rather than increase its value in the eyes of potential purchasers.

The explanation offered for the lack of competitive negotiation is that in most acquisitions it is not assets that are being purchased, but an ongoing enterprise with managers, employees, suppliers, and customers who must be accommodated. It is argued that the process is analogous to a marriage, rather than to an auction. A decision on price is apparently reached by reference to the known value of similar listed firms, by mutual analysis, or by independent appraisal, rather than through competitive bidding. Of course, this is not the case with unfriendly takeovers, nor with takeovers through public offerings, which sometimes attract competitive bidding, nor is it usually the case with liquidations. But it was common practice with many of the friendly, negotiated mergers and acquisitions in our case studies, and the ethic involved seems to be widely accepted.

THE TIMING OF CONGLOMERATE MERGERS

A major characteristic of merger activity is its cyclical nature, which has led a number of researchers to try to relate merger activity to various measures of economic activity or performance. Several observers have focused on the difference between the time pattern for investment in mergers or acquisitions as compared to investment for internal firm growth. Differences in these two cycles are usually attributed to differences between the time required for return on investment, the degree of capacity utilization in the industry, the availability of internal and external funds, and the level and recent activity of the stock market. A priori, it did not seem to us that the comparison between merger activity and internal investment was one worth pursuing at great length, particularly in regard to conglomerate mergers. It seems more plausible to argue that the level of merger activity relates to the psychology of buyers and sellers and their expectations about economic performance, while internal investment in plant and equipment has a longer pay-out term, with its timing being more closely related to the causes of business cycles themselves.

Research done for the RCCC by Steven Globerman and H el ene Lamontagne had indicated that the distribution of total Canadian merger activity over time bore a strong similarity to patterns of mergers and acquisitions in the United States (although less of a relationship to trends in various western European countries).³ The observed similarities between Canada and the United States were taken by them as providing evidence against either restriction of competition or economies of scale as merger motives, and suggesting that merger activity might be related to some measure of economic activity or performance.

A number of researchers have looked for such relationships in Canada and the United States, but the evidence produced is not consistent across industries, or from period to period. Neither capital market conditions nor general economic conditions related to business cycles appear to explain the broadly similar merger experience of the two countries. In an

early Canadian study, Reuber and Roseman (1969) concluded that, for the period 1945 to 1963, merger activity could best be explained by variations in stock market prices, reflecting business expectations, and internally generated funds, reflecting credit conditions. Research undertaken for the RCCC indicated that, over the period 1947 to 1974, the rates of change in the number of mergers were significantly related to the rates of change in Canadian and U.S. stock market levels respectively, but that the relationship was not statistically significant for subperiods within this longer period.⁴ The Globerman statistical model differed somewhat from that used by Reuber and Roseman, and the results are not strictly comparable.

Maule (1966) concluded on the basis of his own work and earlier data collected by Weldon that from 1900 to 1963 Canadian mergers and stock prices showed no consistent relationship to each other. Maule also concluded that the relationship between merger activity and a combination of both stock prices and industrial production was weak and inverse when used to explain merger patterns.

Additional work was undertaken by RCCC staff on the possible relationship of the timing of the initiation (rather than completion) of merger negotiations to stock price levels. The use of completion rather than initiation dates in other studies may have had a built-in bias, given that negotiation periods for successful mergers in our case studies ranged from three weeks to just over two years before a final agreement was signed. The data base consisted of information on a sample of 28 instances when a completed merger would have resulted in a conglomerate merger (excluding market extension) if finalized.

Because of the nature of the sample it is possible to state only very general conclusions. There was a considerable clustering in the timing of initiating mergers, with peak periods two to four months after upturns in the Toronto Stock Exchange (TSE) composite index. A related finding is the degree to which buyers and sellers initiated these conglomerate merger discussions. In all the merger cases we studied, about two-thirds of the

discussions were initiated by the seller, and one-third by the buyer. In peak merger-initiation periods, however, this percentage shifted to almost four-fifths initiated by the seller. Merger discussions when stock market prices were falling were initiated slightly more often by potential buyers than by potential sellers.

Those involved in the intermediating process offered two related explanations for these results. The first was that stock market trends were felt to move sufficiently in step with business cycles that most observers felt confident in knowing when a mild recovery (or a mild recession) in stock market price levels was well under way. Part way up the stock market cycle, the seller's holdings seemed more acceptable to the buyer, perhaps because he knew it would take time to negotiate the conditions of the sale and he expected to have the transaction financed at least in part by the issue of new stock or the exchange of securities. Where the stock of the seller was not traded widely (or not listed on an exchange), the seller also felt that the value of his holdings would not do as well as the market in general in an upturn, while the stock that would be acquired as part of a merger might do as well as or better than the market.

MOTIVES FOR DIVERSIFICATION

It is difficult to unravel the complex factors that might motivate firms to diversify. Many theoretical studies have outlined plausible factors, but empirical evidence supporting these theoretical constructs has been inconclusive and contradictory. The standard economic theory of rational economic man emphasizes the drive of the firm (and its managers) for increased profits and reduced risk as the prime factor in a firm's growth and diversification patterns. More recently, theories that have emphasized a drive for growth for its own sake on the part of firms' managers have gained wide acceptance. These two explanations may not be as far apart as they appear. Several studies have concluded that market share is highly correlated with profitability, possibly because economies of scale in production, management, finance, marketing and research and

development give the larger firms in an industry a competitive advantage over their smaller rivals (see Buzzell, Gale & Sultan, 1975, Mueller, 1977, and Shepherd, 1975).

Diversification may be accomplished by internal growth or by acquiring or merging with existing firms. A general treatment of the merger decision process for firms in Canada is found in Globerman (1977a). This review is confined to the subset of motives for conglomerate diversification.

One motive for diversification is commonly referred to as "synergy" (Scherer, 1970, Mead, 1969, and Carter, 1977). This concept refers to economies of scale at the firm level which may give the diversified firm greater total profitability than the sum of the profits of its component enterprises if they were operated independently. The term is analytically imprecise, because "synergistic" effects may arise from market power, imperfect markets for management expertise, personnel, or facilities, as well as economies of scale. It is therefore difficult to untangle the effects of imperfections in factor and product markets from those effects that arise from real economies of scale possible with increased size and diversification. (See Lecraw, 1977, for a more complete description of the problems in measuring economies of scale.) This difficulty also applies, but to a lesser extent, to the effect of size and diversification on risk, since large firms in concentrated markets may be able to use their market power to smooth their sales and earnings streams over the business cycle. From the point of view of the firms this distinction may not be important: increased profits and decreased risks are desirable goals however they are achieved. From a public policy viewpoint, however, the distinction is very important: pecuniary economies of scale and risk reduction achieved through the exercise of increased market power add nothing to social welfare. This problem of mixed motivation is particularly severe in Canada, with its generally concentrated markets and high tariff barriers.

Gorecki (1975) hypothesized that firms may diversify in order to exploit a "specific asset" which is of value in more than one industry, but for which there is an imperfect market. He gives several examples, including unpatentable knowledge, a loyal labour force, high transfer costs in educating the buyer in using a complex productive process, or imperfections in the market for licensing trademarks. In these cases, imperfect markets may motivate a firm to diversify and realize "synergistic" effects, i.e., greater profits than might be realized if the asset were employed independently of its original owner. Another example of such market imperfections occurs when firms merge in order to acquire complementary assets, such as, say, an established distribution system that could not be separately obtained (see Mead, 1969).

Caves and Porter (1977), in outlining a model of inter-industry mobility, theorized that the opportunity cost of using such intangible assets as goodwill, knowledge, and organization in a new industry through diversification may be close to zero since a firm may apply them in new markets without diminishing their service in former uses. They include economies of scale in finance and management expertise in explaining how going firms may overcome barriers to entry and enter new industries more readily than newly formed firms.

B. R. Scott (1973) concluded that diversified firms exploit economies of scale in research and development and compete with each other by engaging in a continuous search for new products. He termed this effect the "technological imperative" and observed that many U.S. corporations support large R&D establishments and exploit their discoveries by maintaining a diversified group of product divisions to produce and market the new products that result from their R&D efforts. Such firms appear to diversify in order to meet vigorous technological competition as well as to exploit economies of scale in both management and R&D. Since the market for technology through licensing of new products is imperfect, such firms may choose to enter new industries themselves rather than to grant licences to firms that already operate in those industries.

Surely enough, he [Galbraith, 1967] has taken account of the increasing economies of scale associated with higher volumes, more complex equipment, and larger plants - that is, with simple industrial growth. In other words he has correctly analysed the impact of technology on the production process within the company.

However, he has failed to consider the other aspect of modern technology which has influenced the corporation - namely, the development of new products via research. His analysis simply overlooks the impact of R&D on the creation of new products and new markets.

And it is R&D which has shaped the strategies of the largest group of companies - those which we call "related diversified". These are companies which have moved beyond dependence on a single market to multi-market strategies, both as a way to seek more rapid growth and as a way to balance the risks associated with any single business. They have chosen to manage their diversified operations by the divisional structure.

These companies are characterized by an institutionalized R&D effort, by the systematic search for new products, and by the exploitation of new developments within the structure of management by product divisions. (Scott, p. 142.)

In a similar vein, Wood (1971) concluded (p.451), "The empirical relationship between diversification and research expenditures has been amply demonstrated; the direction or absence of causality remains to be investigated."

Wrigley (1976) and Leighton (1976) have emphasized the economies of scale that may be achieved in the use of modern management techniques in such areas as financial planning, accounting, and other areas of a diversified firm's operations. These authors each state that economies of scale may be achieved in the use of top management time, which increases the efficiency of large diversified firms. Although Scherer (in Goldschmid et al., 1974) sketched a diametrically opposite picture of a modern executive inundated with a mass of paper and data concerning businesses about which he has no fundamental understanding, the position of Wrigley and Leighton is supported in the testimony of some executives of Canada's large, diversified firms before the RCCC. These men described themselves and their staff as giving overall aid and support to their subsidiaries in coordination, finance, and long-range strategic planning.

According to Lintner (1971), economies of scale in finance may accrue to large, diversified firms. Indivisibilities may occur in the cost of stock and bond flotation and in the cost of credit investigation.

The motive of risk-reduction is commonly attributed to firms that have diversified. Lewellen (1971) showed that diversified firms may be expected to have lower variability in returns if they combine imperfectly correlated streams of income. In this respect, diversification by the firm has an effect equivalent to diversification of a portfolio of securities. Lewellen also demonstrated that a diversified firm is less likely to default on debt repayments than is an identically diversified portfolio of loans because the diversified firm may subsidize inadequate cash flow in one area with excess cash flow from another. For this reason, a diversified firm will have a greater overall debt capacity than a portfolio of separate enterprises. Levy and Sarnat (1971) have stated that a conglomerate is equivalent to a portfolio of stocks if there is no synergy and if the capital markets and the market for firms are efficient. Lintner (1971), however, showed that these assumptions are quite unrealistic and that diversified firms may enjoy many financial economies and have efficient means to diversify risk. This insurance function of diversified firms is expected to reduce their riskiness and cost of capital. Firms may diversify either to reduce risk or to increase their ability to take on more risky investments which yield higher profits, depending on their present degree of risk and profit and their risk-profit preferences.

Growth maximization may be a management motive for conglomerate diversification. A study by Mead (1969) outlined how a continuous series of mergers with firms that have lower price/earnings (P/E) ratios may generate increasing sales, assets, and earnings per share without altering the underlying profitability of the acquiring or the acquired firms' profitability. Such trends may be regarded by investors as indications of future growth in earnings and cause the diversified firm's P/E ratio to be bid up.

Firms in oligopolistic industries cannot grow faster than the overall growth rate for the industry unless they can increase their market share. An attempt to increase market share in an oligopolistic industry, however, will usually meet with a rapid response from the other firms in the industry and may lead to price wars, which these firms usually want to avoid (Caves et al., 1977). In the United States (and to a much lesser extent in Canada) increased market share, especially by a dominant firm, may bring antitrust action or the threat of such action (Scherer, 1970). For a firm to grow faster than the growth rate of its base industry it may be forced to diversify into other industries. This motivation is particularly strong in old, stable, or declining industries. In Canada, the conglomerate diversification of firms in the beer, sugar, tobacco, and cement industries has been attributed to their desire to maintain their growth records. The existence of a stream of income protected by barriers to entry may also reduce the overall risk faced in diversification by firms expanding out of an oligopolistic industry, in comparison with firms that operate in more competitive base industries. Oligopolistic industries may encourage entry by diversification when the entering firms expect to be able to withstand the efforts of existing oligopolists to deter their entry and subsequently expect to reap part of the joint monopoly profits.

Liquidity may prompt either diversification or takeover. A highly liquid firm may attract the attention of a diversifying firm when it is possible for the acquiring firm to borrow to finance the purchase and make repayment out of the acquired firm's funds or debt-carrying capacity. More conventionally, as Dalton and Esposito (1973) noted, a firm with excess funds may diversify in search of investment opportunities if its liquidity is symptomatic of low growth possibilities in the base industry or if it wishes to avoid being taken over itself.

"Failing firm/failing industry" doctrines as a defence in antitrust merger proceedings emerged in early 1960s (Marcus, 1966). This defence was based on the capacity of diversifying firms to rationalize the operations of a firm faced with adverse prospects. As such, the motive

for diversification may be considered a special case of the economies of scale motive, particularly in regard to indivisibilities in management expertise of the acquiring firm. Weston and Mansinghka (1971) hypothesized that firms in the failing industry may engage in "defensive" diversification, trying to diversify into more profitable areas.

Tax laws may encourage both versions of "failing industry" diversification. A successful firm may buy a failing firm in order to apply the acquired firm's tax losses against current and expected income (Dewey, 1961), thus increasing the merged firm's after-tax profitability. A failing firm may prefer for tax reasons to sell out to a diversifying firm rather than to return capital to the shareholders. Similarly, successful firms may be motivated to reinvest profits via diversification, rather than paying dividends which will be taxed before the stockholders can reinvest them. H. J. Scott (1977) concluded on theoretical grounds that the tax structure encourages mergers for firms with both debt and equity outstanding.

Globerman (1977b) took strong issue with George and Silberston's (1975) conclusion that firms in the post-war period merged to reduce competition in their industry, (the competitive market conditions/market structure hypothesis). He concluded (p. 165):

Our evidence indicates that when industries are ranked in terms of merger intensity, and the rank orders of earlier subperiods are compared to those of later subperiods, no significant difference between rank orders can be established. This observation, as well as similar evidence from other studies, suggests that underlying incentives for merging are relatively stable over time, and are unlikely to be founded (to any significant degree) in short-run competitive conditions.

Globerman further stated that the George and Silberston theory of merger activity could not be used to explain vertical or conglomerate mergers.

Against this list of theoretical and derived motivations to growth and diversification, it is of interest to compare the rather more simplis-

tic and straightforward "stated" motives for conglomerate acquisition and for sale given by the 38 firms in our case study data and by merger intermediaries. Some of these cases have been supplemented by public testimony before the RCCC, and by studies of diversified firms undertaken for the Commission by financial analysts and others. It goes without saying that a large percentage of mergers may not achieve the original expectations of acquiring companies. Also, there may be a divergence between stated and actual motives: we should not, for example, expect to find the expectation of erecting higher barriers to entry and of price leadership stated as motives by a firm diversifying into an industry with many small existing sellers. We note, however, that this "empirical" listing is quite consistent with that produced by Reuber and Roseman (1969), from confidential submissions to the Foreign Investment Review Agency and summarized in FIRA reports, and with the reasons for merging reported in a 1974 international study on mergers and competition policy by the Organisation for Economic Co-operation and Development.

Case Studies

The motive most frequently given as "most important" for diversifying acquisition was that a holding company or an active operating company had cash or credit in excess of its own needs, and was discouraged by taxation provisions and by its own executives' desire for growth from simply distributing excess resources to shareholders. Sometimes the company had a predetermined programme to use profits and cash flow from relatively slow-growing operations to acquire and develop businesses in more dynamic industries. This was the motive stated (publicly) by The Molson Companies Limited for several acquisitions in the 1960s and 1970s, and by Genstar Limited as an explanation for many of their acquisitions. More commonly, though, the company was simply presented with what it considered to be an attractive investment at an acceptable price, perhaps in an unrelated field but with some perceived mutualities in marketing, production, or finance which made it attractive.

Related to this motive of spending excess resources was that of a company that wished to enter a market unrelated to its base industry or to expand in it, and found that even with a premium over market price on acquisition, it could be much cheaper to buy the assets it needed than to develop its own facilities. This has been a common phenomenon in a depressed securities market. During the middle 1970s many firms in Canada were valued "on the market" at 50% to 70% of the cost of replacing their capital assets, and some were valued even lower. The value of existing management and skilled employees and of established relations with customers and suppliers was sometimes capitalized on by an acquirer in deciding that assets might be acquired at a discount through merger or acquisition. Such calculation in one case brought replacement value to almost exactly three times market value.

We are aware of three (and perhaps four) cases where diversified acquisitions were made to gain control over the liquid assets or borrowing capacity of the acquired company for use by the acquiring company, including the making of further acquisitions.

The purpose of several Canadian corporate groups was to acquire the control of relatively small, promising companies which had outgrown their existing management or financing base or were unable to provide their own specialized staff services. Canadian Corporate Management Limited and Hugh Russel Limited have both indicated that they have had success in pursuing such an acquisition strategy.

The only other motive for diversifying that occurred with any frequency in our sample was that of acquiring a business that could use the special technical or commercial abilities of the acquiring firm. Marketing skills were the most common in leading to diversifying mergers; Imasco Limited and Molson testified before the RCCC that acquisition decisions were predicated on exploiting such skills in new markets.

Other considerations were often mentioned in conjunction with conglomerate mergers, but they appeared to be contributory rather than

primary motivations. These included tax considerations relating to the nature of the acquisition, and the possibility of improving the parent company's price-earnings ratio through acquisition of a subsidiary with a lower P/E ratio. In a fully formulated model of diversifying merger, these contributory motivations would take the form of multiplicative rather than additive variables, in that they would become decisive factors if their value approached zero. For example, several conglomerate firms had policies of rejecting proposed acquisitions whose price-earnings multiples were above their own, and thus might have produced a short-term dilution of earnings per share for a merged firm. Several diversifying mergers have also been made with the provision that no change would take place in existing taxation status as a result of the merger.

What is perhaps significant about this short list is that several economies to the large corporation, frequently discussed in the literature as motives for diversification, were of little or no stated significance to the companies in our sample. These include economies of larger scale use of funds; economies of avoiding capital market imperfections (except for the Genstar type of case); circumvention of taxation by making interfirm transactions intrafirm; economies in advertising and sales promotion; and decreased dependence on cyclical and market fluctuations.

Motives for Selling

In the merger cases we studied, about two-thirds of the discussions were initiated by sellers rather than by buyers. This ratio partially explains the most common merger "motivation" of a buyer: simply being presented by a seller or an intermediary with an attractive investment, at an acceptable price.

For companies whose equity was not publicly traded, and particularly for those with relatively few owners, the principal motivation in an overwhelming number of cases was the desire of one or more people to diversify their holdings into marketable assets at a time when they wished to retire

or to reorganize their estates. Individual entrepreneurs with virtually all their assets in a single business seemed to be intensely aware of the need for a more diversified and liquid portfolio to provide for their families, and to enable the future payment of estate taxes. In other cases heirs who came into possession of controlling interests in such businesses sold them, either to raise funds for estate taxes or because they had no desire to undertake the risks and responsibilities of such an investment.

A second motive, and the one most often stated by sellers of small, listed companies, was the difficulty of managing or raising capital as the business grew and different management styles and abilities were required. Firms, at some point in their cycle of growth, seemed simply to go beyond the ability of the initial entrepreneur to run them. A number of witnesses before the RCCC also emphasized difficulties encountered by smaller firms in complying with local, provincial, and federal government regulations affecting all businesses, and the resulting incentive to sell to a larger enterprise which had the staff expertise to undertake these functions.

The next most commonly stated motive to sell was the inability of existing management to finance expansion through capital markets or chartered banks without selling control. Whether this resulted from a gap in the supply of medium- or long-term capital to smaller business or whether it reflected capital suppliers' recognition of management shortcomings is not clear.

This listing, and that for motives for diversifying acquisitions, reflects the "primary" reasons given in our sample. Several motives were likely to be present in most decisions to sell or to buy, but the reasons listed were given overriding importance in most of the cases where they occurred.

Statistical Evidence

Given the wide range of possible motives for diversification, it is not surprising that the empirical results of studies of diversified firms have been mixed. Empirical tests of the existence of economies of scale or synergy have been particularly difficult to perform, and many studies have relied on increases in overall profit as evidence of economies of scale. It has also proven difficult to establish empirical support for other hypothesized motivations for diversification.

Gorecki (1975) provided empirical support for the hypothesis that firms diversify to exploit indivisibilities of and imperfect markets for their "specific assets". He found that the industry level of R&D expenditures was a significant predictor of the industry level of diversification in a 1963 sample of 44 U.K. manufacturing industries. Another U.K. study, by Hassid (1975), supported the hypothesis advanced by B. R. Scott (1973) that diversification is associated with higher amounts of R&D activity. Hassid found that a 10% increase in the number of scientists and engineers per 100 employees resulted in a 3-4% increase in the proportion of business diversified outside the base industry, in 1963 and 1968 observations on all manufacturing industries in the United Kingdom.

Evidence of financial economies of scale was provided by J. T. Scott in Caves et al. (1977). Scott showed that diversified firms had significantly lower cost of equity capital, in a sample of 125 Canadian manufacturing firms from 1961 to 1974. But strangely enough, the variability of the income streams of the firms in his sample increased and their average profitability decreased with diversification. McFetridge and Weatherley (1977), using another sample of firms in Canada, also found that profitability decreased with diversification. Both these studies, however, used measures of diversification that tended to confuse conglomerate diversification with vertical integration.

Several studies have attempted to measure the risk-reducing effects of diversification. Smith and Schreiner (1969) compared the risk and return of 19 U.S. conglomerate firms to the risk and return of 8 U.S. mutual funds. They found that the conglomerates had achieved a risk-return performance quite close to that of theoretically optimal portfolios, but that the mutual funds did even better. Thus, even though the diversified firms in this 1967 sample achieved high returns and low risk, the mutual funds had equivalent returns at lower levels of risk. Smith and Schreiner concluded that conglomerates were a good means of assuring against risk in the period 1960-1967.⁵ Joehnk and Nielsen (1974), however, found that the long-run effects of diversification upon a firm's level of risk were minimal, unless the firm engaged in almost continuous merger activity. This study examined 91 U.S. firms between 1959 and 1972. Bond (1974) examined the variability of profit rates over the period 1963 to 1967 for 157 U.S. manufacturing firms with assets greater than \$40 million. He concluded that, while the diversified firms had more stable profits, this was related to their size and not their level of diversification.

Evidence on the effect of oligopolistic industry structure on diversification patterns has been provided in studies by Gorecki (1975), Hassid (1975), Caves (1975), Caves et al. (1977), Gilbert (1971), and Rhoades (1973, 1974). Neither Gorecki nor Hassid found any evidence of association between diversification and concentration in their samples of U.K. industries. Caves (1975) noted that diversification and concentration were not related in his 1973 sample of 349 Canadian subsidiaries of U.S. corporations. His later study (1977) found that there was no distinct relationship between diversification and concentration in Canadian manufacturing industries. The results of these studies on U.K. and Canadian industries conflict with U.S. results. Gilbert (1971) found a significant tendency for U.S. firms to diversify out of slow-growing oligopolistic industries. Scherer (1970) pointed out that conglomerate mergers intensified as antitrust attention was directed toward concentrated markets. Rhoades (1973) found that, controlling for concentration and other market-structure variables, the primary

industries of diversified firms tended to have high price-cost margins. He attributed this result to the effect of diversification as an oligopolistic barrier to entry in his 1963 sample of 241 U.S. manufacturing industries. In a later study, Rhoades (1974) found that diversification into unrelated industries did not have the effect of a barrier to entry in a more highly aggregated 1967 sample of 117 U.S. manufacturing industries.

Dalton and Esposito (1973) found that liquidity was a significant predictor of acquisitions in a sample of 71 large U.S. manufacturing firms over the period 1955 and 1966, supporting their hypothesis that excess funds encouraged mergers. Mead (1969) examined a sample of 122 U.S. mergers in 1967 and 1968 and found that the price-earnings ratios of acquiring firms were significantly higher than those of acquired firms. The price-earnings ratios of acquiring conglomerate firms were significantly higher than those of firms making vertical or horizontal mergers. These results give some support to the hypothesis that diversifying firms made acquisitions in order to maintain upward trends in earnings per share and size.

STRATEGY AND STRUCTURE OF FIRMS IN CANADA

Methodology

The overall methodological approach taken in this monograph is not the usual one followed by researchers working on problems of industrial organization. Our methodology relies heavily on the Structure-Strategy paradigm originated by Chandler (1962) and quantified and elaborated by Wrigley (1970) and Rumelt (1974). The advantages, disadvantages, and implicit premises of this methodology are discussed below. First, a brief critique of the standard measures of diversification is necessary as a background and motivation for the use of the Structure-Strategy formulation.

Measuring Diversification. In order to test the many hypotheses concerning diversification and to quantify the effect of diversification on performance, some analytical measure of the extent and type of diversification must be constructed. Diversification has at least three dimensions: the number of products, the distribution of output among the products, and the relationship of the activities surrounding these products.⁶ In most studies of diversification these three dimensions are summarized in one number, which purports to measure the diversity of the firm's output. Consequently, there must necessarily be theoretical and practical problems with any single measure of diversification. As will be described in the next section, the measure chosen can drastically affect the results of the regression equations.

Diversification is the process by which a firm extends its production beyond its base industry. The first problem is to define the firm's base industry. Usually this is done using Standard Industrial Classification (SIC) industries. The question is, what degree of aggregation should be used: a two-, three-, four-, five-digit level, or what?⁷ If the level chosen is too low, two-digit for example, the products assigned to the firm's base industry will be too heterogeneous and the degree of diversity of its products will be understated. If a very disaggregated level is chosen, six-digit for example, the base industry will be too narrowly defined and the diversification will be overstated. Carter (1977) calls this "trivial diversification" and gives as an example "men's suits and separate trousers". Given the current SIC classifications, this problem is almost insurmountable; anomalies will occur no matter what definition is used.

Once the base industry is defined and chosen, the first requirement of a diversification measure is that it reflect the extent to which a firm's business is outside the base industry. For example, the Primary Product Specialization Ratio (PPSR) computed by Statistics Canada measures the proportion of a firm's business which is in its base industry. As the PPSR decreases, diversification increases. The PPSR does not, however, take account of the number or relative importance of

industries the firm has diversified into. The number of industries into which a firm has diversified is thus another possible measure, but one that excludes important information about the firm's relative involvement in each industry. Several other measures attempt to include information on the importance and distribution of diversified activities. One measure proposed by Gort (1962) and the U.S. Federal Trade Commission (1972) multiplies (1-PPSR) by the number of industries (n) a firm operates in, $n*(1-PPSR)$. Thus a firm whose business outside the base industry was spread among many industries would be considered more diversified than a firm with the same proportion of non-primary output spread among few industries. Although this measure does reflect the total number of diversified activities, it is not sensitive to variations in the distribution of products outside the base industry.

One measure that accounts for the distribution is the Herfindahl (H) index of diversity, defined as the sum of squared proportions of a firm's activities found in each of the industries it has diversified into. $H = 1 - \sum p(i)^2$, where $p(i)$ is the share of the i^{th} product in total production. A non-diversified firm will have a Herfindahl index of 0, while a firm equally diversified in a number of industries will have a Herfindahl index of 1 divided by the number of industries. This measure increases as the firm diversifies into more industries and increases as the predominance of some activities diminishes to the point where all are equally important. Discussion of these properties may be found in Berry (1971), McVey (1972), Adelman (1969), and Gorecki (1974).

Caves (1975) discusses two indices similar to the Herfindahl but which avoid using squared proportions. The "concentric index" weights the proportions of activity by their "distance" from each other in the SIC classification. Products falling in the same three-digit industry are not considered to be diversified, while products outside the three-digit industry and outside the two-digit industry are considered increasingly "distant". Similarly, the "weighted index of diversity" acknowledges "distance" from the primary industry in which a firm operates.⁸

These measures take account of the three important dimensions of diversification: the number of industries operated in, the distribution of activities among industries, and the "closeness" of activities in terms of SIC-defined industry groups. The use of SIC groupings, however, does not identify the relatedness of the industries other than in terms of the similarity of their output, and omits many potential relationships among industries. For instance, a firm like General Motors operates a finance company, which would be shown as completely unrelated to automobile production under SIC codes but which is related to marketing the auto production. Other functional relations that may stretch across industries may characterize a strategic programme of diversification by firms that may be able to exploit similarities in finance, R&D, distribution, or other operations across seemingly unrelated industries. Most important, these indices do not take into account vertical integration, which often involves production across main SIC industries and hence would be viewed as unrelated, but which is fundamentally different from conglomerate diversification.

A Framework for Analysis. Chandler noted in 1962 that diversification had sparked the development of a distinctly different form of business organization: the multi-divisional firm structure.⁹ This structure arose from the demands of a strategy of diversification for an organizational structure that would assure the efficient utilization of diverse resources.

Chandler's insight sparked a number of studies, including that of Wrigley (1970), who showed that diversified firms not only organized their activities differently from other firms, but that there were significant differences among diversified firms' strategies. Wrigley categorized a 1967 sample of 100 "Fortune 500" firms as being non-diversified (Single Product), diversified but largely dependent on a single product (Dominant Product), diversified into complementary activities (Related Product), or diversified without such patterns (Unrelated Product).

Wrigley's model recognized the degree of unrelatedness of activities as an important component of diversification and expanded the concept of relatedness to cover the interrelations among finance, marketing, and other functional components of a firm's diversification strategy. His use of qualitative assessments of the linkages among diversified activities emphasized the importance of a discernible rationale in case-by-case analysis of diversification. Subsequent studies expanded this work to include firms in the United Kingdom (Channon, 1971), France (Pooley-Dyas, 1972), Italy (Pavan, 1972), and Germany (Thanheiser, 1972).

Rumelt (1974) refined and expanded Wrigley's classification scheme by including subcategories identifying finer degrees of relatedness of activities, isolating vertical integration from other forms of diversification, and using "businesses" rather than "products" as the basic unit. Rumelt's expanded scheme uses Wrigley's basic guidelines: a Single Business derives 95% of its revenues from a single discrete business; Dominant Businesses derive between 70% and 95% of total revenues from their main business; Related Businesses derive less than 70% of their revenue from a single business but are dependent on a set of businesses which are related to basic skills or resources of the corporation and which account for at least 70% of their revenues; Unrelated Businesses derive less than 70% of their revenues from either a single business or a set of related businesses.

Rumelt's expansion of this scheme, in addition to redefining the basic activities in terms of "businesses" rather than products, distinguishes vertical integration as a separate form of diversification. Firms are defined as vertically integrated when they earn 70% or more of their revenue from the sale of by-products, intermediate products, and final products of a vertically integrated sequence of manufacturing operations. If the sale of a single end-product accounts for 95% of revenues, these firms are grouped with Single Businesses; otherwise they are classed as Dominant-Vertical.

Rumelt added a pair of suffixes, "Constrained" and "Linked", which identify another strategic element of the diversification of Dominant and Related businesses. When diversification is based on exploiting a single skill or resource in several activities, such that there is a common thread running through almost all the diversified activities, the firm is classed as Dominant-Constrained or Related-Constrained. When diversification is based on skills or resources basic to the corporation, but different skills or resources are applied to different activities, so that there is no single common thread running through the diversified activities, the firm is denoted Dominant-Linked or Related-Linked. Dominant-Unrelated firms have diversified without building on basic skills or resources.

Finally, Unrelated firms may be divided into those that are Acquisitive Conglomerates and those that are not. The latter are known as Unrelated-Passive. The Acquisitive Conglomerates make at least one acquisition per year, in addition to sustaining high rates of growth in earnings per share and issuance of new stock. (Appendix A gives Rumelt's flow chart for determining the strategic category of a given firm.)¹⁰

As noted by Chandler, the strategies followed by diversified firms give rise to different forms of organization or structure. Structures are classed as: (1) functional - the various functional areas of operations (finance, marketing, production, etc.) define the areas of responsibility of employees, with the chief executive and his staff having overall responsibility; (2) functional with subsidiaries - separate product divisions with managers who have overall divisional responsibility co-exist with functional divisions; (3) product division - separate product divisions are coordinated by a central office; (4) geographic division - divisions are assigned geographic areas of responsibility and may contain product divisions or be responsible to product divisions; (5) holding company - the parent company owns subsidiaries but does not generally exercise authority over them.

The Strategy-Structure model has been criticized by Caves et al. (1977) on the grounds that strategic choices may simply reflect the characteristics of the base industries and opportunities for building patterns of diversification which surround the firms. Caves substantiates this criticism with empirical evidence that firms' strategic choices are systematically related to differences in the market structures of their base industries and that, given industry profit performance, strategic choices have no significant effect on the firms' profitability. Thus, the U.S. firms that had better performance through Related diversification may owe their profitability to a richer set of opportunities, not to their wise choice of strategy. Similarly, the poorly performing Unrelated firms may have found that there were no industries into which they could diversify in a Related way; thus their "strategic choice" was predetermined.

Another criticism may be made that the degree of relatedness or disparity of a firm's business is not objectively measurable, so this dimension of classification in the model must be estimated subjectively. Finally, this model has not yet been shown to be a significant predictor of profitability if included in a conventional industrial organization model incorporating the effects of barriers to entry and other components of the base industry of the firm.

At the risk of oversimplification and perpetuating a dichotomy that has begun to be reconciled, the important distinction between the two approaches to measuring diversification, by SIC industries and through the Strategy-Structure formulation, should be clarified. The former is used for the standard industrial organization analysis. It relates the many variables of the structure of an industry to the behaviour and performance of the firms within the industry. In this approach "strategy" is too grandiose a term to apply to a firm's diversification process, since in this view the process is determined, or at least severely circumscribed, by the structural characteristics of the base industry in which the firm operates. The analysis of diversification via strategy, on the other hand, concentrates on the individual decisions of the managers and top executives of major firms.

The following analysis relies heavily on the latter approach, but with recognition of its inherent weaknesses. Future work will try to reconcile, or at least merge, the two frameworks to answer the question of the relative importance, in determining diversification patterns, of the individual "strategy" of the firm as opposed to the structure of the industry in which it operates.

Diversification Strategies

We applied the Strategy-Structure framework of Chandler, Wrigley and Rumelt to the Financial Post's "Top 200 Industrial Companies" (as measured by sales) for 1976. The strategy and structure of these firms were calculated for the years 1960, 1965, 1970 and 1975 using information from annual reports, the Financial Post Corporation Service, Dun & Bradstreet product classifications, and the record of mergers maintained by the Department of Consumer and Corporate Affairs. This procedure was complicated by the high degree of foreign ownership of Canadian industry. As can be seen in Tables 2-5, Canadian firms followed similar patterns of diversification to those of firms in the United States and Europe. Tables 6 and 7 show the increase in diversification in Canadian firms from 1965 to 1975 as measured by SIC industries. Canadian firms, however, started to diversify somewhat later than did firms in the United States. Greater diversification of product line was usually accompanied by a change in the organizational structure of the firm from a functional to a divisional organization (Tables 8-11). In Canada, with its predominance of regional markets, a larger proportion of firms were organized along geographic divisions than in the United States, which appears to have more integrated markets.

Methods of Diversification

To answer the question of how firms pursued their diversification strategies, we calculated the proportion of the growth in assets attributable to internal growth and acquisition over the period 1960 to 1975 of the publicly traded firms in the Financial Post's 1975 Top 200. An

example of the calculation is in Table 12. In the example, 41.8% $[10.5/(10.5 + 14.6)]$ of the growth would be attributed to mergers and acquisitions, and 58.2% to internal growth. The average type of growth for firms in each of the four main strategic categories was then calculated (Table 13). Firms that followed a pattern of unrelated diversification achieved a greater proportion of their growth (43%) by mergers and acquisitions than did firms in other strategic categories.

The sources of the financing used by publicly held firms to acquire other firms were also tabulated (Table 14). Unrelated businesses tended to finance more by issuing or exchanging stock, while Single businesses tended to finance their fewer acquisitions out of working capital.

EFFECTS ON COMPETITION

Many of the current legal and economic debates over conglomerates and conglomerate mergers focus on the possibility that these will have anti-competitive effects. To have such effects, a conglomerate merger must either create new market power in some market or facilitate the exercise of power that previously existed but was unexercised.

The effect of a conglomerate acquisition on the level of competition in the market of the acquired firm is dependent on market structure, conduct, and performance in that market prior to the acquisition. The entry of a large acquiring firm might, for example, transform a fairly competitive structure into a tight oligopoly characterized by parallel behaviour, either by providing leadership for agreement, by removing the threat of entry, or by raising barriers to subsequent entry. However, the most frequently stated concern about the entry of a large conglomerate acquirer is that an acquiring company with a "deep pocket" of profits or access to extensive outside financing may engage in predatory pricing or long-term subsidization to drive out some competitors and discipline others to "follow the leader".

A large acquiring firm that possesses significant power in its own market but encounters some impediment in using that power may undertake conglomerate mergers to find markets where such power can be exercised, for example through reciprocal dealing.

Finally, a large firm might undertake conglomerate acquisitions in order to extend its power in factor markets, for example in areas where purchases are made by all members of the conglomerate: transport, advertising and promotion, executive and staff services, or finance. The conglomerate may also seek political or social power based on its aggregate size.

The sections that follow discuss areas of conglomerate performance in Canada where some evidence on such effects is available. Many of the concerns regarding conglomerate mergers stem from a belief that they may increase industry concentration (with resultant higher prices, reduced quality, decreased output, or lessened innovation),¹¹ remove potential competition (or at least potential entry), or increase aggregate concentration, resulting in greater power in a very limited number of hands. We discuss these issues and the practices of predatory pricing, cross-subsidization, reciprocity, and increased barriers to entry.

Industrial Concentration

There is considerable evidence in the U.S. that no significant relationship exists between diversifying mergers and industry concentration. Berry (1974) concluded that inbound diversification by conglomerate firms weakened the market position of leading firms in those markets, especially where the markets were concentrated and the entering firm was large. Goldberg (1973, 1974) and Markham (1973) reached similar conclusions based on studies of changes in industry concentration of industries with a high rate of inward diversification. Caves, in research for the RCCC, indicated that firms in Canada have tended to diversify out of concentrated industries and into unconcentrated ones.

Narver (1969) concluded that if a conglomerate enters an industry by acquiring a leading or dominant firm, competition will probably decrease. If it makes a "toehold" acquisition (generally defined as a firm with less than a 5-8% share), competition within the industry will be likely to increase.

To measure the impact of conglomerate diversification directly, a sample of 91 acquisitions of 10 conglomerates in Canada over the period 1960 to 1975 was selected. For this sample, firms tended to make toehold (market share less than 5%) or intermediate (market share 5-9%) acquisitions in unconcentrated (CR_4 from 40-60%) industries (see Table 15). Only 5 of the 91 acquisitions were of leading firms (market share greater than 10%) in concentrated industries (CR_4 greater than 60%) (see Table 16). These results would support the conclusion that conglomerate diversification has increased competition in Canada.

A calculation of the post-acquisition changes in market share of the 91 firms acquired showed that 56 lost market share, while 35 gained market share (see Table 17).

It might, of course, be argued that merger-intensive industries (generally those characterized by faster than average growth) might have had lower concentration levels if mergers had not taken place, and thus might have shown better economic performance. It is also possible, however, that market shares of acquiring companies would have been larger had they devoted their assets to internal growth in their primary industries and diversified less. The impact of mergers on industrial concentration is also overstated to whatever extent mergers serve as an alternative to failure and exit for the absorbed companies.

Potential Competition

A related concern regarding conglomerate mergers is that they may foreclose potential competition. The poised potential entrant is often seen as the only realistic source of deconcentration of oligopolistic

markets, or of new pressures to promote or maintain price and product competition. When a likely candidate for new entry to a market through internal expansion or toehold acquisition enters the market through acquisition of a leading firm in the industry, it is argued that it has added nothing to productive capacity or to the diversity of competitive strategy. To characterize a failure to augment competition as a lessening of competition may appear a strange doctrine, but it is one that has been introduced in a number of major American merger cases.¹² In its 1968 Merger Guidelines, the U.S. Department of Justice said that potential competition "may often be the most significant competitive limitation on the exercise of market power by leading firms, as well as the most likely source of additional actual competition...."

The U.S. cases as they have developed have referred to a conglomerate merger as having the effects of eliminating the acquiring firm as a de novo entrant or a threat to become one; eliminating a likely future de novo entrant; eliminating a larger seller than necessary in entering by merger; raising future barriers to entry by entrenching a large acquirer; and, perhaps least plausibly, eliminating the acquired firm as a potential threat to the acquiring firm. We will consider these sequentially.

The threat of a firm entering unrelated industries de novo seems to act as a competitive deterrent to virtually no one. We examined records of 22 Canadian companies that had made three or more conglomerate acquisitions from 1960 to 1975; not one had expanded de novo in that period in an unrelated industry through greenfield investment. Four major conglomerate acquirers for which we have detailed internal records did not even consider internal greenfield investment as an alternative; they were in the merger and acquisition business, not that of internal expansion into new areas, and had no facilities or desire to "build from scratch" with the need for new hirings, new technology, and the mastering of new business techniques.

It is recognized that three minimum conditions must exist before there are likely to be adverse effects from a firm at the edge of a market

acquiring a firm in that market.¹³ First, the market must have an oligopolistic structure; if many competitors are already in the market, potential competitors will likely be ignored by all. Second, the acquiring firm must be recognized by those in the market not only as a potential entrant, but as the most likely entrant or one of a few very likely entrants. Third, the acquiring firm must be seen as able to achieve such economies of scale on entry that it is a plausible competitor. The significance of the second and third of these conditions is that they are unlikely to apply to a pure conglomerate acquisition.

The possibility of a conglomerate merger's reducing competition by eliminating a larger seller than necessary for entry is perhaps deserving of more attention. The theory of the toehold acquisition seems to be that instead of acquiring a firm that is a significant competitive factor and has the resources to remain as such, a new entrant may increase competition in the market by acquiring an existing firm that is too small or has inadequate resources to be a significant competitive factor, and then inject the necessary resources for the toehold acquisition to challenge dominant firms in the market. If accepted, this argument makes more relevant the findings noted earlier about the degree to which Canadian firms have diversified by toehold acquisitions into unconcentrated industries, and have expanded the market share of their new subsidiaries to a greater degree than have acquirers that took over leading firms.

In the Canadian setting, with its high degree of oligopolistic market structures and foreign ownership, it might be argued that seldom will an acquiring firm be faced with firms of different sizes available in a given market. The normal choice would be a "significant" firm available in one market, and smaller firms available in other markets. However, a policy that creates a presumptive illegality against leading-firm acquisitions in such circumstances creates another problem, which was described by the U.S. Federal Trade Commission (1969) (pp. 286-287):¹⁴

A general policy against leading-firm acquisitions, or a series of consent decrees in which the principal conglomerate

acquirers agree to abstain from major acquisitions, probably lifts the shadow of fear from a dozen corporate boardrooms for every merger it actually prevents. If . . . one wishes to retain a credible threat of entry but not encourage much actual entry, permitting unexpected acquisitions may be highly desirable. Fear of takeover may be a socially useful element in the life of the manager of a large, established, profitable company. If the easy life is one of the rewards of the monopolist and a threat to competition, anything that makes him reluctant to enjoy those rewards may be competitively beneficial.

The final two fears stated in U.S. cases, raising future barriers to entry by entrenching a large acquirer and eliminating the acquired firm as a potential threat to the acquiring firm, seem to us unlikely to be major concerns in Canada, but in any case they are problems more related to horizontal and vertical than to conglomerate mergers.

Based largely on rather impressionistic evidence we have gathered from testimony before the RCCC and elsewhere, our general conclusion is that potential entry probably does exist as a constraint where the potential entrant comes from a closely related area and is seen to be contemplating a market extension merger or a product extension merger, or to be integrating backward or forward in an existing channel of distribution. But potential entry seems to us only a minor factor in true conglomerate situations, and the possibility of conglomerate mergers' foreclosing potential entrants in conglomerate situations cannot be identified in advance. Moreover, the number and identity of potential conglomerate investors will change as economic conditions such as cost-price ratios change; indeed, the very fact of entry by a firm thought to have a perceptive research department may increase rather than decrease the number of remaining potential entrants to that industry.

Aggregate Concentration

The concern about levels of aggregate concentration involves both giant corporations, where absolute size is the essence of the concern, and large diversified enterprises, where the multi-market and multi-industry characteristics increase the concern about size. Recent evidence on

patterns of aggregate concentration in Canada, assembled for the RCCC by Christian Marfels of Dalhousie University, are given in Table 18.¹⁵ When aggregate concentration ratios for the 25, 50, 100, and 200 largest non-financial corporations are compared for 1965, 1968, and 1973, it is seen that there were minor increases in asset concentration evident for the first 200 non-financial corporations from 1965 to 1973, while sales concentration showed a slight decrease. The identity of the top 25, 50, 100, and 200 firms changes over time as firms fail, merge, or are displaced by smaller ones or by new entrants.

While mergers and acquisitions are the most common reason for significant year-to-year shifts in position within the lists of largest firms, they do not add very much to the extent of aggregate concentration over time. Analysis at the RCCC based on Marfels' data suggested that if no mergers at all had been undertaken between 1965 and 1973 by the 50 largest non-financial corporations on the 1973 list, they would have decreased their share of aggregate assets from 32.4% to about 31.2%. No breakdown of type of merger was made in the analysis, but conglomerate mergers probably accounted for about 26-28% of the total over this period, measured by asset value. The conclusion assumes that these firms would not have pursued internal growth alternatives with equal success to maintain their share of aggregate assets or sales.

There is no necessary theoretical relationship between the degree of aggregate concentration and the degree of industrial concentration, although in Canada and other Western countries one observes an empirical relationship. While not all large firms have substantial market shares, and not all large market shares are held by giant firms, there is a strong positive relationship between the two. However, the relationship does not imply anything about relative changes in the level of aggregate concentration or changes in the level of concentration in individual industries, the factors which may be altered by a conglomerate merger.

The concerns expressed about size and aggregate concentration do not seem to be primarily related to conglomerate firms, or to mergers, except

perhaps for the belief that growth by conglomerate merger is less likely to produce economies of scale than are horizontal or vertical mergers or internal growth. Generally, the fears expressed reflect the advantages that all large firms are felt to have over small ones. Large firms are seen as having advantages in access to capital, because their aggregate use of chartered banks, investment houses, and financial markets earns a visibility and preferred treatment not available to smaller competitors in individual markets. They are seen as having an advantage in litigation because of an ability to maintain centralized legal services, and thus to be able to disregard some of the costs of potential litigation in determining competitive tactics. They are also seen as having a capacity to use predatory pricing, or take losses over a long period in markets to discipline small rivals, to enjoy discriminatory treatment from suppliers, distributors and customers because of their size and importance, and to be able to "buy" a reputation through large-scale advertising and a disproportionate influence on government decision-making by campaign contributions, lobbying, and other means.

One economic problem that does come about as a direct result of conglomerate mergers is that known as "mutual forbearance". The assumption is that the presence of many multi-market firms produces a new element of market conduct. When firms interact as rivals in many markets, in some of which they are dominant and in others of which they are minor factors, their conduct in any one market will be constrained by profit maximization concerns over the total enterprise; this could lead either to a conglomerate's refraining from investment in an industry dominated by the subsidiary of another conglomerate, or subsidiaries of conglomerates in the same industry following parallel behaviour to refrain from price cutting or other actions to increase market shares for fear of retaliation in markets where they are more vulnerable. While examples of such behaviour exist, so long as entry to an industry is unrestricted, mutual forbearance will not be a viable long-run strategy for many firms. If conglomerate subsidiaries refuse to compete vigorously in their overlapping industries, then other firms will expand their market share. In Canada, with evidence that conglomerates tend to make toehold

investments in unconcentrated industries, there seems to be less scope for mutual forbearance than has been assumed in the United States and elsewhere.

A more social than economic concern about conglomerate mergers is that virtually every such merger has the effect of further concentrating business decision-making and corporate headquarters in a few major centres, specifically Toronto, Montreal, and Vancouver. Indeed, the financial orientation and centralized management service structure of conglomerates had the effect, in virtually every merger we looked at, of transferring some jobs, and some decision-making, from subsidiary to head office locations. The degree to which this forces individuals to leave their home areas to seek advancement, impoverishes local communities, or produces regional alienation is not clear. Offsetting such effects are the placement of professional management in local communities and often the continuation of local enterprises that might have failed without improved management.

Predatory Pricing and Cross Subsidization

A concern expressed about conglomerate enterprises, which does not occur with single-product, single-market firms, is their potential to use predatory pricing. This is usually defined as the use of profits from one product or subsidiary to subsidize the pricing of another product below long-term average cost in the short run, and thereby capture market share from single-product sellers who are unable to subsidize prices. A single-product firm could not follow this strategy unless it had some other way of financing short-term losses or were able to practise price discrimination across its markets.

Concern about predatory pricing in the United States originated with considerable publicity about the alleged use of predatory pricing by the Standard Oil Trust and by American Tobacco around the turn of the century; however, there have been very few documented cases since.¹⁶ In Canada there is virtually no jurisprudence on the issue of predatory pricing.

The relative lack of examples probably reflects both the fact that the opportunity to practise successful predatory pricing is very limited and the relative weakness of the Combines Investigation Act in prosecuting such behaviour. In a market with many sellers and relative ease of entry, predatory pricing might drive out some competitors, but the subsequent rise in price would then attract new entrants. In an oligopolistic market with a small number of big companies, a price-cutter would be faced with competitors able to sustain short-term losses without being driven out of the market. In the more common case of an oligopolistic industry with a few large companies and a number of small ones (for example steel or chemicals), price cuts would be met at least by the large firms until the smaller firms were driven out or weakened, the extra sales volume would be divided among a number of competitors, and the net increase in volume going to the price cutter would probably not justify the costs involved.

The only market structure that appears conducive to predatory pricing is an industry with one large producer and many relatively small ones spread over a wide geographic area. Here the large company might cut prices in individual areas to drive out smaller producers. Again the volume gain would be temporary if entry barriers were low and new firms entered when the dominant firm again raised prices. Entry barriers would tend to be low in most of those industries characterized by many small firms.

Under any market structure, predatory pricing would be less effective for products characterized by a high degree of differentiation, or by the need for continuous servicing.

A practice similar in effect to predatory pricing is that of cross-subsidization. Here a firm uses profits from one of its product lines or subsidiaries to subsidize temporarily another product or firm to overcome short-term problems, to expand product or market share more quickly than existing profit levels will allow, or to pursue some other objective that is both short-term in nature and non-predatory in intent. As with predatory pricing, a rational businessman will not practise cross-

subsidization unless he feels that the subsidized product or division can eventually earn normal or above-normal returns on its own. In briefs and testimony to the RCCC, a number of examples of short- and medium-term cross-subsidization were raised. Molson subsidized the losses and modernization of Beaver Lumber Company Limited over a number of years; Power Corporation has subsidized Dominion Glass Company Limited and Laurentide Financial Corporation Limited when those subsidiaries were in trouble.

The only Canadian example of long-term subsidization of losses which the RCCC encountered occurred among chain newspapers, where groups like Southam Press Limited systematically subsidize unprofitable newspapers as a matter of policy. Curiously, this long-term loss-subsidization has often been applauded as creating a more competitive press, and cited as one of the benefits of chain ownership of newspapers.

Other firms actively pursue a quite different kind of cross-subsidization, in which the cash flow of subsidiaries in slow-growing industries is used to subsidize the cash flow of other subsidiaries in cash-deficient, fast growing, and potentially more profitable industries. An excellent example presented to the RCCC was that of Genstar, which argued in its brief that one of the basic strengths of a diversified enterprise was this ability to transfer financial resources among companies more efficiently than could the financial sector. In Genstar's case, cash flow went primarily from its depreciation-heavy cement subsidiaries to its land development and housing subsidiaries.

Such short-term, cash-flow cross-subsidization may lead to better use of resources if it can in fact be done more efficiently than would be true through the financial sector. Cash flow cross-subsidization can lead to an inefficient allocation of resources if a firm does not allocate funds as well as the financial market might: for example, if it continues to subsidize a product or division that does not produce above-average returns. In the only study we know of relating to this problem, Porter (1977) concluded that highly diversified U.S. firms were more likely to retain losing subsidiaries than were non-diversified firms.

Increasing Barriers to Entry

It is sometimes argued that the entry of a large enterprise into an industry may serve to increase barriers to entry in that industry, even without any overtly anti-competitive action by the enterprise. If potential new entrants and firms already in the industry believe that the large firm is able and willing to engage in predatory pricing, cross-subsidization, or similar behaviour, they may restrict their normal competitive activities so as not to antagonize their stronger adversary.

For example, in the Procter & Gamble acquisition of the manufacturer of Clorox bleach, the U.S. courts and the Federal Trade Commission concluded that the acquisition would raise barriers to new entry in the bleach industry because of Procter's ability to use advertising on a very large scale.¹⁷ When General Foods Corporation acquired S.O.S. scouring pads, the court decided in the resulting case that entry barriers had been raised to "insurmountable heights" to potential entrants because of the impact of General Foods' advertising, promotional, and distributional resources.¹⁸

There has been considerable criticism in the U.S. of the decisions and economic logic in these cases.¹⁹ Many economists argue that there is no reason to believe that a conglomerate's entry into a market will produce timidity on the part of competitors or a lowering of the level of competition; it may be just as likely to generate more vigorous competition as a result of the entry of the new conglomerate. Indeed, it has been argued that conglomerate entry with short-term cross-subsidization is an important tool with which to shake up lethargic markets and disturb oligopolistic pricing tendencies. It might be argued that if conglomerate firms were able to raise barriers to entry or to competition, we would find that industries with a high proportion of diversified firms would have high cost-price margins. Research by S.A. Rhoades (1974), however, has reached the opposite conclusion, and in research for the RCCC, McFetridge and Weatherley (1977) concluded that corporate profit levels declined with the extent of diversification.

Information Loss

As independent, single-product firms which make public their sales and profit figures are acquired by diversified enterprises that consolidate operating information from their subsidiaries into their own financial statements, information is lost to competitors, investors, and society. Potential entrants and existing competitors no longer have line-of-business information about sales, profits, and growth rates to use in judging whether to shift resources into or out of the industry. The problem exists both in the evaluation of single-product firms in industries in which conglomerates operate and in the evaluation of conglomerate firms themselves. Collins (1975) found that this information loss led investors to make inefficient portfolio choices.

The problem of information loss is not acute in the case of a firm such as Power Corporation, many of whose subsidiaries have public shareholders and must issue annual reports. A firm like Genstar, on the other hand, which seeks 100% ownership of its subsidiaries, can consolidate its returns and thus hide the profitability of individual sectors. The barriers to entry raised by such information loss have long been recognized. In the United States this problem has been attacked by the Securities and Exchange Commission's requesting sales, cost, and profit information by predetermined lines of business from the largest corporations. In Canada a similar requirement is now coming into effect in the Canada Business Corporations Act, except that reporting corporations are permitted to define their own line of business categories based on the breakdown of percentage of sales.

Reciprocity

In the period 1968 to 1974, reciprocity (or reciprocal dealing) was considered in the United States to be the most anti-competitive result of conglomerate mergers. The U.S. Department of Justice's 1968 Merger Guidelines stated that:

"...the Department will ordinarily challenge any merger which creates a significant danger of reciprocal buying. . . . The Department considers that a significant danger of reciprocal buying is present whenever approximately 15% or more of the total purchases in a market in which one of the merging firms ("the selling firm") sells are accounted for by firms which also make substantial sales in markets where the other merging firm ("the buying firm") is both a substantial buyer and a more substantial buyer than all or most of the competitors of the selling firm.²⁰

Note that this rule relates solely to the opportunity for reciprocity, and not to its practice or effect.

At the other extreme, only a year later in 1969, the Stigler Task Force Report to President Nixon stated that: "The economic threat to competition from reciprocity is either small or nonexistent: monopoly power in one commodity is not effectively exploited by manipulating the price of an unrelated commodity."²¹

In Canada there has been no major challenge to a conglomerate merger under the Combines Investigation Act, and thus no indication of what importance the Bureau of Competition Policy would place on reciprocal dealing.

Reciprocity may exist in several forms. In the form most discussed in conjunction with conglomerate mergers, it is a practice that arises when a large company is an important customer for many suppliers, over each of which it has some market power. The large company merges with or acquires a smaller unrelated company, producing a product that many of the large company's suppliers can or must purchase. The large company announces, or its suppliers come to believe, that the way to keep the business of the major firm is to purchase some of their requirements from its subsidiary.

Stated in this form, it is true that the potential for reciprocity (the number of possible interfirm agreements for purchases) can be increased but can never decrease with conglomerate mergers. Further, the

practice of reciprocity would be a plausible occurrence. Many large companies may have unutilized purchasing power. Their suppliers are unable to give them discriminatory price concessions because they fear legal repercussions or demands from other customers for equal treatment, or because they are themselves in regulated or quasi-regulated industries (which would include many financial institutions) and fear publicity. Such suppliers may shift their own purchasing behaviour at little cost to themselves (particularly if the seller agrees to meet the best competitive offer), but at considerable profit to the acquired firm in terms of growth, market share, and profit. Competitors losing market share to the subsidiary of the large firm would have only the option of cutting prices, but with the likelihood that this would simply invite matching cuts and perhaps initiate a price war with a large, rich competitor. A barrier would be created to entry in the industry, except for entrants able to utilize similar reciprocal relationships.

However, the real situations involving conglomerates and reciprocity are considerably more complex than this example would suggest. Beyond the situation described, which might be called coercive reciprocity, a number of other situations might occur. Because search costs and transaction costs in buying and selling are high, reciprocal trading may simply represent a convenient, search-free and low-cost alternative to long-term contracts for both buyers and sellers, in which each party is bound to compliance not by a contract, but by the reciprocal position. Such contractual or voluntary reciprocity may be socially beneficial if it results in real economies (whether or not these are passed on to customers), whereas coercive reciprocity lacks any social benefit.

It is often difficult, however, to know how to distinguish between coercive and contractual reciprocity. Salesmen from the subsidiary in our example may attempt to secure customers by reminding them of the purchases that the firm's parent company makes, but with no credible threat of retaliation if their solicitation is rejected. This sort of behaviour by salesmen has been cited in several U.S. antitrust cases as evidence of coercive reciprocity (and coercive efforts have been defended as merely evidence of salesmen's enthusiasm).

In another situation, potential suppliers of a large company may unilaterally seek to improve their position by becoming customers of the firm's subsidiary, creating the opportunity for reciprocity by the supplier's parent. This might produce a result equivalent to either coercive or contractual reciprocity, but with a different initiating party.

Finally, there is the case of coincidental reciprocity, where two firms purchase each other's products simply as a result of free choice. For example, many companies sell products to the food retail and wholesale distribution divisions of the Loblaw Companies Limited, and also purchase materials from the five food processing divisions, two fisheries divisions, two forest products divisions, or the packaging division of Loblaw's parent company, George Weston Limited. Such reciprocal relationships might, of course, exist even in the absence of common control by Weston. Such coincidental reciprocity creates confusion in statistics showing the extent of reciprocal dealings.

A plausible argument that most reciprocity in large conglomerates is of the coincidental variety is put forward by businessmen who argue that the very structure of the organization of a conglomerate and the wide variety of products and markets involved create the necessity for an enterprise to be organized into "profit centres", which makes it impractical to practise reciprocity. Each profit centre typically has its own decentralized purchasing and sales departments, reducing both the motive and the opportunity to utilize the purchasing activities of one profit centre to benefit the sales of another. Most of the large diversified firms examined by the RCCC were in fact organized into individual profit centres, although whether or not this prevented the "information swapping" necessary to practise reciprocity is not clear.

The RCCC in its work encountered a number of cases of "statistical reciprocity", but without any evidence of whether these represented coercive, contractual, or coincidental reciprocity. No submission to the Commission made allegations of the existence of a case of reciprocity of

any kind, or suggested that reciprocity in general was seen to represent a problem.

Almost certainly instances of coercive reciprocity exist in Canada: cases have been well documented in the United States, and there is no reason to think that the practice respects borders.²² Whether reciprocity in any form is sufficiently important to justify a blanket structural standard for mergers, as with the U.S. Merger Guidelines, or whether it should require only a case-specific, after-the-fact approach based on effect, is another question. The fact that the effects of reciprocity can be benign, desirable (as in reduced search costs), anti-competitive, or even pro-competitive (by aiding entry to a tightly oligopolistic market) would suggest the latter, case-by-case approach as being most appropriate.

OTHER CONCERNS

Unsound Capital Structures

Concern has been expressed in the United States that the financing of mergers through additional debt has led to less conservative (that is, debt-heavy) capital structures in acquiring firms. While there is little evidence on this point even in the United States, we undertook limited research on the problem by examining five financial ratios of four large Canadian enterprises that had undertaken large debt-funded diversifications from 1965 to 1975. The ratios examined were net income to total liabilities, working capital to total debt, net cash flow to total debt, total debt to long-term debt, and current assets to current liabilities. Each of the four enterprises was matched with two firms of comparable size in the same base industry that did not undertake diversification over this period. The analysis was complicated by the fact that virtually all Canadian business showed deterioration in these ratios in the period following 1970.

Using the admittedly small sample and limited methodology, we were unable to find any evidence of capital structures deteriorating because of debt-financed expansion. The ratios of net income to total liabilities, working capital to total debt, and total debt to long-term debt deteriorated marginally more for diversifying firms than for non-diversifying ones. The ratio of current assets to current liabilities was about equal, while the ratio of net cash flow to total debt was slightly better for diversifying companies. This last ratio is generally argued to be the best single predictor of future solvency. Even over a fairly short term, capital markets seem to allow the managers of diversified firms to move towards a debt-equity ratio similar to that for undiversified firms. This empirical observation is in line with the theoretical constructs of H. J. Scott (1977, p. 1249).

Deception of Sellers

Concern has also been expressed in the United States that the sellers of securities or assets of acquired companies may either consistently be paid too little, or may receive complex securities such as convertible debt, convertible preferred shares, or warrants, which are difficult for the recipient to value.

Earlier we pointed out that in a study of tender offers for publicly held firms in Canada from 1960 to 1975, it was found that acquiring firms paid an average premium of 27.3% over market price at the time of the offer for the firm they acquired. We found few large public tender offers where complex securities were offered to shareholders. In most cases the securities offered were traded in sufficient volume that a value for them could be established. We examined 15 mergers where control in publicly held firms was acquired either with cash or with traded securities, comparing values 6 months prior to the merger with values 12 months after, and discounting by a TSE appreciation rate of 8.5% per annum over the period. In every case, it was better for the seller to have sold than to have held his securities. This may, of course, be a misleading result, because the value of residual shares, even if listed, may be consistently

lower after a bid for control has succeeded. Also, this comparison says nothing about value received or securities tendered in mergers involving unlisted firms. Still, the size of "premium" routinely paid and the almost complete absence of extremely complex securities suggest that deception of sellers may be less of a problem than is sometimes alleged. It might also be argued that the only public interest concern in protecting buyers and sellers should be to ensure full disclosure of relevant facts and adequate notification of and time to respond to an offer. No concern was expressed on the disclosure aspect at the RCCC hearings, and we feel that recent rulings on the periods for which offers must remain open satisfy the concerns that have been expressed in that area.

CONGLOMERATE DIVERSIFICATION: TWO SPECIAL CASES

The term "conglomerate" is usually used to denote manufacturing or processing companies diversifying into relatively unrelated fields. However, conglomerate enterprises have developed in a much wider variety of fields. Two of these, financial conglomerates (or congenerics) and conglomerates in the retail trades, have special characteristics that we think deserve consideration. We have not done extensive work on these institutions; however, it is likely that results from conglomerate diversification in these areas would differ substantially from those reported above. Both areas deserve much more extensive work than has been done to date in Canada.

Chartered Bank Conglomerates and Congenerics

One special case arises with the formation of financial conglomerates and congenerics. Financial conglomerates arise when banks diversify into non-financially related fields, such as real estate. Financial congenerics arise when firms are active in several related areas of finance; the term is almost always used to refer to banks that diversify into related fields. In Canada, chartered banks have

diversified into a number of related and unrelated areas, either through wholly or partially owned subsidiaries, or through foreign subsidiaries. Little information on these is published, although they apparently are registered with the Inspector General of Banks. From information filed with the Bank of England under British disclosure regulations, it would appear that the five largest Canadian chartered banks have among them over 1,550 subsidiaries and affiliated companies, although there is no indication how many of these are active. Unrelated and related activities include equipment leasing, factoring, mortgage servicing, distribution of national credit cards, operation of "private label" credit card services for customers, real estate services, credit life insurance, partial trust services, venture capital, commercial mortgages, ownership of non-bank, commercial real estate, computer and data processing services, travellers' cheques, mutual funds, and many others. In the United States, diversification by commercial banks has been carried out primarily through the one-bank holding companies, and for various banks encompasses all the above services plus such things as full-line insurance agencies and travel agency services.

We certainly do not wish to imply that there is anything wrong in Canadian banks' controlling this number and range of subsidiaries and affiliated companies. Where the activities involved are not specifically permitted under the Bank Act, it is our understanding that they are carried out with the prior permission of the Inspector General of Banks. It is likely that the motivation for banks to enter new areas has stemmed from their changing environment. Chartered banks have been subject to increasing inter-bank and non-bank competition in their traditional markets. For example, the development of the commercial paper market in Canada since 1970 has greatly increased competition for chartered banks in both deposit and loan markets. Rather than attempting to consolidate or extend oligopoly power in markets where it is declining, the banks may be attempting to expand into less intensively competitive markets.

It is also possible that bank congenetics exhibit some economies of scale in finance, being able to obtain capital perhaps at a lower cost,

but certainly more readily, than is true of small competitors without bank connections. There may be production economies, in the sense that the same computer used for processing chequing accounts can be used for processing credit card accounts or customer accounts receivable.

Much of the rush into subsidiaries in non-banking areas may have occurred in Canadian chartered banks because of a herd instinct, as has been true with other conglomerate trends. It has been argued that after the major U.S. banks diversified through one-bank holding companies in the late 1960s, The Royal Bank of Canada, The Toronto-Dominion Bank, and Bank of Nova Scotia quickly followed suit in Canada, and other banks rushed in to keep from being excluded from what might develop as necessary competitive offerings.

Another reason offered by chartered banks for the existence of separate subsidiaries and affiliates is that many areas outside line banking require different talents, with more impressive titles and remunerated at higher salaries, and that it is difficult to achieve the requisite flexibility within one corporate structure. Thus it may be desirable to carry out through subsidiaries some activities that otherwise could be carried on within a chartered bank.

The process of banks' becoming involved in related and unrelated fields has raised fears in the United States and other countries of the formation of large bank-dominated financial congeners and perhaps bank-dominated conglomerates. Critics cite the economic power of the German banks, which since the middle of the last century have controlled many industrial corporations through direct or indirect ownership of stock or through control of boards of directors. The second example often cited is the role of banks in the Japanese zaibatsu, which are conglomerates of immense size.

Conglomerates and congeners led by chartered banks may have exceptional opportunity for practising reciprocity. The power of a bank to persuade its customers to patronize its subsidiary services is

considerable, especially where the price and terms of the related service are fixed either by legislation or by tradition. Tie-in sales involving bank loans and credit life insurance have a long history in both Canada and the United States. A significant use of tying arrangements in financial transactions is seen with some Canadian trust companies, which in times of tight mortgage money have informed applicants that funds can be forthcoming only if the company also handles the related real estate transaction. Potential leverage is greater where there is a local monopoly or a strong oligopoly, or simply where the financial transaction is so important to the borrower that he is indifferent to a condition respecting the secondary transaction.

A third concern is that congenerics will create credit advantages for the bank's affiliates and their customers, or credit problems for the competitors of the bank's affiliates.

A related fear is that competitors of bank congenerics may be faced with problems such as the transmission to their bank-affiliated competitors of information submitted to the bank in connection with a loan application, or with routine banking transactions. For example, consumer finance companies have cited cases to the Canadian Department of Finance, and to the RCCC, where chartered banks learned of a customer's patronage of a finance company through bank-cleared cheques and used this information to attempt to win the customer's loan business.

It is also argued that banks cannot be expected to maintain an arm's-length position with borrowers who are its affiliates, and in times of tight credit may be expected to provide more favourable access to credit to their affiliates than they do to competitors. This is not of concern to competitors if alternate sources of funds are available in a competitive market. Fears have also been expressed on the grounds of safety, that unwarranted extensions of credit to non-banking subsidiaries can threaten depositors' funds. There have been a number of U.S. and European cases where such extension has led to bank failure. A related fear is that a multi-firm organization has the opportunity to redistribute

assets among subsidiaries, and may shift the most risky assets to the subsidiary where the degree of bank exposure to loss is least.

Finally, it is argued that when banks enter fields such as data processing services, where the great majority of firms are small, their entry can precipitate an increase in average firm size both through subsequent mergers and a shakeout of smaller firms, with the increase in size coming from the need to compete with bank-affiliated firms, either through seeking economies of larger size or simply through the need for more working capital because of more extensive use of credit in the industry.

U.S. Experience. The U.S. government has responded to these concerns by scrutinizing individual financial and non-financial acquisitions of commercial banks and blocking the formation of one-bank holding companies. In a series of precedent-setting decision, the U.S. Department of Justice blocked the acquisition of Carte Blanche by First National City Bank in 1965; effectively blocked a proposed merger of the First National Bank of Dallas and a mortgage servicing agency, Lomas and Nettleton Financial Corporation, in 1969; and blocked a merger between First National City Bank and Chubb Corporation, a very large insurance company, also in 1969. In 1971 an amendment to the Bank Holding Company Act of 1956 precluded all purely conglomerate subsidiaries in related financial activities regardless of whether competitive consequences would be positive or negative. It also called for divestiture of a number of bank subsidiaries acquired after May 1956.

Conglomerates in the Retail Trades

There have been a number of conglomerate mergers involving retail chains in Canada, although not to the extent that these have occurred in other countries, notably in Europe. The most extensive examples of retail conglomerates are probably the zaibatsu, the Japanese manufacturing-trading conglomerates. In Canada a great many mergers have involved suppliers and distributors in the same distribution channel; the many acquisitions of the Weston group of companies are an outstanding example.

Many mergers among retailers may properly be grouped as conglomerate in that relatively few mutualities emerge in the selling and promotional activities of the merged retail operations. There is little management transfer, little joint advertising, and little joint purchasing, for example.

Conglomeration in the retail trades does, however, provide a great number of opportunities for reciprocity or for leverage of various kinds in dealing with suppliers or customers, and independent retailers have complained for many years of such practices. For example, in obtaining scarce resources, such as desirable locations in planned or existing shopping centres or prime television advertising time, retailing conglomerates may have a decided advantage. Centre developers and their financiers have a marked preference for large and financially stable chains, and are often willing to make concessions to secure a major specialty chain as a tenant, including offering a separate lease to a less well known but affiliated company. Leverage may be exerted on the advertising media, which have a preference for large advertisers. Similar dangers from quasi-integrated manufacturing and marketing conglomerates can be listed, but are not well understood or researched. A priori, we felt that the dangers in this area, and that of financial conglomerates and congenerics, are quite different in nature and importance from those in the manufacturing sector, and deserve separate consideration and analysis.

PERFORMANCE OF DIVERSIFIED FIRMS

A primary concern to firms that engage in diversified acquisitions, their stockholders, and public policy is whether this activity increases the performance of the firm: return on assets and, to the investor, growth and stability of earnings. Does diversification lead to synergies in the various activities of the firm and does the diverse nature of its activities reduce the risk (variation in return) of doing business?

As mentioned in a previous section, the primary problem of testing for the presence of synergy (or firm-level economies of scale) arising from diversification (apart from finding an appropriate measure of diversity) has been the measurement of the effects of this synergy itself. The studies cited above have measured the profitability (or returns to the stockholders) of firms as a function of the degree of their diversification. But since industry structure may affect both a firm's diversification strategy and its profits and risk, a simple comparison among profits, risk, and diversification, without holding industry structure constant, may introduce a spurious correlation. Carter (1977) has tried to surmount this problem by introducing structural variables (weighted by the amount of assets each firm has in the industries in which it operates) as independent variables in his regression equations as well as the several measures of diversification. Diversification was significantly related to profits when the H-index numbers equivalent was used to measure diversification, but not when the entropy numbers equivalent was used (see Carter, 1977, p. 284). Carter also found that there was greater synergy for "trivial" diversification and vertical integration than for product extension and conglomerate diversification (p. 287).

Reid (1968) showed that conglomerate mergers perform better on growth-related dimensions of performance than on measures of financial return. This study of 478 large U.S. industrial firms between 1951 and 1961 concluded that firms relying on internal growth made better profits for stockholders. Reid suggested that stockholder portfolio diversification may be a more profitable strategy than conglomerate diversification by size-maximizing firms. Porter (1977) was surprised to find that diversified firms were less likely to disinvest themselves of the unprofitable subsidiaries than were less diversified firms. This result would support the conclusion that managers of diversified firms were trying to maximize the size, not the profitability, of their firms.

A partial explanation for the low profitability of diversified firms may be that owner-managed firms are more profitable than nonowner-managed

firms, especially for firms in concentrated industries (Palmer, 1973, Mosen et al., 1968), and that the managers of firms controlled by an (absent) dominant stockholder are less likely to take risks to increase profits (McEachern, 1976). By acquiring predominantly owner-managed firms, the diversifying firm may be decreasing both the profitability and the incentive to innovate and take risks in its new subsidiaries.

Another reason for the poor performance of firms that diversify by acquisition was suggested by Gort and Hogarty (1970): these firms may have paid too much for the acquired firm, so that there was a transfer of value from buyer to seller. Martin et al. (1970) calculated the net excess paid over book value of acquisitions for firms on the TSE over the period 1960 to 1968. They found an average premium of 47%.²³ Halpern (1973) summarized evidence suggesting that the premium paid over the existing market price on the stock market for acquired firms was in the range of 10-30%. The acquiring firms may have paid these premiums in the expectation of realizing pecuniary and non-pecuniary economies of scale and of increasing their market power. These premiums are determined by the supply and demand for firms at any given time. Firms that diversify into unrelated products by acquisition must pay the same premium as firms that follow a strategy of acquisition within the base industry, related diversification, or vertical integration.²⁴ However, both a priori expectations and empirical studies support the conclusion that unrelated diversification leads to smaller (if any) economies of scale or increases in market power than other types of acquisition.

Lev and Mandelker (1972) used matched pairs of acquiring and non-acquiring firms to test hypotheses about the effects of acquisitions on the market returns to stockholders, return on assets, growth in income, liquidity, and leverage. There were no statistically significant differences in these measures between the two groups of firms.

Mason and Goudzwaard (1976) provided empirical support for this hypothesis by comparing the performance of 22 conglomerate firms between 1962 and 1967 to 22 mirror portfolios of stock over the same period. The

22 portfolios duplicated the composition of the conglomerates' holdings in 1962, in terms of the amount invested in randomly selected firms in various SIC industry classes. Based on the initial holdings, the portfolio returns were calculated as if (1) the portfolio was held, without changes, from 1962 to 1967; (2) the investor bought and sold securities in emulation of the diversification pattern followed by the diversified firm; and (3) the investor employed a mutual fund manager to follow strategy (2). Allowance was made for all fees and taxes the investor would incur. The results showed that an investor would have been unequivocally better off under any one of the three strategies tested, since the conglomerates returned 7.5% annually, while the three strategies had returns of between 12% and 14%, after allowing for taxes and fees. The return on assets was also significantly higher for the portfolios.

Contrasting evidence on conglomerate economic performance was given by Weston and Mansinghka (1971). The profitability in 1958 and 1968 of 63 conglomerates was compared to the profitability of industrial and non-industrial control groups; the conglomerates improved from significantly lower profitability to equal profitability between 1958 and 1968. Weston and Mansinghka attributed this result to "defensive diversification" by firms facing adverse internal or industry conditions, and they credit diversification with having improved the economic performance of failing firms and avoiding the costs of bankruptcy. This finding was supported by evidence from Melicher and Rush (1974), who found that 32 conglomerate firms had significantly lower profitability than the 61 firms they acquired from 1960 to 1969. There was no significant difference in profitability between acquired and acquiring firms in 71 non-conglomerate mergers made over the same period.

Conn (1976) showed that there was no significant difference in the profitability of acquired and acquiring firms in the five years preceding 56 conglomerate mergers between 1960 and 1969. This study tested the significance of the difference in profitability between each pair of acquired and acquiring firms, rather than the difference of group means

tested in prior studies. Examining industry effects, Conn found that acquiring firms were in industries with constant profitability, while acquired firms were in industries with increasing profitability, suggesting that acquisitions were not made for "defensive" reasons but for "offensive" reasons.

Rumelt's empirical results using the strategy-structure methodology yielded a rich array of insights into the patterns of strategic diversification and changing structures of U.S. firms. Samples ranging from 183 to 107 United States firms were analyzed in each of the years 1949, 1959, and 1967. Rumelt's results show that the proportion of Single-Business firms declined dramatically relative to the increase in the proportion of Related and Unrelated firms, as shown in Table 4. In accordance with this change in strategies, many firms adopted product-division structures rather than functional structures, as may be seen in Table 9. Table 19 summarizes the performance of firms in the different strategic categories. It is somewhat paradoxical, in view of the profit-maximization assumption, that the widely adopted unrelated strategy yielded relatively low returns to both equity and assets. Other aspects of their performance are entirely consistent with growth maximization. Firms that followed a strategy of related diversification showed the highest returns and second-highest rates of growth, along with the highest price-earnings ratios.

These findings should be viewed with caution. The fact that firms that followed a strategy of unrelated diversification did not perform well, when measured in terms of return on equity or assets, does not mean that unrelated diversification was a "bad" strategy to follow. These findings do not show the relationship, if any, between a firm's risk and the strategy it followed. More important, this framework does not take into consideration the opportunity set of the firms that followed each type of strategy. Firms that followed a strategy of unrelated diversification may not have been operating in industries from which related diversification was impossible, but into industries whose growth rate and profitability made diversification look attractive. Finally,

firms may choose a strategy of unrelated diversification as a temporary measure in order to move their assets out of their base industry into a more profitable, faster-growing industry. Over time, such firms may grow internally and through acquisitions into industries that are related to their new businesses and thereby capture the higher returns that seem to be available to firms that follow related diversification strategies. Despite these three caveats, the Strategy-Structure framework has achieved striking results when it has been applied to firms in the United States and Europe.

These studies have focused separately on profitability (or return to the stockholder) and risk as two measures of performance. There is also a growing body of literature using the Capital Asset Pricing Model (CAPM), which emphasizes the relationship between risk and return, to evaluate the performance of firms. The CAPM shows that a firm's value depends not only on its profitability (or return to the stockholder in the market), but also on the level of risk, i.e., the variation in that profitability over time. Lower profits may be compensated for by low risk. Consequently, low profits may not be evidence of inferior performance if they are accompanied by correspondingly lower risk (and vice versa). Halpern (1973), using this model, found support for the hypothesis that there was an increase in the value of merged firms over that of the two firms taken separately and that this increase in value was divided between the shareholders of the acquired and acquiring firms. Mandelker (1974), in a study of a sample of acquisitions from 1941 to 1962, also found a gain in market value, but concluded that it accrued only to the shareholders of the acquired firm. Ellert (1976), in a study of a sample of firms from 1950 to 1970, found that the stockholders of firms that had made a major merger reaped abnormally high returns for the eight years before the merger. Ellert concluded that these returns could not be attributed to the merger itself, but rather to superior management which was subsequently utilized to accomplish a successful merger. The acquired firms in his sample had had a history of abnormally low returns. These studies do not address the question of diversification, but rather of the effect of acquisitions on the firm's market performance on a risk-return basis.

Baesel and Grant (1976) used the Treynor Index (which takes both risk and return into account) to compare the performance of a group of acquisition-oriented firms, ten conglomerates, mutual funds, and a random sample of firms with the performance of the Toronto Stock Exchange (TSE). The ten conglomerates significantly outperformed the TSE over the period 1960 to 1970, a period of high returns, but underperformed the TSE (but not significantly) over the period 1970 to 1975, a period of poor performance of stocks in general. Over the entire period, the ten conglomerates outperformed the TSE, but, surprisingly, so did the random sample of firms. Baesel stated that this result might be due to the "survivor" phenomenon. The study also found that these ten conglomerates were not as diversified as the mutual funds in the study, but that their diversity had increased significantly over the period 1960 to 1975, not a surprising result since several of the firms began to diversify midway through the period.

In summary, the accumulated evidence suggests a positive relationship between diversification and R&D, and some economies of scale in finance. There is mixed evidence on risk-reduction via diversification. Studies of profitability suggest that diversification may act as a barrier to entry in some circumstances and that profitability may be subordinate to growth maximization as a conglomerate goal, since conglomerates' profitability fell short of the performance of theoretical portfolios, mutual funds, and non-diversified firms in several studies. Evidence of "defensive" diversification has been questioned, and it is not clear whether conglomerates tend to acquire more or less profitable firms, or what effect they subsequently have on the profitability of acquired firms.

Performance of Diversified Firms in Canada

One of the most intriguing and controversial of Rumelt's results was that firms in different strategic categories had significantly different performances measured by return on assets, equity, and growth in earnings per share and sales. This study was repeated for the publicly held firms

among the largest 200 firms in Canada in 1975, which had been placed in Rumelt's eight strategic categories. (There were no firms in Canada that satisfied Rumelt's definition of an acquisitive conglomerate.) The average growth in earnings per share, sales per share, return on equity and return to the investor for firms in each category was calculated for each year 1960 to 1975. The weighted average over the 16-year period was taken for each category.²⁵ It should be noted that the population of firms in each category was not constant over the period 1960 to 1975; firms changed categories as they changed their diversification strategy. In general, firms that followed strategies of Unrelated diversification (Unrelated, Related-Linked, Dominant-Unrelated) performed significantly below average (see Table 20). Firms that followed a Dominant-Vertical strategy also performed below the average. Firms that followed a strategy of Related diversification (Related-Constrained, Dominant-Constrained) performed significantly better than the average. Conglomerate (Unrelated) diversification led to a lower growth rate in sales, earnings per share, return on equity, and return to the investor.

To try to determine the factors which had led to the performance of firms which followed a pattern of unrelated diversification, we constructed mirror portfolios to match the assets of each of ten such firms for each year from 1960 to 1975.²⁶ The average return to the stockholder, earnings before interest and taxes as a percentage of total assets, and growth in earnings per share were calculated for the ten firms and their mirror portfolios. This technique is similar to the one used by Mason and Goudzwaard (1976). On these three dimensions the firms had significantly lower performance (at the 5% statistical confidence level) than their mirror portfolios. When the premiums that many of these firms paid for their acquisitions over this period (an average of 27.3%) were taken into account in the mirror portfolios, the portfolios still significantly outperformed the ten firms (Table 21).

These results lend support to the conclusion that conglomerate diversification has led to a lower return on assets and to the stockholders and a lower growth in earnings per share but a higher growth

in sales and assets. This lower performance was partly due to the transfer of value from these firms to the former owners of their acquired subsidiaries. They were not able to realize sufficient synergies, economies of scale or increased market power to offset the average 27.5% acquisition premium they paid for their acquisitions.

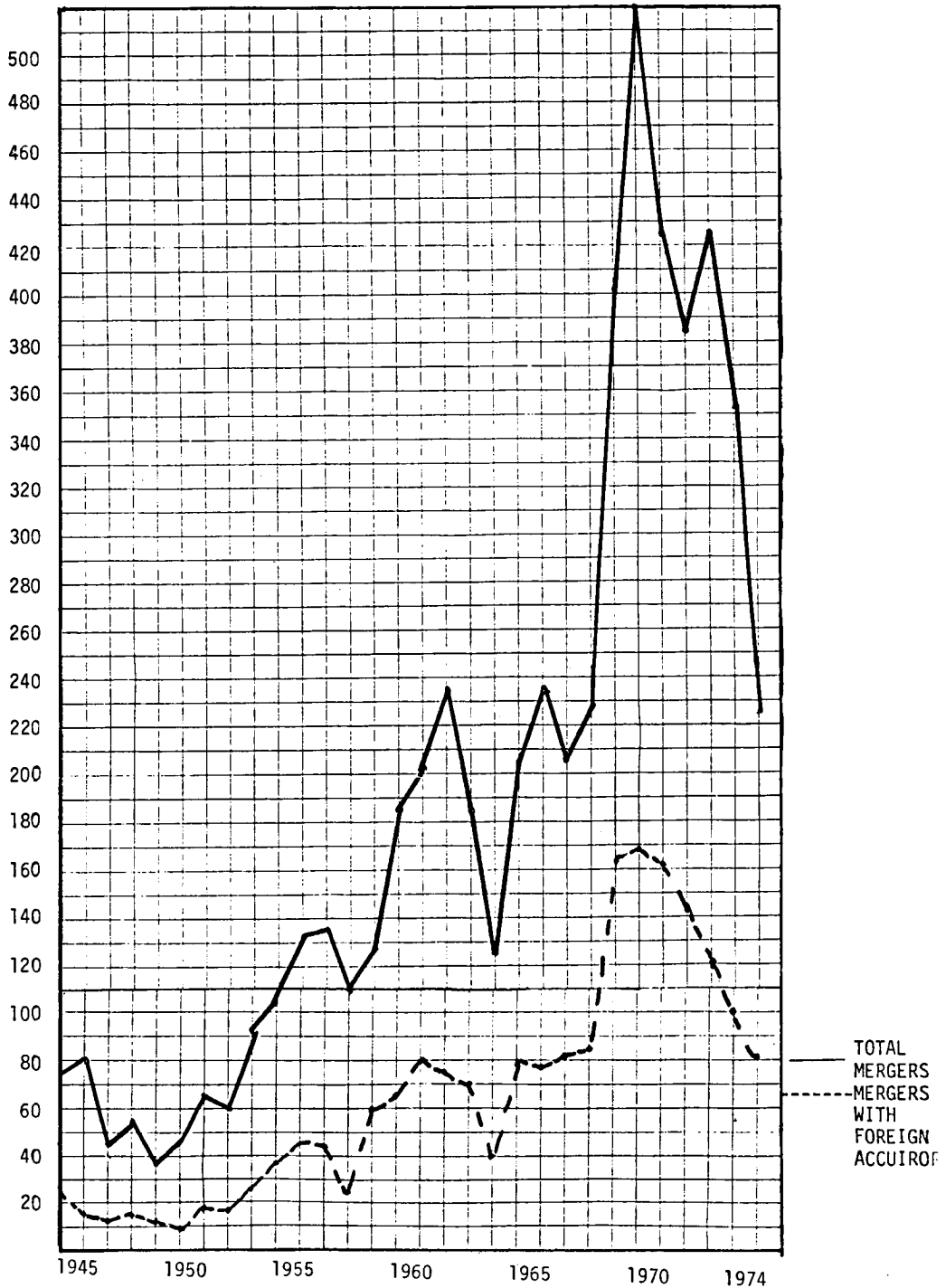
The post-merger and pre-merger profitability of 24 firms that had been acquired by these 10 diversified firms were calculated. Of these subsidiaries, 13 increased in profitability and 11 decreased (Table 22). This pattern was similar to that found by the U.S. Federal Trade Commission. Conglomerate firms were less likely to increase the profitability of their new subsidiaries.

CONCLUSION

Despite the merger wave of the 1960s, the level of concentration within industries and in aggregate has not changed significantly in Canada. Many of the largest firms in Canada have changed their strategies and diversified out of Single or Dominant businesses into Related and Unrelated businesses. This trend toward diversification has also been observed in the United States and Europe. This diversification has been motivated by a search for increased profits, reduced risk, and continued growth. Firms that engaged in Unrelated diversification in general did not achieve these goals. The premium they paid for their acquisitions was greater than they could recover through economies of scale or synergy among their unrelated operations. Unrelated diversification has not, in general, increased concentration within industries, but has probably increased competition.

FIGURES AND TABLES

Figure 1
 MERGER ACTIVITIES BY NUMBER OF MERGERS, CANADA 1945-1974



Source: Globerman (1977a)

Table 1
Percentages of Mergers By Type, Canada 1900-1975

<u>Period</u>	<u>Horizontal</u>	<u>Vertical</u>	<u>Conglomerate</u>	<u>Total</u>
1900-1909	90	4	6	100
1910-1919	85	10	5	100
1920-1929	85	11	4	100
1930-1939	88	7	5	100
1940-1948	83	19	8	100
1945-1961	63.9	23	13.1	100
1960-1968	63	19	18	100
1968-1973	56	18	25	100

Source: 1900-1948 (Weldon)
1945-1961 (Reuber & Roseman)
1960-1968 (Laiken)
1968-1974 (Hinchcliff and Shapiro)

N.B. The definitions used by the different authors are not strictly comparable.

Table 2

Estimated Percentage of the Number Firms That
Pursued Each Strategy in the Top 200 Firms,*
Canada, 1960-1975

<u>Strategy</u>	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>
Single Business	31	18	14	13
Dominant Business	51	52	47	41
Dominant-Vertical	24	23	20	13
Dominant-Constrained	17	17	12	8
Dominant-Linked	10	11	8	10
Dominant-Unrelated	<u>0</u>	<u>1</u>	<u>7</u>	<u>10</u>
Related Business	13	22	25	28
Related-Constrained	8	12	9	8
Related-Linked	<u>5</u>	<u>10</u>	<u>16</u>	<u>20</u>
Unrelated Business	<u>5</u>	<u>8</u>	<u>14</u>	<u>17</u>
	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>

*Ranked by sales.

Table 3

Percentage of Assets of Firms Which
Pursued Each Strategy in the Top 200
Firms,* Canada, 1960-1975

<u>Strategy</u>	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>
Single Business	34	18	12	11
Dominant Business	50	47	44	42
Related Business	11	24	30	29
Unrelated Business	<u>5</u>	<u>11</u>	<u>14</u>	<u>18</u>
	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>

*Ranked by sales.

Table 4
Strategy of U.S. Firms, 1949, 1959 and 1969
(Estimated Percentages)

<u>Strategy</u>	<u>1949</u>	<u>1959</u>	<u>1969</u>
Single Business	34.5	16.2	6.2
Dominant Business	35.4	37.3	29.2
Dominant-Vertical	15.7	14.8	15.6
Dominant-Constrained	18.0	16.0	7.1
Dominant-Linked	0.9	3.8	5.6
Dominant-Unrelated	<u>0.9</u>	<u>2.6</u>	<u>0.9</u>
Related Business	26.7	40.0	45.2
Related-Constrained	18.8	29.1	21.6
Related-Linked	<u>7.9</u>	<u>10.9</u>	<u>23.6</u>
Unrelated Business	3.4	6.5	19.4
Unrelated-Passive	3.4	5.3	8.5
Acquisitive Conglomerate	<u>0.0</u>	<u>1.2</u>	<u>10.9</u>
Total number of firms used to derive the estimates	189	207	183
	100	100	100

Source: R.P. Rumelt (1974), p. 51.

Table 5

Evolution of Strategy and Structure in Four Major
Western European Countries, 1950-1970

(Percentages of Largest Manufacturing Companies)

<u>Strategy</u>	<u>United Kingdom</u>			<u>France</u>			<u>Germany</u>			<u>Italy</u>		
	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>
Single Business	29	17	7	39	30	19	29	20	21	22	16	7
Dominant Business	30	26	25	14	19	21	15	18	11	15	14	20
Related Business	19	34	48	22	25	28	23	25	26	25	31	31
Unrelated Business	1	4	4	4	7	10	10	14	20	1	2	3
Foreign-Owned	14	16	16	19	19	22	21	21	22	20	30	39
Extraneous	7	3	0	2	0	0	2	2	0	17	6	0
 <u>Structure</u>												
Functional	36	16	6	43	32	16	35	22	19	48	45	33
Functional Holding	12	15	6	17	23	18	31	41	17	9	12	13
Holding	26	35	15	18	19	13	10	11	10	4	4	1
Multidivisional	5	15	57	1	7	31	1	3	32	2	3	14
Foreign	14	16	16	19	19	22	21	21	22	20	30	39
Extraneous	7	3	0	2	0	0	2	2	0	17	6	0

Source: B. R. Scott (1973).

Notes: U.K., 86 largest manufacturers
France, 76 largest manufacturers
Germany, 78 largest manufacturers
Italy, 61 largest manufacturers

Table 6

Extent of Diversification of the 200 Largest Firms,*
by 4-Digit SIC Number, Canada, 1960 and 1975

<u>Number of 4-Digit SIC Industries in Which the Firms Operated</u>	<u>200 Largest, 1975</u>	<u>200 Largest, 1960</u>
1- 5	41	37
6-10	43	65
11-20	65	52
21-30	37	27
31-40	12	10
41-50	1	5
51 or more	1	4

*Ranked by sales.

Table 7

Diversification of 100 and 200 Largest Firms,*
at the 2-Digit, 3-Digit and 4-Digit
SIC Level, Canada, 1960 and 1975

<u>Size Class</u>	<u>Year</u>	<u>Average Number of Industry Categories in Which the Firms Operated</u>		
		<u>2-Digit</u>	<u>3-Digit</u>	<u>4-Digit</u>
100 largest	1960	2.3	5.2	8.3
	1975	3.3	8.7	12.1
101-200 largest	1960	1.8	4.7	6.1
	1975	2.1	5.3	8.3
200 largest	1960	2.0	4.9	7.1
	1975	2.8	6.5	10.2

*Ranked by sales

Table 8
Structure of Firms, Canada, 1960-1975
 (Estimated Percentages)

<u>Structure</u>	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>
Functional	66	59	46	29
Functional with subsidiaries	9	11	10	10
Product division	15	18	34	42
Geographic division	5	6	5	12
Holding company	<u>5</u>	<u>6</u>	<u>5</u>	<u>7</u>
	100	100	100	100

Table 9
Structure of Firms, United States, 1949-1969
 (Estimated Percentages)

<u>Structure</u>	<u>1949</u>	<u>1959</u>	<u>1969</u>
Functional	62.7	36.3	11.2
Functional with subsidiaries	13.4	12.6	9.4
Product division	19.8	47.6	75.5
Geographic division	0.4	2.1	1.5
Holding company	<u>3.7</u>	<u>1.4</u>	<u>2.4</u>
Number of firms used to derive the estimates	100.0	100.0	100.0
	189	207	183

Source: Rumelt (1974).

Table 10

Structure of Top 200 Firms,* by Strategy, Canada, 1975

(Percentage in each Structural Class)

<u>Strategy</u>	<u>Structure</u>					<u>Total</u>
	<u>Functional</u>	<u>Functional with Subsidiaries</u>	<u>Product Division</u>	<u>Geographic Division</u>	<u>Holding Company</u>	
Single Business	61	0	8	23	8	100
Dominant Business	41	13	34	10	2	100
Dominant-Vertical	57	10	28	5	0	100
Dominant-Constrained	62	0	25	13	0	100
Dominant-Linked and Dominant-Unrelated	8	23	46	15	8	100
Related Business	11	21	50	18	0	100
Related-Constrained	14	14	43	29	0	100
Related-Linked	5	25	55	15	0	100
Unrelated Business	6	0	65	0	29	100

*Ranked by sales.

Table 11
Structure of Top 500 Firms,* by Strategy, United States, 1969
 (Percentage in each Structural Class)

<u>Strategy</u>	<u>Structure</u>					<u>Total</u>
	<u>Functional</u>	<u>Functional with Subsidiaries</u>	<u>Product Division</u>	<u>Geographic Division</u>	<u>Holding Company</u>	
Single Business	62.3	14.2	14.2	9.3	0	100
Dominant Business	20.7	17.5	60.3	1.5	0	100
Dominant-Vertical	32.2	22.6	45.2	0	0	100
Dominant-Constrained	14.2	6.2	73.5	6.2	0	100
Dominant-Linked and Dominant-Unrelated	0	17.8	82.2	0	0	100
Related Business	2.9	6.6	89.5	1.0	0	100
Related-Constrained	4.1	9.7	86.3	0	0	100
Related-Linked	1.9	3.7	92.5	1.9	0	100
Unrelated Business	0	2.3	85.3	0	12.4	100
Unrelated-Passive	0	5.2	94.8	0	0	100
Acquisitive Conglomerate	0	0	77.8	0	22.2	100

Source: Rumelt (1974).

*Ranked by sales.

Table 12
Hypothetical Example of Internal Versus
External Growth

<u>Period</u>	<u>Initial Assets of Beginning of Period</u>	<u>Acquisition</u>		<u>Internal Growth</u>		<u>Total Growth</u>	
		<u>Amount</u>	<u>%</u>	<u>Amount</u>	<u>%</u>	<u>Amount</u>	<u>%</u>
1	100	20	20.0	20	20.0	40	40.0
2	140	5	3.6	15	10.7	20	14.3
3	160	10	6.3	30	18.8	40	25.0
4	200	0	0.0	20	10.0	20	10.0
5	220	<u>50</u>	<u>22.7</u>	<u>30</u>	<u>13.6</u>	<u>80</u>	<u>36.4</u>
	Totals	85		115		200	
	Averages		10.5		14.6		25.1

Table 13
Percentage Growth in Assets of Publicly
Held Firms among the Top 200,*
Canada, 1960-1975

<u>Strategic Category of Firm</u>	<u>Type of Growth</u>	
	<u>Internal</u>	<u>Merger and Acquisitions</u>
Single Business	91	9
Dominant Business	72	28
Related Business	68	32
Unrelated Business	57	43

*Ranked by sales.

Table 14

Methods of Financing Acquisitions by
Publicly Held Firms among the Top 200,*
Canada, 1960-1975

(Percentages)

<u>Method of Financing</u>	<u>Strategic Category of Acquiring Firm</u>			
	<u>Unrelated Business</u>	<u>Related Business</u>	<u>Dominant Business</u>	<u>Single Business</u>
Working capital	2	15	55	53
Long-term debt	34	21	8	19
Convertible debentures	8	9	2	3
Preferred stock	4	18	6	14
Common stock	<u>52</u>	<u>37</u>	<u>29</u>	<u>11</u>
	100	100	100	100

*Ranked by sales.

Table 15

Market Share of a Sample of
Firms Acquired by 10 Conglomerates,*
Canada, 1960-1975

<u>Market Share</u>	<u>Percentage</u>	
	<u>Firms</u>	<u>Assets</u>
20% or more	5	25
10-19.9%	15	32
5- 9.9%	27	23
1- 4.9%	29	15
Less than 1%	<u>24</u>	<u>5</u>
	100	100

*Enterprises included in the sample were Argus Corporation Limited, Brascan Limited, Canadian Pacific Investment Limited, Imasco Limited, Jannock Corporation Limited, John Labatt Limited, Neonex International Limited, Power Corporation of Canada Limited, Redpath Industries Limited, and Warnock Hersey International Limited.

Table 16

Market Position and Level of Industry Concentration
for a Sample of Firms Acquired by 10 Conglomerates,*
Canada, 1960-1975

<u>Market Position of Acquisition</u>	<u>Type of Industry</u>			<u>Total</u>
	<u>Concentrated (CR₄ over 60%)</u>	<u>Intermediate (CR₄ 40-60%)</u>	<u>Unconcentrated (CR₄ less than 40%)</u>	
Leading Firm (Market share 10% or more)	5	9	4	18
Intermediate (Market share 5-9%)	9	7	9	25
Toehold (Market share less than 5%)	5	14	29	48
Total	19	30	42	91

*See Table 15n.

Table 17

Post-Acquisition Changes in Market Positions
of a Sample of Firms Acquired by 10 Conglomerates,*
Canada, 1965-1975

Market Position of Acquisition	Concentrated (CR ₄ over 60%)		Intermediate (CR ₄ 40-60%)		Unconcentrated (CR ₄ less than 40%)		Total		Total
	Increase	Decrease	Increase	Decrease	Increase	Decrease	Increase	Decrease	
Leading firm (Market share 10% or more)	3	2	4	5	2	2	9	9	18
Intermediate (Market share 5-9%)	3	6	3	4	3	6	9	16	25
Toehold (Market share less than 5%)	3	2	6	8	8	21	17	31	48
Total	9	10	13	17	13	29	35	56	91

*See Table 15n.

Table 18

Percentage of Assets and Sales Accounted for by the
25, 50, 100 and 200 Largest* Non-Financial Corporations,
Canada, 1965, 1968, and 1973

<u>Year</u>	<u>Top 25</u>		<u>Top 50</u>		<u>Top 100</u>		<u>Top 200</u>	
	<u>Assets</u>	<u>Sales</u>	<u>Assets</u>	<u>Sales</u>	<u>Assets</u>	<u>Sales</u>	<u>Assets</u>	<u>Sales</u>
1965	23.8	10.4	30.6	15.2	38.6	23.5	47.2	28.7
1968	22.5	10.1	29.4	14.0	37.3	21.4	46.2	27.6
1973	25.2	11.0	32.4	15.0	40.1	21.0	48.3	28.3

Source: Marfels (1977)

*Ranked by assets.

Table 19
 Financial Characteristics of the Strategic Categories,
 United States, 1949-1969

(Percentages)

<u>Strategic Category</u>	<u>Growth in Earnings per Share</u>	<u>Return on Capital</u>	<u>Return on Equity</u>	<u>Growth in Sales per Share</u>
Single Business	3.92--	10.81	13.20	5.84-
Dominant-Vertical	5.14-	9.24---	10.18---	5.20--
Dominant-Constrained	7.60	12.71+++	14.41++	7.93
Dominant-Linked and Dominant-Unrelated	6.11	8.69	10.28	5.23
Related-Constrained	8.56+++	11.97+++	14.11++	7.93
Related-Linked	5.57	10.43	12.28	6.29
Unrelated-Passive	5.96	9.40	10.38	4.67--
Acquisitive Conglomerate	9.46	9.56	13.13	10.48++

Source: Rumelt (1974)

The plus or minus signs following an estimated category mean indicate that it differed significantly ("+" for a positive deviation, "-" for a negative deviation) from the overall mean (t-ratio test). One sign indicates a deviation significant at the 0.1 level, two signs indicate the 0.05 level, and three signs the 0.01 level.

Table 20

Performance of the Publicly Held
Firms among the Top 200 Firms (1975),*
Canada, 1960-1975

(Percentages)

<u>Strategy Category of Firm</u>	<u>Growth in Earnings per Share</u>	<u>Growth in Sales per Share</u>	<u>Return on Equity</u>	<u>Return to the Investor</u>
Single Business	2.1↓	6.8	10.52	8.9
Dominant-Vertical	3.7↓	6.5	7.1↓	8.3 ↓
Dominant-Constrained	5.2↑	8.3 ↑	11.2↑	19.1 ↑
Dominant-Linked	4.3	6.1	8.9	16.3
Dominant-Unrelated	2.0 ↓	4.2 ↓	7.5↓	10.2↓
Related-Constrained	7.5 ↑	8.7 ↑	11.2 ↑	20.3 ↑
Related-Linked	3.7	6.0 ↓	6.9 ↓	12.2
Unrelated Business	3.1↓	5.2 ↓	7.1↓	8.1↓

*Ranked by sales.

(↓) = significantly below average at the 10% level.

(↑) = significantly above average at the 10% level.

Table 21
Comparison of 10 Conglomerates*
with Simulated Portfolios, Canada, 1960-1975

(Percentages)

	<u>Conglomerates</u>	<u>Simulated Portfolios</u>	
		(1)	(2) ^{***}
Return to stockholders	9.4	12.7	10.0
Return** on total assets	6.7	10.3	8.1
Growth rate of earnings per share	4.3	6.8	5.3

Source: RCCC research.

*See Table 15n.

**Based on earnings before interest and taxes.

***Column (2) included an average acquisition premium of 27.5% above market price.

Table 22

Change in Profitability after Acquisition of
Manufacturing Firms Acquired by Sample
Conglomerates, United States and Canada,
1960-1973

	<u>Total Number of Firms Acquired</u>	<u>Change in Profitability</u>	
		<u>Increase</u>	<u>Decrease</u>
United States	43	23	20
Canada	24	13	11

Source: U.S. data: Federal Trade Commission.

Canadian data: Sample of acquisitions by large Canadian firms.

APPENDIX A

DEFINITIONS

Ratios

Vertical Ratio (VR): the proportion of the firm's revenues that arise from all by-products of a vertically integrated sequence of processing activities.

Specialization Ratio (SR): the proportion of a firm's revenues that can be attributed to the largest single business in a given year.

Related Ratio (RR): the porportion of a firm's revenues attributable to its largest group of related businesses.

Firm's Strategies

Single Business: firms that are basically committed to a single business in a single industry.

Dominant Business: firms that have diversified to some extent, but still obtain the preponderance of their revenues from a single business in a single industry.

- a) Dominant-Vertical: vertically integrated Dominant firms.
- b) Dominant-Constrained: non-vertical Dominant Firms that have diversified by building on some particular strength; their activities are strongly related.
- c) Dominant-Linked: non-vertical Dominant firms that have diversified by building on several different strengths; activities are not closely related, but are still linked to their dominant business.
- d) Dominant-Unrelated: non-vertical Dominant firms whose diversified activities are not linked to their dominant business.

Related Business: non-vertically integrated diversified firms operating in several industries but whose activities are linked.

- a) Related-Constrained: Related firms, all of whose activities are related to a central strength.
- b) Related-Linked: Related firms that have diversified using several different strengths and hence are active in widely disparate businesses.

Unrelated Business: non-vertical firms that have diversified without regard to the relationships between new business and current activities.

Organizational Categories

Functional: an organization in which the major subunits are defined in terms of the business functions or stages in the manufacturing process. Responsibility for coordination and product-market performance rests with the chief executive, his staff, and committees. Vertically integrated firms fall in this class despite the common practice of referring to their process-linked subunits as divisions.

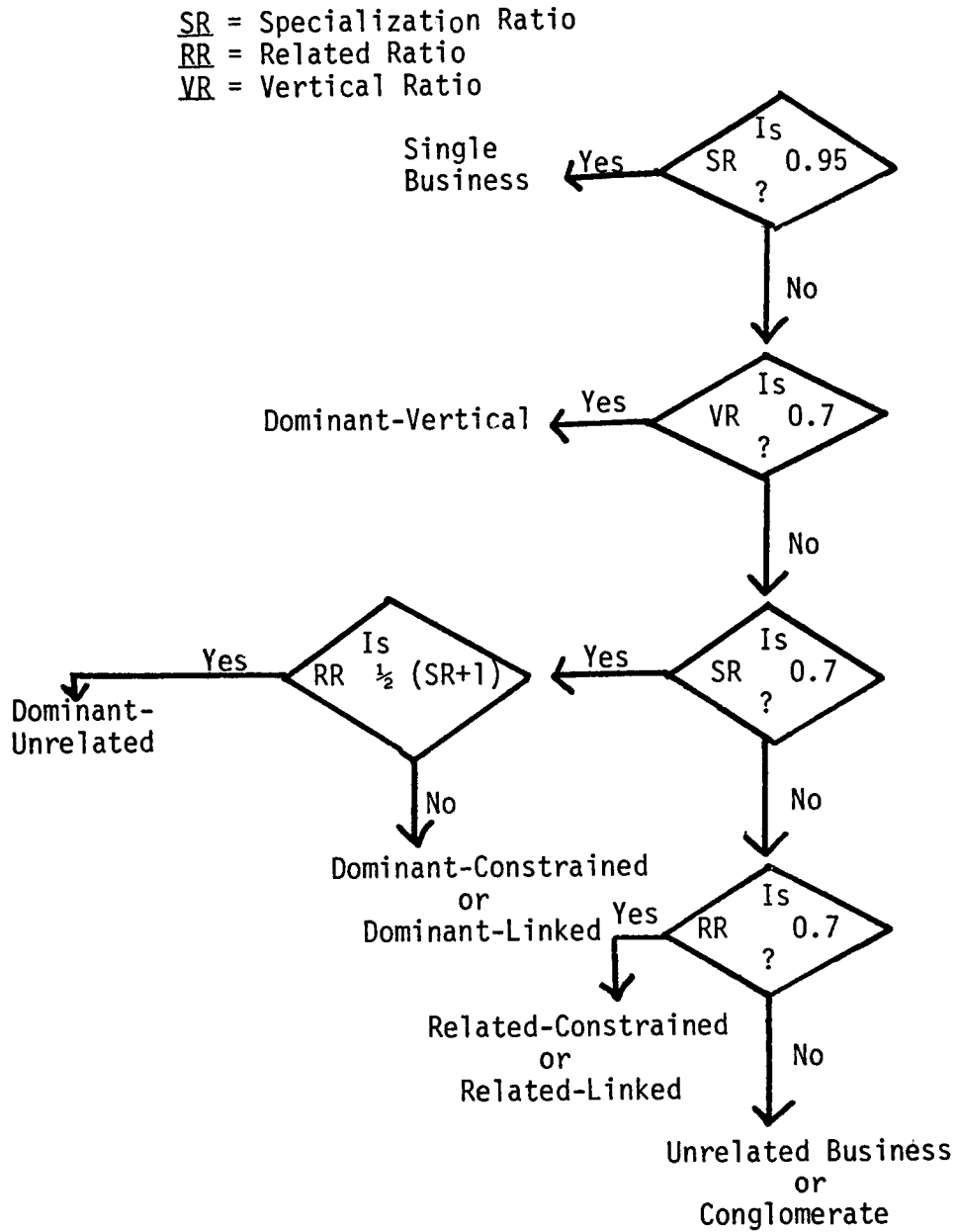
Functional with Subsidiaries: an organization that is basically functional but which also has one or more separate product divisions (not necessarily true subsidiaries) which report to top management or, in some instances, to one of the functional managers. The distinguishing characteristic is that the general managers of the product divisions are organizationally on the same level or below the functional managers.

Product Division: an organization that consists of a central office and a group of operating divisions, each having the responsibility and resources needed to engineer, produce, and market a product or set of products. In some instances the product divisions are clustered into groups and a third line of general management is placed between the division and headquarters. At some point below the division level, the organization reverts to a functional or geographic form.

Geographic Division: an organization that consists of a headquarters office and a group of operating divisions, each having the responsibility and resources needed to engineer, produce, and market a product or set of products in a different geographic area. The areas may be portions of the United States or multinational. At some point below the division level the form of organization reverts to a functional or product form.

Holding Company: an association of firms (or divisions) commonly owned by a parent corporation. Each firm is virtually autonomous and formal organization above the level of the individual firm is virtually nonexistent.

Figure A.1.
Flow Chart for Determining
Strategic Categories of Firms



Source: Rumelt (1974)

APPENDIX B

STRATEGIES OF THE TOP 200 PUBLICLY HELD NON-FINANCIAL FIRMS, CANADA, 1975

<u>Company</u>	<u>Strategy</u>
Abitibi Paper Co.	Dominant-Linked
Agra Industries Ltd.	Dominant-Unrelated
Alberta Gas Trunk Line Co.	Dominant-Constrained
Alcan Aluminium Ltd.	Dominant-Vertical
Allied Chemical Canada Ltd.	Related-Linked
American Motors (Canada) Ltd.	Single Business
Anglo-Canadian Telephone Co.	Single Business
Atco Industries Ltd.	Related-Linked
B.C. Sugar Refinery Ltd.	Dominant-Vertical
BP Canada Ltd.	Dominant-Vertical
Babcock & Wilcock Canada Ltd.	Dominant-Unrelated
Balfour Guthrie (Canada) Ltd.	Single Business
Bell Canada	Related-Constrained
Benson & Hedges (Canada) Ltd.	Single Business
Bombardier Ltd.	Related-Linked
Borden Co.	Related-Linked
Bovis Corp.	Related-Constrained
Bowater Canadian Ltd.	Dominant-Vertical
Brascan Ltd.	Dominant-Constrained
Bristol-Myers Canada Ltd.	Related-Linked
British Columbia Forest Products Ltd.	Related-Linked
British Steel Corp. (Canada)	Single Business
Brooke Bond Foods Ltd.	Related-Linked
Budd Automotive Co. of Canada	Single Business
Burns Foods Ltd.	Related-Linked
CAE Industries Ltd.	Related-Linked
Cadbury Schweppes Powell Ltd.	Related-Constrained
Calgary Power Ltd.	Single Business
Campbell Soup Co.	Related-Constrained
Canada Cement Lafarge Ltd.	Dominant-Constrained
Canada Development Corp.	Unrelated Business
Canada Malting Co.	Single Business

Canada Packers Ltd.	Related-Linked
Canadian Admiral Corp.	Related-Constrained
Canadian Bechtel Ltd.	Dominant-Constrained
Canadian Cannery Ltd.	Related-Linked
Canadian Cellulose Co.	Dominant-Vertical
Canadian Corporate Mgt. Co.	Unrelated Business
Canadian Foundation Co.	Related-Linked
Canadian General Electric Co.	Unrelated Business
Canadian Gypsum Co.	Dominant-Linked
Canadian Hydro Carbons Ltd.	Unrelated Business
Canadian Industries Ltd.	Dominant-Linked
Canadian Ingersoll-Rand Co.	Related-Constrained
Canadian International Paper Co.	Dominant-Constrained
Canadian Johns-Manville Co.	Unrelated Business
Canadian Liquid Air Ltd.	Single Business
Canadian Pacific Ltd.	Unrelated Business
Canadian Reynolds Metals Co.	Dominant-Vertical
Canadian Utilities Ltd.	Dominant-Constrained
Canron Ltd.	Related-Linked
Celanese Canada Ltd.	Related-Linked
Christie, Brown & Co.	Dominant-Unrelated
Chrysler Canada Ltd.	Dominant-Constrained
Ciba-Gelby Canada Ltd.	Dominant-Constrained
Coco-Cola Ltd.	Dominant-Vertical
Colgate-Palmolive Ltd.	Unrelated Business
Comstock International Ltd.	Dominant-Related
Consolidated-Bathurst Ltd.	Dominant-Vertical
Consolidated Foods Corp.	Unrelated Business
Consumer's Gas Co.	Dominant-Linked
Consumers Glass Co.	Dominant-Unrelated
Continental Can of Canada	Unrelated Business
Control Data Canada Ltd.	Related-Linked
Cornat Industries Ltd.	Dominant-Unrelated
Crown Zellerback Canada Ltd.	Related-Constrained

Cyanamid Canada Ltd.	Related-Linked
Denison Mines Ltd.	Related-Linked
Domglas Ltd.	Dominant-Linked
Dominion Bridge Co.	Unrelated Business
Dominion Dairies Ltd.	Dominant-Vertical
Dominion Foundries & Steel Ltd.	Dominant-Vertical
Dominion Textile Ltd.	Related-Constrained
Domtar Ltd.	Unrelated Business
Dow Chemical of Canada Ltd.	Related-Linked
Dresser Industries Canada Ltd.	Unrelated Business
Drummond McCall & Co.	Related-Linked
Du Point of Canada Ltd.	Related-Linked
Eaton Yale Ltd.	Dominant-Constrained
Electrohome Ltd.	Related-Constrained
Emco Ltd.	Related-Constrained
Ensite Ltd.	Single Business
F.P. Publications Ltd.	Related-Constrained
Falconbridge Nickel Mines Ltd.	Related-Linked
Federal Industries Ltd.	Unrelated Business
Federal Pinoneer Ltd.	Related-Constrained
Fednav Ltd.	Not Available
Fiberglas Canada Ltd.	Dominant-Related
Firestone Tire and Rubber Co. of Canada	Dominant-Related
Ford Motor Co. of Canada	Dominant-Constrained
G & H Steel Industries Ltd.	Single Business
GSW Ltd.	Dominant-Constrained
GTE Automatic Electric (Canada) Ltd.	Related-Linked
GTE Sylvania Canada Ltd.	Related-Linked
General Foods Ltd.	Related-Constrained
General Mills Canada Ltd.	Related-Linked
General Motors of Canada Ltd.	Dominant-Constrained
Genstar Ltd.	Related-Linked
BE Goodrich Canada Ltd.	Related-Linked
Goodyear Canada Ltd.	Related-Linked

Greyhound Lines of Canada Ltd.	Related-Constrained
Gulf Oil Canada Ltd.	Dominant-Vertical
Hawker Siddeley Canada Ltd.	Unrelated Business
Hayes-Dana Ltd.	Related-Constrained
H.J. Heinz of Canada Ltd.	Related-Dominant
Hudson Bay Mining & Smelting Co.	Unrelated Business
Husky Oil Ltd.	Dominant-Linked
IBM Canada Ltd.	Related-Constrained
Imasco Ltd.	Related-Linked
Imperial Oil Ltd.	Dominant-Vertical
Inco. Ltd.	Related-Linked
Indal Ltd.	Dominant-Vertical
Inglis Ltd.	Related-Constrained
Intermetco Ltd.	Dominant-Unrelated
International Harvester Co. of Canada	Related-Dominant
International Minerals & Chemical Corp. (Canada)	Unrelated Business
Interprovincial Pipe Line Ltd.	Single Business
Interprovincial Steel & Pipe Corp.	Dominant-Vertical
Ivaco Industries Ltd.	Dominant-Constrained
Jannock Corp.	Unrelated Business
Kodak Canada Ltd.	Related-Linked
Kraft Foods Ltd.	Related-Linked
Kruger Pulp & Paper Co.	Related-Constrained
John Labatt Ltd.	Unrelated Business
Lawson & Jones Ltd.	Related-Constrained
Lever Brothers Ltd.	Related-Linked
MLW-Worthington Ltd.	Dominant-Constrained
MacLean-Hunter Ltd.	Dominant-Linked
MacMillan Bloedel Ltd.	Dominant-Vertical
Maislin Industries Ltd.	Unrelated Business
Majestic Wiley Contractors Ltd.	Related-Linked
Maple Leaf Mills Ltd.	Related-Linked
Marine Industries Ltd.	Single Business
Massey-Ferguson Ltd.	Related-Linked

Michelin Tire Manufacturing Co.	Single Business
Molson Cos.	Unrelated Business
Monsanto Canada Ltd.	Related-Linked
Moore Corp.	Dominant-Linked
National Sea Products Ltd.	Single Business
Neonex International Ltd.	Related-Linked
Nestle (Canada) Ltd.	Dominant-Constrained
Noranda Mines Ltd.	Dominant-Vertical
Norcen Energy Resources Ltd.	Related-Linked
PPG Industries Canada Ltd.	Unrelated Business
Pacific Petroleum Ltd.	Dominant-Vertical
Pacific Western Airlines Ltd.	Dominant-Linked
Pepsi-Cola Canada Ltd.	Related-Linked
Petrofina Canada Ltd.	Dominant-Vertical
Phillips Electronics Ltd.	Related-Constrained
Phillips Cables Ltd.	Single Business
Pitts Engineering Construction Ltd.	Single Business
Power Corporation of Canada, Limited	Unrelated Business
Pratt & Whitney Aircraft of Canada Ltd.	Single Business
Procor Ltd.	Single Business
Proctor & Gamble Company of Canada	Related-Linked
RCA Ltd.	Unrelated Business
Ralston Purina of Canada Ltd.	Related-Constrained
Rayonier Canada Ltd.	Single Business
Redpath Industries Ltd.	Dominant-Unrelated
Reed Paper Ltd.	Related-Linked
Reichhold Chemicals Ltd.	Related-Linked
Rio Algom Ltd.	Unrelated Business
Robin Hood Multifoods Ltd.	Related-Constrained
Rockwell International of Canada Ltd.	Related-Linked
Rolland Paper Co.	Dominant-Constrained
Rothmans of Pall Mall Canada Ltd.	Unrelated Business
Hugh Russel Ltd.	Related-Linked
St. Lawrence Cement Co.	Single Business

Schneider Corp.	Related-Linked
Scott Paper Ltd.	Dominant-Vertical
Seagram Co.	Related-Linked
Seaway Multi-Corp. Ltd.	Unrelated Business
Shell Canada Ltd.	Dominant-Vertical
Sheritt & Gordon Mines Ltd.	Dominant-Vertical
Silverwood Industries Ltd.	Dominant-Vertical
Southam Press Ltd.	Related-Constrained
Standard Brands Ltd.	Related-Linked
Steel Co. of Canada	Dominant-Vertical
Sun Oil Co.	Dominant-Vertical
Swift Canadian Co.	Dominant-Unrelated
Texaco Canada Ltd.	Dominant-Vertical
Thomson Newspapers Ltd.	Single Business
3M Canada Ltd.	Unrelated Business
Toronto Star Ltd.	Single Business
Total Petroleum (North America) Ltd.	Dominant-Vertical
TransCanada Pipelines Ltd.	Single Business
Ultramar Canada Ltd.	Dominant-Constrained
Union Carbide Canada Ltd.	Unrelated Business
Union Gas Ltd.	Dominant-Constrained
Uniroyal Ltd.	Single Business
Versatile Manufacturing Ltd.	Dominant-Constrained
WCI Canada Ltd.	Unrelated Business
Hiram Walker-Gooderham & Worts Ltd.	Single Business
Warnock Hersey International Ltd.	Unrelated Business
Weldwood of Canada Ltd.	Dominant-Linked
Westcoast Transmission Co.	Single Business
Westeel-Rosco Ltd.	Related-Constrained
Westinghouse Canada Ltd.	Unrelated Business
White Motor Corp. of Canada	Unrelated Business
York Lambton Corp.	Unrelated Business

NOTES

¹In 1977-1978 the number of conglomerate mergers in the U.S. again increased.

²Steven Globerman (1977), Table 8, p. 62.

³Reported in ibid., Tables 2 and 3, pp. 56 and 57.

⁴Ibid., pp. 36-38.

⁵The danger of overgeneralizing from the performance over one period is illustrated by the performance of the following "multicompanies" and their stock price declines from 1968-69 highs: Avco (-83%); Avnet (-84%); Bangor-Punta (-89%); Colt Industries (-82%); Gulf and Western Ind. (-81%); Walter Kidde (-80%); LTV (-92%); Litton Inds. (-84%); Ogden (-87%); Olin (-70%); Rapid American (-84%); Republic Corp. (-84%); Teledyne (-80%); Transamerica (-71%); SCM (-81%); and Whittaker (-88%). The Dow-Jones Industrial average declined 25% during the same period. (But see Levitt (1975) for a counterargument.)

⁶The problems related to the first two dimensions are also found in measures of industry concentration and income distribution. The last dimension, the "relatedness of the products", will be discussed later in this section. See M. Paglin (1975) and the comments on this paper in American Economic Review (June 1977), pp. 497-531.

⁷Three-digit SIC industries are more disaggregated than two, four more disaggregated than three, etc.

⁸See Caves (1975), pp. 23-24, for a discussion of these two indices.

⁹"Structure" as used here does not refer to the structure of the industry, but rather to the organizational structure of the firm.

¹⁰See Rumelt, pp. 9-46, for a full description of this methodological framework.

¹¹There is, of course, no unanimity of opinion on the effects of high industrial concentration. In Canadian research, Block (1974) concluded that only in industries with both high tariffs and high concentration levels were firms found systematically to have higher profit levels than normal. Laiken (1972) concluded that areas with high levels of merger activity in Canada were not characterized by high price-earnings ratios or high profit levels. McFetridge (1973) found that highly concentrated industries in Canada had higher price-cost margins than industries with low concentration ratios. In the U.S. Straszheim and Straszheim (1976) found similar pricing behaviour in both concentrated and unconcentrated industries. Armstrong (1976) presented to the RCCC a series of theoretical constructs indicating that competition may (or may not) be intense with only a small number of firms in an industry.

¹²These were first described by Turner (1965).

¹³The arguments are set out in Bendix Corp. v. FTC, 450 F. 2d 534 (6th Cir. 1971).

¹⁴US v. American Tobacco Co., 221 US 106 (1911); Standard Oil v. US, 221 US 1 (1911). More recent examples concerning Safeway Stores, Kraft Foods and Anheuser-Busch are described in Bureau of Economics, Federal Trade Commission (1969), pp. 406-444.

¹⁵See also Marfels (1977).

¹⁶The key cases include: Aluminum Co. of America v. FTC, 285 F. 401 (3d Cir. 1922); El Paso Natural Gas Co. et al. v. US, 376 US 651 (1964); Penn-Olin Chemical Co. et al. v. US, 378 US 158 (1964); Procter & Gamble v. FTC, 386 US 568 (1967); General Foods Corp. v. FTC, 386 F. 2d 936 (3d Cir. 1967); Wilson Sporting Goods v. US, 288 F. Supp. 543 (N.D. Ill. 1968); Ford Motor Co. and The Electric Autolite Co. v. US, 405 US 562 (1972); Kennecott Copper Corp. v. FTC, 467 F. 2d 67 (10th Cir. 1972).

¹⁷FTC v. Procter & Gamble Co., 386 US 568 (1967).

¹⁸General Foods Corp. v. FTC, 386 F. 2d 936 (ed Cir. 1967), at 945.

¹⁹See Guzzardi (1978) for a particularly strong statement of this point of view.

²⁰Among the important and illustrative US court opinions are Waugh Equipment Co. et al., 15 FTC 232 (1931); FTC v. Consolidated Foods Corp., 380 US 592 (1965); US v. General Dynamics Corp., 258 F. Supp. 36 (S.D.N.Y. 1966); US v. International Telephone and Telegraph (the Canteen case), 1971 CCH Trade Cases 73, 619 (N.D. Ill. 1971). Other cases, and a detailed analysis of cases and the literature are found in William Stanbury (1977a).

²¹1969 Presidential Task Force Report on Productivity and Competition, Congressional Record (June 16, 1969), at p. 6476.

²²See for example US v. General Dynamics Corp. (The Liquid Carbonic case), 258 F. Supp. 36 (S.D.N.Y. 1966).

²³Net asset value is an imperfect measure of the firm's underlying worth, however.

²⁴Of course, the market premium is influenced by the demand for acquisitions by firms that follow a strategy of unrelated diversification. This demand averaged 34.7% of total demand, 1961-1970, in the U.S. (Markham, 1973) and about 25% of total demand in Canada, 1968-1973 (Hinchcliff and Shapiro, 1975).

²⁵The weights used were the number of firms in each category each year. When assets were used, the averages did not change significantly.

²⁶The firms were Argus Corporation Limited, Brascan Limited, Canadian Pacific Investments Limited, Imasco Limited, Jannock Corporation Limited, John Labatt Limited, Neonex International Limited, Power Corporation of Canada, Limited, Redpath Industries Limited, and Warnock Hersey International Limited.

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