

ACQUISITION ACTIVITY IN THE WESTERN CANADIAN TRUCKING INDUSTRY
AND THE IMPORTANCE OF FACTORS INFLUENCING
THIS ACTIVITY

by

IAN EARLE FRIER

B.S.F., University of British Columbia, 1966

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF BUSINESS ADMINISTRATION

in the Faculty

of

Commerce and Business Administration

We accept this thesis as conforming to the
required standard

THE UNIVERSITY OF BRITISH COLUMBIA

March, 1970

In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study.

I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the Head of my Department or by his representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Department of Commerce and Business Administration.

The University of British Columbia
Vancouver 8, Canada

Date April 29 1970

ABSTRACT

The Western Canadian Trucking Industry has been undergoing much acquisition activity since 1950. Because of the growing importance of this, it is essential that the effects on the performance of trucking firms be fully understood. This study is meant to be an initial inquiry to document, and to identify the factors that have been conducive to this activity in the Western Canadian Trucking Industry principally for the time period 1950-1968.

This investigation was principally conducted through the interview technique. The sample of firms used in this study, although not all inclusive, was generally agreed among those interviewed to consist of all the major trucking firms active in acquisition activity in the Western Canadian Trucking Industry. Many factors are isolated as being conducive to this activity. These factors were identified principally from current literature on the merger field generally. The relative importance of these factors is discussed.

This study found that many of the acquisitions that have taken place since 1950 were principally to extend the route authority and commodity base of operations. These are of a market-oriented type generally typified by end-to-end acquisitions designed to offer better services. Most consist of larger firms acquiring smaller trucking firms, usually ones in financial difficulty. In almost all cases, the most valuable asset of the acquired

firm has been the route authority. In practical terms, it was found that the only expedient way for a trucking firm to expand was to purchase additional existing route authorities, since an applicant for a new route authority must prove public convenience and necessity to the regulators.

The environmental factors isolated in this study have been conducive to acquisition activity. This activity occurred during periods of economic expansion when business expectations were generally high and many firms were available for sale after incurring operating difficulty during the preceeding recession. The legal factor was also found to be strongly conducive to this activity. This was attributed to the regulatory practices of restricting entry and relatively easy approval of route authority transfers. Much of the acquisition activity was attributed to the exploitable situations that prevailed after World War II, the fortuitous railway strike of 1950 and completion of the Trans-Canada Highway.

It was also found that many industry factors were conducive to the acquisition activity. The technological factor suggests that larger firms have been desirable to provide the managerial and capital base necessary to keep a firm competitive. The diversification factor suggests that many trucking firms diversified their geographic and commodity base to stabilize earnings, balance head and back hauls, and offer better service in hopes of gaining more traffic. The industry is still in the early stage of the industry life cycle with a few larger, financially more stable firms surviving the forces of competition. This factor suggests that acquisition activity should tend to slow down as the opportunities for expansion and acquisition become less.

Many small trucking firms, with limited management ability, either went bankrupt or recognized the need for the many specialized abilities necessary for survival and have tended to be acquired as a result. The financial factor tended to be conducive to the acquisition activity as well. Many small trucking firms have run into a squeeze where they have not been able to properly finance equipment and expansion and have tended to be acquired or go bankrupt. The sympathetic factor, where one carrier sees another expand services through route authority acquisition and hastens to do likewise, can also be viewed as being conducive to this activity. Economies of scale were found to have little effect on the acquisition activity. Although evidence shows that there are no economies of scale of firm size, it was suggested in the discussion that there may be economies of density, management, accounting, advertising and finance that tend to be conducive to acquisition activity.

TABLE OF CONTENTS

CHAPTER		PAGE
I.	INTRODUCTION	1
	Objective and Scope of Study	1
	Importance of Study	2
	Definitions	3
	Contents of Chapters	5
II.	FACTORS INFLUENCING MERGER ACTIVITY	7
	Brief History of Merger Activity in North America ...	8
	The First Merger Movement	9
	The Second Merger Movement	9
	The Recent Merger Movement	10
	Environmental Factors	11
	Business Cycle Factor	11
	Legal Factor	14
	Economic Disturbance Factor	15
	Industrial Characteristics	16
	Economies of Scale Factor	16
	Technological Factor	17
	Diversification Factor	18
	Industry Life Cycle Factor	19
	Management Factor	22
	Financial Factor	22
	Sympathetic Factor	23

CHAPTER	PAGE
III. ACQUISITION ACTIVITY IN THE WESTERN CANADIAN TRUCKING INDUSTRY	25
Definition of the Western Canadian Trucking Industry...	26
Growth of the Trucking Industry	27
Growth of Short and Medium Haul Trucking	32
Growth of Long Haul Trucking	32
Documentation of Acquisition Activity in the Trucking Industry	33
Intermodal Ownership	45
Conglomerate Ownership	47
Trends In the Acquisition Activity	50
IV. THE IMPORTANCE OF FACTORS INFLUENCING MERGER ACTIVITY IN THE WESTERN CANADIAN TRUCKING INDUSTRY	52
Environmental Factors	52
Business Cycle Factor	52
Legal Factor	56
Economic Disturbance Factor	59
Industrial Factors	61
Economies of Scale Factor	62
Technological Factor	64
Diversification Factor	66
Industry Life Cycle Factor	67
Management Ability	70
Financial Factor	71
Sympathetic Factor	73
V. CONCLUSIONS	75
BIBLIOGRAPHY	81

LIST OF TABLES

TABLE		PAGE
I.	Location of Merger Peaks in Seven Reference Cycle Expansions, 1918-1958	12
II.	Intercity Ton-Miles Performed in Canada by Type of Carrier, 1938-1965	28
III.	Total and Average Assets and Revenues for Class I and Class II Carriers (Common and Contract).....	30
IV.	Distribution of Gross Operating Revenues by Size of Carrier for 1964 and 1965 All Carriers Reporting in 1965	31
V.	Number of Railway Cars Loaded in Piggyback Service in Canada, 1958-1966	34
VI.	Major Firms in the Western Canadian Trucking Industry Their History of Acquisition Activity From 1950-1969 and the Route Authority Acquired	36
VII.	Acquisitions Within the Western Canadian Trucking Industry by Year and Frequency, 1950-1969	53
VIII.	Percentage Growth in Ton-Miles Performed in Canada by Truck	68

CHAPTER I

INTRODUCTION

Merger activity has been increasing steadily since 1945 in many industries in North America. The transportation field is no exception, with much merger activity taking place in the railway, airline and trucking industries. Much attention is being directed toward the effects that such merger activity will have on the performance of firms in these industries.

Objectives and Scope of Study

The objective of this thesis is to document the acquisition activity in the Western Canadian Trucking Industry principally in the time period 1950-1968, and to identify the factors that have been conducive to this acquisition activity. The thesis will proceed from the general to the particular with the first step being the identification of factors which are likely to be relevant to the level of acquisition activity. The factors found likely to be relevant, as discussed in Chapter II, have been isolated from the available literature on merger activity generally and tend to be somewhat theoretical in nature.

The balance of the thesis acts as a case study. The principal section of this thesis deals with the documentation of the acquisition activity that has taken place since 1950 in the Western Canadian Trucking

Industry. This documentation was conducted through personal interviews with knowledgeable persons associated with the trucking industry. These interviews permitted the Author to find out what specific acquisition activity had taken place since 1950, some significant trends and a feel for the relative importance of the identified factors in causing this acquisition activity.

Discussion will be generally directed toward the for-hire portion of the industry as defined in Chapter III. The sample of firms used in this thesis represent a large part of the total acquisition activity. This sample, although not all inclusive, was generally agreed among those interviewed to consist of all the major trucking firms active in acquisition activity. This sample can be assumed to represent adequately the current trends in acquisition activity.

The interview results are particularly accurate for those firms domiciled in British Columbia and become less accurate for firms located in the prairie provinces, due to time and money restraints surrounding this study. Some of the acquisition activity in the prairie provinces tends to have been found randomly in current literature and through the interviews conducted.

Importance of the Study

The trucking industry is extremely complex, embracing firms of widely different operating types whose only common denominator is the over the road movement function. The size and complexity of the industry create difficult problems of regulation and management that demand

understanding of the industry's basic attributes and relationships.

One of the areas of inquiry that merits substantial attention is that of acquisitions. This area of study is clearly vital for management planning and for regulation as it affects the performance of the firms in the industry. The timing of this study is important as the National Transportation Act dealing with trucking has as yet not been implemented. An understanding of what has happened and why it has happened should aid in establishing the proper course for future regulation.

There has been little literature accumulated on the trucking industry's basic attributes. Any study of this nature should be actively encouraged with hopes that it will add some information about a very complex and interesting industry.

Before proceeding with the outline of each Chapter's contents, certain definitional problems must be clarified.

Definitions

During the course of the author's field study, considerable looseness of expression was found in the use of words normally associated with merger activity. In an attempt to clarify the meanings of words used in this thesis, the following definitions will be presented. To begin with, a true merger is when one corporation or more is absorbed into an existing corporation. When the transaction is consummated, the separate existence of the absorbed firm ceases. A common analogy is when two rivers flow together, each with a separate name, they become

combined under the name of the largest river. In comparison, an amalgamation is the organization of a new corporation for the purpose of absorbing two or more companies. In the process, the existing companies are voluntarily extinguished and the new entity takes over the other companies' liabilities and property. A new corporation is not created by a merger, but an amalgamation, or consolidation as it is often called, always creates one.

An acquisition, on the other hand, is one company's purchase of another's total or controlling interest, usually in the form of stock. The subsequent operation of the purchased company is usually operated as a separate division or subsidiary. An acquisition is also one company buying another company's assets and the acquired firm goes out of existence without retaining any bartered interest in the buyer.

There are other words commonly used which describe the direction of merger activity. The first is a horizontal unification, which brings under one roof two or more companies in the same general field of commerce or which produce the same products or services. The objective here is to gain dominance in the field and/or economies in administration, advertising, production, distribution and so on. A vertical unification is one which combines various companies which have a supplementary relationship. A vertical unification can be described as one where a supplier acquires a customer or a customer acquires a supplier or a source of supply. The objectives here are production economies, greater control over supplies and markets, stability of earnings, and other reasons.

Another form of unification that has become a common day word in

current literature is the conglomerate unification. By this a company can cluster under its corporate control the most diverse kinds of acquisitions imaginable. The objective here is for the component parts to gain proper financing and management in return for the acquired company's income. Each acquisition by a conglomerate corporation is evaluated on its present and potential profitability and in return assumes the credit status of the acquiring firm.

The reader should be cautioned here that a horizontal, vertical and conglomerate unification can take the form of a merger, consolidation or acquisition depending on the specific unification being looked at.

Due to the many possible uses of these words and combinations of meanings, the word 'merger' shall be used as it is in every day business parlance, to mean any type of inter-company unification. Other words will be used in specific instances throughout the thesis and they should be interpreted as specifically defined in this section. For example, the word 'acquisition' is generally used in relation to the trucking industry. Most of the unifications in this industry have been the purchase of the assets with the acquired firm going out of existence or the purchase of another company's total or controlling interest with the subsequent operation of the purchased company usually operated as a subsidiary or separate division.

Content of Chapters

Chapters II, III and IV constitute the main chapters of this thesis. Chapter II, after a brief discussion of the history of merger activity in

North America, will isolate those factors which are likely to be relevant when studying the cause of acquisition activity in the Western Canadian Trucking Industry. The factors isolated will be broken down into environmental and industrial factors. The environmental factors that will be discussed are the business cycle, legal and economic disturbance factors. The industry factors that will be discussed in Chapter II are economies of scale, diversification, technological, industry life cycle, management, financial and sympathetic factors.

Chapter III will principally be concerned with the documentation of the acquisition activity that has taken place in the industry since 1950. A discussion of the growth of the trucking industry will also be presented in this chapter. The chapter will conclude with a brief discussion of the trends that are developing in this acquisition activity.

Chapter IV will present a discussion of the relative importance of the factors isolated in Chapter II in causing the acquisition activity. The conclusions will be presented in Chapter V.

CHAPTER II

FACTORS INFLUENCING MERGER ACTIVITY

The objective of this chapter is to identify factors likely to be relevant when studying the cause of merger activity in the Western Canadian Trucking Industry. This chapter tends to be theoretical in nature, basically derived from current literature on the merger topic. The existing literature, although vague pertaining to the isolation of underlying factors conducive to merger activity, does offer some insight into such a study. The factors identified as conducive to merger activity are meaningfully broken down in to environmental factors linked to the economy generally and industrial factors which are more particular to the conditions existing in some industries.

Merger activity appears to be a reaction within an industry to changes in the environmental and industry factors. Firms, in a desire to improve profits, react to the conditions which exist at a particular time. Mergers appear to be a more appropriate solution at some times more than at others. When conditions are favourable, certain firms in an industry initiate changes in corporate structure which are considered necessary to permit successful and effective competition in the future.

Before starting to discuss the environmental and industrial factors, a brief historical review will be presented of merger activity in North America.

Brief History of Merger Activity in North America

The first merger activity can be traced back to a few years before 1889. Since this time many industries have shown a willingness to seize promising growth opportunities whether this be through merger activity or through internal growth. This expansionist philosophy has expressed itself in the form of three distinct periods of high merger activity. The three periods were 1889-1903, 1926-1930 and 1945 to the present.

The First Merger Movement, 1889-1903

The early merger movement was evidently associated with important contemporary legal and institutional changes, in particular the emergence of the conglomerate corporations (or holding companies as they were commonly called) and the development of a strong and well-developed capital market. The capital market supplied the resources for expansion. A legal change in the late 1880's, permitting one corporation to own another, afforded the opportunity for conglomerate corporations to form near monopolies in many of the basic industries. An example is Standard Oil Company, incorporated in 1809, which was essentially a reorganization of an existing conglomerate.

The Second Merger Movement, 1919-1927

The first merger movement which was characterized by the formation of near monopolies in many basic industries gave way to much merger activity principally in a horizontal and vertical direction designed to strengthen a firm's position in an expanding market economy. These mergers were much smaller than those in the first merger period and were

described as piecemeal acquisitions designed mainly to expand the operations of the firm.¹

A good example of the type of merger activity that prevailed at this time is given in the oil industry. The great crude oil supplies which were brought into existence during the 1920's, largely as a result of fortuitous discoveries, fostered much new competition at the producing level of the industry and caused many crude oil producers to integrate forward into refining, marketing and transportation activities as a means of securing and assuring an outlet for their production.²

This type of merger activity continued until the spectacular failure of some of the public utility empires precipitated a lack of confidence in the stock market and heralded the depression of the 1930's.

The Recent Merger Movement, 1945 -

The recent merger movement owes its beginning to the conditions that prevailed after World War II. In the mid-1940's, a high business expectations prevailed and there was a strong desire to rapidly overcome shortages of raw materials, management talent, production and distribution facilities to meet the extremely high level of demand that existed after the war. The petroleum industry again gives a good example of this reaction. The very great expansion of demand for many petroleum products

¹A. D. H. Kaplan, "The Current Merger Movement Analyzed," Harvard Business Review, May-June, 1955, p. 93.

²J. G. McLean, "How Corporations Grow," Harvard Business Review, November-December, 1954, p. 86.

created severe shortages both of crude oil and refined products, which prompted both refiners and marketers to integrate backwards as a means of assuring and protecting their source of supply.¹

Following close behind this postwar period was an emergence from the seller's market that prevailed into a market where companies had to become increasingly conscious of the need to improve their competitive positions. The desire to stabilize output and earnings was also prevalent in many industries that had narrow product lines subject to seasonal or cyclical fluctuations. The desire to survive caused many firms to adopt a diversification philosophy in the late 1940's and early 1950's, a philosophy which is still strongly entrenched in the business community today.

An increasing influence in the North American Economy has been the appearance of the conglomerate corporation. A recent study showed that conglomerate mergers, in a minority twenty years ago, have come to account for a majority of all mergers in the United States in the late 1960's. Also observed in this study was the fact that vertical and horizontal unifications are decreasing as a percentage of total merger activity in the United States.²

The above historical review, although cursory in nature indicates that certain conditions existed in the past that were favourable to merger

¹Ibid., p. 87.

²Gilbert Burck, "The Merger Movement Rides High," Fortune, February, 1969, pp. 79-83.

activity at different time periods. The next section of this chapter will attempt to identify factors which are conducive to periods of merger activity and that are likely to be relevant when studying acquisition activity in the Western Canadian Trucking Industry.

Environmental Factors

There appear to be factors conducive to merger activity which are closely associated to general economic conditions that prevail at any one time. The factors to be discussed here are the business cycle, legal and economic disturbance factors. The first to be discussed will be the business cycle.

Business Cycle Factor

A recent publication pointed out that each of the three historic periods of increased merger activity coincided with periods of general economic prosperity. Peak years in the number of business unifications were 1920, 1926, 1929 and in the 1960's. Lows in merger activity occurred during the depression of the 1930's and the recessions of the late 1940's and 1950's.¹ An earlier analysis found that high periods of merger activity occurred during business cycle expansions and that peaks in merger activity came at the two-thirds point in reference to cycle expansions as illustrated in Table I.²

¹Robert A. Short, Business Mergers: How and Why to Transact Them, Prentice-Hall, 1967, p. 2.

²Ralph L. Nelson, "Business Cycle Factors in the Choice Between Internal and External Growth," reported in William W. Alberts and Joel E. Segall, The Corporate Merger, The University of Chicago Press, 1966, p.61.

TABLE I

LOCATION OF MERGER PEAKS IN SEVEN REFERENCE
CYCLE EXPANSIONS, 1918-1958

Month and Year of Turning Points			Duration of Ref. Expansion	Interval From Ref. Trough to Merger Peak	Column (5) as a Percent of Column (4)
Reference Trough (1)	Merger Peak (2)	Reference Peak (3)	(3) - (1) (4)	(2) - (1) (5)	(6)
4/19	5/20	1/20	9	13	144
7/24	2/26	10/26	27	19	70
11/27	2/29	6/29	19	15	79
3/33	2/36	5/37	50	35	70
10/45	5/46	11/48	37	7	19
8/45	5/56	7/57	35	21	60
4/58	6/60	5/60	25	36	104
TOTAL			202	136	67

Source: Ralph L. Nelson, "Business Cycle Factors in the Choice Between Internal and External Growth," reported in William W. Alberts and Joel E. Segall, The Corporate Merger, The University of Chicago Press, 1966, p. 61.

One way in which the business cycle affects merger activity is that during periods of cyclic expansion, business expectations increase. The value of any prospective investment rises and falls with the state of expectations. During periods of business expansions, higher values may be placed on prospective mergers. Associated with this is the psychology of buying and selling. A recent study suggests that a seller is generally more willing to sell after he has had some gain and is not still at the lowest evaluation of his holdings. A buyer is most likely to buy when he foresees additional gains.¹ This would indicate a peak in the merger cycle, when the seller can look back and see his gains and the buyer can look ahead and see his future gains.

An example of this type of activity is presented in the current conglomerate corporation activity. It can be argued that the modern conglomerate corporation exists in periods of high expectations. Conglomerate corporations prefer a high stock price to earnings ratio to carry out their expansion plans. Only during an expansion of the business cycle is there a high probability that a desirably high stock price to earnings ratio would exist.

The business cycle factor also affects the availability of opportunities to merge. Many firms may run into difficulty during a period of low economic activity due to a depression in their profit stream. It may be that bargain purchases tend to exist only during and after a period of low economic activity. Such a low period of economic activity

¹Ibid., p. 68.

may seriously curtail expenditures on equipment and other necessary competitive tools, and may make management look for merger opportunities to alleviate their position. As economic conditions improve, mergers tend to increase in numbers. It can be argued that this is partly explained by the psychology of buying and selling previously discussed.

It is clear that merger movements in business coincide with expansions in the business cycle. When there are downswings in the business cycle, there is a noticable falling off of merger activity, and visa versa.

Legal Factor

The legal environment has a very influential effect on merger activity. Changes in the legal environment can enable an abrupt start or stop to merger activity within an industry. A good historical example of this occurred during the first period of increased merger activity from 1889-1903. The passing of the Sherman Act in 1890 followed a long period of public outcry against the concentration of economic power into giant near monopoly enterprises that typified the times. The Sherman Act was passed to prevent the formation of monopolies. Section one prohibited any contract, combination, or conspiracy in restraint of trade. Section two prohibited monopolization or attempts to monopolize.¹ The passing of this Act gradually halted the formation of such large monopolies by merger, thus leading to the noticable decrease in merger activity by 1903.

¹Arthur H. Dean, "Some Significant Aspects of the Law Concerning Mergers," An article reported in American Management Association, Report Number 4, Corporate Mergers and Acquisitions, 1957, p. 35.

At present, antitrust laws in the United States and in Canada forbid merger activity which substantially lessens competition or tends to create a monopoly. These laws have contributed to the existence of the conglomerate corporation which cuts across industry boundaries in such a way as not to lessen competition or create a monopoly. The power of legal changes are being felt by these conglomerate organizations presently. The threat of formal legislation to curtail the expansion by merger of conglomerate organizations has recently come to the forefront in the United States. Just the threat of such legislation and the adverse publicity attached to it has caused the stock market acceptance of conglomerate corporation stocks to decline. This has affected the expansion plans of many conglomerate organizations adversely and, when such legislation is passed, could herald the end of the recent merger movement.

Economic Disturbance Factor

Economic disturbance can have a great deal of effect on merger activity. For example, the end of World War II saw the business world in conditions conducive to merger activity. There was a need for rapid expansion in production and marketing facilities to exploit the high demand for goods and services after the war. If firms were not fast enough in developing the resources necessary to remain competitive, they would likely go into bankruptcy. A recent study describes the merger activity in the post war years running to the end of the 1940's as marked by a desire to overcome shortages and to acquire access to raw materials as well as facilities for distribution of the new products developed

during the war.¹

Minor economic disturbances, such as a prolonged strike, can cause exploitable situations to exist. If an exploitable situation occurs, it is highly likely that merger activity will occur, much as did happen after World War II. Such periods of economic realignment requires firms to merge simply to develop the resources to remain competitive.

Industrial Characteristics

The preceding discussion points out that merger activity is most likely to occur during periods of economic expansion with its high level of business expectations. This merger activity can be stimulated by an economic disturbance like World War II, which provided the need for very rapid expansion. At the same time, such merger activity will only take place if the legal environment does not act as a constraint. Merger activity also appears to be closely related to many factors which are associated with conditions which exist in many industries. The first to be discussed will be economies of scale.

Economies of Scale Factor

It is apparent that there are many industries where substantial economies of scale exist. A typical industry has size of firm becoming successively more efficient up to some particular size or range of sizes. After the most efficient size or range of sizes of firm have

¹A. D. H. Kaplan, "The Current Merger Movement Analyzed," Harvard Business Review, May-June, 1955, p. 95.

been reached, then firms become successively less efficient as firm size increases. One sensible reason why firms grow by merger is to achieve economies of scale. If economies increase with the size of the firm they offer a strong justification for merger.

It can be argued that the optimum size¹ of firm varies among industries and within industries over time. In an industry where large increasing returns to scale are present, small firms cannot compete with larger firms, assuming no other advantages accrue to small firms. Industries in which large economies of scale are present can be expected to show a relatively more rapid change in the average size of firm through merger activity. It is also likely that merger activity aimed at achieving economies of scale will be rapid at first and will slow down as the surviving firms approach the optimum size.

If economies of scale exist within an industry, one would expect merger activity to take place. The relative strengths of this merger activity would vary from industry to industry and over time within an industry.

Technological Factor

Another variable which is likely to affect merger activity is technology. The implications of technological change are that most industries witness an increasing degree of technological sophistication as the years go by. In the later years of an industry's life, technological

¹Optimum size means the most efficient of all scales that a firm can build.

advances would typically become less significant. This would cause unit costs to be more difficult to reduce. Many new products and services enter the older industry's market, thus leading to the desire by the older companies to participate in the newer rapid growth industries. Older firms would therefore be expected to be active in merger activity.

The increasing degree of technological sophistication leads to the need for more capital-intensive production processes and more highly specialized personnel in the operation of the production process. Thus technological sophistication tends to make larger corporations very attractive as a source of capital and management necessary to remain competitive. This would lead to a desire for merger or internal growth activity within a young industry.

In small rapidly growing businesses where technological change is producing rapid product obsolescence, many firms go bankrupt or must sell out due to lack of adequate financing and managerial ability. This is particularly true in industries where equipment, for example, may last a short time and where new and better equipment is necessary to give the same service as competition is offering.

It can therefore be argued that when technological change is rapid in a young industry, merger activity would tend to be high.

Diversification Factor

Diversification is a magic word in the business world today and has been closely linked with recent merger activity since 1945. A recent study showed that although diversification is a phenomenon of long standing,

there has been some acceleration in the movement in recent years. For example, in a sample of 111 large manufacturing companies, the annual rate of entry into new industrial activity was 48.4 in the period 1929-1939, 43.1 in 1939-1950, and 107.8 in 1950-1954.¹

The presence of the diversification desire affects merger activity. Older firms in an industry, to ward off the contingency of decreasing profit margins in main product lines, will constantly seek to enter into merger activity with rapid growth industries. Also many firms that survive the early rapid growth of an industry, will desire to diversify to stabilize earnings and sales. This acts as protection against declines in total earnings that can result from unpredictable changes in the economy.

The desire for diversification has grown quite rapidly in the last twenty years, and there are no signs of it subsiding well into the future.

Industry Life Cycle Factor

The industry life cycle hypothesis states that most industries go through fairly well defined stages of development--the early stage, the maturity stage and the stage of decline. Each stage is characterized by certain conditions which prevail.

One of the first exponents of the industrial life cycle concept, describes the early stage as one of rapidly expanding demand, numerous opportunities for large profits, and venture capital entering the field.

¹Michael Gord, "Diversification and Integration in American Industry," (Princeton N.J.: Princeton University Press, 1962), reported in William W. Alberta and Joel E. Segall, The Corporate Merger, The University of Chicago Press, 1966, p. 32.

Competition normally, though not always, is rife. And as a rule, business mortality is high, and surviving corporations lay the foundation for success.¹ A concomitant of rapidly expanding demand in a young industry is usually a high risk of bankruptcy. In a description of the automobile industry, it was shown that between 1900 and 1908 more than 500 automobile companies went out of business either by bankruptcy or merger. By 1917, 76 companies were active in the industry, but 10 produced three-quarters of the total output.²

Typically, when one firm demonstrates that a solid demand exists for a product or service, many imitators rush in to capitalize on and help cultivate market growth. After much merger activity, bankruptcy and internal growth, a relatively few firms take over a fairly large percentage of a young industry's total volume of business.

The maturity stage is characterized by a levelling off of demand and a growth rate less than in the early stage. The relatively few firms that are controlling the large percentage of the industry's business at this point have established a strong financial position. These firms have now been in operation long enough to have established a performance record which gives them access to bank financing and to the external capital market at least to a limited degree.

¹ Julius Grodinsky, Investments, (New York: Ronald Press Co., 1953), p. 64.

² Herman E. Kroose, American Economic Development (New York: Prentice-Hall, Inc., 1955), pp. 357-369. reported in Jerome B. Cohen and Edward D. Zinbarg, Investment Analysis and Portfolio Management (Richard Irwin, Inc.,) 1967, p. 251.

The mature stage typically calls for a new kind of emphasis on competing more effectively. As this philosophy takes hold, firms will seek to find cost reducing techniques. As the industry becomes more automated or capital intensive, there is a greater desire to protect large investments through better control over markets and supply of raw materials. This stage will bring vertical and horizontal unifications to achieve lower costs and control. The opportunities to reduce costs and expand markets eventually become fewer and fewer. Firms are now entering the stage of decline which is characterized by reduced profitability on existing product lines.

Firms entering the stage of decline would typically enter into a philosophy of extending their life through merger with more profitable business ventures. It is highly likely that firms entering the decline stage would have more liquid assets than in earlier stages. In an attempt to forego the stage of decline, these firms would seek to diversify into the fields of rapid growth industries through merger.

This analysis points out that the industry life cycle will play an important role in the amount and type of merger activity that will take place. For example, in the early stage there would be many mergers of larger dominant firms purchasing financially weak and/or poorly managed smaller firms. The stage of decline would witness diversification into high growth industries to prolong the life of the acquiring firm.

Management Factor

One of the major factors leading to a high level of merger activity, especially during the rapid growth stage of development, is the management factor. The initial propulsion of a small firm is supplied by the specific ability of the owner--entrepreneur--manager. He may be a good salesman, technician or a good production man. His narrow abilities may be all that the firm needs to be self-sufficient while it is small. As a firm grows in size, it reaches an 'awkward age' when more is needed than the dynamic force of one individual.

The very nature of an entrepreneur may be that he cannot work closely with other dynamic personnel nor delegate responsibilities to others. When the 'awkward age' is reached, the owner may realize that it takes a full range of managerial abilities to succeed. As a result, such firms are likely to merge with other firms which complements strengths and weaknesses. More typically, such a firm would sell out to larger firms which can offer the necessary missing abilities. Well managed firms often look upon their poorly managed associates as excellent opportunities to acquire property at a bargain and to earn a quick return on its managerial skill.

Financial Factor

Although a function of managerial ability, many small firms experience financial problems as they grow. The growth of a business has its own special financial problems. As sales increase, so does inventory, accounts receivable and cash requirements. The necessary

cash to run an expanding business may come from profits or from borrowing. In the rapid growth stage of a business, profits are likely to be small for many firms and borrowing difficult due to the faith bankers usually put on earnings records. If the management does not allow adequately for financing replacement and expansion needs, the firm will find itself in a squeeze. In most cases, a firm must sell out, go bankrupt or try public financing.

This financial factor leads to many mergers in the rapid growth stage of an industry. Many firms in the early stage of the life cycle can only too clearly see the threat they face unless they have access to sufficiently large pools of capital to permit them to take advantage of expanding horizons in their business--horizons that their competitors presumably can see also. As a result, many firms are anxious to sell so as to free themselves of financial restrictions that prevent future expansion.

Sympathetic Factor

This psychological factor is one particularly relevant to the snowballing effect which tends to increase merger activity once it has started within an industry. This factor is based on a reaction to remain competitive with competition. Once the first merger has taken place within an industry, many firms tend to join in the merger wave out of fear of being left at some competitive disadvantage.

In a recent study of merger activity in the United States railway

industry, reference was made to this sympathetic reaction.¹ Many railways apparently joined the bandwagon out of fear of being dwarfed by surrounding super railways. A few of the mergers mentioned in this study apparently would not have taken place had not there been a psychological fear of being left behind competitively.

The environmental and industry factors identified in this chapter tend to act as forces which, depending on their relative strengths, tend to be conducive to merger activity within an industry. In Chapter IV, each of these factors conducive to acquisition activity in the Western Canadian Trucking Industry will be discussed. Before proceeding to this discussion, the next chapter will document merger activity in the Western Canadian Trucking Industry and discuss trends that are developing.

¹Robert E. Gallamore, Railroad Mergers: Costs, Competition and the Future Organization of the American Railroad Industry, Harvard University, 1968, p. 369.

CHAPTER III

ACQUISITION ACTIVITY IN THE WESTERN CANADIAN TRUCKING INDUSTRY

The primary objective of this chapter is to document the nature of acquisition activity within the trucking industry. More specifically, the first part of this chapter will define the trucking industry and discuss the growth of the industry. The next part will document the acquisition activity that has taken place and will discuss the history of intermodal and conglomerate ownership separately. This will be followed by a discussion of trends that have developed in this acquisition activity.

The documentation of acquisition activity will be primarily concerned with the time period between 1950 to 1968. The acquisition activity of ten firms was documented and dated as accurately as possible. A few other acquisitions, some of which occurred prior to 1950, mentioned in the text of this chapter were obtained randomly in interviews or in current literature. The research was conducted through personal interviews with executives in the industry and other knowledgeable persons. The sample used was generally agreed upon by all persons interviewed to include a very large percentage of all the acquisition activity that has taken place in the industry.

Definition of the Western Canadian Trucking Industry

Defining the segment of the trucking industry from which the sample of firms used in this thesis were taken is a difficult task. This is so because of the heterogenous nature of the trucking industry and the lack of information available about the total number of firms in the trucking industry, their route authorities and the nature of their operations.

In geographic terms, western Canada will be defined as that part of Canada west of Winnipeg. Probably the best definition available for the purposes of this thesis is that of the for-hire trucking industry. The for-hire trucking industry is concerned primarily with intercity or highway transport. Such operations as these firms carry out within cities or other transportation centers are almost exclusively the pick-up and delivery service incidental to its highway operation. Private trucking is excluded from this thesis as it is an alternative to for-hire service which some manufacturers and distributors find beneficial in terms of lower costs, better service to customers and faster service to off-line points.

The for-hire trucking industry is composed of both common and contract operations. Almost all the firms studied had at least a small part of their business represented as contract operations while the bulk of their operations were common carriage. Common carriers are defined as those firms who hold themselves out to the general public to engage in the transport of property over regular or irregular routes. Contract carriers are defined as those firms under continuing contracts, with one or a limited number of persons or firms, either for the furnishing of

transportation services for the exclusive use of each person serviced or distinct service designed to meet the needs of various customers.¹

Growth of the Trucking Industry

The trucking industry is still relatively young and at its inception was very local in nature. During the 1920's entrepreneurs shifted from livery barn operations to trucklines. Most of the firms in the industry in the 1920's and 1930's were proprietorships, usually family run businesses. During the 1940's and 1950's, very rapid growth in the industry witnessed the emergence of closely held corporations which relied on financing from a small number of wealthy individuals. Many of these firms still existed well into the 1960's and only in the last few years has the industry started to move into publicly held corporations. During this transition stage in the 1950's and 1960's, many firms who had access to sufficient financing, expanded their geographic and commodity base in response to changing requirements of shippers. The industry today consists of relatively few firms expressing dominance with a large number of firms remaining as local operations. The larger firms are starting to develop a need for public financing, specialized management and more capital intensive operations.

The trucking industry from 1938 to 1965 has undergone very rapid growth as shown by the change in freight transportation patterns that have taken place. Table II indicates that the percentage share of ton-miles

¹Canada, Dominion Bureau of Statistics, Motor Carrier Freight (Common and Contract), Ottawa, Queen's Printer, 1966, p. 6.

TABLE II
INTERCITY TON-MILES PERFORMED IN CANADA BY
TYPE OF CARRIER, 1938-1965

(Millions of Ton-Miles)

Year	Rail	Road	Water	Air	Oil Pipeline	Gas Pipeline	Total
1938	26,835	1,515	24,267	1	-	-	55,618
1945	63,349	2,995	21,994	3	-	-	88,341
1950	55,538	7,597	27,017	8	610	-	90,770
1955	66,176	10,248	34,348	31	12,302	-	123,105
1956	78,820	10,614	39,406	39	16,193	-	145,072
1960	65,445	13,841	36,869	43	17,226	6,414	139,838
1961	65,028	16,099	39,169	45	21,483	9,308	151,932
1962	67,937	16,585	42,720	49	24,295	11,710	163,296
1963	75,796	16,704	46,559	54	26,648	13,232	178,993
1964	85,033	18,181	54,164	64	28,072	15,307	200,776
1965	87,190	19,411	55,063	75	29,881	16,955	208,575

PERCENTAGE DISTRIBUTION

1938	51.0	2.9	46.1	-*	-	-	100.0
1945	71.7	3.3	25.0	-	-	-	100.0
1950	61.2	8.4	29.7	-	0.7	-	100.0
1955	53.8	8.3	27.9	-	10.0	-	100.0
1956	54.3	7.3	27.2	-	11.2	-	100.0
1960	46.8	9.9	26.4	-	12.3	4.6	100.0
1961	43.3	10.6	25.8	-	14.2	6.1	100.0
1962	41.6	10.1	26.2	-	14.9	7.2	100.0
1963	43.4	9.3	26.0	-	14.9	7.4	100.0
1964	42.4	9.0	27.0	-	14.0	7.6	100.0
1965	41.9	9.3	26.5	-	14.3	8.1	100.0

*Less than one-tenth of one percent.

Source: Canada, Dominion Bureau of Statistics, Daily Bulletin, Feb. 13, Ottawa, Queen's Printer, 1967.

performed by the trucking industry has increased rapidly between 1938 and 1957. Since 1957, the relative percentage share of total Canadian freight ton-mile movement has remained relatively stable while the absolute volume has continued to increase.

The trucking industry has made this advance at the expense of rail and water. Especially in the 1950's, there was a great deal of traffic shifted from rail to truck. It can be concluded that most of this shift has taken place and the industry is now tending toward stable expansion as the economy grows. In fact, the railways are starting to compete more vigorously to regain some of the lost traffic. At the same time, pipelines and especially air freight continue to take an increasing share of total ton-miles moved. Air Freight in particular is now capturing some of the high value traffic much the same way that truckers have captured this market from the railways.

Accompanying the rapid growth in volume of freight moved by the trucking industry has been a trend toward larger size firms. Table III indicates that the average size of firm as measured by total assets increased by a factor of two from 1957 to 1966. Some of the growth can be attributed to the acquisition activity that has taken place. It is also interesting to note that in 1965, 4.8 percent of the firms obtained 72.7 percent of the gross operating revenue reported. Table IV illustrates that the largest class¹ of carrier had the fewest number of operators

¹ Class I	carriers with gross operating revenue of \$500,000 and over
Class II	" " " " " " \$100,000-\$499,000
Class III	" " " " " " \$20,000-\$99,999
Class IV	" " " " " " under \$20,000

Source: Canada, Dominion Bureau of Statistics, Motor Carrier Freight (Common and Contract), Ottawa, Queen's Printer, 1966, p. 5.

TABLE III

TOTAL AND AVERAGE ASSETS AND REVENUES FOR
CLASS I AND CLASS II CARRIERS
(COMMON AND CONTRACT)

(Thousands of Dollars)

Year	Total Assets	Total Revenues	Number of Firms	Average Assets	Average Revenue
1957	\$155,534	\$226,434	324	\$ 480	\$ 699
1958	162,936	245,437	341	478	720
1959	204,313	300,545	390	524	771
1960	218,975	306,243	354	619	865
1961	234,046	325,756	365	666	892
1962	259,350	328,413	382	679	860
1963	282,097	396,833	410	688	968
1964	284,721	421,662	405	703	1,041
1965	503,103	341,384	477	1,050	713
1966	551,584	373,830	548	1,006	682

Source: Canada, Dominion Bureau of Statistics, Motor Carrier Freight (Common and Contract), Queen's Printer, Ottawa.

TABLE IV

DISTRIBUTION OF GROSS OPERATING REVENUE BY
SIZE OF CARRIER FOR 1964 AND 1965
ALL CARRIERS REPORTING IN 1965

Class	Number of Firms	Percent	Operating Revenue Millions	Percent	Percent 1964 Revenue
1	206	4.8	\$485.4	72.7	72.0
2	492	11.4	111.0	16.6	15.7
3	1,107	25.2	49.6	7.4	8.4
4	<u>2,528</u>	<u>58.2</u>	<u>22.2</u>	<u>3.3</u>	<u>3.9</u>
Total	4,333	100.0	668.2	100.0	100.0

Source: Canada, Dominion Bureau of Statistics, Motor Carrier Freight
(Common and Contract), Queen's Printer, Ottawa, 1965.

but by far the largest amount of operating revenue. Class I and Class II carriers increased their share of total revenue from 1964 to 1965. At the same time, Class III and Class IV carriers had a decreased share of total revenues. This would indicate a distinct trend toward a higher level of concentration i.e., a fewer number of firms gaining a larger share of total industry sales.

Growth of Short and Medium Haul Trucking

The Royal Commission study on transportation¹ found that after a relatively slow growth in the 1920's and 1930's, short and medium haul trucking² expanded rapidly in the late 1940's and 1950's. By 1960 it was estimated that over three-quarters of the traffic within a 300 to 400 mile haul range was being moved by truck. In this market the railways were undergoing serious competitive difficulties to the type of door-to-door service being offered by the trucking industry.

Growth of Long-Haul Trucking

The growth of the long-haul sector of the trucking industry has been fairly recent as it just got its start in 1950. Before 1950, poor highway facilities and inadequate equipment formed the major obstacles to the growth of this sector of the industry.

¹D. W. Carr and Associates, Truck-Rail Competition in Canada, Report Reported in the Royal Commission on Transportation, Ottawa, Queen's Printer, 1962, Vol. III, p. 10.

²Short haul is defined as a truck movement within the range of a single drivers operation (up to 400-500 miles). Hauls beyond a 1,500 mile range are defined as specialized long-haul. Canada, Royal Commission on Transportation, Report. Ottawa, Queen's Printer, 1962, Vol. III, p.

The growth of long-haul trucking was not easy in its first five years of existence. After a short period of early growth, long-haul trucking met severe crises, the first of which was an outbreak of foot and mouth disease in 1952 and 1953. This outbreak seriously affected the lucrative back-haul in dressed meat traffic to the East. Serious restrictions were placed on the movement of meat traffic particularly in entering the United States as the Trans-Canada Highway was as yet not completed. A second crisis occurred when the railways in 1955 removed a restriction on mixing LCL¹ traffic to western Canada. This permitted LCL shipments to be mixed in one car so as to obtain the lower car-lot rate. These two events seriously affected the profits of the long-haul carrier causing many bankruptcies.

Starting in 1957, piggyback shipments on the railway were used by trucking firms as a means of expanding. This required only the purchase of additional trailers. Table V shows that during the period 1957 to 1960, the number of trailers carried by piggyback increased rapidly. This rapid growth can be attributed to an increase in ownership of truck lines by the railways and cost saving benefits for the trucking firms to switch to the use of piggyback service.

Documentation of Acquisition Activity in the Trucking Industry

The major growth by acquisition in the trucking industry has taken place since 1950, with much of this activity being in the long-haul

¹LCL means less-than-car load.

TABLE V
NUMBER OF RAILWAY CARS LOADED
IN PIGGYBACK SERVICES IN CANADA
1958-1966

Year	Number of Cars Loaded Piggyback	Total Cars Loaded	Piggyback Loading Percent of Total
1958	77,109	3,771,000	2.0
1959	133,929	3,843,900	3.5
1960	154,898	3,635,400	4.3
1963	199,416	3,632,559	5.5
1964	223,005	3,928,883	5.7
1965	232,178	3,980,793	5.8
1966	187,587	4,032,983	4.7

Source: Canada, Dominion Bureau of Statistics, Catalogue Number 52-001, Queen's Printer, 1966.

segment of the industry. Since this development has been so recent and the number of firms taking part in this acquisition activity relatively few, it was possible to obtain much of the history of this acquisition movement. Table VI lists the firms studied and the acquisition activity undertaken by each one.

The early developments in long-haul trucking were mainly pioneered on western routes between western and central Canadian points. In the spring of 1950 at least two firms inaugurated trucking operations between Alberta and central Canada. These firms had previous short and medium haul operations and expansion was relatively easy. The first firm to follow this path was M and P Transport Limited which began operations in April, 1950 interprovincially between Alberta, Ontario and Quebec. Two later acquisitions elevated the service of M and P Transport Limited to a national scale. In 1965, M and P Transport Limited acquired Prairie Mountain Pacific Limited which operated from Alberta to Vancouver. In 1966, the acquisition of Continental Express Lines Limited added route authorities from Alberta to Saskatchewan and Ontario to Manitoba.

The second firm to enter the field was Midland Superior Express Limited in September, 1950, with operations interprovincially between Alberta, Saskatchewan, Manitoba, Ontario and Quebec. Two subsequent acquisitions of East-West Transport Limited and Empire Freightways Limited built up a Trans-Canada route network. The later acquisition gave Midland Superior Express Limited route authorities from Winnipeg to Regina and intra-provincially in Saskatchewan to Saskatoon, Melfort, Prince Albert and North Battleford. This Trans-Canada route network attracted Canadian

TABLE VI

MAJOR FIRMS IN THE WESTERN CANADIAN TRUCKING INDUSTRY,
THEIR HISTORY OF ACQUISITIONS FROM 1950-1969
AND THE ROUTE AUTHORITIES ACQUIRED

Canadian Freightways Limited

- 1967 - Hanson Transport Limited - route authority intra-provincially within Ontario.
- 1965 - Eastern Asbestos Limited - route authority from Ontario to Quebec.
- 1955 - Northern Freightways Limited - route authority from Edmonton into British Columbia to Prince Rupert and waypoints between Prince Rupert and Prince George.

- 1950's Canadian Freightways was acquired by Consolidated Freightways Limited
- 1951 - Continental Carriers Limited - route authority from Vancouver to Calgary.
- 1950 - Winguist Carriers Limited - route authority from Edmonton to Calgary.
- 1948 - Harsden Kooler Transport Limited - route authority from Edmonton to Calgary.

- 1942 - Canadian Freightways was formed from the amalgamation of the following two firms:
- Chris Transport Limited - route authority from Lethbridge to Coutts.
- Wilson Freightways Limited - route authority from Calgary to Edmonton.

Canadian Motorways Limited - Soo-Security Motorways Limited is the western division.

- 1957 - Prairie Pacific Transport Limited - route authority from Vancouver to Alberta.
- 1957 - Soo Freightlines Limited - route authority intra-provincially in Saskatchewan and Alberta
- 1956 - Security Storage Limited - route authority from Winnipeg to Edmonton and Calgary.
- 1955 - Biggar Brothers Limited - route authority from Winnipeg to Windsor and Toronto.

Canadian National Transportation Limited

- 1966 - D. Chapman & Company Limited - route authority throughout the Okanagan Valley, the Cariboo country to Prince George, Kamloops and Revelstoke.
- 1964 - Husband Transport Limited - route authority from Windsor through to Quebec.
- 1964 - Toronto-Peterborough Transport Company Limited - route authority east of Hamilton.
- 1963 - Empire Freightways Limited - route authority between Winnipeg and Regina, Saskatoon, North Battleford, Prince Albert, Melfort.
- 1963 - Eastern Transport Limited - route authority into Nova Scotia including Cape Breton Island.
- 1963 - Hoar Transport Limited - route authority north of Toronto
- 1963 - Midland Superior Express Limited - route authority interprovincially from B.C. into Alberta, Saskatchewan, Manitoba, Ontario and Quebec.
- 1963 - East-West Transport Limited - a subsidiary of Midland Superior Express Limited.

Canadian Pacific Transport Company Limited

- 1965 - F. W. Loucks Trucking Services Limited - route authority from Vancouver to Prince George and Dawson Creek.
- 1957 - Smith Transport and Subsidiaries Limited - route authority from the Atlantic seaboard to Winnipeg.
- 1957 - Expressway Truck Lines Limited - route authority from Vancouver through the Okanagan Valley to Winnipeg.
- 1948 - Fritz and Audette Truck Company Limited - route authority from Swift Current to Regina.
- 1948 - Dinsdale Cartage and Storage Limited - route authority from Brandon to Minnedosa.
- 1948 - Dench of Canada Limited - route authority interprovincially into British Columbia, West Kootenays and intraprovincially in Alberta.
- 1947 - Island Freight Services Limited - Route authority from Vancouver to Nanaimo plus all of Vancouver Island.
- 1947 - O.K. Valley Freight Lines Limited - route authority through the Okanagan Valley and into the East Kootenays.

Gill Interprovincial Truck Lines Limited

- 1967 - Bestway Freight Limited - route authority from Manitoba to Ontario and Quebec.
- 1966 - Pacific Inland Express Limited - route authority from British Columbia to Alberta, Saskatchewan and Manitoba.
- 1956 - Southern Freight Lines Limited - This acquisition added route authority from Ontario to British Columbia but gave a base of operation in Ontario.

Johnston Terminals Limited

- 1966 - Shorty's Transport Limited - route authority from British Columbia into Alberta, Manitoba.
- 1966 - West Coast Freight Limited - route authority from Nanaimo to Duncan, Port Alberni, Countney, Campbell River, Gold River and Vancouver.
- 1962 - Merchants Cartage Limited - This acquisition added a heavy haul operations which extends throughout British Columbia.
- 1962 - Bray's Cartage Limited - route authority from Victoria to Vancouver.
- 1962 - Heaney Cartage and Storage Limited - This acquisition added a moving and storage operation similar to the one offered in Vancouver.

Kingsway Freightlines Limited

- 1950's Arrow Truck Lines Limited - this acquisition added a heavy haul operation.
- Gossett and Sons Truck Lines Limited - route authority from Manitoba to Alberta.
- Rice and Trimble Limited - route authority from Alberta to British Columbia.

M and P Transport Limited

- 1965 - Prairie Mountain Pacific Limited - route authority from Alberta to Vancouver.
- 1966 - Continental Express Lines Limited - route authority from Alberta to Saskatchewan, Ontario to Manitoba.

Public Freightways Limited

- 1968 - Coronation Credit Corporation Limited - a conglomerate which took over financial control of Public Freightways Limited.
- 1965 - T and H Cariboo Transport Limited - route authority from Vancouver to Hope, Williams Lake and Lillooet serving waypoints in between.
- 1965 - Haney-Hammond Trucklines Limited - route authority between Coquitlam and Haney.
- 1954 - Green Truck Lines Limited - route authority between Harrison Lake and Agassiz.
- 1953 - Stevenson Trucklines Limited - route authority between Langley and Cloverdale.
- 1951 - Public Freightways Limited - formed as a result of the amalgamation of the following nine firms:
- Anderson Freightlines Limited - route authority between Coquitlam and Haney.
 - Chilliwack Cartage Company Limited - route authority in Chilliwack.
 - Crescent Beach Transfer Limited - route authority in Crescent Beach area.
 - Hume Trucklines Limited - route authority in Langley area.
 - Lake Freightlines Limited - route authority between Harrison Lake and Agassiz.
 - Surrey Freightlines Limited - route authority in Cloverdale.
 - Vanderspeck Transportation Limited - route authority from Vancouver to Hope and Princeton.
 - Winton's Transfer Limited - route authority in Abbotsford area.
 - White Rock Transfer Limited - route authority in White Rock area.

Van-Kam Freightways Limited

- 1960 - White Transport Limited - route authority from Kamloops to Salmon Arm.
- 1960 - Kamloops-Salmon Arm Freightlines Limited - route authority from Kamloops to Revelstoke.

National Transport Limited to acquire Midland Superior Express Limited in 1963.

In the next few years, many other trucking firms jumped into the industry. Gill Interprovincial Truck Lines Limited started operations in 1952 as a one truck operation with route authority from Vancouver to Ontario points. Gill Interprovincial Truck Lines Limited later acquired Southern Freightlines Limited in 1956. The acquisition of this Toronto based firm gave Gill Interprovincial Truck Lines Limited an overlapping route authority from Ontario to British Columbia but added a base of operations in Ontario. In 1966, Gill Interprovincial Truck Lines Limited acquired Pacific Inland Express Limited which added route authorities from British Columbia into Alberta, Saskatchewan and Manitoba. In 1967, Bestway Freight Limited was acquired adding the missing route authority between Manitoba, Ontario and Quebec to give Gill Interprovincial a trans-Canada route network which permitted service into and out of all provinces between Quebec and British Columbia.

In the mid-1950's, Soo-Security Trucking Limited was brought into Canadian Motorways Limited, a consolidation of some 52 small Eastern Canada trucking firms. Soo-Security Motorways became the Western division with interline hook-up to the Eastern division at Winnipeg. Soo-Security Motorways Limited in 1955 acquired Biggar Brothers Limited which added route authority from Winnipeg to Windsor and Toronto. In 1956, Security Storage Limited was acquired adding route authorities from Winnipeg to Edmonton and Calgary. In 1957, Soo-Freightlines Limited was acquired adding route authority intraprovincially in Saskatchewan and interprovincially into Alberta. To complete the firms Trans-Canada route

network, Prairie Pacific Transport Limited was acquired with route authority from Vancouver to Alberta.

Another Trans-Canada firm that was developed in the mid-1950's was Kingsway Freightlines Limited. This firm started as an intra-provincial operation in Ontario with operating authority into Quebec in the year 1954. It is owned by Canadian Steamships Limited and was established to complement the parent companies shipping operations on the Great Lakes. Kingsway Freightlines Limited subsequently expanded their truck operations to British Columbia through acquisitions. Arrow Trucklines Limited, principally a heavy hauling operation, was acquired. The acquisition of Gossett and Sons Trucklines Limited added route authorities from Manitoba to Alberta. The acquisition of Rice and Trimble Limited completed the trans-Canada route network by adding route authority from Alberta to Vancouver.

A firm which started operations in 1950 as well and which specializes in mainly long-haul operations from Vancouver to Ontario, Quebec and Maritime points is D. S. Scott Transport Limited. This firm subsequently acquired Reitmier Trucklines Limited which operated from Vancouver to Prince Rupert serving waypoints west of and including Vanderhoof. Reitmier Trucklines Limited, prior to the acquisition, interlined a lucrative fish backhaul to eastern Canada with D. S. Scott Limited. Competitive pressure for this traffic motivated this acquisition.

Canadian Freightways Limited has developed operations in western and eastern Canada through acquisition. The company came into existence in 1942 with an amalgamation of Chris Transport Limited and Wilson

Freightways Limited both of Alberta. The newly formed company, Canadian Freightways Limited, had route authority from Edmonton south to Coutts, Alberta. Two small acquisition in 1948, Harsden Kooler Transport Limited with route authority between Edmonton and Clagary and Winquist Transfer Limited with a similar route authority, established the firms intraprovincial operational base. In 1951, Continental Carriers Limited was acquired with route authority from Vancouver to Calgary. This acquisition was the firms first step into interprovincial trucking. In the early 1950's, Canadian Freightways Limited was acquired by Consolidated Freightways Limited, presently the largest trucking firm in the United States. In 1955, Canadian Freightways Limited acquired Northern Freightways Limited extending the firms route authority from Edmonton into British Columbia serving Prince Rupert and waypoints between Prince Rupert and Prince George. Two later acquisitions were made in Eastern Canada, Eastern Asbestos Limited in 1965 with route authority from Ontario to Quebec, and Hanson Transport Limited with route authority within Ontario. These later two acquisitions have created a great deal of speculation as to when and with whom Canadian Freightways Limited will bridge the gap between their eastern and western operations.

Van-Kam Freightlines Limited, a small intraprovincial firm in British Columbia, acquired two small firms in response to economic development in the Mica Dam area. In 1960, White Transport Limited with route authority from Kamloops to Salmon Arm was acquired. In the same year, Kamloops-Salmon Arm Freightlines Limited with route authority from Kamloops to Revelstoke was acquired.

Johnston Terminals Limited, since its inception in 1913 as a local horse and buggy operation, has developed into a diversified service company principally through acquisitions. Before 1962, Johnston Terminals Limited co-ordinated the services of the following subsidiaries: Johnston National Storage Limited, Terminal Cartage Limited, Westminster Storage and Distribution Limited, Brade Storage and Distribution Limited, Burke and Wood Limited, Red Ball Limited and J. T. Serive Limited, all operating in the metropolitan Vancouver market.

Johnston Terminals made several acquisition after 1962 to enlarge the territory and commodity base of operations. In 1962, Heaney Cartage and Storage Limited, a Victoria based firm, gave Johnston Terminals Limited a similar moving and storage operation to that which existed in Vancouver. In 1962, Bray's Transfer Limited of Victoria was acquired adding route authority between Vancouver and Victoria. Merchants Cartage Limited was also acquired in 1962, adding a heavy haul service which operates throughout the province of British Columbia. Johnston Terminals Limited made one other acquisition in 1962. This was of Transco Services Limited which expanded the service offered into Calgary, Edmonton and Winnipeg. In 1966, West Coast Freight Limited, a Nanaimo based firm was acquired to round out service on Vancouver Island. This acquisition added route authorities from Nanaimo to Duncan, Port Alberni, Courtenay, Campbell River, Gold River and Vancouver. Also in 1966, the acquisition of Shorty's Transport Limited, added a general freight route authority between British Columbia to Alberta and Manitoba.

Intermodal Ownership

Since the late 1940's there has been much activity in the ownership of trucking firms by other modes of transportation. The first railway entered into the trucking industry in the late 1940's but most of the railway ownership came in the mid 1950's. Canadian Steamships Limited entered the trucking industry by acquiring Kingsway Freightlines Limited in the mid 1950's. Recently, Pacific Western Airlines has purchased a small trucking firm in Alberta. Regional airlines could be expected to utilize trucks, principally for pick-up and delivery service, much the same way as do the railways. Large shipping lines that are currently entering containerization and a complete shipper-to-consignee transportation policy, could be viewed as potential entrants into the trucking industry.

Canadian Pacific Transport Company

The Canadian Pacific Railway was the first railway to enter the trucking field in 1947. By the end of 1948, the Canadian Pacific Railway had acquired five trucking firms. At this time, the acquired companies were geographically separated and the first serious attempt to hook-up these separate units occurred in 1957. The acquisition of Expressway Trucklines Limited in 1957 added route authorities from Vancouver through the Okanagan Valley to the Kootenays and into Calgary and Edmonton. This acquisition hooked-up the operations of Dench of Canada Limited, Fritz and Audette Trucking Limited, O.K. Valley Freightlines Limited and Island Freight Service Limited.

In 1957, Smith Transport and Subsidiaries Limited were acquired

in eastern Canada making Canadian Pacific Transport Limited the first trucking company linking between the two coasts of Canada. In 1965, J. W. Loucks Trucking Service Limited was acquired. This acquisition added route authority from Vancouver to Prince George and Dawson Creek. This acquisition is interesting as it had two major reasons for taking place. The first and more obvious reason was to gain access to the lucrative market in the Prince George area. The second reason was that there were already four or five trucking firms serving Prince George and instead of applying for a route authority from the Public Utilities Commission, Canadian Pacific Transport found it expeditious to purchase the authority. To obtain an authority from the Public Utilities Commission, a firm must prove public convenience and necessity. Because of the existing service in the area at this time, such proof would be extremely difficult and would attract much opposition from existing carriers.

Canadian National Transport Limited

The Canadian National Railway was a little slower than its rival in entering the trucking industry on a big scale. Presumably this was because of the difficulty in persuading the Federal Government to advance the necessary capital. Many truckers voiced opposition to public funds being used to purchase trucking firms that would compete against private enterprise.

The Canadian National Railway first entered the trucking industry in 1963. The first acquisition made by the Canadian National Railway was that of Midland Superior Express Limited in 1963. This acquisition

gave route authorities from British Columbia into Alberta, Saskatchewan, Manitoba, Ontario, and Quebec. At the same time Canadian National Transport Limited was very active in acquiring trucking firms in eastern Canada. In 1963, Hoar Transport Limited of Ontario and Eastern Transport of the Maritimes were acquired. In 1964, Toronto-Peterborough Transport Company Limited and Husband Transport Limited, both located in eastern Canada, were acquired.

The last acquisition made by Canadian National Transport Limited was that of D. Chapman and Company Limited. This acquisition added route authority throughout the Okanagan Valley, the Cariboo country to Prince George, Kamloops and Revelstoke. The acquisition of D. Chapman and Company Limited is a good example of a manager-owner who saw benefits in being acquired. In a recent discussion about the reasons for the acquisition, the owner was concerned about increasing competitive pressure on the financial viability of the firm. Also discussed was the fact that the company would continue operations after the acquisition as a separate entity, and that the firm had access to more capital which would allow it to continue to grow and build new terminals that are required.¹

Conglomerate Ownership

A very recent trend has been the attraction of conglomerate corporations into the trucking industry. A very interesting case history of

¹D. Chapman, President and General Manager, D. Chapman and Company Limited, reported in an article called "Pioneer British Columbia Firm Joins C.N.'s Truck Family," Motor Carrier, November, 1966, p. 22.

a company which was purchased by such an organization is that of Public Freightways Limited. Public Freightways Limited, an intraprovincial operation in British Columbia, was formed through amalgamation of nine firms principally located in the Fraser Valley region. (See Table VI). Three small acquisitions were subsequently made expanding operations further in the Fraser Valley region. Stevenson Trucklines Limited in 1953, Green Trucklines Limited in 1954 and Haney-Hammond Trucklines Limited in 1965 were acquired.

Vanderspeck Transportation Limited, one of the originally amalgamated firms, added route authority from Vancouver to Hope and Princeton. In 1965, T and H Cariboo Transport Limited was acquired adding route authorities from Vancouver to Hope, Williams Lake and Lillooet. In December, 1968, Public Freightways was acquired by Coronation Credit Corporation Limited, a conglomerate corporation. The reason for the acquisition was given to be to supply additional funds needed to further expand Public Freightways Limited, particularly in bidding for larger contracts where substantial capital investment in new equipment is required. The reason for choosing Public Freightways Limited was that it is a well managed company in an essential and growing industry, offering a solid investment opportunity for Coronation Credit Corporation.¹

A policy of conglomerate corporations appears to be to enter a growth industry and then to expand horizontally within that industry.

¹W. E. Donnelly, Vice President, Coronation Credit Limited, reported in an article called "Pioneer Coast Employee-owned Line-Haul Now Part of New Conglomerate," Motor Carrier, December, 1968, p. 11.

In early 1969, Coronation Credit Corporation acquired Rempel-Trail Transportation Limited of Edmonton, one of Western Canada's largest bulk carrying firms. Rempel-Trail Transportation Limited was formed in Dawson Creek in 1943. The company today hauls such wet and dry bulk products as gas and oil, salt, asphalt, lime, fertilizer, seed grain and chemicals. This acquisition is illustrative of horizontal spreading which can be expected from the conglomerate firms.

Another conglomerate corporation to enter the trucking industry is Neon Products of Canada Limited, which, in September, 1968, acquired Reimer Express Limited of Winnipeg. A recent discussion showed the policy of Neon Products of Canada Limited to be to move into the service industries--the food industry, communications, maintenance, broadcasting, and transportation. The objective being to diversify into companies with better than average growth potential.¹

Reimer Express Limited has route authorities from Edmonton and Calgary east to Saskatchewan, Manitoba, Ontario and Quebec. A major speculation has been when and with whom would Reimer Express Limited expand its operations to British Columbia. There were only two firms with attractive route authority patterns, Hunt Transport Limited of Vancouver and P. L. Porter Trucking Limited of Calgary. This speculation has recently disappeared as Neon Products of Canada Limited announced plans of acquiring Hunt Transport Limited.

¹J. A. Pattison, President, Neon Products of Canada, reported in an article called "Reimer Purchased by Coast-based Conglomerate May Alter Interlines," Motor Carrier, September 1968, p. 15.

Another conglomerate acquisition followed close behind the first two mentioned above. Trimac Transportation Limited of Calgary, Canada's biggest bulk products hauler, was acquired by United Westburne Industries Limited, a Montreal plumbing and heating wholesaler. Trimac Transportation Limited was formed out of an amalgamation of five bulk commodity transporters. These were H. M. Trimble and Sons Limited of Calgary, Maccam Transport Limited of Moose Jaw, Oil and Industry Supplies Limited of Winnipeg, Municipal Tank Lines Limited of Toronto, and Westland Carriers Limited of Vancouver. The acquisition by United Westburne Industries Limited will result in a much larger corporation with interests in highway transportation, oil drilling resource industry and the building and construction supply industry.

Trends in the Acquisition Activity

Acquisition activity in the Western Canadian trucking industry started after World War II and has been increasing to the present day. This acquisition activity after the War occurred largely in response to the rapidly changing demands of shippers who now desired rapid, door-to-door shipments to vastly larger geographic areas. Most unifications have been of the acquisition type, with only three notable exceptions. These exceptions were the amalgamation of firms to form Canadian Freightways Limited, Public Freightways Limited and Trimac Transportation Limited.

The acquisitions that have occurred in the trucking industry have tended to extend route authority and commodity scope of operations. Most acquisitions have been of a market-oriented nature generally typified by

end-to-end acquisitions which can provide shippers with better service to more markets.

Another major trend has been the presence of intermodal ownerships. This trend along with the recent trend of conglomerate ownership has apparently acted as a large stimulus to the acquisition activity. The availability of capital to carry out expansion plans has played a large role in the acquisition activity that has taken place.

Most of the acquisition activity that has taken place has been of larger firms taking over smaller trucking firms, usually ones that are in financial difficulty. In a high percentage of the acquisitions recorded, the most valuable asset of the acquired company has been the route authority. These route authorities are a carrier's authorization to provide service, and the ownership and extent of this service is specifically spelled out. Sale or transfer of these route authorities require regulatory approval. In practical terms, the only expedient way for a carrier to expand its area of service is to purchase additional existing route authorities, since an application for a new authority must prove public convenience and necessity. The purchase price of many acquisitions have quite often reflected the value of the route authority to an acquiring company in terms of a premium paid. A particular route authority pattern may be more valuable to one carrier than another, depending on how well it fits into the existing authority pattern of the acquiring company. At any extent, the price paid for these authorities would be some function of what the acquiring firm could earn on these additional routes.

CHAPTER IV

THE IMPORTANCE OF FACTORS INFLUENCING MERGER ACTIVITY IN THE WESTERN CANADIAN TRUCKING INDUSTRY

In Chapter II, many factors likely to be relevant to merger activity in the trucking industry were discussed in general terms. The primary objective of this chapter is to discuss specifically the importance of these isolated factors. The first factors to be discussed will be the environmental factors.

Environmental Factors

Acquisition activity has been stimulated by the environmental factors discussed in Chapter II. The business cycle, legal and economic disturbance factors have all been very conducive to the acquisition activity that has taken place since 1945. The first factor to be discussed will be the business cycle.

Business Cycle Factor

Acquisition activity appears to have coincided with periods of general economic prosperity as might be expected from the general discussion in Chapter II. Evidence of this is presented in Table VII, which presents the number of acquisitions for each year since 1950. Only those acquisitions which occurred within the Western Canadian Trucking Industry

TABLE VII

ACQUISITIONS WITHIN THE WESTERN CANADIAN TRUCKING INDUSTRY

BY YEAR AND FREQUENCY,

1950-1969

<u>Year</u>	<u>Frequency</u>	<u>Year</u>	<u>Frequency</u>
1950	1	1960	2
1951	2*	1961	-
1952	-	1962	4
1953	1	1963	3
1954	1	1964	-
1955	2	1965	4
1956	2	1966	5
1957	3	1967	2
1958	-	1968	3
1959	-	1969	1 (as of April, 1969)
		TOTAL	36

*Note: One tally here represents the amalgamation of Public Freightways Limited from 9 small trucking firms.

Source: Interviews conducted by the author during March, 1969.

as defined in this thesis are included in Table VII. These acquisitions were obtained from the ten firms interviewed, plus other acquisitions randomly located by the author during the course of the field studies. Table VII is not all inclusive, but does illustrate the timing of acquisition activity in the trucking industry.

Between 1950 and 1969 there have been minor recessions which existed from July, 1953, to August, 1954; from July, 1957 to April, 1958; and from May, 1960 to February, 1961.¹ Table VII evidences that there is a notable lessening of acquisition activity corresponding to the times of economic contractions and an increase of acquisition activity for periods of economic expansion. Table VII also indicates that acquisition activity has been increasing in intensity from 1950 to the late 1960's.

This type of pattern can in part be explained by the nature of demand in the trucking industry. This demand is derived from the demand for consumer goods and raw materials. This would indicate that expectations in the trucking industry would be closely related to the expectations of the economy generally. Expectations would, therefore, be high during periods of economic expansion. During such periods of high business expectations, prospective acquisitions in the trucking industry would be valued higher than in periods of economic contractions. A good example is that of the conglomerate corporation. This type of conglomerate acquisition is more likely to take place during periods of high business

¹Derek White, Business Cycles in Canada, Ottawa, Queen's Printer, 1967, p. 237.

expectations where the acquired trucking firm represents a good investment and the expectations of the stock market are generally high affording the conglomerate corporation a favourable stock exchange position.

Another aspect of this acquisition pattern arises from the availability of acquisition opportunity in the trucking industry resulting from the business cycle. The trucking industry can be described as a low margin industry and as such is open to acquisition activity. Because of low profits for internal expansion and generally poor credit availability, a slight narrowing of the gap between revenues and expenses could produce a sharply reduced profit position. This characteristic has made the trucking industry one which is very sensitive to changes in volume of traffic resulting from changes in business conditions. The result is that many poorly financed and managed trucking firms run into competitive difficulty as the next paragraph explains.

Most of the acquisitions studied were ones characterized by larger, more dominant firms acquiring smaller firms which were in financial difficulty. One executive interviewed stated that all the acquisitions made by his firm were of firms in financial difficulty resulting mainly from their inability to survive minor recessions.¹ Such recessions caused serious depressions in the smaller firms' profit streams and typically seriously curtailed expenditures on equipment necessary to remain competitive.

¹Confidential, personal interview, 1969

The nature of the business cycle is very influential to the amount of acquisition activity in the trucking industry. During recessions, many trucking firms have tended to become available for sale or have gone bankrupt. During the ensuing economic expansion period, business expectations increase and the larger trucking firms find those firms in financial and competitive difficulty very attractive acquisitions, especially if they possess attractive route authorities.

Legal Factor

In Chapter II the legal factor was shown to be very influential. The trucking industry has a somewhat unique legal environment as compared to many other industries, but one which has been very conducive to the acquisition activity which has taken place.

The trucking industry has long been regarded as affected with public interest and in the common good. The trucking industry began to attract much regulatory interest with its rapid growth in the 1940's and early 1950's, especially in interprovincial long-haul operations. The first significant regulation appeared in the trucking industry in the 1930's, leading to the present regulatory system.

The present status of regulation in the trucking industry has each province in Canada responsible for regulation of that portion of the trucking industry that falls within its provincial boundaries. Each province, as a result of the 1954 Motor Vehicle Transport Act, has regulatory powers over interprovincial trucking. In 1967, the Federal Government decided to bring the regulation of all forms of transportation under national policy in the form of the National Transportation Act. All

parts of the National Transportation Act have since been implemented except for the part concerning interprovincial trucking and solids pipelines. At present, therefore, the regulation of interprovincial trucking is still under separate provincial government regulatory bodies.

The provincial regulatory bodies have accepted regulation of the trucking industry to varying degrees with Alberta choosing not to regulate at all. British Columbia, on the other hand, is one of the better regulated provinces.¹ In British Columbia, through the Public Utilities Commission, all that is necessary for acquisitions to be approved is for the acquiring carrier to submit an application for transfer. This is generally approved if no basic changes in the quality of service offered is to result from the acquisition. For interprovincial transfers, the acquiring firm must get approval from each provincial regulatory body who is affected by an acquisition.²

The 1967 National Transportation Act requires Canadian Transportation Commission approval of all transportation mergers. This along with the above described provincial regulations represents the legal restriction imposed on the trucking industry as to controlling acquisition activity. There has never been a case to clarify whether acquisition activity in the trucking industry must comply to the Federal Government Antitrust Division or not.

¹ John Munroe, The History of Motor Carrier Transportation in Canada, Unpublished M.B.A. Thesis, Indiana University, 1965.

² Personal Interview, A. Fitch, Administrative Assistant and Chief Inspector, Public Utilities Commission, British Columbia, 1969.

The objective of regulation in the trucking industry is to encourage stability of rates, prevention of discrimination, financial responsibility and stability and dependability of service. In Canada and the United States, these objectives are being sought through restriction of entry and the resulting increase in the average size of firm in the industry. A trucking firm can only expand its operations through route extensions or acquiring other trucking firms with attractive route authorities.

In the United States, the Interstate Commerce Commission reluctantly grants route extensions, since they have adopted the philosophy that adequate service exists presently and the presence of an additional carrier would produce results harmful to existing carriers as well as to new carriers. This practice has created a climate for an increasing amount of acquisition activity, since it is the most expedient means by which a firm can expand.

In Canada the situation appears, at least in practice, to closely resemble that in the United States. A firm can expand either through application for route extension in the regulated provinces or can purchase a route authority through acquisition. In British Columbia, the regulatory board appears to find it desirous to refuse requests for route extension. A specific example of this practice occurred in 1962, when all seven requests for route extensions were refused.¹ An existing trucking firm can obtain more capacity by purchasing another firm instead of going through the tough process of applying for a route authority,

¹British Columbia Public Utilities Commission Annual Report,
Victoria, Queen's Printer, 1962.

proving public convenience and necessity, and then competing with existing firms for traffic.

The legal environment of the trucking industry differs from that in most other industries in that it is regulated at present by separate provincial government bodies. These regulatory bodies, with the Alberta Highway Traffic Board being the most obvious exception, tend to favour acquisition activity in an attempt to achieve the objectives of regulation as presented above. This legal environmental factor is, therefore, very important in creating the acquisition activity documented in Chapter III. Unless a different policy is adopted by the Federal Government, when they implement the section of the National Transportation Act dealing with the trucking industry, this legal factor should perpetuate the acquisition activity well into the future.

Economic Disturbance Factor

The occurrence of economic disturbances has had a very important influence on the timing of acquisition activity. For example, at the end of World War II there existed conditions which were very conducive to acquisition activity. Shortly after the end of World War II there was a high demand for the movement of highly valued merchandise through the use of trucks. The post-war period was characterized by a rapidly increasing demand for many consumer goods and raw materials which, through existing rail service, took a long time to reach markets. The rapid expansion of many trucking firms was desirable to meet the demand for fast, door-to-door service. The rapid expansion into extensive markets was expedited through acquisition activity.

Acting as constraints on this rapid expansion were poor road conditions and poor equipment which prevailed during World War II. Immediately after the War, highway tractors did not have the power or the endurance for long-haul operations. Highways before 1950 were structurally weak and light payloads made long-haul trucking operations before this time appear unprofitable. World War II supplied relief to the equipment problem in that the diesel engine was developed and later introduced to the Western Canadian Trucking Industry. The diesel engine gave the industry a dependable machine capable of long-hauls. New and lighter metals, developed during the War, permitted larger and lighter trailers and larger payloads.

By 1950, there existed high expectations of early completion of the Trans-Canada highway. This had a further stimulus to the acquisition activity especially in long-haul trucking. As roads became better, the markets of shippers and truckers both spread. To achieve this geographic spreading, many trucking firms acquired firms with suitable route authorities.

The long-haul segment of the industry responded to yet another disturbance. A fortuitous rail strike in August, 1950, created a pressing demand for long-haul trucking services. This nine-day strike was a notable test for the industry. It opened the door for an expansion of long-haul trucking that otherwise probably would have taken years to accomplish.

In response to the conditions that existed after World War II, entrepreneurs quickly adapted their principally local operations to that of long-haul. For most of the early entrepreneurs that pioneered the long-haul trucking industry and survived the early difficulties, there

were large rewards in the form of rapidly growing volume of traffic and large profits. Shippers became aware of the specialized service offered by truckers. Shippers also valued the truckers' service as a hedge against future rail strikes that threatened to cut them off from their markets.

To be able to meet the changing demands of shippers after the War, trucking firms began to value their route authority very highly. To remain competitive, the route authority became a very important item to the trucker. Many firms expanded their service geographically through acquisition in order to take advantage of exploitable situations that existed in the trucking industry, especially after World War II.

Industrial Factors

The proceeding discussion points out that the acquisition activity has tended to occur during periods of economic expansion. The legal environment was viewed as a very strong factor in causing acquisition activity within the industry. Many of the conditions conducive to acquisition activity in the trucking industry were made available by World War II, the rail strike of 1950 and the building of the Trans-Canada Highway.

There are many other factors which were also influential to the acquisition activity. These industrial factors tend to be more specific characteristics of the trucking industry. The first to be discussed will be Economies of Scale.

Economies of Scale Factor

There was much interest in the early 1960's about mergers of railroads, trucking companies and of airlines. Almost always, the proposed mergers were supposed to achieve, among other things, substantial economies of scale. If these economies increase with the size of transport companies, they offer a strong justification for merger.¹ In Chapter II, it was indicated that economies of scale of plant size and economies of scale of management, accounting, advertising and financing were strong reasons why merger activity took place within an industry.

If there are economies of scale in the trucking industry, one would expect to see the acquisition activity that has taken place since 1950. One would expect a trend toward larger more efficient trucking companies which would drive out smaller operators. Virtually all studies suggest that economies of scale do not exist in the trucking industry. For example, one study concluded that for carriers domiciled in and out of New England and operating in New England, that size of firm bears little relationship to operating costs. Consequently, it can hardly be maintained that there are economies of large scale available in the industry, or a tendency toward monopoly resulting from that cause.²

In an English study, it was found that there were no economies of

¹Kent T. Healey, "The Merger Movement in Transportation," American Economic Review, May, 1962, p. 437.

²Robert A. Nelson, "The Economies of Scale in the Motor Carrier Industry: A Reply," Land Economics, May 1959, p. 185.

scale in the trucking industry.¹ This study showed that for a certain time, 1955-56, large firms in off-farm milk collection in England had no advantage over small; if anything their costs were higher.

Another study also demonstrated the absence of economies of scale in the trucking industry.² This study, however, demonstrated that there were economies of density to be gained in the trucking industry. Economies of density are defined as economies which accrue from carrying more traffic over a given complex of plant, equipment and route. These economies were attributed to two operating characteristics of the trucking firm--the intensity of route utilization and average haul. Acquisitions which simply entail the addition of traffic increments with the same general haul pattern are not apt to bear much economic reward. Acquisition activity can only contribute to lower costs if they alter operating patterns in specific ways. For example, end-to-end acquisitions may result in increased average haul and parallel combinations may improve route utilization. Much more work needs to be done in this area of study, especially for approval of route extensions and acquisitions by the regulatory boards.

If one assumes that the cost function for trucking firms is constant per unit of output as plant size increases, there is little reason to view economies of scale as conducive to acquisition activity in the trucking industry. There may very well be economies of diseconomies of management,

¹M. Chisholm, "Economies of Scale in Road Goods Transport, Off-Farm Milk Collection in England and Wales," Oxford Economic Papers, October, 1959, pp. 283-290.

²Merill, J. Roberts, "Some Aspects of Motor Carrier Costs: Firm Size, Efficiency and Financial Health," Land Economics, May, 1956, pp. 228-38.

accounting, advertising and financing as well as economies of density. Literature to date does not clarify where economies of diseconomies exist and tends to lump all costs together to show that there are no economies of scale at work in the trucking industry.

In Chapter II, the economies of scale factor was viewed as being strongly conducive to acquisition activity. Evidence shows that small firms in the trucking industry should be able to compete with larger firms, assuming no other disadvantages accrue to smaller firms. The above discussion tends to indicate that economies of scale in firm size is not a very strong reason for acquisitions in the trucking industry. Economies of density, accounting, financing and so on may be valid reasons for such acquisitions to take place but to date no evidence has been presented to validate this claim.

Technological Factor

In Chapter II, the discussion pointed out that for a firm to remain competitive, it must keep up with technological advances. These technological advances tend to make large corporations very attractive to supply the increased capital base and the increased managerial base necessary to take advantage of technological change. In the trucking industry, technological change has had an influence in causing the acquisition activity that has taken place.

There has been a fairly rapid technological advance taking place in the trucking industry, especially since 1945. Much of this technological advance has been in equipment, for example the shift from gasoline to diesel engines. The diesel offers improved fuel economy, lower maintenance

costs and greater dependability. Along with better engines came better drive-train components, lighter and stronger tractors and trailers, and other such changes. The larger better financed firms were the ones that were able to obtain these new developments and gain the competitive advantage over those firms, usually smaller ones, that could not obtain such equipment.

Future developments will likely take place in improved terminal facilities. Because of the high labour content in the trucking industry, future technological developments will emphasize greater productivity per worker. Automated terminals are on the horizon. Truckers will also be forced, either by competition within the industry or from other modes of transport, to improve service as rapidly as possible. Competitive pressure will perpetuate long-term productivity trends especially of the labour saving type.

The use of electronic data equipment is presently entering the industry. Most of the efforts to date have been directed at reducing clerical costs. The computer, however, appears to afford a competitive advantage to those who can utilize its services. For example, the computer may well afford answers to complex problems which can allow better utilization of equipment.

The use of highly mechanized terminals, electronic data processing equipment, better and more specialized trucks and trailers, and so on, will tend to make the trucking industry more capital intensive. This will demand firms to grow in size so that they can utilize the same tools as their competitors. Larger firms will tend to form as they are more

attractive to keep up with technological change.

Diversification Factor

Many firms have grown and diversified over time. Geographic expansion is a form of diversification because it gives the firm a greater number of industries to draw from, making it less affected by a depression in any one. Many firms are diversified into many specialized forms of trucking operations as well. For example, diversification can be into moving and storage, demolition, air freight forwarding, heavy hauling, and so on.

Much of the geographic diversification has taken place in response to changing demands of shippers who want their goods delivered expediently and with certainty to any point within their area of distribution. Small firms cannot give the same service as larger firms. It can be argued that larger firms will occur in the trucking industry, even if no economies of scale exist, because of the service advantages inherent in geographically extensive operations and hence a greater ability of the larger carrier to get traffic. There appears to be a preference on the part of shippers to send their goods by the trucking firm which provides a complete service to the ultimate destination of the shipment. As long as this singleline service is preferred, the larger carriers operating over an extensive geographic area will have an advantage over smaller firms. Some of the reasons for this added attractiveness to shippers are direct service to more markets, reduced transit time, reduced possibility of damage and more frequent schedules.

The desire to diversify geographically in hopes of offering better service and obtaining more traffic is a strong factor causing the end-to-end acquisitions that have typified the industry. A strong desire to stabilize earnings has also caused much diversification in the trucking industry. Many firms try to balance head and back haul traffic through acquisition as well as to extend service into moving and storage and other related fields. The desire to diversify has increased since 1950 and shows no immediate signs of subsiding. The diversification philosophy is a very important factor as many firms interviewed were striving to diversify in an attempt to cushion the impact of any severe decline in traffic from one geographic area or type of service.

Industry Life Cycle Factor

As discussed in Chapter II, much merger activity can be expected in the early stage of an industry's life cycle. Many symptoms of the trucking industry tend to indicate that it is approaching the end of the early stage of development.

The rapid growth rate before 1957 indicated in Table II, shows that the trucking industry has been undergoing a rapidly expanding demand. This rate of growth has shown signs of leveling off in the 1960's to a rate of 7-8 percent per year as shown in Table VIII. This leveling off effect would indicate the approaching end to the early stage of growth.

High business mortality is another characteristic of the early stage of the industry cycle. The trucking industry has had a high rate of mortality throughout its history. This was especially true during the depression of the 1930's and subsequent minor recessions. In the early

TABLE VIII

PERCENTAGE GROWTH IN TON-MILES

PERFORMED IN CANADA BY TRUCK

(Millions of Ton-Miles)

<u>Year</u>	<u>Percentage Increase Per Year</u>
1950 - 1960	8.2% average
1960 - 1961	16.3%
1961 - 1962	2.9%
1962 - 1963	.7%
1963 - 1964	8.8%
1964 - 1965	6.7%

Source: Calculated from Table II.

1950's, there were many long-haul firms that did not survive the early troubles of hoof-and-mouth disease, new equipment procurement and railway competition. Although mortality exists in the industry, there is definitely a trend toward more financially stable firms. This slowing down of the mortality rate also indicates that the industry is approaching the end of the early stage of development.

The investment of venture capital indicates that the industry is still in the early stage of development. Because of the low costs of entry into the trucking industry, many entrepreneurs entered the industry in the 1920's and 1930's as well as in the early 1950's to exploit the demand for trucking which existed at the time. A notable trend in the 1950's was the increased investment of capital from outside the industry. In several important instances this capital was used to consolidate long-haul services with complementary short-to-medium haul operations. For example, Canadian Motorways Limited is owned by British Traction Corporation of Great Britain. Capital also entered the trucking industry from the United States. Canadian Freightways Limited is owned by Consolidated Freightways Limited, the largest trucking firm in the United States. Another United States trucking firm, United Buckingham Trucklines Incorporated, owns Millar and Brown Limited, a trucking firm operating from Vancouver through the Kootenays to Calgary, Edmonton, Regina and Winnipeg.

The participation of the railways into trucking is also notable as is the current entrance of conglomerate corporations into the industry in the last few years. The investment of the conglomerate corporations,

in particular, tends to indicate that the industry is still viewed as an investment with a better than average growth rate.

The Western Canadian Trucking Industry is starting to show signs of having a few firms evolve into positions of dominance. These firms are gaining a larger share of the market by acquiring smaller firms and are attracting better financing. This tends to indicate an industry made up of a few dominant trucking companies doing the largest share of the industry's total business. At the same time, there will be many small firms doing very localized service. As the industry approaches the end of the early stage of its life cycle, one would expect the acquisition activity to slow down as the opportunities for expansion by acquisition become less.

The above discussion indicates that the industry is still in the early stage of the industry's life cycle and that much of the acquisition activity is attributable to this factor. As the industry approaches the end of this early stage of development, a lesser number of acquisitions would be expected.

Management Ability

It is generally recognized that most small trucking firms are managed by self-established former drivers who lack managerial talents appropriate for larger firms. As many of these small firms grow in size, the narrow expertise of the managers is not enough to allow the firms to be competitive. Lack of managerial ability has brought many firms to an 'awkward age.' Historically, many of these firms have had to either go bankrupt or join with larger carriers.

As many of the trucking firms have grown in size, so have their need for specialized managers such as rate men, customs brokers, auditors, agents, dispatchers, and so on. Larger trucking firms are best able to obtain such specialists and as such have made competition for the small operator tougher. Recognizing the need for many of the specialized abilities, small trucking firms at the 'awkward age' tend to be acquired by larger firms.

In the future, the need for good managerial abilities will be even greater. The trucking industry is presently going through a transitory stage into a period of managerial sophistication. The trucking industry has been slow in attracting good managerial ability.

A few trucking firms are now bringing in highly skilled managers. For example, the railways are moving personnel from the railways into their trucking operations. If the computer brings high competitive advantages, then management abilities will continue to be an important reason for acquisitions to occur. This factor will tend to cause larger firms to acquire less ably managed firms in the future.

Financial Factor

In almost all the interviews conducted by the author, it was found that most acquisitions that have taken place were of larger firms acquiring smaller, financially weak firms. In fact, a large amount of the acquisitions were of firms on the verge of bankruptcy. In one particular acquisition, the firm acquired had just under a 2 million dollar loss position.¹ This acted as an incentive for purchase and also typified

¹Confidential, personal interview, 1969.

the problems that many trucking firms have found themselves in.

Many small trucking firms have run into a squeeze where they have not made the proper provisions for equipment replacement and expansion. These firms are not far from serious financial difficulty. Many such firms appear for sale or go bankrupt. Most firms today realize the need for large pools of capital to supply the needed funds for expansion and equipment replacement.

The small firms have been limited as to the amount of debt that they could obtain. Investors typically require a proven earnings record, good management and other such criteria before loans will be granted. Most small trucking firms are unable to meet the requirements to obtain the necessary debt to remain operative.

Many of the trucking firms which are expressing dominance are ones that have been successful in tying into large pools of capital. For example, Johnston Terminals Limited and Gill Interprovincial Trucklines Limited have gone public in the last 5-10 years. Another example is Public Freightways Limited being acquired by Coronation Credit Corporation. In any case, the need for available capital to meet future expansion and replacement of equipment is a very significant factor in causing many of the acquisitions that have taken place.

It is very likely that larger firms appear attractive because they can obtain the funds needed for expansion more easily. The trucking industry has been plagued with undercapitalization over the years and with funds available, aggressive management will be able to seek the route

authorities needed to extend their operations.

Sympathetic Factor

The commodity sold is basically the quality of service. This includes such factors as speed, reliability, freedom from loss and damage, pick up and delivery service, and identical route patterns. The desire for certain route patterns deemed necessary for competitive reasons is one of the significant factors causing a snowball effect to the acquisition activity in the trucking industry.

One end-to-end acquisition seems to cause others. One carrier, seeing its competitor expand service, hastens to do likewise. The implications of not having a competitive route authority is that only those points of a firm's route authority can be serviced and other points go to competitors. It is apparent that, starting in the 1950's, that a sympathetic reaction has occurred within the trucking industry in order to obtain competitive route authorities. This sympathetic reaction might lead to acquisitions which are done in haste and which might end up unprofitable and complete failures.

CHAPTER V

CONCLUSIONS

The preceeding three chapters have attempted to document the nature of acquisition activity within the Western Canadian Trucking Industry and to isolate and discuss the relative importance of factors conducive to this acquisition activity. The purpose of this chapter is to summarize the more important findings.

First, many other areas of study suggest themselves throughout this thesis. An important area where further investigation is necessary concerns a study which determines the operating features which affect the efficiency of trucking firms. Such a study would enable economic decisions to be made on acquisitions and mergers by trucking firms' management and by the regulators. A study of economies of scale would also be desirous in the Western Canadian Trucking Industry. Such a study should try to investigate where, if at all, economies of diseconomies exist. For example, are there economies or diseconomies of firm size, management, accounting, advertising and financing?

Another area which requires investigation is the area of shippers' preferences. Such a study should determine if shippers associate superior quality of service with larger carriers. The implication here is that if shippers prefer larger carriers to small, the industry may take the form of few larger carriers with better quality of service rather than an

industry composed of many smaller trucking firms and poorer quality of service.

A study to determine whether the regulatory objectives of financial responsibility and stability are being achieved through the formation of larger firms would also be desirous. If no economies of scale exist, then small carriers could compete as efficiently as large. The implication here is that the formation of larger size trucking firms may not be solving the financially weak carrier problem which has characterized the trucking industry for so many years. For example, this could develop if diseconomies of scale exist in the industry. If this were true, the regulators may find it desirous to review their acquisition approval criteria.

Another important area of study is that of intermodal ownership. Such a study should try to determine what net benefits are likely to accrue from intermodal ownership. A good focus for such a study would be to analyse the two railways participating in the trucking industry. Canadian Pacific Transport Limited, between 1958 and 1962, consolidated all their acquired trucking firms into one operational unit. This integrated approach differs from the approach of Canadian National Transport Limited who operate their trucking firms as separate units. Each unit competes with others and operates under independent colours with each reporting separate profit and loss statements. These two differing approaches to intermodal ownership would provide a good base for such a study.

Another area of study of growing interest is the one of foreign ownership in the Western Canadian Trucking Industry. For example, how

desirous is it to have large American owned trucking firms influencing policy in the Canadian transportation field? Another related area of importance is a study of the desirability of outside ownership. For example, how able are managers of conglomerate corporations in managing transportation companies, and are their interests the same as those of companies concerned only with the transportation function?

This study shows that there has been much acquisition activity in the Western Canadian Trucking Industry since 1950. This acquisition activity has tended to extend route authority and commodity scope of operations. Most of these acquisitions have been of a market-oriented type generally typified by end-to-end acquisitions, that are aimed at improving service.

Most of the acquisition activity that has taken place has been of larger firms acquiring smaller trucking firms, usually ones that are in financial difficulty. In the majority of cases, the most valuable asset of the acquired firm has been the route authority. In practical terms, the only expedient way for a carrier to expand is to purchase additional existing route authorities, since an applicant for a new route authority must prove public convenience and necessity.

It was found in Chapter II, that many factors can be isolated that are likely to be conducive to acquisition activity in any industry. In Chapter IV it was found that these factors varied in importance when considering the Western Canadian Trucking Industry.

More specifically, the environmental factors were found to be

conducive to merger activity. It was found that acquisition activity occurred during economic expansion periods. During recessions, many trucking firms tend to get into financial difficulty and become available for sale or go bankrupt. Many of these firms become attractive acquisitions during periods of increasing business expectations, especially if they possess attractive route authorities. A little speculation would see the recent period of high acquisition activity continuing until there is a sharp reversal of the economy.

The legal factor was found to be one of the strongest forces conducive to acquisition activity. Because of the regulatory practices of restriction of entry and relatively easy approval of route authority transfers, a climate conducive to acquisition activity has been created by the regulators. It can be concluded that, barring some new government regulation, the recent high acquisition activity will continue.

Economic disturbances have had a very powerful effect in causing the acquisition activity that has taken place since 1950. The exploitable conditions that prevailed after World War II had a very prominent role in the rapid adjustments necessary that resulted in a fairly rapid acquisition movement. The railway strike of 1950 and the building of the Trans-Canada Highway acted as a further stimulus to this acquisition activity.

Many of the industry factors isolated in Chapter II also were conducive to the acquisition activity that took place. Economies of scale were viewed as being strong reasons for merger activity in industry generally. Evidence showed that this factor has very little effect in causing the acquisition activity that has taken place in the trucking

industry. At the same time, there may exist economies of density, management, accounting, advertising and finance that tend to be conducive to acquisition activity.

The technological factor has played a significant role in the acquisition activity that has taken place. Larger firms are desirous to attract the financial and managerial base necessary to take advantage of the many technological changes that have taken place. Future technological changes will tend to make the Western Canadian Trucking Industry more capital intensive. Most of this technological change in the future appears to be directed at increasing productivity per worker. A little speculation would see this technological factor becoming more strongly conducive to acquisition activity as automated terminals and electronic data equipment become more widely used.

The desire to diversify geographically in hopes of offering better service and obtaining more traffic is a strong factor causing end-to-end acquisitions. The desire to stabilize earnings, balance head and back haul, and to extend service into related moving and storage, air freight, and so on, make the diversification factor a strong one in causing this acquisition activity. This factor shows no signs of subsiding and should tend to perpetuate mergers in the Western Canadian Trucking Industry.

Another factor which is associated with the acquisition activity that has occurred, is the industry life cycle factor. Evidence tends to show that the Western Canadian Trucking Industry is presently in the early stage of development. Few symptoms show that the industry is nearing the maturity stage. If the industry follows the expected pattern the

acquisition activity could be expected to slow down as the industry enters the maturity stage. A little speculation would see relatively few dominant firms emerging.

The trucking industry is presently going through a transitory stage into a period of management sophistication. Historically, poorly managed firms have had to sell out or go bankrupt. In the future, as a result of the growing need for attracting good managerial ability, this management factor will cause the smaller firms to be at a disadvantage and will tend to perpetuate the acquisition activity in the Western Canadian Trucking Industry.

The financial factor has also had a strong association in causing the acquisition activity that has taken place. The serious financial difficulties experienced by many smaller trucking firms and the recognition for the need of large pools of capital to supply expansion and equipment needs have been very conducive to the acquisition activity that has taken place. Outside capital has been very influential in causing this acquisition activity. The railways in particular, due to an absence of regulation restricting intermodal ownership in Canada, have entered the trucking industry freely. This financial factor should continue to be an important factor in perpetuating acquisition activity in the Western Canadian Trucking Industry.

The sympathetic factor has also been influential. It appears as if many acquisitions have been made in response to those by competing trucking firms. This sympathetic reaction has expressed itself mainly in the form of end-to-end acquisitions that give a firm a similar route authority to

other firms. The desire for certain route patterns deemed necessary for competitive reasons is one of the significant factors causing a snowball effect in the rate of acquisition activity.

In conclusion, this study finds that much acquisition activity has taken place in the Western Canadian Trucking Industry since 1950 as documented in Table VI. Most of this acquisition activity has been to extend route authorities. This acquisition activity has been in response to the following environmental factors: business cycle factor, legal factor, and economic disturbance factor. Also influential in causing this activity has been the following industrial factors: diversification factor, technological factor, industry life cycle factor, management factor, financial factor and sympathetic factor. Economies of scale factor was found to be relatively unimportant except for possible management, accounting, advertising and financial economies. There may also be some economies of density.

It is hoped that this study will contribute some understanding of the basic attributes of the trucking industry in Western Canada leading to optimum decision making by management and the regulators. The result, hopefully, will be the best possible national transportation system.

BIBLIOGRAPHY

Books

- Adams, Walter, and Hendry, James B. Trucking Mergers, Consolidations and Small Business: An Analysis of Interstate Commerce. Commission Policy, Washington, D.C.: U. S. Government Printing Office, 1957, pp. 190.
- Alberts, William W., and Segall, Joel E. The Corporate Merger. University of Chicago Press, 1966, p. 287.
- American Management Association. Report Number 4, Corporate Mergers and Acquisitions, 1957, pp. 5-200.
- Burnie, Nadreen A. Conference on Transportation Mergers and Acquisitions. Evanston, Illinois: Transportation Center at Northwestern University, 1962, p. 180.
- Caves, Richard. American Industry: Structure, Conduct, Performance. Prentice-Hall Inc., 1964, p. 115.
- Currie, A. W. Economics of Canadian Transportation. Toronto: University of Toronto Press, 1959, p. 600.
- Drayton, Clarence I. Jr., et al. Mergers and Acquisitions: Planning and Action. Financial Executives Research Foundation Inc., 1963, p. 215.
- Filgas, James F. Yellow in Motion: A History of Yellow Transit Freight Lines Inc. The Foundation for the School of Business: Indiana University, 1967, p. 144.
- Gallamore, Robert E. Railroad Mergers: Costs, Competition and the Future Organization of the American Railroad Industry. Harvard University, 1968, p. 369.
- Grodinsky, Julius. Investments, New York: Ronald Press, 1953, p. 250.
- Locklin, D. Philip. Economics of Transportation. 4th Ed., Irwin Press, Homewood, Illinois: 1966, p. 600.
- Mace, Myles L. Management Problems of Corporate Acquisitions. Division of Research, Graduate School of Business Administration, Harvard University, 1962, p. 276.
- Meyer, John R., et al. The Economics of Competition in the Transportation Industries. Cambridge, Massachusetts: Harvard University Press, 1964, p. 500.

Munroe, John. The History of Motor Carrier Transportation and Its Regulation in Canada. Unpublished M.B.A. thesis, Indiana University, 1965.

Short, Robert A. Business Mergers: How and When to Transact Them. Prentice-Hall, 1967, p. 200.

Statton, W. B. The Economic Characteristics of the Motor Carrier Industry in Canada. Faculty of Commerce and Business Administration, May 1964, p. 200.

Weston, J. Fred. The Role of Mergers in the Growth of Large Firms. Berkeley: University of California Press, 1953, p. 225.

_____, and Brigham, Eugene F. Managerial Finance, 2nd Ed., Holt, Rinehart and Winston, 1966, pp. 631-803.

White, Derek. Business Cycles in Canada. Ottawa: Queen's Printer, 1967, p. 200.

Journals

Austin, Douglas V. "A Defence of the Corporate Pirate," Business Horizons, Winter, 1964, pp. 51-58.

Burck, Gilbert. "The Merger Movement Rides High," Fortune, February, 1969, p. 79.

Business Week. "Conglomerates: The Corporations that Make Things Jump," November 30, 1968, pp. 74-84.

Chisholm, M. "Economies of Scale in Road Goods Transport: Off-Farm Collection in England and Wales," Oxford Economic Papers, October, 1959, pp. 282-290.

Cook, P. W. Jr. "Trends in Merger Activity," Harvard Business Review, March-April, 1959, pp. 15-18.

Distribution Manager. "The Road Ahead," April, 1968, pp. 32-37.

Farmer, Richard M. "The Motor Trucking Industry," Business Horizons, Fall, 1966, pp. 5-25.

Folz, D., and Weston, J. Fred. "Looking Ahead in Evaluating Proposed Mergers," N.A.A. Bulletin, XLIII, April, 1962, pp. 17-27.

Hayes, Samuel and Taussig, Russell. "Tactics of Cash Takeover Bids," Harvard Business Review, March-April, 1967, pp. 135-148.

Healey, Kent T. "The Merger Movement in Transportation," American Economic Review, Vol. LII, No. 2, May, 1962, p. 439.

Henman, P. S. "The Economics of Goods Transport by Road," Institute of Transport Journal, March, 1962, pp. 259-271.

Kaplan, A. D. H. "The Current Merger Movement Analyzed," Harvard Business Review, May-June, 1955, pp. 91-98.

Levitt, T. "Exploit the Product Life Cycle," Harvard Business Review, November-December, 1965, pp. 81-94.

Lintner, John and Butters, J. Keith. "Effects of Mergers on Industrial Concentration," 1940-1947, Review of Economics and Statistics, February, 1950, pp. 30-48.

McLean, J. G. and Haigh, R. W. "How Business Corporations Grow," Harvard Business Review, November-December, 1954, pp. 81-93.

Motor Carrier Magazine. Wes Trade Publications Ltd., Vancouver, B.C. January, 1950 - February, 1969.

Nelson, R. A. "The Economies of Scale in the Motor Carrier Industry: A Reply," Land Economics, May, 1959, pp. 180-187.

Peterson, G. S. "Motor Carrier Regulation and Its Economic Basis," Quarterly Journal of Economics, August, 1929, pp. 604-646.

Purcell, Robert L. "Building a Conglomerate Company," Financial Executive, March, 1968, pp. 18-26.

Roberts, Merrill J. "Some Aspects of Motor Carrier Costs: Firm Size, Efficiency, and Financial Health," Land Economics, May, 1956, pp. 228-238.

Schrener, John. "Trucking Takeover Extends U.S. Links," The Financial Post, January 3, 1967, p. 4.

Smykay, E. W. "An Appraisal of the Economies of Scale in the Motor Carrier Industry," Land Economics, May, 1958, pp. 144-150.

Staudt, Thomas A. "Program for Product Diversification," Harvard Business Review, November-December, 1954, pp. 122-123.

Traffic World. "Increase in Motor Carrier Mergers Forecast as ATA Convention Opens," October, 1966, p. 23.

Weston, J. Fred. "The Recent Merger Movement," Journal of Business, January, 1952, pp. 31-38.

Wilson, G. W. "The Nature of Competition in the Motor Transportation Industry," Land Economics, November, 1960, p. 5.

Government Publications

British Columbia, Public Utilities Commission, Annual Report, Victoria, Queen's Printer, 1962.

Canada, Royal Commission on Transportation, Report. Ottawa, Queen's Printer, 1962, Vol. III.

Canada, Dominion Bureau of Statistics, Catalogue Number, 52-001, Queen's Printer, Ottawa, 1966.

Canada, Dominion Bureau of Statistics, Daily Bulletin, February 13, 1967, Queen's Printer, Ottawa.

Canada, Dominion Bureau of Statistics, Motor Carrier Freight (Common and Contract), Ottawa, Queen's Printer, 1965.

Canada, Dominion Bureau of Statistics, Motor Carrier Freight, (Common and Contract), Ottawa, Queen's Printer, 1966.

Personal Interviews

Fitch, A. Administrative Assistant and Chief Inspector, Public Utilities Commission, Vancouver, B.C., April, 1969.

Froess, E. Operations Manager, Johnston Terminals Limited, Vancouver, B.C., March, 1969.

Gretzinger, J. General Manager, D. S. Scott Transport Limited, Vancouver, B.C., March, 1969.

Hartrick, J. Manager, Canadian National Express Limited, Vancouver, B.C., March, 1969.

Hayworth, P. Manager, Vancouver Division, Soo-Security Motorways Limited, Vancouver, B.C., March, 1969.

Jackson, K. Assistant Manager, Public Freightways Limited, Vancouver, B.C., March, 1969.

McDonald, Harry. General Manager, Canadian Pacific Transport Limited, Vancouver, B.C., March, 1969.

McDuff, J., General Manager, Gill Interprovincial Truck Lines Limited, Vancouver, B.C., March, 1969.

Morris, B., Director, Automotive Transport Association of British Columbia, Vancouver, B.C., March, 1969.

Tompkins, T. Editor and Publisher, Motor Carrier Magazine, Vancouver,
B.C., March, 1969.

Winton, W. G. General Manager, Public Freightways Limited, Vancouver,
B.C., March, 1969.