# THE EMERGENCE OF A CORPORATE STRUCTURE IN THE WILLIAMS LAKE DISTRICT LUMBER INDUSTRY, 1947-1956

by

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## ABSTRACT

Between 1947 and 1956 the Williams Lake District lumber industry developed from a minor seasonal economic activity into a full-time industrial sector of great importance to the Cariboo region of British Columbia's Central Interior. The local sector is an excellent example of the kind of economic expansion that was occurring in the provincial forest industry at that time. This thesis analyzes the entrepreneurial strategies which provided the foundations of the district industry and the quasi-corporate structure that arose as a result of those strategies.

Local, national, and international forces combined to make the lumber industry one of the most volatile in the North American economy. The mutually beneficial structure that arose informally among district lumbermen served to counteract adverse market conditions. The quasi-corporate form of business had the salient characteristics of the hierarchical, administratively coordinated, functionally diversified production and distribution structure which Alfred D. Chandler, Jr. has argued is the mature Multidivisional form of enterprise. While Chandler argues that modern corporate business formed in capital-intensive industry as a response to technological change, the Multidivisional structure emerged informally in the labour-intensive Williams Lake District industry to buffer the effects of volatile market forces.

The British Columbia government, as the monopolist timber

resource owner, was the one detrimental influence that the local production and distribution system could not ameliorate. Despite a strongly-voiced commitment to sustained-yield management in the interest of community stability and development, the government's Forest Service forced short-sighted and inappropriate timber management and allocation policies on the local sector which seriously undermined efficient industrial organization. This thesis concludes that the British Columbia government seriously hindered the economic development process in the district lumber industry, and suggests that this case study may serve to explain why the provincial government's efforts to induce industrialization in the Interior region have been largely unsuccessful.

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# LIST OF ABBREVIATIONS USED IN FOOTNOTES

BCL = British Columbia Lumberman

WLT = Williams Lake Tribune

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To the Memory of

My Father

With Love

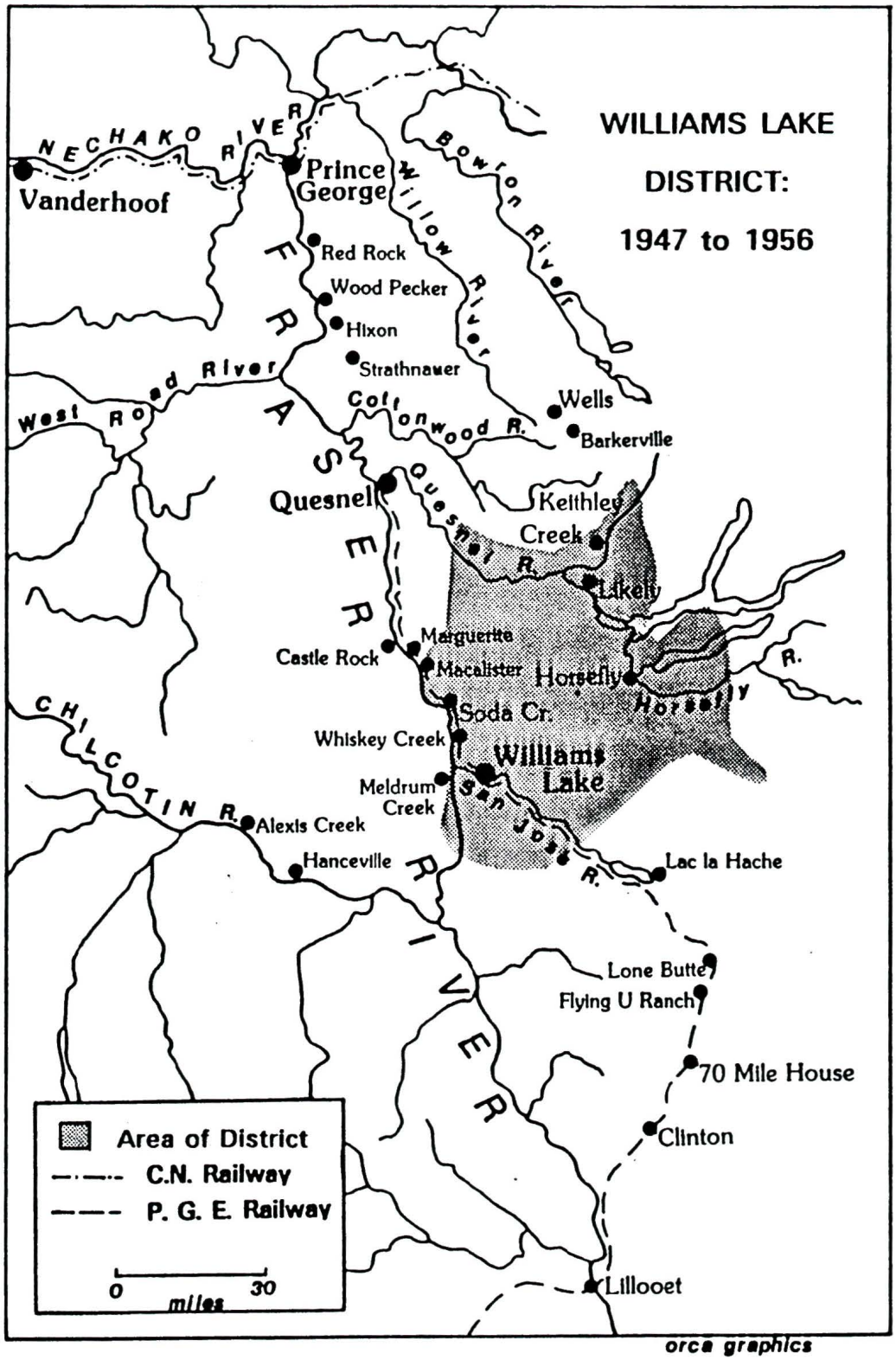
# CHAPTER ONE

## INTRODUCTION

The establishment and development of industry in Canada's hinterland regions has attracted little attention from professional historians. Despite its important role in the Canadian economy, the British Columbia forest industry, which is primarily a hinterland economic activity, has remained somewhat of an enigma. Although the province's Coastal forest industry is beginning to receive academic attention, that of the Interior, the major lumber producing sector of the provincial industry today, has gone relatively unnoticed. Lumber production in the Cariboo region alone represents ten percent of all lumber currently produced in Canada, yet virtually nothing is known about the historical roots from which that important forest industry sector grew. The general purpose of this thesis is to shed some light on the establishment and development of the lumber industry in the Interior by focussing on the Williams Lake District of the Cariboo region between 1947 and 1956 (see Map 1.1). The specific purpose is to analyze the establishment of a sector of the lumber industry in terms of the entrepreneurial strategies that governed production and distribution, and the structure of enterprise that arose from those strategies.

The Williams Lake District lumber industry came into existence as a full-time economic activity almost immediately after the British

Map 1.1:


WILLIAMS LAKE
DISTRICT:
1947 to 1956
NECHAKO RIVER
Vanderhoof
Prince George
Willow River
Bowron River
Red Rock
Wood Pecker
Hixon
Strathnaver
FRASER
West Road River
Colonwood R.
Wells
Barkerville
Quesnel
Quesnel R.
Keithley Creek
Likely
Marguerite
Castle Rock
Macalister
Horsefly
Horsefly R.
Soda Cr.
Whiskey Creek
Williams Lake
Meldrum Creek
San Jose R.
CHILCOTIN R.
Alexis Creek
Hanceville
Lac la Hache
RIVER
Lone Butte
Flying U Ranch
70 Mile House
Clinton
Lillooet
Area of District
C.N. Railway
P. G. E. Railway
0
30
miles
orca graphics

Columbia Forest Service (BCFS) shifted its resource allocation philosophy from simple timber extraction, often referred to as timber mining, toward sustained yield forest management. Following the recommendations of a one-man Royal Commission investigation into all aspects of the provincial forest industry, the British Columbia Government amended the Forest Act in 1946 and 1947 to ensure that provincial forest reserves were maintained in perpetuity. During those years the Williams Lake District lumber industry grew from a minor, predominantly seasonal economic activity into a permanent, full-time industrial sector of great importance to the Cariboo region's economy.[1]

In 1947 there were twenty-seven sawmills in the district. Most were seasonal operations run by ranchers to subsidize their cattle businesses, but a few were full-time sawmills producing for the British rough lumber market. By 1950 the number of district sawmills had more than doubled as a result of the arrival of Lignum Ltd., a Vancouver lumber wholesaler. Lignum set up a finishing plant which coordinated sawmillers' production, dressed their rough lumber, and shipped it to the burgeoning American market. Through the 1950s the industry expanded rapidly until, by 1956, there were six or seven planer mills connected to wholesalers in the Canadian and American Pacific Northwest. They coordinated the production of over 150 sawmills within the quasi-corporate production and distribution structure that Lignum introduced. The Lignum business structure established and maintained the local industry as a full-time lumber manufacturing sector and remained its dominant firm throughout this period. When British Columbia's Chief Justice,

Gordon Sloan, carried out his second Royal Commission investigation and reported in 1956 on the state of the provincial industry under the first decade of sustained yield management, the local lumber industry was firmly established as the economic mainstay of the Williams Lake District.[2]

The local lumber sector arose primarily from the sharply heightened demand for residential housing in the United States after World War II. The highly volatile market conditions throughout the western world during the post-war years, however, often threatened the survival of the local industry. To buffer the effects of continual market fluctuations, district operators developed entrepreneurial strategies which resulted in the formation of a particular pattern of economic relationships, and a structure of enterprise which facilitated the local sector's rapid and continued expansion. The swift growth of the local industry combined with the inadequate, chaotic sustained yield system of timber allocation used by the Forest Service produced a timber shortage that, by 1956, had reached critical proportions. Having grown up when timber resources were plentiful, the industry was unable to withstand a situation of scarcity. As the first stage of development drew to a close, local operators were revising their strategies and seeking a new structure that could cope with the more stringent requirements for gaining access to the resource base.

Study of the nascent years of the Williams Lake District lumber industry requires the delineation of the various forces that determined its pattern of growth, and an analysis of the structure that was

developed to cope with those forces. Although the field of Forest History has been continually expanding, the main thrust of existing studies has been to trace the development of government policy and to assess its effectiveness in conservation, management and allocation of the forest lands. Apart from company histories commissioned by large forest companies to promote their corporate images and the counter-balancing union histories that trace glorified accounts of worker organization amid a homogenous mass of rapacious capitalists, scant attention has been paid to the actual development of the individual industries which produce and distribute the different forest products within constantly changing economic environments. The multitude of forest product industries which draw on the resource base, and the diversity of enterprises within each of those industries has been all but overlooked in the historical record.

Of the few important studies of economic development in the Canadian lumber industry, perhaps the best known is Arthur M. Lower's The North American Assault on the Canadian Forest: A History of the Lumber Trade Between Canada and the United States. Lower's landmark book traces the trading patterns of eastern Canadian lumber from its roots as a staple for the British market through its shift to supplying the United States market. Clearly reflecting his captivation with man's struggle to conquer the wilderness, Lower developed his version of the staple thesis, describing the rampant depletion of Canadian forest lands. In taking the broad view of the industry and tracing the changing flow of goods, Lower ignored the structure of each sector and how

those many structures came together to form the eastern Canadian lumber industry.[3]

A more recent book that deals with a smaller geographical region and presents a deeper analysis of the industry is Graham Wynn's Timber Colony: A Historical Geography of Early Nineteenth Century New Brunswick. Although informed by Lower's perspective, Wynn delves more thoroughly into the variations in industry structure of the early nineteenth-century New Brunswick timber trade and analyzes the changing patterns of organization. Wynn's interest in the entrepreneurial strategies underlying those changing patterns of enterprise provided the initial framework for this thesis. While building on Wynn's approach, this study seeks to add to our understanding of more than the evolution of a particular sector of the lumber industry. By focussing on the development of enterprise in a labour-intensive industry, this thesis addresses and, in some areas, attempts to redress current theories explaining the evolution of the modern corporate structure.[4]

The traditional neoclassical theory of the firm which has dominated microeconomics claims that market coordination, meaning allocation of resources by the market mechanisms of supply and demand dictating price and level of output, is the most efficient method of coordinating production and distribution of goods and services in an economy. This argument supports the laissez-faire notion that unencumbered competition among small, single-unit enterprises is the most desirable form of enterprise, and that multiunit bureaucratic businesses are disruptive to the competitive process that is essential for

efficient resource allocation. However, conditions in the provincial lumber industry did not approximate those that the neoclassical model of perfect competition assumes to exist.

The British Columbia lumber industry was not composed of homogeneous firms with equal access to factor markets. Firm size and location had a tremendous effect on the cost and availability of all inputs, including labour, raw materials, and financial capital. In addition, access to accurate information regarding market conditions was far less than perfect. Acquiring that information was costly for both buyers and sellers and the relevant data was unevenly distributed among market participants. The volatile, unpredictable lumber markets rendered information obsolete almost as quickly as it was obtained. Therefore, reliance on market mechanisms for the allocative function was virtually impossible except in the most general sense.[5]

Autonomy among buyers and sellers was not a characteristic of lumber markets. Firms sought to develop relationships with customers that were based on fair prices for dependable quality and quantity of output. In a market characterized by verbal agreements, past reputation definitely affected the price and demand for individual firms' output. The general price ranges in lumber markets tended to be wide and to change relatively rapidly. Negotiations between buyers and sellers determined the actual price of lumber. When these basic market conditions are considered, it is clear that the neoclassical theory of the perfectly competitive firm, as an ideal, does not suit an analysis of the Williams Lake District lumber industry.[6]

Several writers have extended neoclassical theory to include corporate organization. Ronald Coase, for example, has argued that market transactions are not costless. In opposing the traditional model, Coase points out that all market participants do not have equal access to market knowledge and, since all are striving to achieve the best returns for their investments, the negotiations among buyers and sellers, and the acquisition of necessary knowledge involve time and expense. In addition, Coase explains why the firm replaced market exchanges among buyers and sellers. According to Coase, the firm arose when it was possible to improve productivity, lower costs, and increase profits through incorporating technologically separable production and distribution stages within one integrated economic structure. In other words, when it was less of a financial risk to take on another stage in the production and distribution process rather than negotiate in the market for the good or service that it produced, that stage was internalized within the economic structure known as a firm. The firm owner, or his designate, replaced market mechanisms as the resource allocator among the firm's production and distribution stages.[7]

Alfred D. Chandler, Jr. agrees with Coase that transactions involve costs and that those costs were at least partially reflected in the evolution of the firm's structure. However, Chandler goes beyond Coase in stressing that the advantages of internalizing the stages of production within a single corporate structure, from raw material base through intermediate products to the distribution of final products in the market, were not realized until a managerial hierarchy was formed

and the administrative coordination function was rationalized. Due to the expanded size of the enterprise, a single individual or group of owners could no longer coordinate day-to-day operations and undertake long-term planning and resource allocation. Thus, a hierarchy of managers appeared with each having a clearly defined role and function within the overall enterprise. The managerial hierarchy coordinated all the operating parts within the enterprise in a manner that preserved the whole. Through the hierarchy, management personnel carried out the tasks that the market had performed, namely allocation, coordination and monitoring of human, physical, and financial resource flows.[8]

Chandler's central thesis is that the modern corporate form of business emerged primarily in capital-intensive industries as a response to technological changes. Chandler contends that the final stage of corporate development was a mature form of business he calls Multidivisional enterprise which was a hierarchical, administratively coordinated, functionally diversified, production and distribution structure. However, Chandler claims that the Multidivisional form of business offered no advantages in the technologically simple labour-intensive sectors, like the lumber industry. In those industries, coordination was typically undertaken by mass retailers who distributed a number of different products from a variety of firms. Therefore single-function firms continued to prosper in labour-intensive sectors.[9]

Contrary to Chandler's argument, the Williams Lake District lumber industry was not able to develop into a viable lumber sector until a Multidivisional structure emerged, albeit informally and on a

much smaller scale than the massive enterprises that Chandler describes. In addition, that structure became the dominant form of enterprise in the local sector long before owners relinquished control over their business units to a cadre of professional salaried managers.

Chandler contends that the emergence of modern industrial enterprise "dampened entrepreneurial opportunity in many sectors of the economy" and resulted in "the coming of a new subspecies of economic man--the salaried manager." However, the Williams Lake District lumber industry case study suggests that Chandler's salaried manager was not a new subspecies of economic man, but a product of the specialization and formalization of the entrepreneurial function that has been diffused throughout the various levels within the modern business structure's hierarchy. As Chandler points out, career managers favoured long-term stability and growth of the enterprise over maximization of current profits. In the district lumber industry, the owners who operated successful enterprises, including those who also took on the role of production labour in their business ventures, showed the same preference as Chandler's salaried professional managers.[10]

Concern for the enterprise's long-term health must be seen as an entrepreneurial goal that guides decision-making in an efficient business structure. The distinction lies between the <u>opportunist</u> who seeks quick profits based on minimal capital investment in a fly-by-night operation, and the <u>entrepreneur</u>, who plans, coordinates, allocates, supervises, and innovates, based on sound judgements derived from a long-term view. Within the context of the district lumber

industry, that distinction was very clear.

The long-term health of the Williams Lake District lumber industry's dominant structure was threatened, however, by the very pervasive and powerful opportunistic resource owner, the British Columbia Government. When the Forest Act was revised in the late 1940s as a sign of government's commitment to sustained-yield management, many of the policies and regulations developed to implement the Act did not suit the specific conditions of the Williams Lake District. Moreover, the Forest Service's policies often ignored Commissioner Gordon Sloan's warnings and collectively acted as a disruptive supply-side force that frustrated the district lumbermen's attempts to develop long-term stability in their industry. The Forest Service, as the resource monopolist, often made unreasonable demands of the local lumbermen and charged the highest prices that the competitive marketplace would bear. Instead of joining in the promised partnership with industry to develop long-term stability in the Williams Lake District through efficient forest management, the British Columbia Government policymakers in Victoria ignored the district's specific needs and added to the nascent industry's growing pains.

## An Overview

The thesis itself is broken down into four chapters. Chapter Two delineates the general market conditions that affected the Williams Lake District lumber sector. Supply and demand forces at the international, national, and local level are described and analyzed.

The quasi-corporate structure that developed in response to prevailing market conditions and the entrepreneurial strategies which underlay that structure are discussed in Chapter Three. As the timber resource monopolist owner, the British Columbia Government through the British Columbia Forest Service had an enormous influence on the local sector. The results of that influence are outlined in Chapter Four. Chapter Five provides the basic conclusions of this thesis, and suggests the value of the case study as a guide for future research directions.

## Footnotes

[1]Peter H. Pearse, Timber Rights and Forest Policy in British Columbia: Report of the Royal Commission on Forest Resources, I (Victoria: The Queen's Printer, 1976), 2-4; E. C. Manning, Address by the Chief Forester to the Forestry Committee of the British Columbia Legislature [Location: University of Victoria Library, Victoria, B.C.] (November 2, 1937), 4; Gordon McG. Sloan, Report of the Commissioner The Honourable Gordon McG. Sloan, Chief Justice of British Columbia Relating to the Forest Resources of British Columbia 1945 (Victoria: Charles F. Banfield, Printer to the King's Most Excellent Majesty, 1945), 10.

[2]"27 Sawmills Here Export 9 Million Feet of Lumber," WLT (January 23, 1947), 1; "To Assist Cariboo Sawmillers in Their Plea," WLT (April 24, 1947), 1; "Carloading Space Hard to Find," WLT (June 17, 1947), 1; "Planer Mill to Bring 14-Man Payroll for Town," WLT (April 8, 1948), 1; "Planer Mill Now Operating," WLT (June 24, 1948), 1; "Lignum Owner Passes in Vancouver," WLT (September 6, 1972), 1; Gordon McG. Sloan, Transcripts: Royal Commission on Forestry XVIII (1955), 8531; Gordon McG. Sloan, Transcripts XXIII (1956), 10840, 10888-89; interviews with Herb Gardner, Roy Crosina, Reg Norberg, Gabe Pinette, Dollard Therrien, Chuck Flint, and J. Stewart Smith.

[3]A. R. M. Lower, The North American Assault on the Canadian Forest: A History of the Lumber Industry Between Canada and the United States (Toronto: Ryerson Press, 1938); Carl Berger, The Writing of Canadian History: Aspects of English-Canadian Historical Writing: 1900-1970 (Toronto: Oxford University Press, 1976), 116-18.

[4]Graeme Wynn, Timber Colony: A Historical Geography of Early Nineteenth Century New Brunswick (Toronto: University of Toronto Press, 1981).

[5]British Columbia Lumberman contains numerous articles during the period from 1947 to 1956 referring to the poverty of relevant market information. That is, of course, a characteristic of volatile markets like the lumber industry.

[6]Interviews with Gabe Pinette, Dollard Therrien, Harold M. Jacobson, and O. J. "Whitey" Andersen.

[7]R. H. Coase, "The Nature of the Firm" [reprinted from Economica, New Series, 4 (1937)], Readings in Price Theory, George J. Stigler and Kenneth E. Boulding, compilers (Chicago: The American Economic Association and Richard D. Irwin, 1952), 331-51; Oliver E. Williamson, "The Modern Corporation: Origins, Evolution, Attributes," Journal of Economic Literature, 19 (December 1981), 1540-41.

[8]Alfred D. Chandler, Jr., The Visible Hand: The Managerial

Revolution in American Business (Cambridge, Mass.: Harvard University Press, 1977), 7-11.

[9]Alfred D. Chandler, Jr., The Visible Hand; Alfred D. Chandler, Jr., "The Emergence of Managerial Capitalism," Business History Review, 58 (Winter 1984), 473-503.

[10]Alfred D. Chandler, Jr., The Visible Hand, 10, 484, 497.

# CHAPTER TWO

## THE SIGNIFICANT FACTORS BEHIND A RISKY BUSINESS

The Williams Lake District lumber industry used a harvest crop to manufacture a durable good. Many forces influenced the local lumber trade and, in combination, created a highly volatile, unpredictable economic environment. This chapter outlines the major underlying factors.

### Environmental Factors

While the influences of weather and terrain are seldom omitted from discussions of Canada's other harvest crops, they are rarely included in accounts of the British Columbia lumber industry. The Williams Lake District lumber industry was susceptible to often unfavourable and costly environmental conditions. While some were common, in varying degrees, throughout the province others were peculiar to the Cariboo region. Each year during spring breakup, when the winter snow melted, the muddy conditions in the woods and on the access roads made logging and hauling virtually impossible. Truck load limits imposed by the Department of Public Works and the expense of regrading bush access roads further deterred attempts to continue logging and sawmilling even on a limited scale. Rough lumber was stockpiled at the planer mills prior to the annual spring thaw and woods operations ceased for approximately two months. Often the same conditions prevailed in

November until the winter frost set in and firmed up the district roads.[1]

Excessively rainy weather hampered deliveries of logs to the sawmills and rough lumber to the planer mills. While short wet spells could be handled through stockpiling at the sawmills, a week or more of uninterrupted rain imposed serious hardship on the small bushmill operations with their very limited ability to finance expanding inventories. For example, in 1954 a prolonged wet spell reduced district production by thirty to forty percent through the summer and into the fall and kept local lumbermen from taking full advantage of the favourable prices caused by a lumber strike in the American Pacific Northwest.[2]

Long periods of dry summer weather also threatened operations. Forest fires were a serious danger to the whole provincial industry, but the Kamloops Forest District of which the Williams Lake District was part had the worst record of forest fire outbreaks in the province. Moreover, a very limited supply of fire fighting equipment and manpower combined with vast tracts of virgin timberland containing a high proportion of easily kindled underbrush made forest fires very difficult to combat and contain. Vast blocks of merchantable timber were decimated by forest fires and valuable production time was lost while operators and their employees helped the local Forest Service crew fight numerous blazes. Although human carelessness was a factor, the vast majority were incendiary fires caused by lightening from flash storms.[3]

The cold Cariboo winters also hindered lumber production. During one or more cold snaps temperatures were so low that they endangered machinery and workers. While the extreme cold usually lasted only a short duration, it sometimes extended up to four to six weeks. Even when the temperatures were within the range of human tolerance, vehicles and equipment were difficult to start and often had to be kept running night and day. That increased labour and fuel costs and hastened equipment depreciation. However, yarding and hauling logs to the bush mills could be carried out more quickly on frozen ground so costs could be offset.[4]

Icy road conditions and steeply graded government access roads made hauling from the bush to the planer mills in town very precarious. Extreme cold could even destroy timber stands. The most dramatic case arose in late 1952, when a very large tract of virgin timber in the district succumbed to "winter kill." Because the local Forest Service staff was unable to cope with the task of organizing removal of the dead timber stands bark beetle infestations set in and threatened the adjacent healthy stocks. However, no plans for removal had been firmed up by 1956 and the diseased timber killed by the winter cold continued to endanger the surrounding timber inventory.[5]

The particular terrain of the Cariboo also added to costs. The lack of usable waterways meant that log storage was generally on dry land. While the small bushmills tended to use the logs immediately they were delivered to the mill site, larger operators faced much more rapid deterioration of their log stocks than their Coastal competitors, who

stored logs in extensive water systems adjacent to their timber areas and mills. Even those Williams Lake District operators who were located near lakes lost their storage facilities during the winter freezeup from roughly November to April. The measures taken to minimize log deterioration from dry-land storage significantly increased stockpiling and handling costs.[6]

The lack of any substantial waterway systems significantly added to the expense of accessing the timber. The cheapest ungravelled roads cost about $650 per mile while the main hauling roads with gravelled surfaces required expenditures of around $5,000 per mile. Although the per mile cost of road-building was far greater in the mountainous Coastal terrain, the overall cost was greater in the Interior because of distance. The relatively large capital expenditures required to develop access roads limited small operators to timber adjacent to the meagre road system provided by government and/or by the larger, better capitalized, district lumber firms.[7]

The Williams Lake District climate, in general, affected the size of the timber supply. In the colder, drier Cariboo region the Douglas-fir trees were far smaller and more widely scattered than in the Coastal forests. The additional logging and processing costs put district lumbermen at a significant competitive disadvantage since far less merchantable wood was obtained from each tree.[8]

## Governments and Markets

National and international governments concerned themselves

with the welfare of their nations as a whole and that often resulted in adverse market conditions for the lumber industry. Following World War II Canada's balance-of-payments account was showing an annual deficit of one-half billion dollars or more by providing loans to Britain through exports, and paying cash for imports from the United States. It was clear by early 1947 that Canada could not sustain the debt load any longer and had to halt her growing shortage of American dollars. She could, for example, no longer export lumber to Britain without some payment in convertible exchange, namely American dollars instead of pounds sterling.[9]

After the American Government lifted price controls in the United States, lumber prices rose sharply. It appeared that the United States lumber industry would soon be meeting that country's minimum lumber needs and wood purchases from Canada would decline. By mid-1947 American demand for high grade lumber was still strong, but that market no longer provided a dumping ground for lower grades which no other customers wanted. President Harry S. Truman announced the end of the United States Emergency Housing Act and restored the duty on Canadian lumber entering the United States.[10]

To ameliorate Canada's foreign exchange problems, the federal government devalued the Canadian dollar which effectively reduced the cost of exports for international customers. However, Britain's large contracts for British Columbia lumber ran out in 1948 and were not renewed.[11]

Despite high hopes that the Marshall Plan, a four-year European

aid program providing massive loans of United States' dollars to hasten reconstruction and hold off the advancing Communist bloc, would bring back British customers, orders from the United Kingdom Government Timber Controller were substantially reduced. The seriousness of Britain's financial state was revealed in a 1948 White Paper which showed that, without American Marshall Plan aid, living standards and imports would have to be cut "more drastically than ever known" and industrial recovery was a remote prospect. Indeed, Britain clung to her United States' dollars and revived her traditional timber trade with the Baltic countries of Sweden and Finland, who accepted her sterling currency and asked lower prices for their wood than British Columbia lumbermen.[12]

The Canadian dollar was further devalued in 1949, but the relative devaluation of the British pound sterling further inflated Canadian wood prices. The only prospect of a stable market was the United States. The timber trade fell off in the province while producers adjusted their machinery to the different dimensions required by North American architecture, and lumber wholesalers tried to develop new trading avenues. By the last quarter of 1949, the American economy was recovering from the minor slump that had started a year earlier. The demand for housing began to increase sharply, and continued its rapid upsurge to mid-1950.[13]

The Korean War broke out at the end of June 1950, and United States President Truman geared his nation's finances toward the enormous defence budget necessary to hold back the Russian advance. The

ensuing reduction of government-backed mortgage money led to a slackening in the United States' building industry which was not substantially offset by military orders for lumber. Exacerbating the problem was the increasing business activity in other Canadian manufacturing sectors which resulted in heightened exports and produced an almost spectacular reduction in the adverse balance of trade with the United States and the surplus with the United Kingdom. By mid-1950, revaluation of the Canadian dollar upward was inevitable in order to avoid the reverse of the previous balance-of-payments problems. However, it also meant the concommitant rise of imports from and fall in exports to the United States, the main market the British Columbia lumbermen depended on for survival.[14]

The Korean War had shocked the British Government into the realization that the United Kingdom softwood stocks had run low enough to threaten the country's national security. As a result, 1951 contracts from Britain's Timber Controller were triple the meagre level of 1950, despite the high price of British Columbia lumber compared with Scandinavian stocks. However, the American market demand continued its decline from the summer 1950 peak. The downward trend was primarily due to the more stringent credit restrictions imposed by the American government. A further dampening effect on the British Columbia lumber economy arose from Canada's break from the International Monetary Fund's Bretton Woods Agreement of fixed exchange rates, so her dollar floated freely on the foreign exchange markets. The result was upward revaluation of the Canadian dollar in 1951 which made her exports,

including lumber, more expensive for foreign buyers.[15]

Although the volume of Canadian lumber production declined slightly, inflationary pressures originating from the massive American defence expenditures for the ongoing Cold War and the continuing shortage of lumber stocks drove the prices up. With the Canadian economy, as a whole, undergoing a period of economic expansion, the lumber industry was losing the competition with other sectors for manpower, and could not provide the increase in production levels needed to hold prices down. Lumber shortages in Canada were extreme and talk of imposing price controls surfaced, but the Canadian Government rejected the measure as socialistic and unnecessary. However, credit was frozen at the high 1950 levels, which raised down-payments on housing and increased government-backed mortgage interest rates. The resulting decline in domestic demand meant increased competition from Eastern Canadian lumber regions in British Columbia's two major export markets.[16]

In the spring of 1951 came promising news regarding future Canadian exports to the United States. As a result of concessions achieved at a round of General Agreements on Tariffs and Trade (GATT) talks held in Geneva and Torquay, Canada gained the maximum tariff reduction possible under the existing American legislation, namely a fifty percent reduction from the 1945 tariff levels on lumber and nearly all other items of interest to Canadian exporters. It was welcome news for British Columbia, because by August 1951 there was no domestic demand for the province's lumber in eastern urban centres and only

spotty demand in Canada's rural areas. The provincial lumber manufacturers were also aware that the high 1951 British demand was only temporary, to replenish dangerously low government inventories.[17]

The terms of trade between Britain and Canada were not good, as the prices of imported Canadian raw materials were rising faster than the prices of British exports. Early in 1952 the United Kingdom's balance-of-payments problems again reached crisis proportions. To meet the crisis, the British Government ended bulk buying of lumber by Timber Control and returned softwood importing to private dealers, limiting their individual quotas to the quantity they had purchased in the first eleven months of 1951.[18]

In the American economy military spending had created serious inflationary pressures. To resist importing American inflation, the Canadian dollar was further revalued upward, such that the former premium on the United States dollar was reversed to a premium on the Canadian dollar. However, the measure made British Columbia lumber more costly for both American and British buyers and gave the Scandinavians a strong edge over British Columbia in the United Kingdom lumber market at a time when the United States home building industry was slumping.[19]

The world market price for lumber continued to fall through 1953 and, as the provincial lumber industry entered 1954, a further deflation of market prices was anticipated. However, the reductions did not materialize. The abolition of British softwood consumption licencing at the end of 1953 only resulted in a temporary spurt of buying and United

Kingdom market demand remained generally sluggish. Although the quantity of lumber for American consumption increased, stabilizing lumber prices, the United States' market was beset with uncertainties and provincial lumbermen tended to depend on Britain for a sound stable source of demand. The United States provided the more important market by far, but the British market often meant the difference between the British Columbia lumbermen scraping by or doing fairly well.[20]

Although 1955 began with a very strong level of lumber sales to the United Kingdom, provincial lumber exports to the British market were curtailed as a result of a rapid unprecedented rise in ocean freight rates. In addition, the United Kingdom's construction industry was experiencing a mild recession, and house-building activity declined.[21]

The American construction industry's recession of 1953 and early 1954 had been worked out by early 1955. However, shortages of mortgage money felt early in the year were exacerbated in the fall, when the United States Government stiffened federally-backed mortgage loan requirements by reducing the loan terms and increasing the percentage of the house value required in down payments. The American Government's move to curb the mounting mortgage debt, plus the partial satisfaction of the United States' housing needs, began to weaken the demand for British Columbia lumber. The only reassuring news for the provincial lumber producers was American Forest Service head, R. E. McArdle's prediction that the United States was going to have increasing trouble meeting the nation's wood requirements in the years to come, due to a

growing population and a declining supply of American forests. While the short-run prospects for British Columbia lumbermen were those of softening demand, the long-run potential demand from the south appeared very promising.[22]

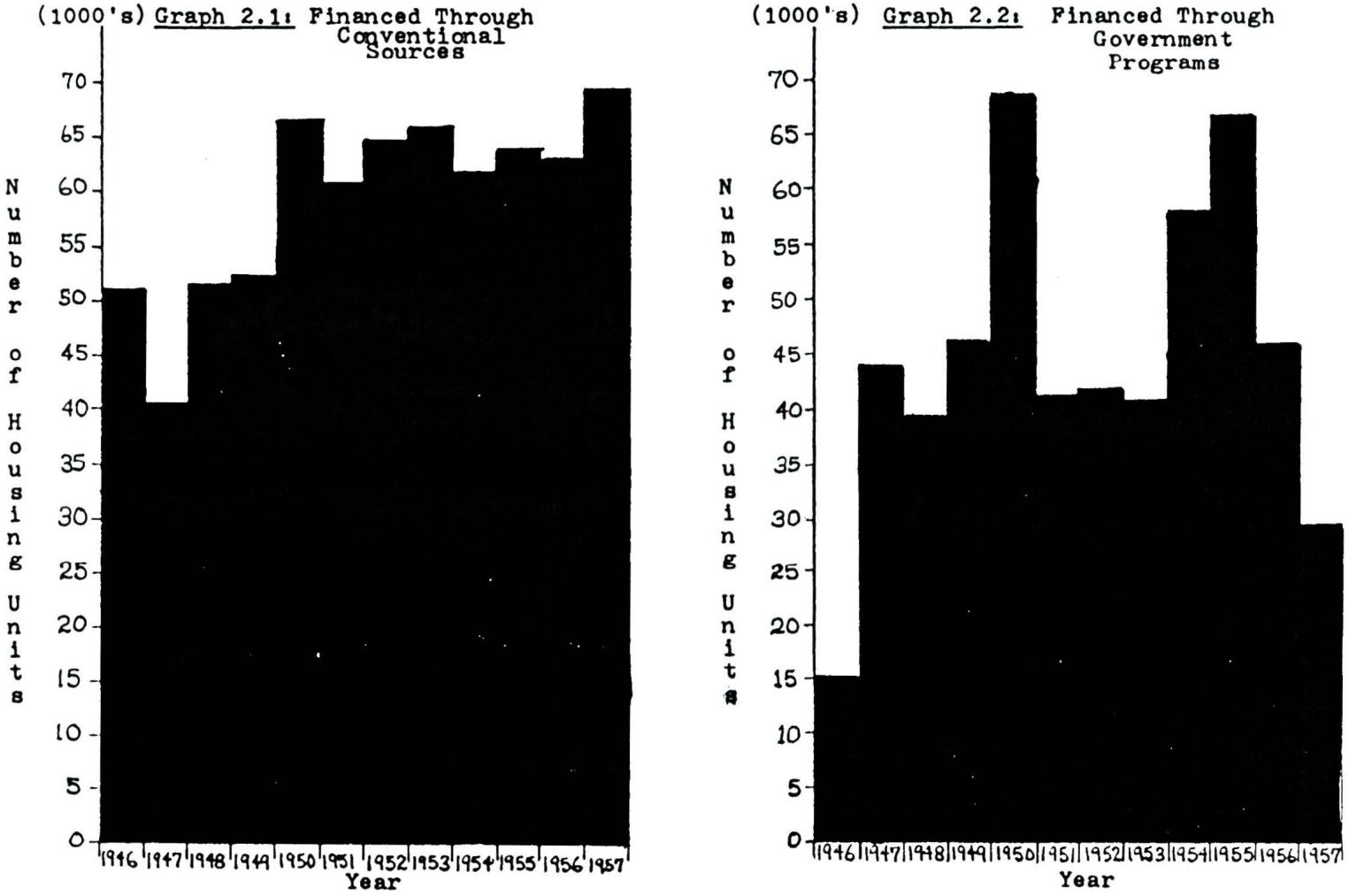
Until mid-1956 lumber prices remained relatively stable with demand having levelled out from a mild slump in 1955. However, the United Kingdom's sudden decision to sell off her accumulation of wartime strategic lumber stocks in mid-1956 meant purchases of new lumber by Britain were virtually finished for the year. Furthermore, the housing construction tempo in the United States was starting to slow down at an accelerating rate by mid-year. The American Federal Reserve Board recognized that their policy of restricting credit was causing a decline in mortgage lending and planned to make loans easier to acquire. However, the credit easing in the United States housing sector did not have any effect in 1956. The progressively softening demand for provincial lumber continued through the latter half of the year. In addition, a further upward revaluation of the Canadian dollar, which amounted to almost four percent by the year's end, was adding more downward pressure on prices for British Columbia lumber. The normal seasonal slackening when the American lumber yards cut back on inventory in preparation for year-end stock taking for income tax purposes struck a month earlier than usual, inflicting another jolt on British Columbia lumber producers in September. Although prices had leveled off from the sharp slump by the end of October, it was not until 1957 that the provincial lumbermen experienced more promising conditions.[23]

Government decisions within and beyond Canada's borders significantly affected conditions in the district lumber industry. Although inextricably linked with many other factors which influenced lumber markets, government policies contributed to the instability that the lumbermen experienced.

## Mortgage Markets and Residential Construction

The Williams Lake District lumber industry sold virtually all its output to the volatile Midwestern and Eastern American residential housing sector. General conditions in the Canadian construction industry in part influenced this demand. The level of competition from other areas for Canada's share of the American market depended on the the amount of lumber that the Canadian domestic market absorbed. A more important demand determinant, however, lay in the nature of housing finance. Conventionally-financed housing starts remained relatively stable from 1948 through 1956 but housing financed through government programs was unstable (see Graphs 2.1-2.2). The Canadian National Housing Act (NHA) mortgages as well as those of the American Federal Housing Authority (FHA) and Veterans Authority (VA) depended on the availability of funds from financial institutions and the relative attractiveness of mortgage interest rates compared with yields on other types of investments. As newcomers the Williams Lake District operators were almost totally dependent on the extra demand induced by government housing programs. The more established lumber producers in Canada and the United States, with their far better developed reputations for

United States Housing Starts, 1946 to 1957
(Excluding Farm Dwellings)




Source: Leo Grebler, Housing Issues in Economic Stabilization Policy: Occasional Paper 72 (New York: National Bureau of Economic Research, 1960), 6.

supply and quality and their more advantageous locations for finished lumber shipment, received the more stable ongoing contracts.[24]

During periods of monetary ease, the demand for money was low in the general economy. Therefore interest rates, meaning the prices paid by borrowers for using money, were unattractive in comparison with the fixed rates of the Canadian NHA or American FHA or VA mortgage markets. As a result, financing for housing became more abundant and stimulated residential construction. As the economy began to boom, the demand for money forced the price of money, or interest rates, up with a concommitant flow of investment out of the fixed-interest mortgage market. Since mortgage availability depended on relatively lower interest rates in the rest of the economy, residential construction tended to vary contracyclically with the general business cycle. Due to the interlocking nature of the Canadian and American economies, there were very minor leads and lags between the two nations' business cycles. Consequently, the cyclical trends of housing starts were very similar in both nations from late 1949 through 1956.[25]

While housing starts were influenced by the availability of credit, the effects tended to be detected through expansions or contractions in builders inventories rather than increases or decreases in final demand. Although interest rates were the main variable influencing builders' decisions, conditions in substitute forms of housing, such as vacancy rates and rent levels, also significantly affected builders' inventories. Poor transmission of market information compounded the problem of decision-making in a system plagued with

volatile conditions. Housing production, which was a very large sector in both the Canadian and American economies, ranked among the most cyclical of industries.[26]

In the post-World War II period single- rather than multi-family housing starts were the primary focus of government-backed mortgages and were the primary indicator of residential construction activity. For the reasons already described, residential construction tended to increase when the Gross National Product (GNP) was depressed and, the rest of the time, either decreased or fluctuated within a relatively narrow range. American housing starts sharply increased in late 1949, while Canadian starts expanded more moderately. Both markets peaked in the summer of 1950 then fell off abruptly in a decline that continued until the fall of 1952. The market stagnation continued until the 1953-1954 recessions in Canada and the United States led to the contracyclical upward trend in their housing markets. Following a peak in the summer of 1955, the housing market declined steadily until a trough in the North American business cycle caused the housing sector to begin expanding again in 1957.[27]

The housing construction sector is what Nagle refers to as a "non-industry" since it is an industry that can not achieve the production economies of scale to provide the consumers with what they want at a price they can afford. The construction industry was very similar in structure to the primitive factories existing at the onset of the Industrial Revolution in the mid-nineteenth century American economy. A general contractor hired various tradesmen as subcontractors

who, in turn, hired the necessary labour to carry out the many unskilled tasks of house-building. The ease of working with wood in residential construction somewhat buffered the lumber industry from substitute products. However, the inefficient organization of the building sector meant that cost reductions through improved efficiency in the lumber industry were undoubtedly dissipated in the building sector, with very little cost-benefit passed on to the consumer.[28]

The technology for mass-producing houses, in the form of prefabricated and modular homes, existed by 1947 but the architectural designs were generally very unimpressive. The mass-produced homes looked too much the same and were of inferior aesthetic quality. Consumer resistance to mass-produced housing, combined with the cyclical instability of residential construction, were significant causal factors underlying the building sector's poor performance. Its concentration on the Midwestern and Eastern American construction market meant Williams Lake District lumber production was buffeted by the volatile demand of the housing sector as well as by conditions peculiar to the lumber industry itself.[29]

## Freight Rates

In early 1947 the two transcontinental railroads, Canadian Pacific (CPR) and Canadian National (CNR) applied to the Board of Transport for what threatened to be a thirty percent rate increase in freight costs for British Columbia shippers. The British Columbia Lumber Manufacturers Association (BCLMA) filed a strong protest,

claiming that such an increase would: destroy existing competitive relationships and market patterns among producing regions; accentuate existing inequities in Western rates relative to those paid in the East; defy Canadian railway agreements with the American Railway Association regarding tariffs and tolls on transcontinental hauls; and so reduce rail shipments of lumber that railway revenues would ultimately decrease. Those complaints became a constant refrain from the provincial lumbermen during the post-World War II period.[30]

Cariboo lumbermen had to ship their output to the transcontinental railroad terminals on the provincial government-owned Pacific Great Eastern (PGE) railway. Until the end of 1952 the provincial line only extended from Quesnel to Squamish, which meant there was a bottleneck of railway traffic waiting for the barge service to the Vancouver CPR terminus. The additional time and cost placed Williams Lake District lumbermen at a competitive disadvantage in both provincial and international markets. Even after the Prince George extension opened in late 1952, the differential arising from Williams Lake District shipments to the Prince George CNR terminal was a serious hindrance in the highly cost-competitive lumber markets. The price differential that disadvantaged local lumber manufacturers was not eradicated by the 1956 completion of the PGE link to Vancouver. Some concessions were gained locally and provincially, but the general trend was that of rising railway transportation costs.[31]

The district lumbermen also encountered rising ocean shipping costs. In 1954 Lignum Limited, the district's main lumber shipper,

began redirecting up to half of its planer mill's output to the United Kingdom softwood market which had returned to the hands of private importers at the end of 1953. Due to escalating Scandinavian wood prices, British Columbia lumber was again attracting British contracts. However, due to the heavy demand that wheat, coal, and other commodities were placing on ocean freight service, shipping costs rose rapidly. From September 1954 to February 1955, the rates increased by fifty percent and there was no halt to the upward trend in sight. The cost advantage of ocean over rail freight diminished for provincial lumber producers. With the British market effectively closed, the Williams Lake District's largest lumber shipper again directed virtually all of its finished lumber to the Midwestern and Eastern American markets. The cost of shipping on land or sea had a significant adverse effect on the local lumber industry. Although protests from the local and provincial lumbermen led to some temporary reductions, freighting costs continued to rise. These costs escalated at a faster rate than lumber prices and seriously threatened district operations.[32]

## The Cost-Price Squeeze

Although the average price that Interior lumbermen received for dressed Douglas fir dimension lumber increased from 1948 to 1956 at a higher rate than Canadian forest products in general, the rate of increase fell well behind the average annual rate of cost increases for machinery and equipment replacement, wages, and the price of the timber supply, or stumpage (see Table 2.1). In addition, district lumbermen,

Table 2.1: COMPARATIVE PRICE INDEXES FOR B.C. INTERIOR DOUGLAS FIR, CANADIAN CAPITAL STOCK, NORTHERN B.C. INTERIOR WAGES AND KAMLOOPS DISTRICT STUMPAGE, 1947-1956. (1949=100)

| | Price Indexes for: | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Average Value per M f.b.m. of Interior Dressed Douglas Fir Lumber[1] | | Average Value per M f.b.m. of Kamloops District Douglas Fir Stumpage[2] | | Canadian Average for New Machinery and Equipment[3] | | Northern B.C. Interior Basic Employee Wages Based on a 260-Day Man-Year[4] | |
| | Price Index | Change from Previous Year | Price Index | Change from Previous Year | Price Index | Change from Previous Year | Price Index | Change from Previous Year |
| 1947 | - | | 77.3 | | 85.3 | | 77.4 | |
| | | | | +22.4 | | +10.7 | | + 7.6 |
| 1948 | 100.9 | | 99.7 | | 96.0 | | 85.0 | |
| | | - 0.9 | | + 0.3 | | + 4.0 | | +15.0 |
| 1949 | 100.0 | | 100.0 | | 100.0 | | 100.0 | |
| | | +20.8 | | +28.6 | | + 5.5 | | + 4.3 |
| 1950 | 120.8 | | 128.6 | | 105.5 | | 104.3 | |
| | | + 8.9 | | +88.2 | | +12.7 | | +15.4 |
| 1951 | 129.7 | | 216.8 | | 118.2 | | 119.7 | |
| | | + 7.7 | | - 0.3 | | + 8.6 | | +13.6 |
| 1952 | 137.4 | | 216.5 | | 126.8 | | 133.3 | |
| | | -10.3 | | -36.9 | | + 4.8 | | + 1.9 |
| 1953 | 127.1 | | 179.6 | | 131.6 | | 135.2 | |
| | | - 0.6 | | - 8.8 | | - 0.2 | | + 4.7 |
| 1954 | 126.5 | | 170.8 | | 131.4 | | 139.9 | |
| | | + 6.8 | | +145.7 | | + 4.0 | | + 2.9 |
| 1955 | 133.3 | | 316.5 | | 135.4 | | 142.8 | |
| | | - 2.8 | | +75.2 | | + 7.2 | | + 6.6 |
| 1956 | 130.5 | | 391.7 | | 142.6 | | 149.4 | |
| Average Rate of Increase of 10 Years 1947-1956: | | + 3.7 | | +34.9 | | + 6.4 | | + 8.0 |

[1]Calculated from data in: Dominion Bureau of Statistics--Industry and Merchandising Division, "British Columbia Lumber, by Kinds of Wood [1947 through 1956]," The Lumber Industry/L'Industrie du bois (Ottawa: The King's Printer [until 1953], The Queen's Printer [1953 onward], 1948 through 1957), [various pages].

[2]Calculated from data in: Department of Lands and Forests, "Average Stumpage Prices as Bid, by Species and Forest Districts on Saw-Timber Cruised on Timber Sales," Report of the Forest Service, [1974 through 1956] (Victoria: The King's Printer [until 1953], The Queen's Printer [1953 onward], 1948 through 1957), [various pages].

[3]"Implicit Price Indexes of Gross National Expenditures, 1946 to 1960," Historical Statistics of Canada (Toronto: The MacMillan Company of Canada, 1965), p. 305.

[4]Calculated from data in: "Bargaining History: Northern Interior B.C.," File: Outdated Master Agreements, Location: IWA Local 1-424 Office, Prince George, B.C. A 44-hour week at the base rate plus base vacation pay was used. B.C. woods operations employees had their wages calculated on the basis of a 260-day man year. Regarding the 260-day man-year, see Historical Statistics of Canada, M. C. Urquhart, ed., 1965, footnote 1, p. 331.

having just received direct access to the Canadian prairie and American mid-western and eastern markets through the PGE extension to Prince George's CNR terminal, were faced with a revalued Canadian dollar in 1952 which had raised the price of Canadian lumber by seven percent over the 1951 level in the American market without providing any additional revenues to the Cariboo producers (see Table 2.2.).[33]

The United States housing market became increasingly important to Canadian lumber manufacturers following the decline of the Canadian softwood shipments to the United Kingdom in 1948. However, British Columbia exported the largest volume and the highest percentage of its total lumber output to the United States of any Canadian lumber producing region; the proportion of lumber production exported to the United States from the British Columbia Interior was typically much higher than the proportion of Coastal production. Considering the high proportion of production volume Williams Lake lumbermen exported to the United States--often around the ninety percent level during the 1950s--the 1952 drastic revaluation of the Canadian dollar was a serious jolt at a time when United States housing lumber demand was declining sharply from its summer of 1950 peak. Therefore, although the average price of lumber was rising, the actual profits were often diminished or at times non-existent. The pressure of the cost-price squeeze demanded greater utilization per unit of wood volume and increased productivity which could only come, ultimately, from relatively rapid technological advance and increased administrative coordination.[34]

Table 2.2: THE EXCHANGE RATE OF THE CANADIAN DOLLAR EXPRESSED IN TERMS OF THE AMERICAN DOLLAR AND THE BRITISH POUND STERLING, 1947-1956.

| | $1 Canadian = __$ U.S. | $1 Canadian = __£ U.K. |
|---|---|---|
| 1947 | 0.9975 | .2481 |
| 1948 | 0.9975 | .2481 |
| 1949 | 0.9701 | .2659 |
| 1950 | 0.9181 | .3285 |
| 1951 | 0.9498 | .3344 |
| 1952 | 1.0216 | .3658 |
| 1953 | 1.0169 | .3615 |
| 1954 | 1.0275 | .3658 |
| 1955 | 1.0139 | .3631 |
| 1956 | 1.0162 | .3634 |

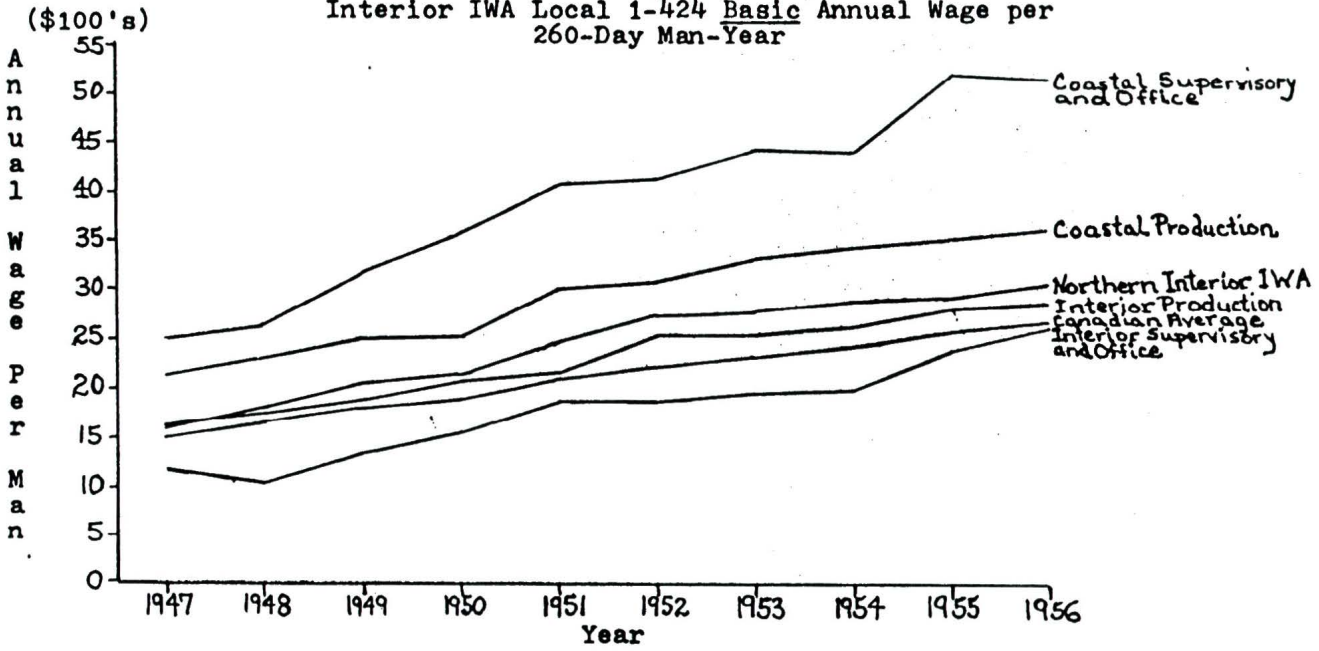
Source: "Foreign Exchange Rates, 1913 to 1977," Historical Statistics of Canada, second edition, M. C. Urquhart, ed. (Ottawa: Statistics Canada and the Social Science Federation of Canada, 1983), Series 562, 563 [no pagination].

Labour Relations

An acute labour shortage throughout the post-war period from 1947 through 1956 provided the International Woodworkers of America (IWA) with a fine opportunity for expansion in the Interior where conditions were harsher and wages lower than on the Coast (see Graph 2.3). However, that union was almost nonexistent in the Williams Lake District. The IWA Kamloops Local 1-417 representatives came to the district in August 1951 and organized Lignum and many, if not all, the mills supplying Lignum with rough lumber, but that was virtually the last attempt to organize the area until 1956. In 1955, the IWA transferred the district to the union's Prince George Local 1-424, and all the certifications, including some for mills that had gone out of business several years previously, were sent to that office. In 1956 the Prince George Local organized Netherlands Overseas at Macalister but apparently no other mills were certified. In at least one of the so-called union shops the mill employees were not aware that they were union members. Even Lignum had no shop steward and the men were never consulted about the demands they had. No bargaining sessions between union and management were held. The IWA brought the contract negotiated and signed elsewhere in their Local, and Lignum signed it. Presumably the other union operations did the same.[35]

While the IWA did not exist in the district except on paper, the union did set the wage standard for employees. Most mills paid the IWA wage scale because of their need to attract workers. There was also the fear that the union would get a strong foothold in the district, and

Graph 2.3: Average Annual Earnings per man in the B.C. Lumber Industry compared with Canadian Average Earnings in the Lumber industry and with the Northern Interior IWA Local 1-424 Basic Annual Wage per 260-Day Man-Year




Sources: Dominion Bureau of Statistics--Industry and Merchandising Division, The Lumber Industry/L'Industrie du bois [1947 to 1956] (Ottawa: The King's Printer,[to 1952] The Queen's Printer,[1953 to 1957]), [various pages]; "Bargaining History: Northern B.C.," File: Prince George IWA Local 1-424 Certifications Not Applicable, Outdated and Revised or Varied, (Location: IWA Local 1-424 Office, Prince George, B.C., [undated]), [no pagination].

demand employee fringe benefits that would force operators out of business. In that way the IWA had a tremendous influence on the wages workers received.[36]

During the period under review here, there was very little job action in the British Columbia forest industry apart from rashes of wildcat, or illegal strikes that hit individual mills for short periods and there was none in the Williams Lake District. The only major work stoppages in British Columbia were a forty-five-day strike affecting the Coastal operators in the summer of 1952 and a bitter three-month strike which hit many British Columbia Interior mills in 1953. During the Coastal strike, Interior operators received the benefit of extra orders to cover the immediate needs of buyers who ordinarily shopped at the Coast. While the long Interior strike crippled many lumber operations from Quesnel north to Prince George and in the British Columbia Southern Interior, Williams Lake area operations were not directly affected. The threat of secondary pickets from the Lignum Group's Quesnel Sawmills operation appearing at the Williams Lake planer never materialized. Lignum was redirecting Quesnel area rough lumber supplies to the Williams Lake planer which enraged the company's striking Quesnel IWA workers. However, the Williams Lake Lignum workers voted overwhelmingly against job action, and their Quesnel union brothers ultimately chose to respect that decision.[37]

A lengthy forest industry strike on the American Pacific Coast during the summer of 1954, a period of rising lumber demand gave operators throughout British Columbia a tremendous amount of extra

orders. Unfortunately, the Williams Lake District was kept from reaping the full benefits of high lumber prices due to an abnormally rainy summer.[38]

The major problem in the Williams Lake District was the shortage of labour. Even by 1956 the workforce turnover was extremely high and finding replacements was a constant problem. While the lumber industry operated on a year-round basis, a significant portion of the workforce engaged in lumbering seasonally to subsidize income during slow periods in order to keep farming and ranching operations solvent.[39]

However, district employees were generally supportive and worked hard to help the lumbering concerns survive many rough periods. Despite extremely primitive working conditions and living accommodations, especially in the bush, the workers typically had few complaints and were a vital factor in the success of the industry as a whole. In general, from 1947 through 1956 labour was not just part of the mill's mechanical operations. The workers were typically consulted before the mill owners made decisions that influenced lumbering operations. Since the district's wage scale was kept in line with the prevailing Northern Interior IWA Local 1-424 agreements signed in Quesnel and employees were involved in the firms' decision-making process, there was little reason for workers to feel the need for direct union aid in gaining concessions from management.[40]

Each one of the combination of forces outlined in this chapter had a significant effect on the Williams Lake District lumber industry's marketplace. Nature often produced harsh conditions that disrupted the

district lumber production. Decisions by governments far removed from the district often militated against the lumber industry's well being. The housing market was, itself, one of the most volatile sectors in the economy and depended on numerous variables. The pressures imposed by transportation companies who desired to improve their own financial positions often frustrated the local lumbermen's hopes of becoming cost-competitive in new markets and threatened to price them out of existing ones. Costs that rose more rapidly than lumber prices frustrated local operators' attempts to improve their profit margins. The demands of workers in a time of labour scarcity sometimes benefited and sometimes threatened the local industry. Even individually those forces produced complex effects on lumber markets. When brought together in unpredictable patterns with other market influences, the resulting volatility made lumber operations in the Williams Lake District extremely precarious undertakings fraught with risk.

## Footnotes

[1]Gordon McG. Sloan, Commissioner, Transcripts, XVIII (1955), 8391-92; interviews with J. Stewart Smith, Gabe Pinette, Harold M. Jacobson, and Elton Elliot. Note: These references can be verified through many articles in the Williams Lake Tribune between 1947 and 1956.

[2]Gordon McG. Sloan, Commissioner, Transcripts, XVIII (1955), 8391-92; XXIII (1956), 10834; interviews with Gabe Pinette, Dollard Therrien, A. "Pete" Routley; "Summer Rains Hard on Lumbering," WLT (September 30, 1954), 1.

[3]Gordon McG. Sloan, Commissioner, Transcripts, XVIII (1955), 8391-92; interviews with Reg Norberg, O. J. "Whitey" Andersen, and Herb Gardner. Note: There are many articles in the Williams Lake Tribune citing specific fire outbreaks in the district.

[4]Gordon McG. Sloan, Commissioner, Transcripts, XVIII (1955), 8391-92; interviews with Gabe Pinette, Dollard Therrien, and Harold M. Jacobson.

[5]Gordon McG. Sloan, Commissioner, Transcripts, XVIII (1955), 8391, 8579-80; interviews with Elton Elliot, Harold M. Jacobson, Gabe Pinette, Dollard Therrien, and Reg Norberg; "Lumbermen Fear Small Operators May Lose Out on Proposed Timber Sale," WLT (October 6, 1955), 1; "A Matter of Economics," WLT (October 6, 1955), 2; "Trade Group Wants Assurance Small Lumber Operators will be Given a Chance at Timber," WLT (October 20, 1955), 1; "Winter Damaged Forest will not be Sold This Spring," WLT (March 1, 1956), 1.

[6]Gordon McG. Sloan, Commissioner, Transcripts, XVIII (1955), 8388-92, 8481-83.

[7]Ibid., 8429-30, 8481-83.

[8]Interviews with O. J. "Whitey" Andersen, Reg Norberg, Fred Linde, Gabe Pinette, Dollard Therrien, and Harold M. Jacobson.

[9]"U.S. Economist Looks at Canada's Coming Crisis," BCL (March 1947), 100.

[10]"Sharp U.S. Lumber Price Rise Threatens Market," BCL (March 1947), 68; "Adverse Exchange Situation Renders Trade Prospects Meagre Western Lumber Manufacturers Told at Annual Meeting," BCL (may 1947), 49-50; "News from Overseas Markets," BCL (May 1947), 70; "The Industry Today," BCL (July 1947), 51.

[11]"The Canadian Dollar," BCL (June 1947), 116, 118; "Believes

in More Immigration for British Columbia," WLT (September 4, 1947), 6; "Sawmills Face Tougher Markets," WLT (December 4, 1947), 4; "News from Overseas Markets," BCL (June 1947 through December 1949) [various pages]; "A Stitch in Time," WLT (April 15, 1948), 2.

[12]"News from Overseas Markets," BCL (April 1948), 89-90; (June 1948), 87-89; (September 1948), 91-92; (November 1948), 93; (December 1948), 84; (May 1949), 93-94.

[13]"News from Overseas Markets," BCL (November 1949), 74; "Foreign Exchange Rates, 1913 to 1977, Historical Statistics of Canada, second edition, M. C. Urquhart, editor (Ottawa: Statistics Canada and the Social Science Federation of Canada, 1983), Series J560-J563 [no pagination]. Note: The United Kingdom market generally demanded odd lengths, such as 7 feet, 9 feet, and so forth, of 3-inch thick lumber, while the North American market typically called for even lengths, such as 4 feet, 6 feet, 8 feet and so forth, of 2-inch thick lumber. The British market generally demanded rough lumber, while the American market required dressed lumber with much more emphasis on grading standards than the United Kingdom. Therefore, the change over to manufacturing for the United States market involved major adjustments to production. Sources for note: "Outlook Gloomy as Cripps Fails to Buy More Lumber," WLT (September 30, 1948), 4; interviews with J. Stewart Smith and Harold M. Jacobson.

[14]Maurice B. Dix, "With the Retailers," BCL (August 1950), 38; "Would Revaluation be Premature?" BCL (August 1950), 80.

[15]"News from Overseas Buyers," BCL (October 1950), 37; "Foreign Exchange Rates, 1913 to 1917," Historical Statistics (1983), Series J560-J563 [no pagination].

[16]"News from Overseas Markets," BCL (January 1951), 65; Maurice B. Dix, "Credit in Housing," BCL (February 1951), 41; Maurice B. Dix, "With the Retailers," BCL (march 1951), 38; (may 1951), 38; (July 1951), 38; "The Industry Today," BCL (June 1951), 37.

[17]"Canada 'Living Beyond Her Means' in World Trade," BCL (June 1951), 163; Maurice B. Dix, "With the Retailers," BCL (August 1951), 46; "Defence Needs Cramp U.K. Imports," BCL (August 1951), 50; "The Industry Today," BCL (September 1951), 37; C. G. Tickle, "United Kingdom Newsletter," BCL (September 1951), 50.

[18]"Canada 'Living Beyond Her Means' in World Trade," BCL (June 1951), 163; C. G. Tickle, "United Kingdom Newsletter," BCL (February 1952), 40, 120; "Alberta Lumber Prices Lower," BCL (October 1952), 87.

[19]"Foreign Exchange Rates, 1913 to 1977," Historical Statistics (1983), Series J560-J563 [no pagination]; Hugh Weatherby,

"Natural Resources Conference," BCL (March 1952), 31; C. G. Tickle, "United Kingdom Newsletter," BCL (July 1952), 88; "The Industry Today," (August 1952), 35; (October 1952), 35.

[20]"Editorial," BCL (October 1953), 37; J. K. Nesbitt, "Victoria Report," BCL (October 1953), 88, 91; C. G. Tickle, "U.K. Newsletter," BCL (August 1954), 86, 88; (October 1954), 86, 88; (November 1954), 94, 96; (January 1955), 29; Donald MacKay, Empire of Wood, 177.

[21]C. G. Tickle, "U.K. Newsletter," BCL (February 1955), 100; (March 1955), 95; (May 1955), 130.

[22]"BCL Market Review," BCL (May 1955), 67-68; (June 1955), 124; (August 1955), 97; (September 1955), 96; (November 1955), 110; (December 1955), 92.

[23]"BCL Market Review," BCL (May 1956), 115; (June 1956), 93-94; (November 1956), 87; "Mill Operators Caught in a Slump," WLT (September 27, 1956), 1; "Lumber Market Levelling Off after Slump," WLT (October 25, 1956), 9.

[24]Interviews with Gabe Pinette, Dollard Therrien, J. Stewart Smith, Harold M. Jacobson, and Fred Linde; "District Mills Face Hard Winter as Market Slumps," WLT (September 24, 1953), 1; Derek A. White, Business Cycles in Canada: Staff Study 17, Economic Council of Canada (Ottawa: Economic Council of Canada, 1967), 220-1; Jack M. Guttentag, "The Short Cycle in Residential Construction, 1949-59," American Economic Review, 51 (June 1962), 275; Leo Grebler, Housing Issues in Economic Stabilization Policy: Occasional Paper 72 (New York: National Bureau of Economic Research, 1960), 5-15; Lawrence Berk Smith, The Postwar Canadian Housing and Residential Mortgage Markets and the Role of Government (Toronto: University of Toronto Press, 1974), 60-64, 67; Edward J. Chambers, "Canadian Business Cycles and Merchandise Exports," Journal of Economics nd Political Science, 24 (August 1958), 107. Note: Jacobson Bros. started up early in 1955 in the district and sold 50 to 60 percent of the company's production in Eastern Canada, but that was extremely unusual. There was some demand for longer length Douglas fir lumber, especially in Ontario, and Jacobson Bros. specialized in longer lengths. However, the basic demand in Eastern Canada was for "white woods" like spruce, pine, and balsam fir (SPF). The district lumbermen did not produce SPF lumber until a later period because there was no SPF demand in the American Market. About 90 percent of district output was Douglas fir lumber for the U.S. market.

[25]Joseph H. Chung, Cyclical Stability in Residential Construction in Canada (Ottawa: Economic Council of Canada, 1967), 44-48; William W. Alberts, "Business Cycles, Residential Construction Cycles and the Mortgage Markets," Journal of Political Economy, 70 (June 1962), 274, 278-81, 293-94; Anna J. Schwartz, "Short Term Targets of

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[26]Sherman J. Maisal, "A Theory of Fluctuations," 359-61.

[27]William Alberts, "Business Cycles," 263; Leo Grebler, Housing Issues, 6-7; Jack M. Guttentag, "The Short Cycle," 283, 287-91, 296-97; Harold G. Vatter, The U.S. Economy in the 1950s: An Economic History (New York: W. W. Norton & Company, 1963), 79; Lawrence Berk Smith, Mortgage Markets, 22-24; Joseph H. Chung, Cyclical Instability, 8-11; Derek A. White, Business Cycles in Canada, 220, 225.

[28]George S. Nagle, "Economics and Public Policy in the Forestry Sector of British Columbia," (Ph.D. thesis, Yale University, 1970), pp. 161-67; Robert Eccles, "The Quasifirm in the Construction Industry," Journal of Economic Behavior and Organization, 2 (December 1981), 335-58.

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[32]"U.K. Newsletter," BCL (December 1953), 96, 98; "Market Review," BCL (Febreuary 1955), 67; interview with J. Stewart Smith.

[33]"Implicit Price Indexes of GNE for New Machinery and Equipment," Historical Statistics of Canada, M. C. Urquhart, editor (Toronto: The Macmillan Company of Canada, 1965), 305; "Bargaining History: Northern B.C.," File: Outdated Master Agreements between Forest Products Industries Interior Region, B.C. and the International Woodworkers of America CIO-CCL [Location: IWA Local 1-424, Prince

George, B.C. (undated)]; Dominion Bureau of Statistics--Industry and Merchandising Division, "Lumber Production in M. f.b.m. and its Value by Region," The Lumber Industry/L'Industrie du bois [1947 to 1956] (Ottawa: The King's Printer, [1948 to 1952], The Queen's Printer [1953 to 1957], [various pages]; Department of Lands and Forests, "Average Stumpage Prices Bid, by Species and Forest Districts, on Sawn-Timber Cruised on Timber Sales," Report of the Forest Service for the Year Ended December 31st [1947 to 1956] (Victoria: The King's Printer [1948 to 1951], The Queen's Printer [1953 to 1957], [various pages]; "Foreign Exchange Rates 1913 to 1977," Historical Statistics of Canada (1983), J560-J567 [no pagination].

[34]Hugh Weatherby, "Natural Resources Conference," BCL (March 1952), 31; interviews with Gabe Pinette, Dollard Therrien, J. Stewart Smith, and Reg Norberg; "District Mills Face Hard Winter as Market Slumps," WLT (September 24, 1953), 1.

[35]"Certifications at Williams Lake," File: Prince George IWA Local 1-424 Certifications Not Applicable, Outdated and Revised or Varied (Location: IWA Local 1-424 Office, Prince George, B.C. [undated]. Note: Although this document is undated, it does indicate all certifications that took place on August 1951, which was apparently the last time the union organized in the district until 1956. W. H. Sands, Labour Relations Board Chairman, "Certificate--Labour Relations Act--Form 5," File: Local 1-424 Outdated Certifications. Note: The above letter transfers all August 1951 certifications the Kamloops IWA Local 1-417 jurisdiction to that of the Prince George IWA Local 1-424. However, Chilco Sawmills had burned down in 1952, I. J. Bryce & A. Woehler had broken up their partnership in 1952, A. V. Smith was no longer in business, and Y. S. Sawmills had sold out in 1954. This can only led to the conclusion that the union had virtually no contact with the district mills. Interviews with Stanley Benson, A. "Pete" Routley, J. Stewart Smith, Roy Crosina, Toby Mogensen, and Jerry Le Bourdais.

[36]Interviews with Fred Linde, Harold M. Jacobson, Roy Crosina, A. "Pete" Routley, and Jerry Le Bourdais.

[37]"Bargaining History: Northern B.C.," File: Outdated Master Agreements [undated]; "The Industry Today, " BCL (August 1952), 35; "U.K. Newsletter," BCL (July 1952), 88; "Strike Question May be Settled at Coast Today," WLT (October 22, 1953), 1; "No Change Reported in Lumber Picture," WLT (November 5, 1953), 1; "Union Operators Agree at Quesnel," WLT (November 5, 1953), 1; interviews with Gabe Pinette, Dollard Therrien, Jerry Le Bourdais, Roy Crosina, A. "Pete" Routley, Toby Mogensen, and J. Stewart Smith.

[38]"Lumber Picture Bright as Prices Show Increase," WLT (July 1, 1954), 1; "U.K. Newsletter," BCL (August 1954), 86, 88; "Summer Rains Hard on Lumbering," WLT (September 30, 1954), 1; Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10834.

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# CHAPTER THREE

## ENTREPRENEURIAL STRATEGY AND CORPORATE STRUCTURE

Between 1947 and 1956 the Williams Lake District lumber industry grew from a minor, predominantly seasonal, economic activity into a permanent, full-time industrial sector of great importance to the Cariboo region. While the local industry did not have any significant impact on the British Columbia economy, it did represent one important type of growth that occurred in the provincial forest industry during the post-World War II years. The influences which affected the provincial industry were felt in the Williams Lake District and served to shape the structure of the district's lumbering activity. Entrepreneurial strategies for buffering the effects of increasing supply shortages and continual market fluctuations developed and, in turn, patterned the type of economic relationships that formed among the industry's participants. Through those mutually beneficial business relationships a simulated corporate production and distribution structure emerged as the dominant form of enterprise in the local lumber sector. The production and distribution system of the Williams Lake District lumber industry constitutes the unit of analysis for this chapter.

The organizational structure that had formed in the Williams Lake District lumber industry by 1956 suggests that the model created by Alfred D. Chandler, Jr. to explain the modern corporate structure's

development requires revision. Chandler's thesis is that modern corporate enterprise arose in capital-intensive industries as a response to technological changes. In order to coordinate the flow of goods efficiently from the resource base through increasingly complex technological stages of production and distribution, business enterprise became multiunit and multifunctional. The final stage of development was the structurally mature Multidivisional enterprise, which was a hierarchical, administratively coordinated, functionally diversified production and distribution structure that spanned several product lines, brands, or geographical regions.[1]

What distinguished the Multidivisional structure from its predecessor, the centralized, functionally departmentalized Unitary form of enterprise was a general office of senior executives and advisory personnel, semi-autonomous operating divisions, and a hierarchical rationalization of the decision-making process. The day-to-day operating decisions were carried out by the divisions' chief executives, who were middle managers. The top managers of the general office were thus freed from current operations, leaving them the opportunity to focus on monitoring divisional performance, resource allocation among the divisions, and strategic planning for the enterprise as a whole. Through the senior executives' ability to organize separable economic activities by product, brand, or geographical region, to monitor the efficiency of those divisions, to provide incentive and control mechanisms, to allocate cash flows to the most profitable uses, and to carry out strategic planning, such as diversification, acquisition, and

divesture of assets, the Multidivisional structure became the dominant form of modern business enterprise.[2]

The rationalization of decision-making in an administrative hierarchy was the Multidivisional structure's most powerful feature. The short-run tactical decisions required to adapt resources, facilities and personnel to short-term market conditions were left to the middle managers who ran the operating divisions. The top managers of the general office focussed on the long-run objectives of the enterprise as a whole and, to that end, improved the mechanisms for monitoring divisional performance, for allocating resources according to performance, and for applying incentives and controls in ways that improved divisional performance.[3]

Chandler says that the modern business enterprise replaced the traditional single-function firm when administrative coordination through a managerial hierarchy allowed greater productivity at lower costs and higher profits than did the "invisible hand" coordination of market mechanisms. Through the rationalization of decision-making in a managerial hierarchy the flow of goods and services was coordinated in ways that utilized personnel and facilities more intensively in both production and distribution. As a result, the daily flow of goods through the production and distribution facilities, which Chandler calls throughput, increased and unit costs were lowered. Making transactions between the enterprise's business units routine reduced the costs of negotiating contracts and formulating decisions. Finally, the structure linked purchasing, production and distribution and, by eliminating

intermediate product markets, it reduced the costs of acquiring accurate market information.[4]

Chandler contends that the older, technologically simple sectors like the lumber industry provided little opportunity for cost reductions through forward integration into distribution, which he designates as the first stage of development in modern corporate business. The technology used in those industries did not require large volumes of throughput in order to lower unit costs. Coordination of those daily flows was not technically complex and distribution did not require specialized skills and facilities. Instead, cost reductions in labour-intensive industries were achieved through the usurpation of wholesalers by mass retailers who coordinated the material flows from the manufacturer to the consumer, and who achieved efficient scale and scope economies by handling a number of different product lines from a number of different manufacturers. Therefore the Multidivisional structure did not emerge in labour-intensive industries and the small, single-function firm continued to compete vigorously and prosper.[5]

Contrary to Chandler's thesis that technology determined structure, the Multidivisional form of enterprise emerged in the technologically simple Williams Lake District lumber industry, albeit informally and on a much smaller scale, as a response to market forces. Chandler limits his research to the largest of formally-integrated businesses and analyzing the Williams Lake District in terms of formally-integrated, legally-unified structures lends credence to Chandler's argument. However, it does not accurately explain the dominant structure through

which lumber production and distribution was carried out. Although single-function firms did prosper and compete vigorously, that was only achieved through a pooling of financial, physical, and human resources within a quasi-Multidivisional structure. The production and distribution system that was formed from the mutually beneficial agreements among owner-operators of the industrial business units represents the correct unit of analysis, because it was the organization of that economic system which created a viable lumber sector in the Williams Lake District.[6]

Chandler argues that the modern corporation required "a new sub-species of economic man," the professional salaried managers, to carry out the administrative coordination and allocation functions. What apparently distinguished management by salaried employees from management by owners was that career managers preferred policies that "favored the long-term stability and growth of their enterprises to those that maximized current profits." Wanting to preserve and expand the prestige of their positions, career managers were more willing to reinvest profits in the enterprise rather than pay them out as dividends. Keeping the enterprise fully employed, and protecting sources of supply and outlets were more important than providing owners with the highest possible returns on capital investments.[7]

Furthermore, Chandler contends that it was through the career managers, imbued with the goal of long-term survival and growth of their enterprises, that Multidivisional enterprise was formed. However, the quasi-Multidivisional structure of the nascent Williams Lake District

lumber industry was based on decision-making by owner-operators who were also concerned with the long-term health of their businesses. That concern for long-term survival and growth of enterprise, whether carried out by salaried managers on behalf of owners or by the owners themselves, is entrepreneurial. The entrepreneurial response is not a rare occurrence that disrupts the market equilibrium through the development of new combinations, as described by Schumpeter's notion of "creative destruction." It involves numerous decisions over a period of time, each aimed at enhancing the enterprise's capacity to survive over the long term in a market characterized by uncertainty.[8]

In defining entrepreneurship, an important distinction is to be made between the short-term profit maximizer, or opportunist, who seeks quick windfall profits in a fly-by-night operation, and the true entrepreneur, who plans, coordinates, allocates, supervises and innovates, based on judgements derived from a longer-term view. The opportunist is a human agent who is motivated by short-term profits based on rapid turnover of capital investments. There is little, if any, motivation for the opportunist to increase his exposure to risk by reinvesting profits in the enterprise to improve its capacity to operate in the market over the longer term. Once the opportunity for immediate profits ceases to exist, the opportunist abandons his operation and invests elsewhere. The enterpreneur is a human agent who seeks to enhance the long-term stability of his enterprise. While this involves reducing costs wherever possible, the entrepreneur is primarily concerned with internally generating financial capital as a residual of the production

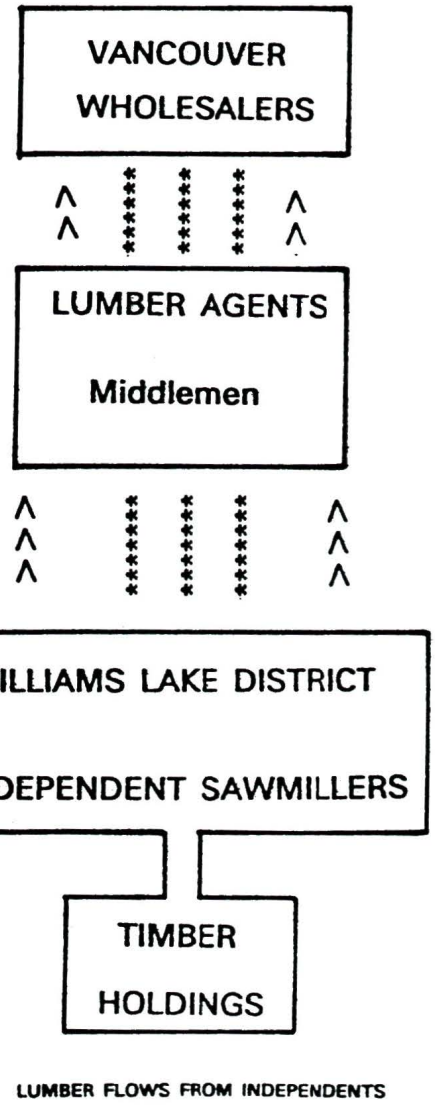
or distribution process. Therefore he is willing to take on the additional risk of reinvesting profits in methods and technology which will result in more cost-efficient production and distribution. In the short run, profit is merely a means to achieve the end rather than the end in itself. The entrepreneur as a mere short-term profit maximizer is a faulty notion; he is more appropriately seen as a cost minimizer who is willing to risk reinvesting profits when that investment is anticipated to significantly reduce production and distribution costs over the longer term.[9]

The quasi-Multidivisional form of industrial enterprise arose in the Williams Lake District lumber industry when long-term entrepreneurial decisions were able to override the short-term opportunistic desires for quick profits, thereby redirecting the local industry toward establishing a permanent economic base. Although a response to market conditions, the simulated corporate structure was not an inevitable outcome of market forces. It was the result of a particular pattern of human decision-making that was motivated by specific economic goals. It was only when entrepreneurial goals were able to dominate over opportunistic goals that the district structure was able to establish and grow.

Prior to 1948 there was no full-time export lumber industry in the two thousand square mile Williams Lake Ranger District (see Figure 3.1). Of the twenty-seven sawmills reported operating in 1947, most were crude, inexpensive sawmilling outfits run by ranchers who were clearing grazing land during the off-season of their cattle businesses. Sawmilling was carried out opportunistically as a means of obtaining

Figure 3.1:

Pre-1948 Williams Lake District Structure: Production Coordinated with Distribution Through Middlemen Purchasing on a Commission Basis for Wholesalers in an Industry of Independent Buyers and Sellers



short-term profits which were invested in ranching. Of the few operations that were intended to be full-time sawmills, all were small extremely marginal operations buoyed by the temporarily strong British demand for railway ties and mining pit props, and none reinvested profits in upgrading their facilities. The first truly entrepreneurial venture to establish in the district was the Lignum planer mill which opened in 1948.[10]

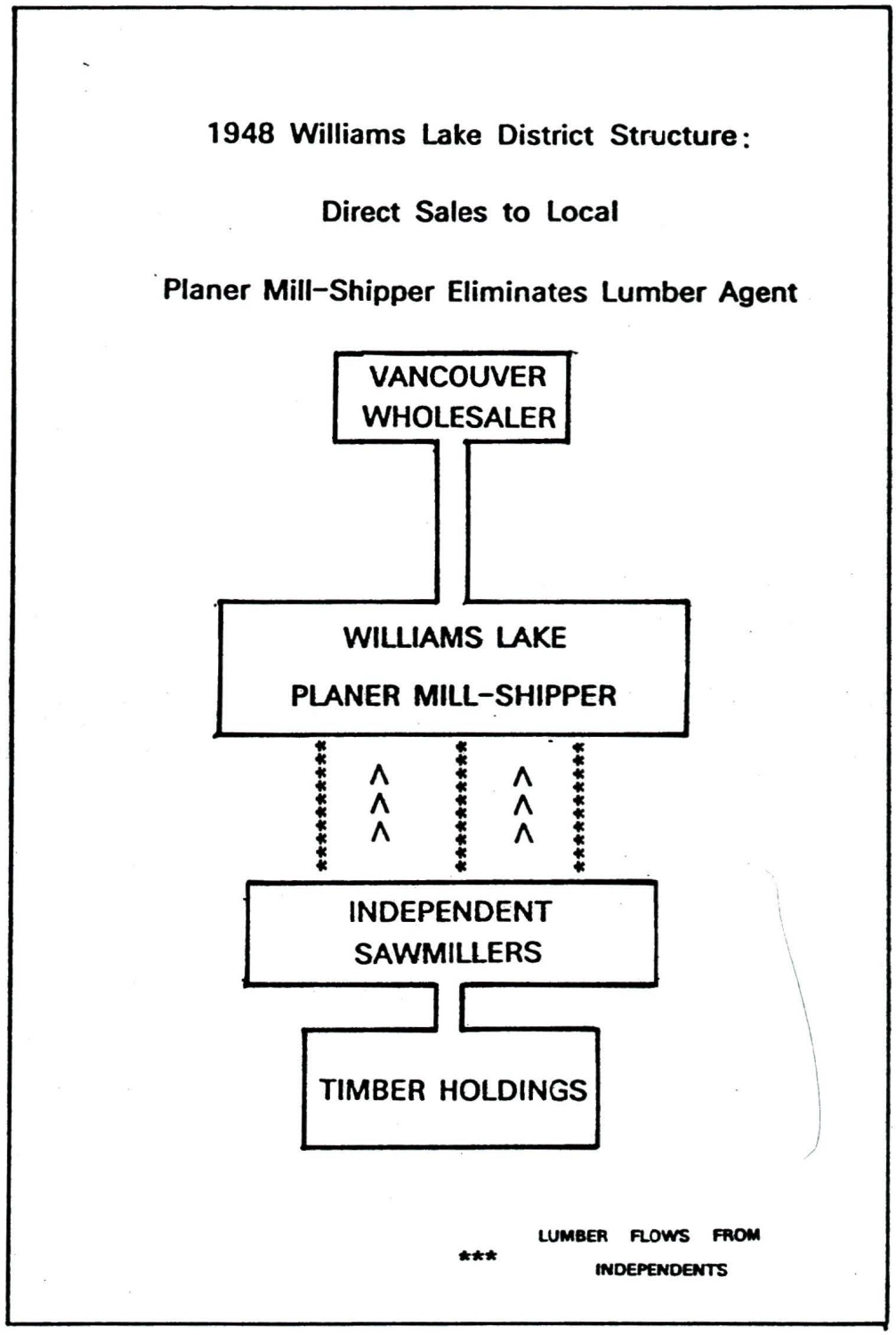
Lignum owner, Leslie Kerr, had significant experience in the lumber industry on an international scale. One of the third generation of lumbermen from a Yugoslavian family involved in the European hardwood industry, Kerr pursued academic training in business, receiving his doctoral degree from the University of Vienna. In the late 1920s he went to work for the Koerner brothers' lumber organization in Poland and remained with them when they sold out their European holdings and set up a new enterprise, Alaska White Pine, in British Columbia during the late 1930s. Acquiring extensive training in softwood lumber production management in what was one of the province's largest forest industry companies, Kerr decided to go out on his own. In 1946, with the limited financing available to him, Kerr established the Lignum wholesaling office in Vancouver and opened the Quesnel Division, which produced and shipped finished lumber from the predominantly spruce timber of that district. When those investments proved feasible, Kerr expanded into the Williams Lake District in 1948 to attempt lumber production and shipment utilizing the Douglas fir-based forests of that area.[11]

Lumber production and distribution consisted of four

technologically separable phases: logging, sawmilling, planing and shipping, and wholesaling. During the logging phase, the tree was "felled," bucked" into log lengths, "yarded" into log bundles and "skidded" or hauled to the nearby sawmill. There the logs were "scaled" to ascertain their wood volume for "stumpage" payments to the Forest Service. Once measured, the logs were "canted" into squared timber, "sawn" into rough-surfaced dimension boards called "rough lumber," and delivered to the planer mill-shipping facility located on railway access, known as "railhead." In the remanufacturing stage, the rough lumber was graded and tallied according to quality and wood volume by a provincial government agent. Once sorted, the lumber was planed and trimmed down to smooth-surfaced boards of precise dimensions called "finished lumber," and loaded onto railcars for shipment. The lumber was sold through the wholesaler who negotiated contracts and forecasted future demand based on current market information. While each phase represented a single-function firm, lumber production and distribution only became viable as a full-time economic activity when Lignum developed into a quasi-Multidivisional structure.

A planer mill-shipping facility represented the first stage of Lignum's expansion into the Williams Lake District (see Figure 3.2). With the falling British demand for rough lumber and the rising American demand for finished lumber, it was becoming increasingly necessary, in the late 1940s, to plane the lumber before shipment to market. Rather than sending rough lumber by rail to coastal planer mills, finishing it, then reloading it onto railcars for market, it was much more cost-

Figure 3.2:


1948 Williams Lake District Structure:
Direct Sales to Local
Planer Mill-Shipper Eliminates Lumber Agent
VANCOUVER WHOLESALER
WILLIAMS LAKE
PLANER MILL-SHIPPER
INDEPENDENT SAWMILLERS
TIMBER HOLDINGS
LUMBER FLOWS FROM INDEPENDENTS

efficient to locate a finishing plant at the initial point of shipment. There the excess bulk of the rough lumber was removed by the remanufacturing process, then the final product was sent directly to its destination.[12]

In addition to providing the essential lumber remanufacturing facilities, Lignum also reduced the costs of negotiating sales. Until Lignum appeared in the district, local operators negotiated with lumber agents who travelled through the British Columbia Interior, purchasing rough lumber on commission for Vancovuer wholesalers. Lignum virtually eliminated the role of the lumber agent by routinizing lumber exchange transactions, decreasing the lag between delivery and payment for the rough lumber supply, and providing current market information regarding which dimensions and lengths were drawing the best prices. Some of the cost advantages were passed on to the Williams Lake District sawmillers, who were quickly attracted to the local rough lumber buyer. However, the local sawmillers, with their marginal operations, were not able to withstand the unstable market conditions of the late 1940s.[13]

Of the two basic types of sawmillers who supplied the Lignum planer mill, most were opportunistic operators who went into the lumber business anticipating rapid returns on their investments, but who had very little knowledge about organizing and running a sawmill or about the lumber market. They lacked mechanical expertise, organizational skills and had no concept of planning for the years to come. Although exact proportions are not available, apparently most sawmillers ran crudely-equipped ventures which were based on the hope of immediate

profits from minimal investments. However, a few were entrepreneurial operators who came to the local industry with the idea of starting up a sawmill that would, in time, become a stable and lucrative enterprise. Having a relatively good understanding of the industry's demands, entrepreneurial operators were more willing to conserve profits from stronger markets for reinvestment in their firms as working capital when markets slackened. However, they also had crude sawing equipment and were unable to build up the necessary capital to reinvest in better milling technology. The volatile lumber markets of the late 1940s threatened the survival of even the most organized sawmillers.[14]

Although Kerr recognized the district's profit potential over the longer term, the inconsistent supplies of rough lumber were disrupting the efficiency of his planer mill and wholesaling operations. When supplies dwindled and some of Lignum's most reliable sawmillers sold out and left the area, Kerr decided to reorganize the Williams Lake Division. The changes included a more sophisticated system of payment and financing for the sawmillers, the establishment of a company-owned feeder sawmill through which district production costs were gauged, and an expansion of company assets into timber holdings. Each of the changes had important implications for the long-term health of Lignum in particular and the local industry generally.[15]

Operating in the lumber industry, with its volatile demand, was a risky venture in itself. Each additional capital investment served to increase that risk. For the small sawmilling ventures of the Williams Lake District, the startup costs included purchasing milling equipment,

acquiring timber from the government, publicly advertising the timber sale, providing an initial deposit that covered the government estimates for cleanup and forest management on the sale, and developing road access to the timber sale. The ongoing operating costs were added on to the initial capital outlay. When the Timber Sale, which was a three to five year timber licence, was logged off, or when equipment broke down and had to be replaced, another period of significantly increased capital outlays was encountered. The unstable markets made the additional risk too much for full-time sawmillers to bear.

District lumbermen could not obtain credit from banks or other financial institutions to tide them through economically straining periods. In part, that was the result of the high bankruptcy rate in the local industry. Perhaps more significant was the tendency of lumber markets to vary contracyclically with the general business cycle. During stringent monetary periods, when the North American economy was booming and the demand for money was high, mortgage interest rates were unattractive and the housing industry sagged. In competition with prospering businesses for limited financial reserves, the faltering lumbering operations were among the poorest credit risks for lending institutions.[17]

Realizing that simply paying the sawmillers a piece rate based on current market values was not enough to support full-time sawmilling in the district, Kerr developed a more flexible financing system and a more equitable method of sharing the risk. By 1950 Lignum had instituted a policy of offering loans to individual sawmillers to cover

larger capital outlays for timber, equipment, or other extenuating expenses. In return, the sawmillers agreed to sell all their rough lumber to the Lignum planer mill until the loans were paid off. The sawmiller was paid the current price for rough lumber minus an agreed deduction per thousand board feet of lumber to pay off the loan acquired from Lignum. Virtually anyone could apply to be "bankrolled" by Lignum and during the initial years most applications were approved.[18]

Sawmillers who did not wish to take on the additional risk of purchasing Timber Sales were given cutting contracts on Timber Sales purchased by Lignum. Those sawmillers received the market price paid to independent district sawmillers minus the cost of timber charges levied by the Forest Service for the wood volume and forest management. Again, the deductions were made on the sawmillers' production at a set rate per thousand board feet. Those sawmillers were basically contract labour hired on a piece rate that fluctuated with market conditions.[19]

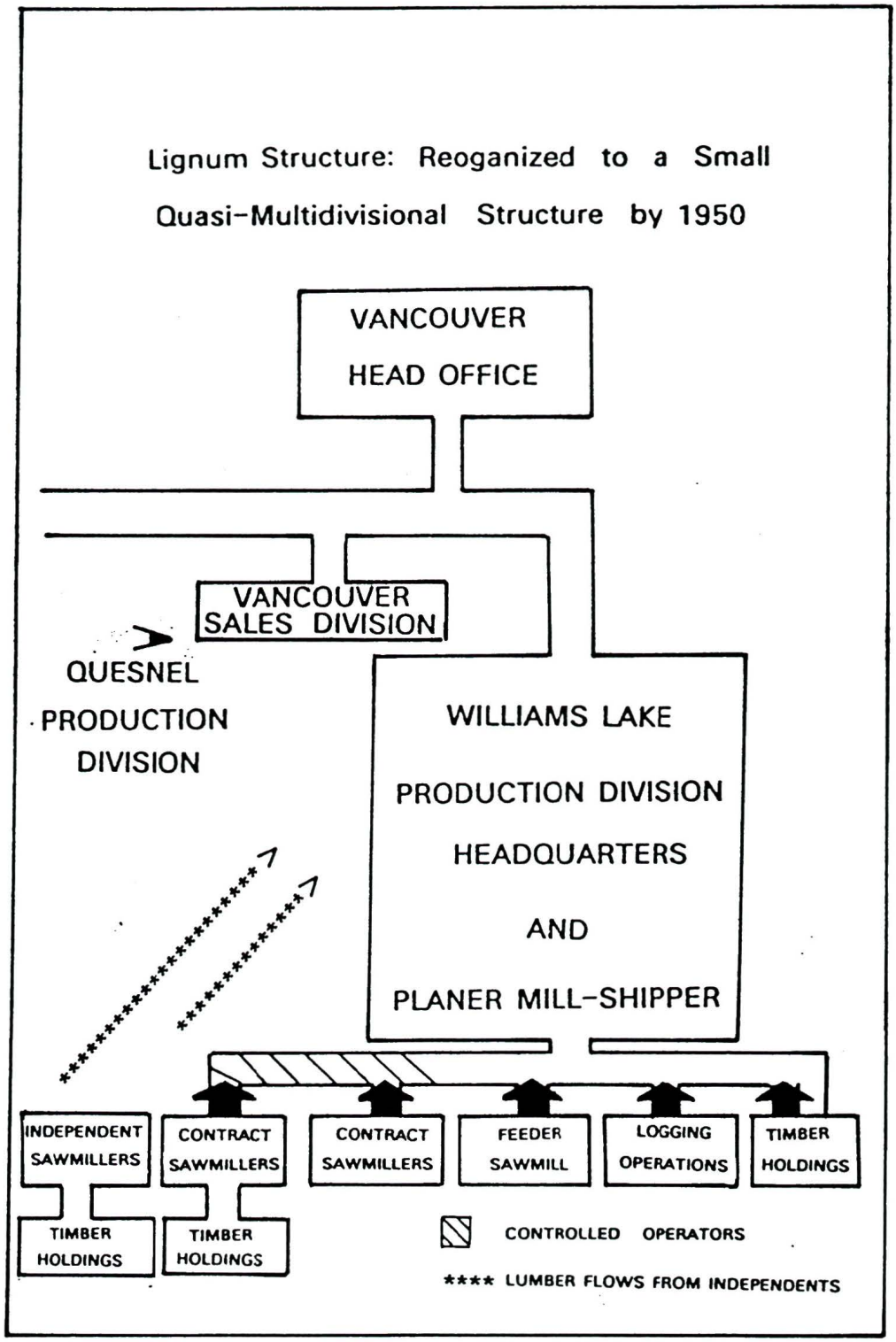
The third type of sawmiller was the independent supplier who owned his timber sale and equipment outright. Kerr offered those sawmillers the option of taking out loans to tide them through financially straining periods, using their timber holdings and sawmilling equipment as collateral. The method of payment was the same as in the other two instances. All sawmillers could obtain advances on the lumber inventory that was delivered to the planer mill awaiting processing. Payment was not officially made until after the lumber was dressed in the planer mill, but the sawmiller's rough lumber inventory was considered collateral for the advance. The system of loans and advances that

Lignum established provided the sawmillers with some capacity to buffer themselves from the volatile marketplace. Furthermore, the payments on loans were varied according to market conditions, such that deductions decreased during downturns and increased during periods of stronger prices. The flexibility in loan payments allowed the sawmillers to cope with the inevitable market fluctuations and reduced the uncertainty involved in running a small sawmilling business. Through the company-owned sawmill, Kerr was able to determine the costs of production in the district and gauge the loan payments that the local sawmillers could sustain.[20]

The result of these informal, mutually beneficial, bilateral trading agreements was the creation of a quasi-corporate structure (see Figure 3.3). For Lignum, the more flexible system of payment and credit was an effective way of establishing and organizing the local industry very rapidly as a full-time lumbering sector. In addition, it was a method of determining which sawmillers were reliable, relatively efficient suppliers who were able to serve the long-term interests of Lignum's Williams Lake Division. The inefficient, fly-by-night operators were left to their own devices once they had completed their initial contracts, and usually fell into bankruptcy through their inability to cope with market conditions.[21]

While Lignum unquestionably lost money through operators failing and leaving behind unpaid loans with useless, broken-down equipment as collateral, Lignum did retain the timber rights. Furthermore, any losses that Lignum incurred were undoubtedly less than the costs of

Figure 3.3:


Lignum Structure: Reoganized to a Small
Quasi-Multidivisional Structure by 1950
VANCOUVER
HEAD OFFICE
VANCOUVER
SALES DIVISION
QUESNEL
PRODUCTION
DIVISION
WILLIAMS LAKE
PRODUCTION DIVISION
HEADQUARTERS
AND
PLANER MILL-SHIPPER
INDEPENDENT
SAWMILLERS
CONTRACT
SAWMILLERS
CONTRACT
SAWMILLERS
FEEDER
SAWMILL
LOGGING
OPERATIONS
TIMBER
HOLDINGS
TIMBER
HOLDINGS
TIMBER
HOLDINGS
CONTROLLED OPERATORS
**** LUMBER FLOWS FROM INDEPENDENTS

equipment depreciation and training of workers that the option of formal integration through direct investment in company-owned sawmills provided. Lignum effectively carried the short-term risk of portfolio investments in suppliers' operations. By 1955 that investment had reached $157,000 in loans and advances and another $100,000 in outstanding timber deposits for thirty-three contractors and partially financed operators in the Williams Lake District and twenty-five in the Quesnel District.[22]

In return, Lignum reduced the risk on over $700,000 of capital investments in the company-owned milling and wholesaling assets by gaining greater control over the supplies required to ensure efficient utilization of company assets. Moreover, the resulting production structure of the Williams Lake Division was flexible, in that market signals remained an effective means of shutting down less cost-efficient sawmills during adverse market conditions. Through an ongoing assessment of the planer mill records by the division management, performance of individual sawmillers was determined and financing was increasingly allocated to high-return suppliers, according to Lignum head office directives. By rewarding efficiency, Kerr encouraged entrepreneurial sawmillers who valued the long-term health of their ventures and who were interested in reinvesting their production residual in technology and methods that reduced manufacturing costs.[23]

As the bilateral trading arrangment became a familiar and dependable method of exchange in the district, mutual trust developed between the sawmillers and the Lignum planer mill management. Trade

became more personal, through constant repetition and, as a result, the costs of lumber exchanges and negotiating credit and advances became negligible. The sawmillers were able to finance technological innovations and expansions yet remain economically viable during the expansion phase by paying off the costs in manageable installments that accounted for market conditions. It was primarily through Lignum's method of financial resource allocation that the local industry's quasi-corporate structure arose.[24]

Why that structure arose requires closer analysis of the local sawmillers' production patterns. Virtually all sawmills, with the exception of Lignum's feeder mill, were run by their owners, who contributed their own labour in the production process. Although the proportion totally run by owners' labour and that which used hired labour as well cannot be determined, it is clear that owners provided a very significant amount of the production labour. The particular work-force structure caused an apparently paradoxical reaction to price signals. Rather than decreasing output during downturns, the entrepreneurial sawmillers tended to cover their fixed costs by working extra shifts themselves. By using "free" labour to increase productivity temporarily, sawmillers covered costs and avoided laying off hired workers who were in extremely short supply throughout the late 1940s and 1950s. Laying off workers or cutting their wages so that they quit their jobs and went elsewhere would have endangered the long-term survival of the sawmill. Therefore, the cost of hired labour could not be varied with market conditions. Sawmillers also personally ran extra

shifts during peak market periods to acquire reinvestment capital for better milling technology. Clearly, the Lignum financing arrangements, by reducing the effects of market signals on sawmillers, helped to stabilize the supply received by the finishing plant. Reducing loan payments during downturns, increasing payments during boom markets, and providing relatively easy credit reduced the effects of price fluctuations and stabilized the flow of rough lumber to the planer mill.[26]

The Lignum system's flexibility further reduced the risk of lumber production by providing several different methods of operating a sawmilling business. If a supplier chose to purchase his own Timber Sale, then found the costs of production prohibitive, he could obtain a loan from Lignum, using his timber as collateral, or he could leave the sale until market conditions improved and operate as a contractor on a Lignum Timber Sale. Contract sawmillers could become independents through accumulating capital from operating on Lignum sales, then investing in timber of their own. This flexible system allowed sawmillers to move from one type of relationship into another, depending on market conditions and the personal preference of the operator.[26]

Rather than seeking to increase the dependency of suppliers on Lignum, Leslie Kerr wanted greater autonomy for the rough lumber producers. In a brief to a 1956 Royal Commission hearing Kerr argued that small operators should be able to acquire long-term timber tenures. Without guaranteed access to the timber resource for an extended period, the small lumberman was disadvantaged compared with larger lumber producers. For small mill owners like Lignum's contractors, who were

unable to finance the forest management requirements, Kerr suggested that large companies act as guarantors, posting a bond or some other form of security with the Forest Service on the small operator's behalf, to ensure the forestry was done on the logged off areas. The timber tenure that Kerr proposed could not be transferred through the sale of a licencee's assets and could not be turned over to the guarantor. It would be only tenable while the small operator remained in business. Kerr's proposed timber licencing system reaffirms his claim that having suppliers completely "hogtied" was not economically feasible. He was concerned about the potential elimination of small operators through an overdependence on large concerns. It was in Lignum's interest to maintain a mutually beneficial flexible structure composed of semi-autonomous units run by their owners.[27]

In 1953, Lignum still handled ninety percent of the district output. Of the 28.6 million board feet shipped by Lignum, twenty percent was from the company-owned feeder mill, twenty-five percent was from independents, and fifty-five percent was from suppliers who were either straight contractors or under some form of credit obligation to Lignum. While Lignum's share of district shipments was reduced to forty percent in 1954 due to competition from other planer mill-shippers, Lignum's actual output increased to 30-million board feet, of which nineteen percent came from the company-owned mill, twenty-one percent from independents and sixty percent from controlled operations. The proportions remained basically the same in 1955, but output had increased by roughly another 5-million board feet. However, the opera-

tors within each of the two categories of suppliers were changing under the flexible system. Independent operators became controlled operators and controlled operators became independents in what was a continually dynamic system. The important point is that a significant proportion of Lignum's suppliers remained independent, and some were totally dependent.[28]

Prices paid to independent sawmillers dictated the price that suppliers under contract accepted as payment, before deductions were made for the wood volume or loans obtained from Lignum. Therefore, despite the number of sawmillers who were financially indebted to Lignum at any given time, the price for rough lumber remained at competitive levels and the suppliers were content with the financial arrangements that Lignum offered. While smaller planer mills moved in to challenge Lignum's dominant position during the 1950s and often gave slightly higher prices over the short term to attract business away from Lignum, they could not offer the kind of credit and contracting opportunities that were available to Lignum suppliers. Lignum's most successful competitor was Allfir, a Seattle-based wholesaling company that opened a planer mill-shipping facility at the beginning of 1954. However, Allfir was unable to function efficiently and compete effectively for the rough lumber supplies until 1955, when the company assets were reorganized in the same way that Lignum's were in 1950 and the Lignum system of payment and credit was instituted. And while Allfir became a large operation and was a primary reason for Lignum's decline in supply market share from ninety percent of the district's output in 1953 to forty percent in

1954, Lignum's actual output increased during the next two years, indicating that Allfir had little effect on Lignum's business activities. The economic relationships that Lignum had built up were not disrupted, despite the growing number of remanufacturing plants which had reached six or seven by 1956. Of the three other large planer mill-shippers in the district by 1956, all had adopted the Lignum strategy and structure, and unlike the Quesnel District planer mills, did not engage in price wars to acquire rough lumber suppliers.[29]

While cut-throat competition did not materialize among the district remanufacturing plants, the rapid expansion of the local sector in the mid-1950s created enormous demand pressure on the resource base. By 1955 the supply shortage had reached critical proportions, posing a severe threat to the long-term health of the Williams Lake District lumber industry, as a whole. Timber adjacent to public roads was no longer available and Timber Sales, which were located up to seventy miles hauling distance from the lumber distribution centre of Williams Lake, were being utilized by 1956. The continual penetration farther and farther into the district forest land escalated road building, Timber Sale development and hauling costs. Upgrading machinery and reorganizing timber holdings into larger tracts, based on long-term tenures which corresponded to the needs of more efficient mills, was essential to the future stability of the local industry. However, no long-term bilateral trading agreements could be struck with the provincial government and the risk involved in making large financial investments in capital stock without having any guarantee of a future timber

supply through which the investments could be amortized made it difficult for the entrepreneurial operator to see any gain in further increasing his financial ties to the district.[30]

For large operators, like Lignum and Allfir, who owned a number of Timber Sales, acquiring some overpriced sales could be balanced out by other sales that were purchased at more reasonable stumpage rates. Expensive sales were held for times when markets were particularly strong while operations were shifted to cheaper sales during market downturns. However, for the sawmiller or the small integrated operator, who could only finance one or two sales at a time, bidding a price that was only economically feasible during the industry's boom periods meant that his operation was no longer viable. Rather than face the increasing probability of bankruptcy through timber prices that the market could not support, entrepreneurial sawmill operators either sold out like their more opportunistic counterparts, or merged with one of the large lumber enterprises as contract sawmillers financed by the parent organization.[31]

While the problem of timber shortages was not resolved by 1956, the industry's reaction does suggest why rapid consolidation began to occur in the late 1950s and early 1960s. The merger movement was as much the choice of small operators seeking relief from the bidding wars at timber auctions as it was the desire of large lumber enterprises to maintain a timber supply that could support their long-term plans to increase efficiency through consolidation and reorganization of production patterns. Gaining control over the resource base was essential to

the survival of all district lumbermen over the long term, and the desire for control led to the mergers that had begun by 1956 and gained momentum in the later years of the decade.

Concern for their enterprises' long-term stability in the industry was the distinguishing feature of the economic agents who engineered the establishment and growth of the Williams Lake District lumber industry. When Lignum began operating in Williams Lake, Leslie Kerr was faced with a choice between pulling out of the district and suffering the minimal losses associated with the planer mill or exposing his company to additional risk by investing more capital and attempting to develop a viable Williams Lake Division that would become profitable over the longer term. Kerr's longer-term view that considered the local industry as a whole, led to the establishment of a full-time lumber sector that was cost-competitive in the international marketplace. Temporary booms in the lumber trade drew opportunistic operators to the district, lured by the short-term opportunities for high profits. However, the foundations of the local industry were built by entrepreneurial lumbermen who were willing to endure further exposure to short-term risk through reinvesting profits in better technology and new methods in order to enhance the long-range prospects of their enterprises in the district lumber trade.[32]

While the goal of entrepreneurship remained relatively constant from 1948 through 1956, the strategies used to achieve that goal did change. Initially, entrepreneurial rough-lumber producers used the planer mill-shipper's financing arrangements to accumulate capital for

reinvestment in better facilities while minimizing the risk involved during the upgrading process. Their strategy, in most cases, was to develop into independent operators associated with the planer mill-shipper, but gradually to reduce the financial ties of that relationship. During that stage of development, entrepreneurial rough-lumber producers began vertically integrating into remanufacturing and, in a few cases, into some lumber shipment and sales. However, an inevitable scarcity of timber developed because no effective method existed for limiting the entry of new industry participants during temporary market booms.[33]

The increasingly critical need for entrepreneurial operators to gain control over the resource base led to a strategic change in the district's structure. A shift toward more formal horizontal integration resulted from the entrepreneurial sawmillers' need to reduce the rapidly mounting risk involved in gaining access to the resource base. Formal long-term bilateral trading agreements with the large planer mill-shippers began to replace the informal exchange agreements of the previous years. Rather than operating as separate entities, the entrepreneurial rough-lumber producers began identifying with the remanufacturing and shipping operations in a more clearly defined subsidiary-parent relationship.[34]

Although a very informal structure in 1950, the quasi-Multidivisional form of enterprise became more formalized when Lignum suppliers shifted away from independent growth toward the more integrated relationship. The major impetus behind more formal integration

was the growing timber shortage and the resulting need for all business units to gain control over the resource base. Only a stable, continuous supply of timber would maintain a flow of lumber production and distribution which used personnel and facilities effectively and efficiently. Without access to the timber resource, the long-term survival of the entire production and distribution structure was endangered. While the structure did not change, the degree of control exerted by the head office over the operating units increased over time through the growing dependence of suppliers on Lignum to take formal control over timber resource allocation.[35]

While the method of control was related to the simulated corporate structure, it was carried out as a function within that structure rather than being inherent in that structure, as is often assumed. There are two basic types of control, behaviour control and output control. The former was carried out by the owner-manager or salaried manager of each individual business unit to ensure the effectiveness of that unit within the enterprise, the latter, by Lignum to ensure the effectiveness of the enterprise as a whole. The individual business units developed behaviour that maintained efficiency, such that the quality and quantity of output maximized the value of available inputs, which included physical, financial and human resources. At the sawmilling level owner-operators exerted control by setting the example of appropriate behaviour through their own activities as production labour, and by encouraging hired workers to participate in the decision-making process. Working extra shifts, taking lower wages than their employees

during stringent economic periods, reinvesting profits in ways that enhanced the mill's ability to survive, and giving hired labour a voice in day-to-day production decisions were methods used by owner-operators to develop an efficient form of workforce organization known as the relational team, in which:[36]

> . . . employees understand and are dedicated to the purposes of the firm, and employees [are] provided with considerable job security, which gives them assurance against exploitation . . . a sense that management and workers are in this together furthers all those purposes.[37]

Through giving their workers a sense of sharing in the goals of the firm sawmill owners were able to exact economic behaviour that maintained, and where possible, improved the volume and quality of lumber output.

The bushmill operators had a similar relationship with the planer mill-shipper, as did the planer mill-shipper and sales division with the head office. However, control was exerted by monitoring the output. Through resources allocated by the head office and distributed to the functional units by the division management, those units which maximized the quality and quantity of output from company inputs were rewarded for their economic performance. Since the nature of control was based on economic performance and submitting to that control brought monetary rewards, confidence in the system, as a whole, was maintained throughout the production and distribution hierarchy. The structure's head office had effectively calculated a profit-sharing system that rewarded efficiency and developed bonds of trust in the control

mechanisms. Those control mechanisms facilitated efficient flows of lumber through the production and distribution structure and encouraged technological and organizational improvements at all levels within the industry. As suppliers increased their dependence on Lignum for physical and financial resources, the control mechanism, based on output, became stronger and the quality and quantity of lumber produced and distributed by the system improved.[38]

By 1956 the Williams Lake District lumber industry's dominant enterprise was clearly distinguishable as a hierarchical, administratively coordinated, functionally diversified production and distribution structure. The Lignum wholesaling office contained the head office in which the top executives carried out long-term strategic planning, policy formulation, performance evaluation, and resource allocation to the operating divisions according to performance over the longer term. It also contained the sales division managerial staff who coordinated current production from the operating divisions toward the highest return markets, assessed market data, and provided current market information and sales contracts for the planer mill-shipping facilities. The planer mill-shipping plant management coordinated current production from the supply units according to the market information and sales contracts provided by the sales division, monitored the performance of the Lignum suppliers, maintained quality standards for the division's finished lumber output, and allocated the resources provided by the head office among the operating units. At the lowest managerial level, the sawmillers ensured efficient coordination of rough lumber production

flows and sought technological and organizational innovations that improved the cost-effectiveness of their individual production units over the longer term. Through the hierarchical division of managerial labour, with each level of owner-operators or salaried managers concerned with the long-term viability of the realm of business which they oversaw, the miniature capital market developed within the production and distribution system. This miniature capital market of Multidivisional enterprise distinguishes it from other structural forms of business.[39]

While differing in size and complexity from the massive, formally integrated corporations that Chandler describes, the nascent Williams Lake District lumber industry's production and distribution system retained the underlying characteristics of the Multidivisional structure. The dominant form of enterprise in the district was a hierarchical, administratively coordinated, functionally diversified production and distribution structure that provided greater productivity at lower costs and higher profits than did the market coordination that preceded it. Until the Lignum head office took over the financial and physical resource allocation function and instituted control mechanisms that geared those resources toward long-term high-return uses, the Williams Lake District lumber industry was unable to function efficiently as a full-time economic sector. Through the managerial division of labour that coordinated throughput and allocated resources, unit costs were reduced and the quality and quantity of output was increased. As a result of the quasi-Multidivisional structure and the

functions which supported it, transaction costs became negligible, intermediate product markets were effectively eliminated, and information costs for the entire system were reduced significantly.[40]

The managerial hierarchy was guided by control mechanisms that favoured long-term survival and growth of the Lignum structure over opportunistic maximization of current profits. Long-term health of the enterprise was the entrepreneurial objective that guided decision-making throughout the structure, whether carried out by Lignum owner, Leslie Kerr, by his salaried managers, or by the owner-operators of each individual business unit that supplied Lignum in the quasi-Multidivisional structure. The structure was only able to emerge when long-term entrepreneurial decision-making was able to override short-term opportunistic desires. As the lumber suppliers increasingly relied on Lignum to allocate and coordinate for the enterprise as a whole, the structure became more formal and the control mechanisms, more powerful. By 1956, the Lignum head office coordinated the entire system's throughput from resource base to retail lumber yards through the miniature capital market that defined Lignum's quasi-Multidivisional structure.

Multidivisional enterprise appearing in a nascent twentieth-century lumber sector contradicts Chandler's argument that such a structure provided no advantages in the technologically simple, labour-intensive industries. Chandler claims that those industries did not require large volumes of throughput to lower unit costs, and coordination of daily flows was not technically complex. Therefore cost reduc-

tions were achieved in those industries by the elimination of the wholesaler, or middleman, by the mass retailer who coordinated the flows from several manufacturers and handled several product lines in order to maintain the high volumes of throughput that most efficiently utilized distribution facilities and personnel. For that reason, Chandler believed, the Multidivisional structure did not emerge and single-function firms were able to remain cost-competitive in labour-intensive industries.[41]

In the British Columbia lumber industry of the 1950s lumber retailers complained that wholesalers were circumventing their industry function as lumber outlets for local customers. The wholesaler, rather than the retailer, carried out the large volume sales to regional markets and coordinated production and distribution. In the Williams Lake District, the Vancouver wholesaling firm of Lignum introduced the dominant structure that coordinated the local industry's throughput. Through the informal Multidivisional structure that arose from mutually beneficial agreements among district operators the local sector realized the cost advantages Chandler associates with incorporating all stages of production and distribution into a single, administratively coordinated, formally integrated enterprise. However, the division of administrative labour in the district occurred long before control of the enterprise was relinquished to a cadre of career managers within a formally-integrated structure. Rather than a means of coordinating flows through complex technological processes, the local lumber industry's dominant structure arose informally as a method of allocating resources to their

highest-yield uses, and of coordinating throughput efficiently to the constantly fluctuating demand of unstable lumber markets.[42]

The Williams Lake District case suggests that the Multidivisional structure may be a cost-efficient form of business found in most twentieth-century North American industries, rather than a structurally mature form of enterprise peculiar to capital-intensive sectors. Chandler's central thesis is that technology determined structure. However, Chandler only studies formally-integrated enterprises. The correct unit of analysis appears to be the production and distribution system and the real issue is the degree to which market mechanisms carry out allocation and coordination within that system. The basis on which Chandler's thesis rests is that modern corporate enterprise emerged when coordination through a managerial hierarchy achieved greater productivity at lower costs and higher profits than did coordination by market mechanisms. Until the Lignum head office took on the allocation and coordination functions and instituted the control mechanisms which ensured that those functions were effectively carried out, the Williams Lake District lumber industry was unable to operate efficiently as a full-time economic sector. However, the quasi-Multidivisional structure that supported those functions emerged as a means of buffering the production and distribution process from short-term adverse market conditions which threatened the survival of all industry participants. Size and degree of formal integration may be related to the technology utilized to carry out production and distribution, but structure apparently is not. Instead, the form of organization appears to be the

result of human agents' ongoing attempts to reduce the effects of short-term adverse supply and demand forces created by market mechanisms.[43] However, government resource allocation methods created a powerful and pervasive force that seriously undermined the district industry's development. The next chapter will analyze the significant Forest Service policies and their supply-side effects on the local sector.

## Footnotes

[1]Alfred D. Chandler, Jr., The Visible Hand: The Managerial Revolution in American Business (Cambridge, Mass.: Harvard University Press, 1977); Alfred D. Chandler, Jr., "The Emergence of Managerial Capitalism," Business History Review, 58 (Winter 1984), 473-503.

[2]Alfred D. Chandler, Jr., Strategy and Structure: Chapters in the History of the Industrial Enterprise (Cambridge, Mass.: The M.I.T. Press, 1962), 387-96; Alfred D. Chandler, Jr., "Structure and Investment Decisions in the United States," The Rise of Managerial Capitalism, Herman Daems and Herman Van Der Wee, eds. (Louvain and The Hague: Leuven University Press and Martinus Nijhoff, 1974), 37, 43-46; Alfred D. Chandler, The Visible Hand, 453-63; Oliver E. Williamson, The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting (New York: The Free Press, 1985), 280-81, 284.

[3]Alfred D. Chandler, Jr., The Visible Hand, 453-63; Alfred D. Chandler, Jr., Strategy and Structure, 393-95; Oliver E. Williamson, The Economic Institutions of Capitalism, 280-81.

[4]Alfred D. Chandler, Jr., The Visible Hand, 1, 6-8, 241; Alfred D. Chandler, Jr., "The Emergence of Managerial Capitalism," Business History Review, 58 (Winter 1984), 480-2.

[5]Alfred D. Chandler, "The Emergence of Managerial Capitalism," 480-1, 486-87, 491.

[6]Robert Eccles has also noticed that stable organizational units exist which operate similarly to formally integrated enterprises under certain conditions. While his argument diverges from mine, he recognizes the phenomenon of mutually beneficial relationships leading to the formation of an identifiable quasi-firm. See Robert Eccles, "The Quasifirm in the Construction Industry," Journal of Economic Behavior and Organization, 2 (December 1981), 335-58.

[7]Alfred D. Chandler, Jr., The Visible Hand, 10, 484.

[8]Alfred D. Chandler, Jr., The Visible Hand, 8-10, 456-84; J. A. Schumpeter, "The Fundamental Phenomenon of Economic Development," Entrepreneurship and Economic Development, Peter Kilby, ed. (London: Collier-Macmillan Ltd., 1971), 43-70; Israel M. Kirzner, Competition and Entrepreneurship (Chicago: The University of Chicago Press, 1973), 125-31.

[9]Professor Chandler seemed to be moving toward this definition of entrepreneurship in Strategy and Structure, where he says that entrepreneurs make decisions regarding resource allocation for the enterprise as a whole and when they effectively carry out their entrepreneurial

role, they are "imbued with a long-term strategic outlook." Strategic decisions are defined as being concerned with the long-term health of the enterprise. However, he contrasts entrepreneurs with managers, who he says "concentrate on short-term activities" and make tactical decisions which affect day-to-day operations. It is clear in Chandler's The Visible Hand that his earlier definition of entrepreneurship could only apply to the top management function of Multidivisional enterprise. However, interestingly enough, he states that career managers preferred administrative policies that "favored the long-term stability and growth of their enterprises," and he does not limit that goal to top managers.

The concept of entrepreneurship advanced in this paper attempts to build on Chandler's earlier definition, which apparently has been contradicted in his later work. This paper's definition rejects Chandler's implicit notion that owners are short-term profit maximizers and can be contrasted with salaried managers who forego current profits in favour of the long-term health of their enterprises.

Alfred J. Chandler, Jr., Strategy and Structure: Chapters in the History of the Industrial Enterprise (Cambridge, Mass.: The M.I.T. Press, 1962), 11-12; Alfred J. Chandler, Jr., The Visible Hand, 10.

[10]"27 Sawmills Here Export 9 Million Feet of Lumber," WLT (January 23, 1947), 1; British Columbia Forest Service--Kamloops Forest District, "Timber Industries and Prices," Kamloops Forest District Management Report for 1945 (Kamloops: Kamloops Forest District of the British Columbia Forest Service, 1946); "Carloading Space Hard to Find," wlt (June 17, 1947), 1; "Board of Trade," WLT (December 18, 1947, 1; "Interior Lumber Export Quotas Reduced by Ottawa," BCL (May 1947), 83; "Planer Mill to Bring 14-Man Payroll for Town," WLT (April 8, 1948), 1, 3; "Planer Mill Now Operating," WLT (June 24, 1948), 1; "Outlook Gloomy as Cripps Fails to Buy More Lumber," WLT (September 30, 1948), 4; Interviews with Roy Crosina, Elton Elliot and Herb Gardner.

[11]John C. Kerr to Mary McRoberts, personal letter (September 9, 1982); "Lignum Owner Passes in Vancouver," WLT (September 6, 1972), 1; "Founder of Lignum Ltd. Dies Here," The Province (September 6, 1972); "Pioneer Lumberman Leslie Kerr Dies," BCL (October 1972), 57; Joseph Collins Lawrence, "Markets and Capital: A History of the Lumber Industry of British Columbia (1778-1952), unpublished M.A. thesis (1957), 166; Lignum Group of Companies, A Submission to the B.C. Forest Service. Location: B.C. Forest Service Forestry Library, Victoria, B.C. (June 1955), 11; Gordon McG. Sloan, Commissioner, Transcripts: Royal Commission on Forestry, XXIII (Victoria: The Queen's Printer, 1956), 10839-40.

[12]Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 1083-40; Lignum Group of Companies, A Submission to the B.C. Forest Service, 11; John C. Kerr to Mary McRoberts, personal letter (September 9, 1982); interviews with Herb Gardner, Roy Crosina, O. J. "Whitey" Andersen, and J. Stewart Smith.

[13]"27 Sawmills Here Export 9 Million Feet of Lubmer," WLT (January 23, 1947), 1; "Carloading Space Hard to Find," WLT (June 17, 1947), 1; "Planer Mill to Bring 14-Man Payroll for Town," WLT (April 8, 1948), 1; "Outlook Gloomy as Cripps Fails to Buy More Lumber," WLT (September 30, 1948), 4; "Timber Production Drops in 1948," WLT (December 30, 1948), 3; "Dryden and Roach Close Sawmill," WLT (January 13, 1949, 1; "Sawmill Fined for Wage Default" WLT (March 3, 1949), 3; interviews with Roy Crosina, Elton Eliot, Jerry Le Bourdais, Herb Gardner and O. J. "Whitey" Andersen.

[14]"Timber Production Drops in 1948," WLT (December 30, 1948), 3; "Dryden and Roach Close Sawmill," WLT (January 13, 1949), 1; "Sawmill Fined for Wage Default," WLT (March 3, 1949), 3; interviews with Roy Crosina, Elton Elliot, Herb Gardner, Reg Norberg and J. Stewart Smith.

[15]"Timber Production Drops in 1948," WLT (December 30, 1948), 3; "Wet Weather Affects Lumbering," WLT (August 4, 1949), 1; "Dryden and Roach Close Sawmill," WLT (January 13, 1949), 1; "Sawmill Fined for Wage Default," WLT (March 3, 1949), 3; interviews with J. Stewart Smith, Jerry Le Bourdais, Roy Crosina and Elton Elliot.

[16]Interviews with J. Stewart Smith, Fred Linde, Gabe Pinette, Dollard Therrien, and Herb Gardner. Each timber sale had to be advertised in the WLT. Until 1950, there were no sales longer than 5 years. Even after that date, sales with longer tenures were extremely rare. It appears that only one sawmilling operation at Horsefly was granted a sale with a longer tenure.

[17]Derek A. White, Business Cycles in Canada: Staff Study 17, Economic Council of Canada (Ottawa: Economic Council of Canada, 1967), 220-1; Jack M. Guttentag, "The Short Cycle in Residential Construction, 1949-1959," American Economic Review, 51 9June 1961), 275; William W. Alberts, "Business Cycles, Residential Construction Cycles and the Mortgage Markets," Journal of Political Economy, 70 (June 1962), 274, 278-81; Leo Grebler, Housing Issues in Economic Stabilization Policy: Occasional Paper 72 (New York: National Bureau of Economic Research, 1960), 5-15; Lawrence Berk Smith, The Postwar Canadian Housing and Residential Mortgage Markets and the Role of Government (Toronto: University of Toronto Press, 1974), 60-4, 67; interviews with J. Stewart Smith, Gabe Pinette, Dollard Therrien, Fred Linde, Herb Gardner, and Tom Mason.

[18]Interviews with J. Stewart Smith, Roy Crosina, Tom Mason, Fred Linde, and Jerry Le Bourdais; Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10887, 10893-94; Lignum Group of Companies, A Submission to the B.C. Forest Service, 2, 4-5. The interest rate charged on the loans is not known. However, suppliers who were financed by Lignum did not remember it being a factor and Leslie Kerr, in his brief to the 1956 Royal Commission hearing in Victoria, explained that

it was not in Lignum's interest to have suppliers "hogtied." Offering credit appears to have been a method of attracting and maintaining reliable suppliers rather than a money-making venture in itself. The sources quoted above felt this was Leslie Kerr's intention. It is certain that Lignum offered better credit terms than financial institutions such as banks.

[19]Lignum Group of Companies, A Submission to the B.C. Forest Service, 2, 4-5; Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10887, 10893-94; interviews with J. Stewart Smith, Fred Linde, Jerry Le Bourdais, Stanley Benson, and A. "Pete" Routley.

[20]Lignum Group of Companies, A Submission to the B.C. Forest Service, 2, 4-5; interviews with J. Stewart Smith, Fred Linde, Reg Norberg, Jerry Le Bourdais and Chuck Flint.

[21]Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10886-87, 10897; Lignum Group of Companies, A Submission to the B.C. Forest Service, 1-5, 7, 11-12; interviews with J. Stewart Smith, Reg Norberg, Fred Linde, Gabe Pinette, Dollard Therrien and Jerry Le Bourdais.

[22]Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10835, 10893-94; Lignum Group of Companies, A Submission to the B.C. Forest Service, 3-5, 10-12, 14-15; interview with J. Stewart Smith.

[23]Lignum Group of Companies, A Submission to the B.C. Forest Service, 2-5, 10-12; Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10835, 10886, 10897-901; interviews with J. Stewart Smith, Reg Norberg, Gabe Pinette, Dollard Therrien, Chuck Flint, and Fred Linde.

[24]Interviews with J. Stewart Smith, Gabe Pinette, Dollard Therrien, Fred Linde, and Reg Norberg.

[25]Interviews with J. Stewart Smith, Clive Stangoe, Gabe Pinette, Dollard Therrien, Reg Norberg, Chuck Flint, Fred Linde, Jerry Le Bourdais, and Harold M. Jacobson. This apparently paradoxical perverse reaction to price signals during market downturns has been noted in research dealing with labour-managed firms. See Benjamin Ward, "The Firm in Illyria: Market Syndicalism," American Economic Review, 48 (September 1958), 566-89. For other studies analyzing the "Ward effect," see Jaroslav Vanek, "Decentralization Under Workers' Management: A Theoretical Appraisal," American Economic Review, 56 (December 1969), 1006-14; J. E. Meade, "The Theory of Labour-Managed Firms and of Profit-Sharing," The Economic Journal, Special issue, 82 (March 1972), 402-28; S. Charles Maurice and C. E. Ferguson, "Factor Usage by a Labour-Managed Firm in a Socialist Economy," Economica, New Series, 29 (February 1972), 18-31; Eirik G. Furubotn, "The Long-Run Analysis of the Labour-Managed Firm: An Alternative Interpretation,"

American Economic Review, 66 (March 1966), 104-23; Jacques H. Drèze, "Some Theory of Labor Management and Participation," Econometrica, 44 (November 1976), 1125-39; Dinko Dubravcic, "Labour as Entrepreneurial Input: An Essay in the Theory of the Producer Co-operative Economy," Economica (August 1970), 297-310; Abram Bergson, "Entrepreneurship Under Labour Participation: The Yugoslave Case," Entrepreneurship, Joshua Ronen, ed. (Toronto: D. C. Heath and Company, 1983), 177-234.

[26]Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10835-36, 10886-87, 10895; Lignum Group of Companies, A Submission to the B.C. Forest Service, 2, 4-5, 7; interviews with J. Stewart Smith, Stanley Benson, Jerry Le Bourdais, Fred Linde, Gabe Pinette, Dollard Therrien, Reg Norberg and Harold M. Jacobson.

[27]Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10823-24, 10831-32, 10835-36, 10841, 10881-89, 10891-95, 10900-1. Kerr's statements to the 1956 Royal Commission hearings were verified by Fred Linde who was and continues to be a small independent Lignum supplier, by Stanley Benson, a former employee for a Lignum supplier who was sometimes in independent and sometimes a contractor, and by Jerry Le Bourdais who was always a Lignum contractor while in the industry but says he was free to contract with another planer mill or to become an independent if he had wanted to. Interviews with Fred Linde, Stanley Benson and Jerry Le Bourdais.

[28]Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10895; Lignum Group of Companies, A Submission to the B.C. Forest Service, 2, 4-5, 7. It ws in Lignum's interest that the sawmillers remain solvent because the quality and quantity of throughput, rather than increased indebtedness, was the issue. As the sawmiller's debt increased, Lignum's capital risk increased. Therefore escalation of supplier indebtedness was discouraged. The Lignum-owned feeder mill was used to gauge district production costs, and sawmillers whose debts were mounting were gradually eliminated from the system. Verification of this information is found in interviews with J. Stewart Smith, Reg Norberg, Fred Linde, Stanley Benson, Gabe Pinette, and Dollar Therrien.

[29]Lignum Group of Companies, A Submission to the B.C. Forest Service, 7; Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10835, 10895-97; interviews with J. Stewart Smith, Fred Linde, Jerry Le Bourdais, Elton Elliot, Roy Crosina, Stanley Benson, Gabe Pinette, Dollard Therrien, and Reg Norberg. Lignum owner, Leslie Kerr's argument that competitive prices were paid for lumber supplies is confirmed by Fred Linde, who was an independent lumberman who sold most of his lumber to Lignum. While he did undertake some of his own sales, Linde said that it was not really cost-efficient to do so in most cases, because the price obtained from Lignum was generally the best price available when the costs of sales, renting railway loading space, and shipping were taken into account. Jerry Le Bourdais, who was a Lignum

contract supplier, also felt that Lignum offered good prices, as did Stanley Benson, who worked for a sawmiller who was sometimes an independent and sometimes a contractor. Lumbermen such as Gabe Pinette, Dollard Therrien, and Reg Norberg, who were running operations in competition with Lignum, said that Lignum offered price levels which they had to match and they often found that to be a very difficult task. In regard to the price wars of the Quesnel planer mills that did not occur in Williams Lake, Kerr says that Quesnel District lumber industry was composed primarily of people who lived in the district prior to starting up a lumber business while those who started lumbering operations in the Williams Lake District were generally newcomers to the area. However, he does not make the connection that the different composition of industry participants underlay the difference in economic behaviour. While that may be a significant factor, there is no evidence to support that conclusion.

[30]Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10832, 10843-43, 10889, 10896, 10899-901; Lignum Group of Companies, A Submission to the B.C. Forest Service, 10-12; "Operators Fear Lumber Source Cut," WLT (January 27, 1955), 1; "Stabilization Necessary," WLT (February 3, 1955), 2; "Forest Policies Explained," WLT (March 10, 1955), 1; "Mills Cutting Twice As Much As Working Circle Can Stand," WLT (November 3, 1955), 1; "Lumber Industry Plans Call for Staying in Williams Lake for Extended Period," WLT (August 22, 1956), 4; interviews with Gabe Pinette, Dollard Therrien, Harold M. Jacobson, Reg Norberg and Clive Stangoe.

[31]Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10832, 10835-36, 10881-82, 10885, 10889-92, 10897; "Operators Fear Lumber Source Cut," WLT (January 27, 1955), 1; "Lumber Industry Plans Call for Staying in Williams Lake for an Extended Period," WLT (August 23, 1956), 4; interviews with Harold M. Jacobson, Reg Norberg A. "Pete" Routley, Gabe Pinette, and Dollard Therrien.

[32]Lignum Group of Companies, A Submission to the B.C. Forest Service, 1-12; Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10818-47, 10881-901; interviews with Gabe Pinette, Dollard Therrien, Reg Norberg, Harold M. Jacobson, Herb Gardner, Roy Crosina, Elton Elliot, Fred Linde, and Clive Stangoe.

[33]According to J. Stewart Smith, a salaried manager at Lignum's Williams Lake planer mill, financing was offered as a means of getting sawmillers started and of helping them through stringent economic periods. It was not intended to be a means of tying suppliers to the planer mill. Credit availability and contracts for cutting on Lignum timber sales were methods of attracting self-supporting suppliers. However, as timber became increasingly scarce, suppliers began seeking the safety of more formal tying with Lignum which, by early 2956, was a source of concern for Lignum owner, Leslie Kerr, who requested the Forest Service to provide long-term timber tenures that

preserved the autonomy of the small operator to a greater extent than prevailed at that time. The sources that support this argument are Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10831-33, 10835-36, 10883-901; interviews with J. Stewart Smith, Fred Linde, Stanley Benson, Reg Norberg, Gabe Pinette, Dollard Therrien, and Harold M. Jacobson.

[34]Lignum Group of Companies, A Submission to the B.C. Forest Service, 5, 7, 12, 13-15; Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10886-89, 10891-94, 10900-1; interviews with Jerry Le Bourdais, J. Stewart Smith, Reg Norberg, Gabe Pinette, Dollard Therrien, and Tom Mason.

[35]Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10881-901; interviews with J. Stewart Smith, Gabe Pinette, Dollard Therrien, Reg Norberg, and Harold M. Jacobson.

[36]Interviews with J. Stewart Smith, Gabe Pinette, Dollard Therrien, Harold M. Jacobson, Clive Stangoe, Reg Norberg, Stanley Benson, Fred Linde, A. "Pete" Routley, Roy Crosina, and Elton Elliot. References to Lignum's emphasis on performance evaluation which focussed on quality and quantity of output occur in Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10825, 10821, 10842, 10887, 10889, 10891-92, 10895, 10897-901. The discussion of control advanced in this paper has been adapted from William G. Ouchi, "The Relationship Between Organizational Structure and Organizational Control," Administrative Science Quarterly 22 (March 1977), 95-113.

[37]Oliver E. Williamson, The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting (New York: Macmillan, 1985), 247.

[38]Interviews with A. "Pete" Routley, Stanley Benson, Gabe Pinette, Dollard Therrien, Fred Linde, Harold M. Jacobson, Reg Norberg, and J. Stewart Smith.

[39]Interviews with J. Stewart Smith, Fred Linde, Stanley Benson, Reg Norberg, Gabe Pinette, and Dollard Therrien; Lignum Group of Companies, A Submission to the B.C. Forest Service, 1-17; Gordon McG. Sloan, Transcripts, 10818-47, 10881-901; Oliver E. Williamson, The Economic Institutions of Capitalism, 281; Oliver E. Williamson, "The Modern Corporation: Origins, Evolution, Attributes," Journal of Economic Literature, 19 (December 1981), 1556.

[40]Alfred D. Chandler, Jr., The Visible Hand, 1, 6-8, 241; Alfred D. Chandler, Jr., "The Emergence of Managerial Capitalism," 480-82.

[41]Alfred D. Chandler, Jr., "The Emergence of Managerial Capitalism," 480-81, 486-87, 491.

[42]The BCL contained a number of direct references to the retailers' frustration with wholesalers and manufacturers who were circumventing their role. However, after the column "With the Retailers" was cancelled in 1952 there was very little discussion of lumber retailing. The lack of information on the retailing aspect of the industry is a significant indication of the minor role retailers played in large volume lumber distribution. For articles that mention the erosion of the retailer's role in the lumber industry see "With the Retailers," 34 (January 1950), 30; 35 (February 1951), 38; 35 (May 1951), 39; 35 (June 1951), 38; 35 (September 1951), 38; 35 (October 1951), 46; 36 (March 1952), 28, 112.

[43]Alfred D. Chandler, Jr., The Visible Hand, 1, 6, 8, 345-76, 379, 453-55; Alfred D. Chandler, Jr., "The Emergence of Managerial Capitalism," 491-92.

# CHAPTER FOUR

## SUPPLY-SIDE EFFECTS OF THE GOVERNMENT TIMBER MONOPOLY

The purpose of this chapter is to describe the specific provincial Forest Service policies as they were applied in the Williams Lake District, and to assess their impact on the local industry. The analysis shows that the British Columbia Government, as the resource monopolist, often made unreasonable demands of its customers. Instead of undertaking the sustained-yield planning that a government commission recommended in 1945, the Forest Service's method of resource allocation was a disruptive supply-side force that frustrated the local lumbermen's attempts to develop long-term stability in their industry.

### Government Policy and the Forest Service

The Williams Lake District lumber industry depended on the British Columbia Government, as the forest resource owner, for a stable supply of timber. Major revisions in forestry legislation, however, did little to halt the rapid depletion of timber in the district. The British Columbia Forest Act was modified during the latter 1940s as a result of a 1945 one-man Royal Commission investigation into all aspects of the provincial forest resource and its utilization. Although the new legislation was intended to lead the province toward sustained-yield management of the forest land, many of the policies and regulations developed to implement the Act did not suit the specific conditions of

the Williams Lake District. Still others created circumstances that Commissioner Gordon Sloan had strongly urged government to eliminate. Although the district industry had only started to become a full-time lumber manufacturing sector by 1950, the Forest Service's inefficient management of the wood supply led to a critical timber shortage by the time the second Sloan Commission sat in 1956.

The 1945 Sloan Commission report had stressed the urgent need for the immediate introduction of an active sustained-yield forest management program throughout British Columbia. Exploitive mining of timber as a non-renewable resource had to be replaced with the agrarian notion of tending the woodlands and harvesting crops to maintain or increase the land's productivity in perpetuity. The goal of "sustained yield" as described by Sloan was:[1]

> a perpetual yield of wood of commercially usuable quality from regional areas in yearly or periodic quantities of equal or increasing volume.[2]

The forest resource, of course, could only be harvested completely every sixty to one hundred years. To achieve the goal of a perpetual supply of timber required the establishment of an annual rate of harvest able to maintain or increase the wood volume, accounting for the natural growth that occurred over time. The volume to be harvested each year on a sustained-yield basis was called the "allowable annual cut."[3]

The proposed sustained-yield system had two main aspects. The first was to provide a continuing timber supply to support regional

industry and enhance the stability and development of communities dependent on forest payrolls. The second objective was to encourage multiple use of forest land, allocating its varied contributions to their most valuable economic and social applications. The forest was not merely a timber supply for the forest industry. It was provincial land to be designated according to its highest economic and social values.[4]

To achieve perpetuation of the forest cover, Sloan urged the government to divide the province's productive forest land into sustained yield units, or "working circles," which were large enough to provide scale economies in forest management and protection, but small enough to meet the objective of long-term stability for the communities dependent on revenues from the forest sector. Those administrative units, once surveyed, provided the practical means of regulating the cut and ensuring that effective sustained-yield forest management and fire protection were carried out, either by the government Forest Service staff or by private enterprise under the auspices of the Forest Service. The sustained yield units managed by the Forest Service were called "Public Working Circles" (PWC's) while those managed by the private sector were called "Forest Management Licences" (FML's). However, FML applications were restricted to companies which were large enough to handle tracts of timberland sufficient to achieve scale economies in the extensive forest management and protection responsibilities which the FML incurred. In exchange, the timber harvested from the FML was assessed at a reduced rate recognizing the additional costs and the

timberland was provided to the operator as long as he met the obligations of the contract. In 1945 the British Columbia Government held a virtual monopoly over the provincial timber supply controlling over ninety percent of the provincial timber lands and merchantable timber volume in the Interior as in the province as a whole.[5]

Sloan warned changing over to an adequately regulated sustained-yield system would require considerable funds and additional staff members to carry out the massive reorganization necessary to institute and administer the forest management programs. While almost all the recommendations of Sloan's 1945 report were legislated through various revisions of the British Columbia Forest Act during the latter 1940s, the practical applications of that legislation led to a chaotic period of timber management that ignored many of Sloan's important warnings. During that first decade of sustained-yield management the Williams Lake District lumber industry became a full-time economic sector.[6]

Neglecting Sloan's warnings about the need for an adequate staff to manage sustained-yield forestry, the provincial Forest Service allocated five full-time staff members--a ranger, two assistant rangers, a patrolman and a dispatcher--to handle all the needs and responsibilities of overseeing the two thousand square mile Williams Lake region. The ranger staff was expected to look after forest protection, including rounding up and coordinating fire fighting crews. For all Timber Sale applications the same three men had to "cruise" the timber. Timber cruises involved walking the forest acreage to identify and map the timber, estimating the total volume and per unit value, determining

the exact boundaries of the timber acreage that would yield the amount of wood volume the operator desired and, except when the student marking crews were there for the summer months, establishing precisely which trees were to be cut. The ranger staff also kept track of the log scale and planer mill tallies which detailed the exact volume of wood each tenure holder had extracted from the district forests and taken, as rough lumber, to the planer mills. From the log scale, the ranger staff calculated and deducted the stumpage, or wood cost per unit of volume, required from each lessee from the money held back by the planer mills for that purpose. If problems arose regarding any regulations or policies, the local staff acted as intermediaries between the lumbermen and the Kamloops District or provincial Forest Service Offices.[7]

At the local level, relations between the Forest Service and the lumbermen were generally amicable. The Williams Lake District Forest Service staff members were cognizant of the operators' problems in dealing with Victoria's policies which were often ill-suited to the district's forest conditions. If the directives were too unreasonable, the local staff either argued with their superiors on the lumbermen's behalf, or turned a blind eye and left the operators alone. The Forest Service also included the Grazing Department. In the Williams Lake area there was a relatively large ranching community that depended on the local ranger staff to act as mediators when the inevitable problems arose through lumbermen and ranchers using the same land for different purposes.[8]

Timber Appraisal

Before the timber required by district operators could be purchased, the Forest Service had to appraise its market value to determine the lowest price that the government was willing to accept as stumpage. Stumpage was the dollar value per unit of raw timber standing in the forest before the trees underwent any processing. The assessed value, or "upset price," did not include any part of the costs of extraction and was meant to reflect the standing timber's current market value. On the British Columbia Coast, where a competitive market was said to exist for logs, stumpage was based on the Vancouver Log Market prices and information obtained from the British Columbia Loggers' Association. However, in the Interior, where logging was generally integrated with manufacturing, the first competitive market considered to exist was that for finished lumber. Stumpage prices in the Interior were based on "information voluntarily supplied to Forest Service travelling auditors" by planer mills and other dressed lumber shippers.[9]

The Interior minimum stumpage was based on the average price of dressed lumber over a three month period, minus lumber extraction and manufacturing costs of the "average efficient operator." The timber holder was also provided with a profit margin that accounted for the opportunity cost of his financial investment, meaning a reasonable rate of return and some compensation for capital risk. Until 1951, the stumpage assessed at the time of the sale was the rate paid throughout the tenure. However, objections from the industry caused government to

institute a sliding-scale stumpage rate to counteract temporary peaks and depressions in lumber prices. An operator had his stumpage rate reassessed every three months. When the current price index fluctuated more than fifteen to twenty per cent from the price index in effect at the time of the last assessment, an adjustment in stumpage rates was made. The Forest Service absorbed forty to sixty per cent of the price change to buffer the effects of unstable market conditions.[10]

While appearing to be a fair method of assessment, appraisals in the Williams Lake District revealed several serious problems with minimum stumpage calculations. The notions of "the average efficient operator" and "average price" were far too general and tended to favour operators who held the prime timber stands in easily accessed areas. This discouraged industry operators from pioneering new timber areas and logging lower grade merchantable timber. Concessions given for logging lower grades and remoter areas were not sufficient to cover the actual additional transportation or manufacturing costs. Another problem was the length of time the Forest Service required to carry out stumpage reappraisals. Reassessments were often based on prices that had prevailed up to six months earlier and the usual result was a rise in timber costs.[11]

The most serious problem with the stumpage appraisal policy was the fairness of assessing Interior operators on the basis of finished lumber prices while log prices guided the Coastal operators' minimum stumpage rates. Stumpage rates were intended to reflect the wood's market value before processing. However, Interior operators were

probably paying for more than the standing timber's value. The government was very likely extracting some of the value that entrepreneurship had added through manufacturing methods and technology that reduced costs or increased the quality of the timber market. While Coastal operators extracted all entrepreneurial gains, the Interior operators quite probably did not.[12]

It was not necessary for the Forest Service to use finished lumber as the basis for stumpage assessments in the Williams Lake District. A competitive market for rough lumber existed and it was a market which was at least as free, if not more so, than the Vancouver Log Market which governed Coastal prices. Therefore, it was clearly more judicious to base stumpage on rough lumber prices, although probably less lucrative for the government.[13]

Timber Tenure

The form of timber tenure that determined the value and duration of virtually all the district operators' wood supply was the Timber Sale. The Timber Sale was established through the 1912 Forest Act as a new form of timber tenure that sold timber harvesting rights through public competition after the Forest Branch had cruised, surveyed, appraised and advertised the timber block. An operator who required timber applied to the Forest Service and was responsible for all expenses incurred during the assessment and advertising process. Until 1950, it was relatively easy to find timber stands that did not abut another operator's supply area and competition was carried out by sealed

tenders submitted to the district head office in Kamloops up to the advertised date of tender closure.[14]

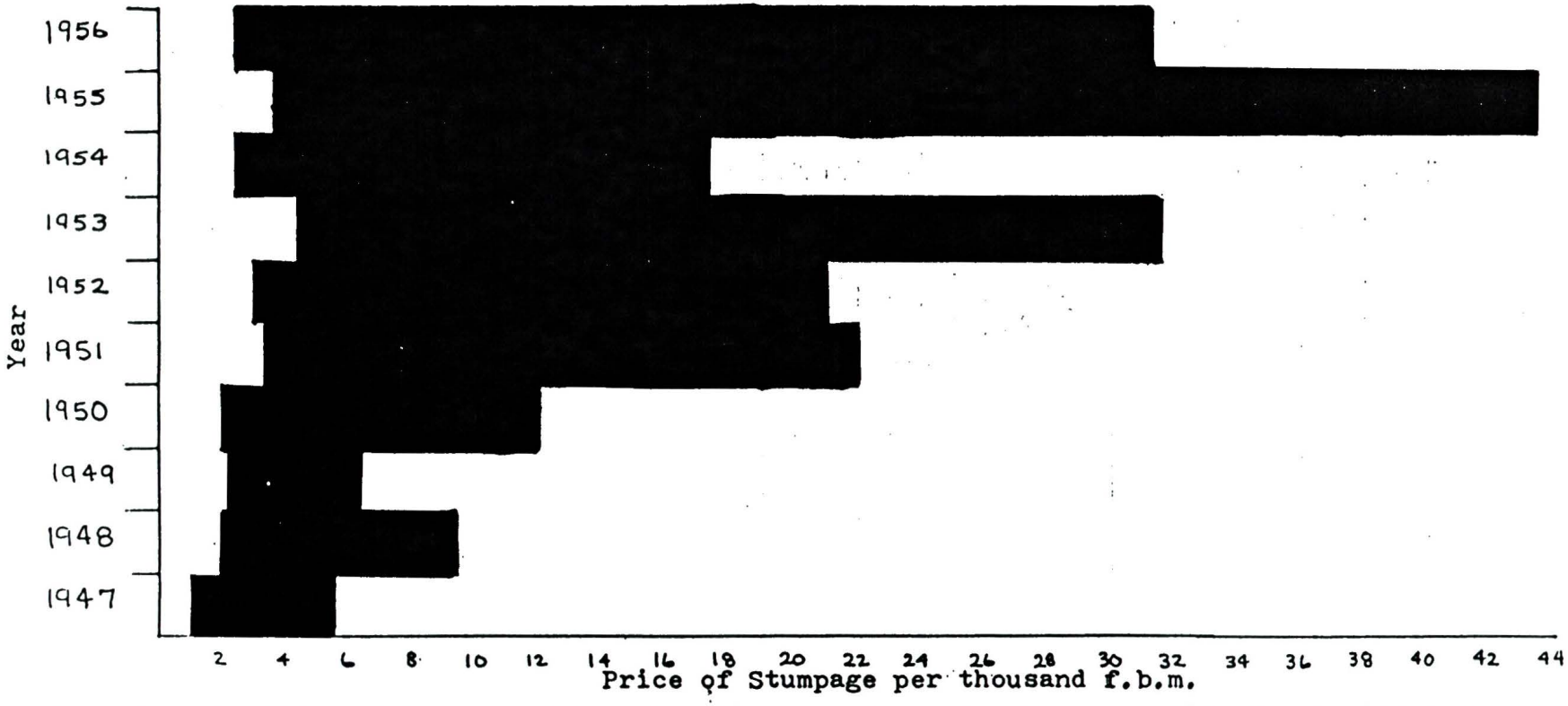
After 1950 the influx of new lumbermen made it increasingly difficult to locate timber blocks that did not border on another operator's supply area. Therefore bidding was increasingly carried out at public auctions held at the local Ranger office on the advertised date. Whether by sealed tender or public auction, timber was always allocated to the highest bidder. If the original applicant lost the bidding, he was reimbursed for the costs of initiating the sale. Anyone else who tendered a bid was required to pay a non-refundable entrance fee.[15]

Clearly, the assessed market value, or minimum stumpage, appraised by the Forest Service ranger staff was not necessarily the price paid for the timber. It merely represented the "upset price" or lowest price that the Forest Service would accept for the Timber Sale. While most Williams Lake District timber was sold at the "upset price" without competition until 1953, as time went on bidding became more prevalent and competition became more fierce. By 1955, the stumpage prices being bid at public auctions were getting completely out of hand (see Graphs 4.1 and 4.2). The situation was further exacerbated by the Forest Service's announcement that the district's timber was being cut at a rate far beyond the forests' capacity to replenish through annual growth.[16]

News of extreme supply shortages resulted in financially incapacitating stumpage rates being bid. The sale winners often

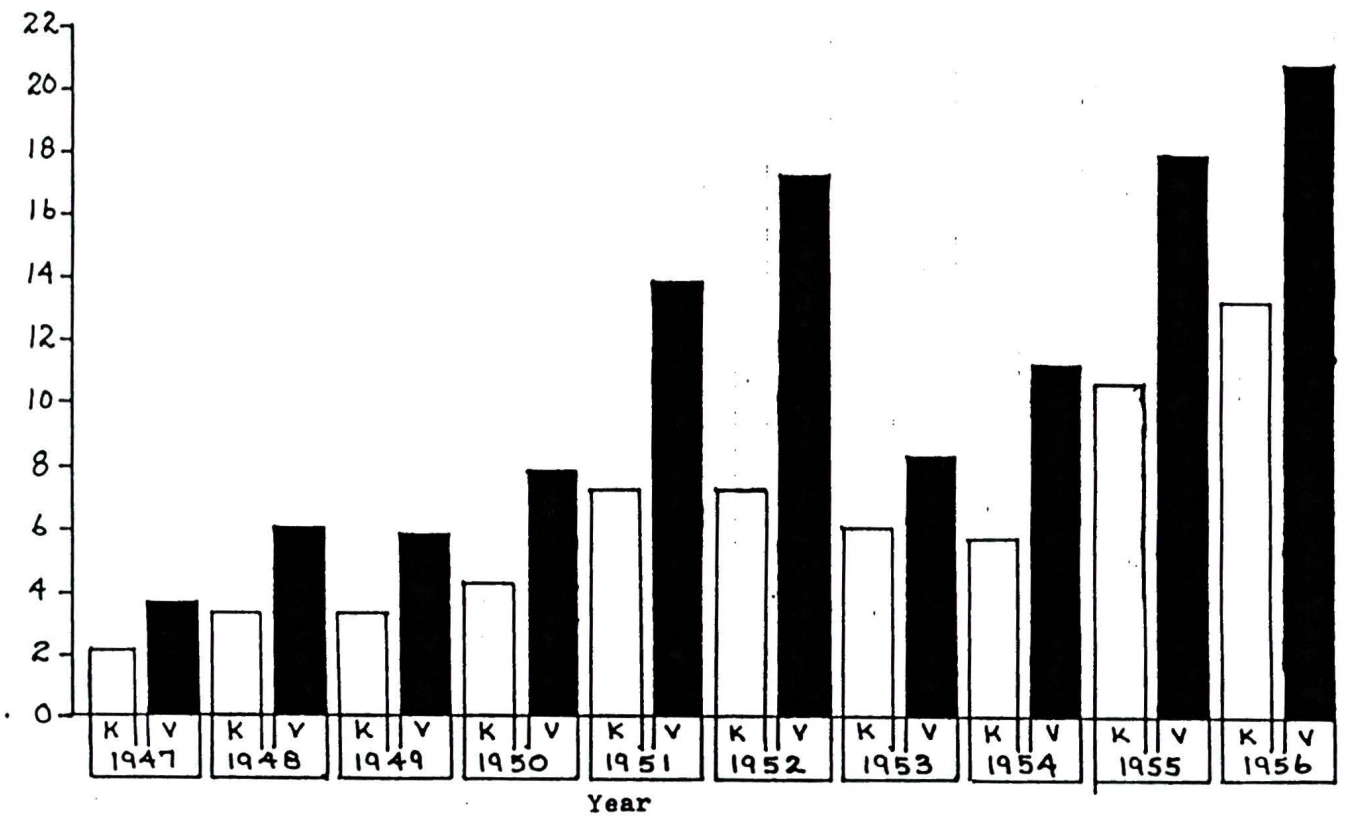
Graph 4.1: Range of Stumpage Prices as Bid per thousand f.b.m. of Douglas fir timber in the Kamloops District, 1947-1956

**f.b.m. refers to wood volume and is otherwise known as board feet
1 f.b.m. = 1 foot long x 1 foot wide x 1 inch thick of wood volume




Source: Department of Lands and Forests, "Average Stumpage Prices as Bid, by Species and Forest Districts, on Saw-timber Scaled on Timber Sales" Report of the Forest Service [1947 through 1956]. [Appendix--various pages]

Graph 4.2: Average Stumpage Price Bid per thousand f.b.m. of Douglas fir timber in the Kamloops Forest District compared with the Vancouver Forest District, 1947-1956




** K = Kamloops Forest District V = Vancouver Forest District

Source: Department of Lands and Forests, "Average Stumpage Prices as Bid, by Species and Forest Districts, on Saw-timber Scaled on Timber Sales", Report of the Forest Service [1947 through 1956]. [Appendix--various pages]

received overpriced timber while the losers faced supply deficiencies. While the Forest Service extracted monopoly gains from the excessive demand for timber, operators were forced to cut all possible financial corners, including equipment maintenance and replacement costs as well as those of responsible timber harvesting and forest cleanup.[17]

The Timber Sale was a form of timber tenure that dated back to the "cut out and get out" days of timber "mining" which sustained-yield management was committed to eliminating. The inevitable results of short-term timber disposal through public auctions were well-known before the Williams Lake District lumber industry existed. During the first Sloan Commission hearings, Interior region lumbermen described the pattern of excessive cutting that occurred in the Williams Lake District during the 1950s. Sloan warned that a conscious effort had to be made in order to eliminate the reoccurrence of such an undesirable result:[18]

> It is a much better policy to plan and manage any Interior work circle so that one mill may be assured a continuity of supply and permanent operation than to allow the productive capacity of an area to be divided between [sic] four or five mills with the result that none of them has a sufficient supply to ensure an economic production thus leading to the ultimate disappearance of them all. Ghost towns in the Interior bear distressing and silent witness to the past policy of too many mills cutting out areas that could have supported in perpetuity, on a system of planned management, the potential capacity of probably half of them.[19]

Despite the pleasant-sounding catchphrases promoting sustained-yield management in the interest of community stability, the Williams Lake District, as a whole, faced just the kind of serious supply crisis that

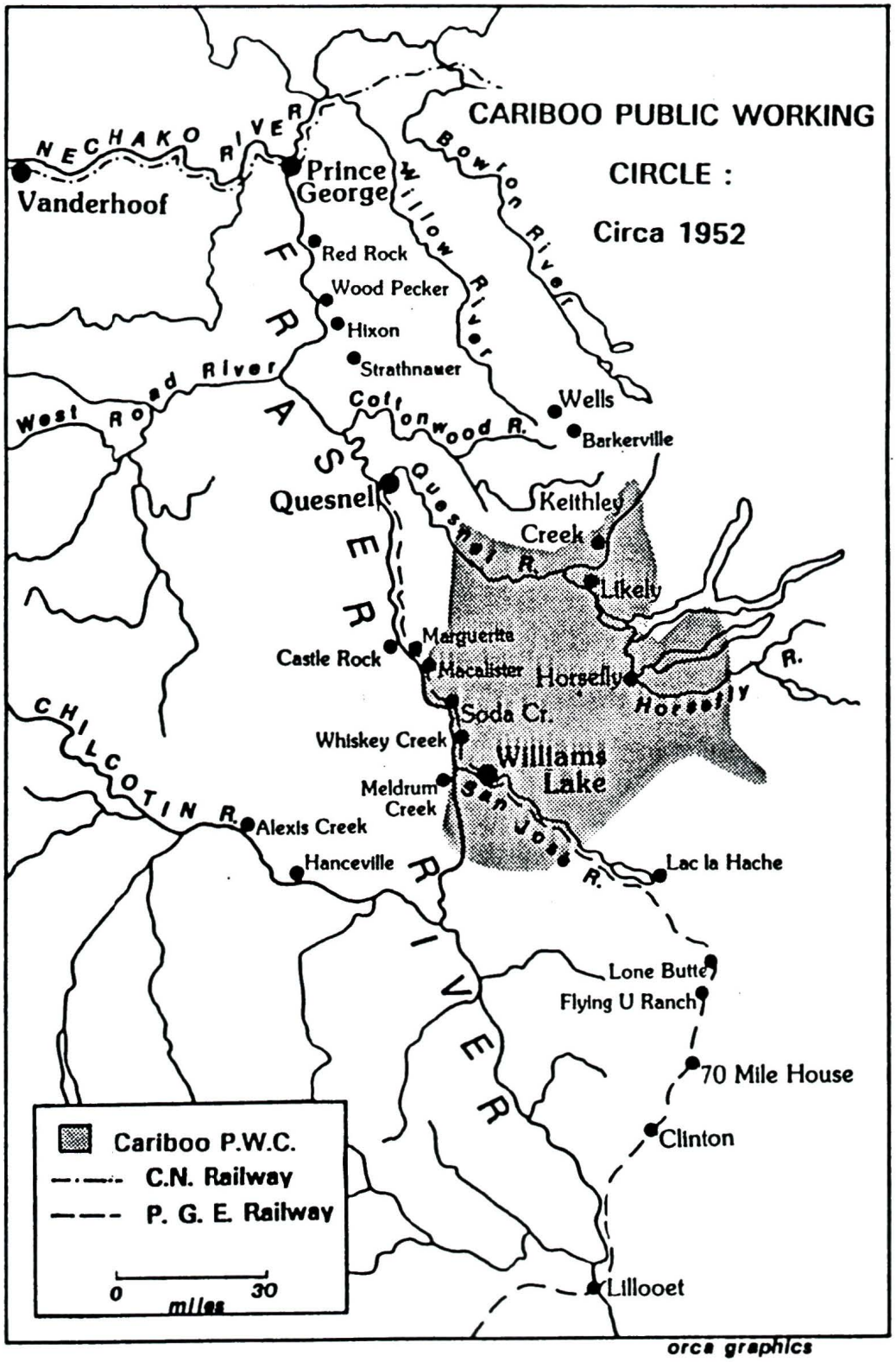
Sloan had warned the government to prevent. The inept allocation methods of the Timber Sale remained and the Williams Lake District operators bore the brunt of anachronistic policies from shortsighted Victoria bureaucrats who had learned little from the industry's past experience.

Timber Allocation

The Forest Service's reaction to the timber crisis amounted to too little too late. Following the 1952 forest inventories carried out by the Forest Service, virtually the whole Williams Lake District was brought within the boundaries of what was named the Cariboo Public Working Circle (see Map 4.1). Set up as an administrative unit to be managed on a sustained-yield basis, the 1,231,107-acre tract of productive forest land that the PWC contained was to be divided into timber tenures of varying sizes and durations. Log scale records submitted to the Forest Service as the basis for stumpage assessments provided a regular record of the actual harvest or "cut" by each tenure holder in the Cariboo PWC. It was a relatively simple matter to aggregate and compare the actual annual cut with the allowable annual cut that the PWC was estimated to hold.[20]

Despite access to the necessary information and the power to restrict further entry into the PWC when the first signs of overcrowding appeared, the Forest Service refused to do more than institute a poorly devised policy which, if anything, increased the local operators' timber supply problems. In an attempt to curtail the rapid depletion that

Map 4.1:

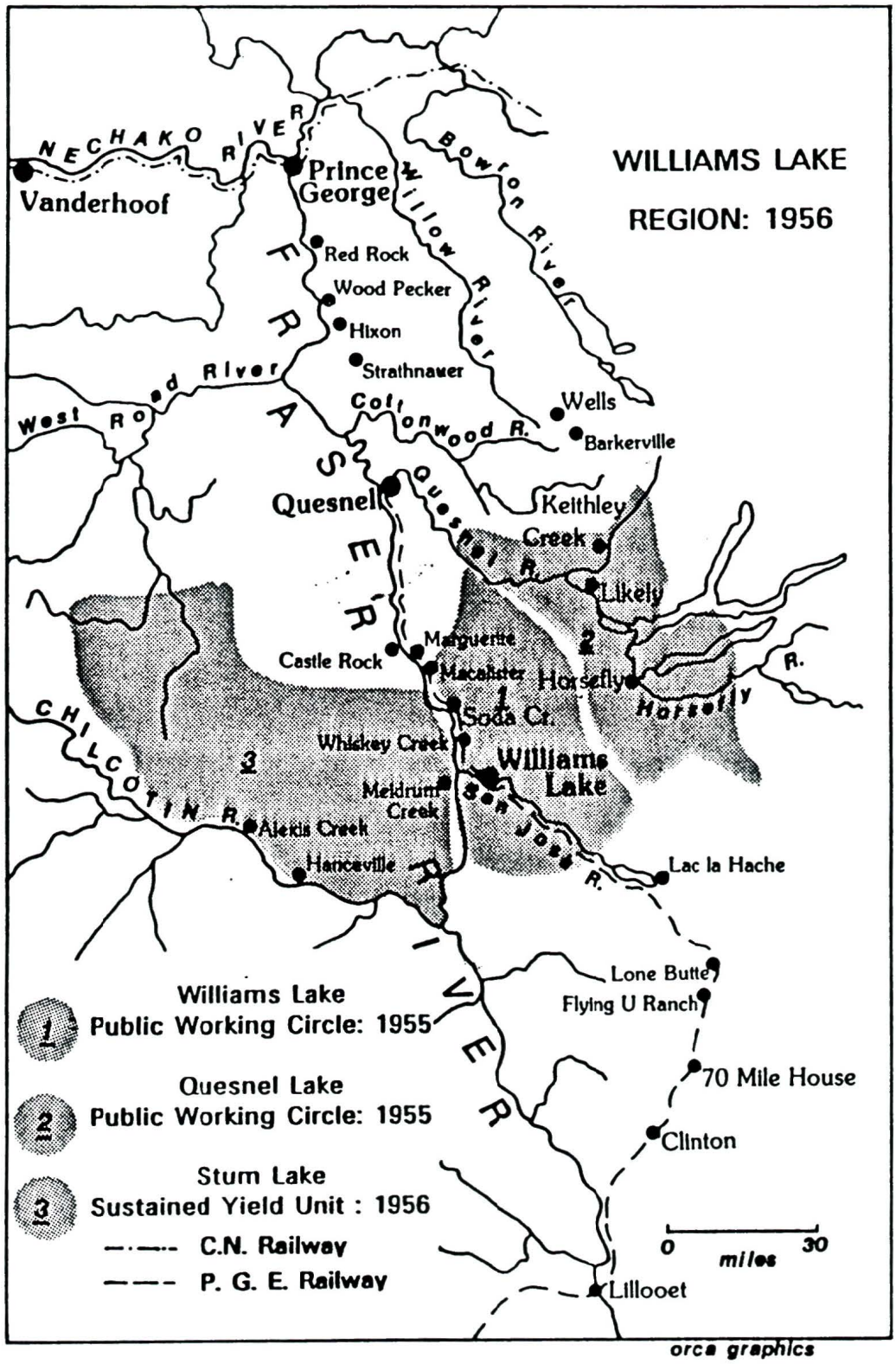

CARIBOO PUBLIC WORKING CIRCLE :
Circa 1952
NECHAKO RIVER
Vanderhoof
Prince George
Willow River
Bowron River
Red Rock
Wood Pecker
Hixon
Strathnaver
FRASER
West Road River
Cottonwood R.
Wells
Barkerville
Quesnel
Quesnel R.
Keithley Creek
Likely
Marguerite
Castle Rock
Macalister
Horsefly
Horsefly R.
Soda Cr.
Whiskey Creek
Williams Lake
Meldrum Creek
San Jose R.
CHILCOTIN R.
Alexis Creek
Hanceville
Lac la Hache
RIVER
Lone Butte
Flying U Ranch
70 Mile House
Clinton
Lillooet
Cariboo P.W.C.
C.N. Railway
P. G. E. Railway
0
30
miles
orca graphics

threatened to eliminate all merchantable timber within a few years, the Forest Service divided the Cariboo PWC in half, forming the Williams Lake and Quesnel Lake PWC's (see Map 4.2). The overcut was exacerbated in the Williams Lake PWC, but the Quesnel Lake circle contained a small margin of cut able to be allocated before the sustained-yield limit was reached.[21]

Applications for initiating Timber Sales were restricted to established operators. Only those operators with Timber Sale holdings amounting to less than their average actual annual cut or "quota" were permitted to apply. There, protection for existing operations ended. The auctions remained open to anyone willing to pay the bidding fee, and the sale went to the highest tender. If the established operator who initiated the sale failed to win the bidding, he simply lost that portion of his quota. His only options were to bid on another operator's Timber Sale or buy up another operator's business for its timber.[22]

In defining "established operator," the Forest Service assumed the owner of the Timber Sale was the operator carrying out the timber harvesting. Clearly that was a spurious conclusion which failed to account for the industry's structure. As already described in Chapter Three, many of the district lumbermen harvested timber from other operators' sales as well as their own in order to build up the necessary capital to become totally independent. However, the Forest Service policy applied the volume harvested on the sale to the sale owner, rather than to the lumberman who actually carried out the cutting operations. The effect was to force timber holders and their

Map 4.2


WILLIAMS LAKE
REGION: 1956
NECHAKO RIVER
Vanderhoof
Prince George
Willow River
Bowron River
Red Rock
Wood Pecker
Hixon
Strathnaver
Wells
Barkerville
West Road River
Cottonwood R.
FRASER RIVER
Quesnel
Quesnel R.
Keithley Creek
Likely
Castle Rock
Marguerite
Macalister
Horsefly
Horsefly R.
Soda Cr.
Whiskey Creek
Williams Lake
Meldrum Creek
Chilcotin R.
Alexis Creek
Hanceville
Lac la Hache
Lone Butte
Flying U Ranch
70 Mile House
Clinton
Lillooet
1 Williams Lake Public Working Circle: 1955
2 Quesnel Lake Public Working Circle: 1955
3 Stum Lake Sustained Yield Unit : 1956
C.N. Railway
P. G. E. Railway
0 miles 30
orca graphics

contractors into increasingly formal relationships that neither party desired.[23]

The quota policy was a static concept applied to a rapidly transforming industry. The Forest Service was well aware of many existing operators' need to expand and upgrade their operations, as financial capital accumulation permitted, in order to achieve greater productive and allocative efficiency. However, quota volumes were based on previous production records and provided no margin for technological and organizational advances that required additional timber volume to sustain such innovation at economic levels.[24]

Furthermore, the "quota" did not account for market conditions which forced operators to run at less than capacity or to shut down temporarily. It also failed to address the needs of new operators whose existing quota positions did not permit them to amortize their capital expenditures. Although far less significant the policy also failed to account for the 1953 shift in log scaling methods from the board foot scale to the cubic foot scale. Due to lack of training in the new, more complicated scaling method, some operators submitted inaccurate cut volumes until they became used to the cubic scale system. Therefore their cut was below the level that their existing operations required. In short, the policy had an adverse impact on an already beleaguered industrial sector.[25]

Speculation by outsiders further exacerbated this situation. The "quota" allocated by public auction in a market characterized by excess demand provided a very attractive and often extremely lucrative

investment for timber speculators who had no interest in participating in the local industry. Opportunists from as far away as Vancouver began attending auctions to bid on sales, with the sole purpose of acquiring an increasingly valuable asset--the timber plus the quota that it represented. Successful speculators were able to acquire the timber for the cost of the bidding fee and the deposit of ten per cent of the stumpage price bid for the volume. They were then able to resell the asset immediately, for a healthy profit, to a district operator who desperately needed the wood volume. Some speculators did not have to invest any money. Instead, they approached the original applicant and threatened to bid up his Timber Sale at the coming auction. Rather than face exhorbitant stumpage costs, the operator often paid the speculator cash or a certain percentage of the Timber Sale wood volume on the understanding that the sale would not be contested.[26]

Sales were also bid up by those who had heard that manufacturing lumber was a lucrative business, but who had no idea of the costs involved in running a lumber operation. This further exaggerated timber supply problems when market conditions were beginning to sag. Even the most efficient operators feared that they would not be able to survive. Rather than gamble for timber supplies in the increasingly fierce competitions at public auctions, many small operators sold their mills and equipment at exhorbitant prices to other lumbermen who desperately needed the timber quota attached to the logging and milling assets. The Forest Service had effectively created a commodity market which allowed timber to be sold for large profits based on its future value.

Ultimately, the very group of operators that the policy was supposed to protect suffered most from the effects of its application.[27]

The most interesting aspect of the quota policy was that the district's head office in Kamloops did not officially acknowledge it. Although the local ranger staff informally told many district operators about the Kamloops directives and the manner in which they were being applied, there was never any formal recognition of the policy and the operators certainly did not receive any forewarning of its application. The operators were totally unprepared for the restrictions placed on their ability to apply for timber, and many were unaware of the quota policy due to their infrequent contact with the local Forest Service staff. In theory, quota tallies provided a reasonable method of limiting the influx of lumbermen, but in practice, the policy was a static, shortsighted measure that failed to provide the necessary barriers to entry on Timber Sales. It also failed to account for the specific composition of the district industry and the needs of the individuals within that structure.[28]

## Timber Access

While the Kamloops Forest District Chief Forester, Lorne Swannell, publicly announced in early 1955 that a severe timber crisis had emerged, the annual cut of timber suitable for lumber was not being exceeded. Only the economically accessible merchantable timber was being cut at too rapid a rate. The operators' real problem was the Forest Service's serious neglect of access road construction. The

Forest Service was unwilling to allocate any of the stumpage profits earned in the district toward building access roads that opened up new timber supply areas.[29]

The pioneering operator who opened up a new supply area through constructing an access road was soon crowded by other operators who were awarded Timber Sales on adjacent blocks. He even risked losing his own timber area when the short-term tenure ran out. The profits from timber areas opened up through the efforts of industry operators were extorted by the Forest Service, with no compensation to the original operator.[30]

The Forest Service effectively created a "free rider" problem. By failing to protect pioneering investors who required longer tenures to amortize the access development costs, the Forest Service allowed new operators to take advantage of the revenues generated by the original operators' expenditures. While the Forest Service gained from the stumpage revenues and the new operators gained from the economically accessible timber supply, the original operators were placed at a disadvantage. Not only did they have to amortize the relatively large development costs over basically the same tenure period as was awarded to the new arrivals, but it is doubtful that they ever received the full value of their investments. Their costs were, quite obviously, much higher than those of the average operator in their timber region, due to the "free rider" problem. Furthermore, their capital outlays placed them at a disadvantage in competition with newcomers. Instead of using stumpage revenues to stabilize the industry through opening up the

district forest, profits generated by the local sector were siphoned out of the district. Community stability was sacrificed in favour of expanding the provincial government coffers.[31]

Long-Term Supply

While access roads into new timber areas and restrictions on entry into the district industry might have provided short-term relief, the underlying problem was the lack of any form of long-term timber tenure for the existing operators. The local lumbermen were effectively discouraged from reinvesting profits in new technology and methods to increase the long-term stability of their enterprises. In the 1940s the Forest Service requested operators to limit their Timber Sale applications to a two-year timber supply. During the 1950s, Timber Sales were generally for three to five year wood supplies, but even that length of time was not sufficient to amortize any but the smallest capital investments. Restricting operators to short-term tenures was a clear indication that the Forest Service believed the local lumbermen were only temporary participants who would be gradually phased out when major investors were attracted by the district's potential. The Forest Service did not acknowledge that a stable and flourishing long-term industry could develop from capital generated from within the nascent sector's structure.[32]

Another clear indication of the Forest Service's preference for large operators was the number of Forest Management Licence applications it accepted for consideration in what was supposedly an overcut region.

Despite the Williams Lake District PWC being cut well beyond its capacity to maintain, and despite the Quesnel Lake PWC approaching its allowable annual cut limit, no less than four Forest Management Licence (FML) applications were being considered, all of which included large blocks of timber from the northern half of the Quesnel Lake PWC, where the public sustained-yield unit's best commercial forest cover was located. Established operators who had located in the Quesnel Lake PWC were, in many cases, cutting in areas that directly abutted the proposed FML blocks. The local Forest Service rejected Timber Sale applications on the excuse that the forest land requested by the operators was reserved for FML's under consideration. Even more upsetting for the local lumbermen was the fact that the FML applicants, with one exception, were outside operators who intended to harvest the timber for processing outside the region in direct contravention of the government's stated objective of community development through industry payroll stability.[33]

During the 1955 Sloan Commission hearings held in Quesnel, the arguments for and against FML's for large, integrated forest companies as a means of providing community stability came to the fore in the context of the Williams Lake District. The major argument in favour of the Western Plywood Company FML application in the Quesnel Lake PWC was that the proposed centralized manufacturing plant was essential to future community expansion and development. The itinerant small operators of the district were supposedly destined for extinction and the Forest Service had to protect the large operator through timber

security in order to ensure future forestry revenues for government coffers and future payrolls for the regional communities.[34]

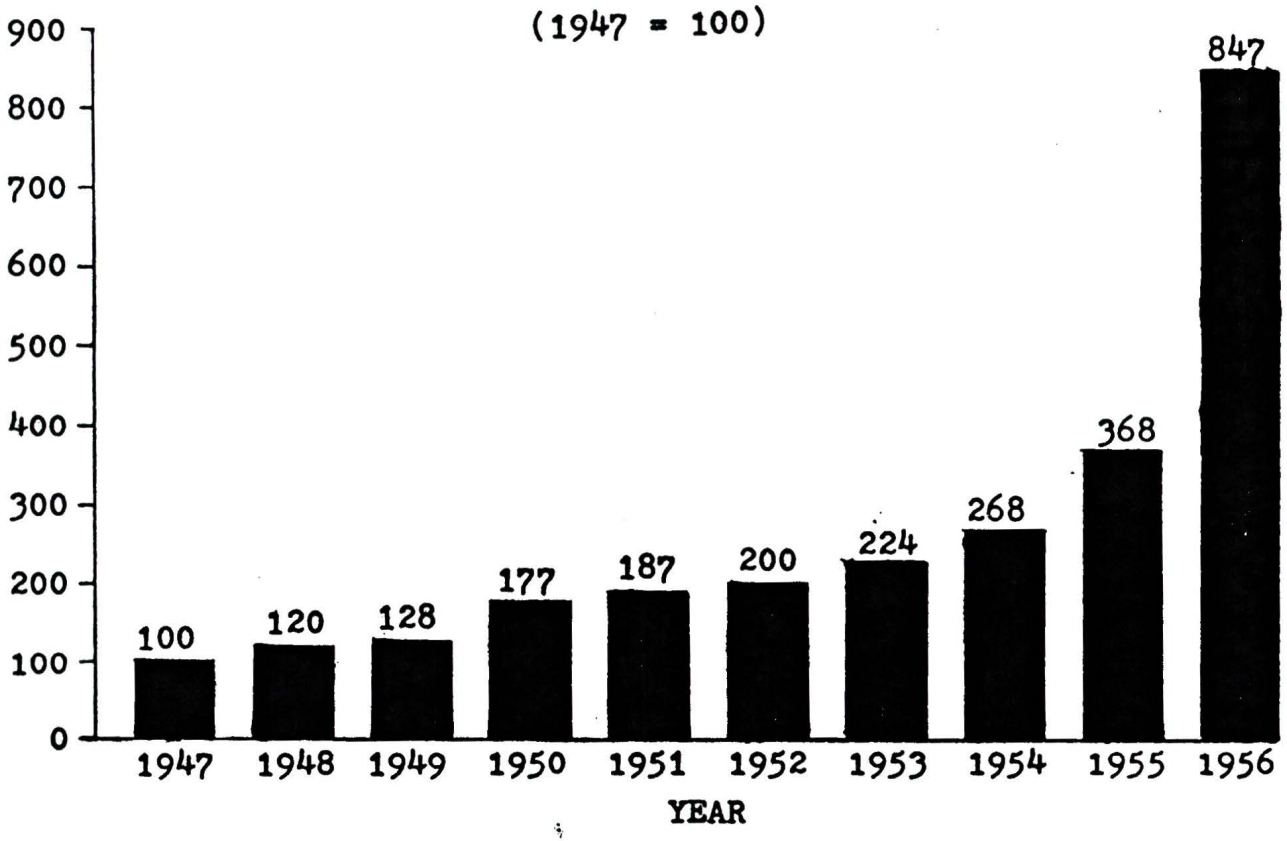
While a compelling statement filled with the pleasant-sounding objectives expressed by the first Sloan Commission, the Western Plywood brief was countered with an extremely forceful submission from the Horsefly Committee of the Williams Lake Board of Trade. In support of established operators in the Quesnel Lake PWC, the brief argued that the objective of centralized manufacturing under a single company at the expense of nineteen lumber operations and thirteen trucking firms was not a stabilizing influence. Unlike FML holders, who economized on access road building, smaller operators were gradually opening up many valuable pockets of excellent agricultural land through building roads into the many smaller timber areas. In addition, farmers and ranchers were able to obtain jobs in close proximity to their agricultural enterprises. The additional income made it possible for them to finance the expenses of developing their land. The distances to work and the requirement of steady employee attendance that characterized large, centralized manufacturing plants were not conducive to the needs of the developing Williams Lake District region. Furthermore, centralized manufacturing plants purchased most of their supplies in bulk from Vancouver while small operators purchased from district merchants. If multiple use and community stability were the goals of long-term tenure then, the submission argued, the established operators should receive preference.[35]

It was undeniable that the town of Williams Lake had mushroomed

from the revenues generated by the existing forest industry structure (see Graph 4.3). Despite lumber market fluctuations, Williams Lake had expanded and developed as a commercial and distribution centre as a result of the local forest sector and communities like Likely and Horsefly had been transformed into permanent settlements. It was also quite evident that three of the FML applicants, whose manufacturing plants were outside the Williams Lake District, intended to log the timber and transport the wood out of the area for processing. Only one of the FML applicants, Lignum Limited, received tacit support from the local business sector by being included as one of the nineteen operators that the Horsefly Committee urged the Forest Service to preserve.[36]

When Leslie Kerr presented his brief to the Victoria sitting of the Sloan Commission in early 1956, it was clear he intended to enhance the district structure through a long-term development plan, rather than simply replace existing enterprise with a totally new form of lumber business. In Kerr's view, the existing structure held the key to the district's future and, as such, needed the protection of long-term tenure to expand and grow into an increasingly efficient economic sector. Kerr agreed that the economies of scale required to carry out the extensive forest management requirements of the FML were often too great for smaller operators and contended that they were unfair to most district operators by denying them access to any form of long-term tenure. As a possible solution, Kerr recommended that the Forest Service grant a small operator long-term tenure if he was able to get a large forest company like Lignum to guarantee the forest management

Graph 4.3: Index of Current Taxes Collected in the Village of Williams Lake, 1947-1956




Source: Corporation of the Village of Williams Lake Financial Statements: Annual Report of the Auditor, [1947-1956], (Location: Williams Lake City Hall, [1948-1957]), [various pages].

requirements. The small operator would retain the timber in his own name, and the tenure was only valid if that operator remained in business. The guarantor benefitted from the lumber sold to him for finishing and/or shipment, but was forced to maintain competitive prices in order to ensure his supply source remained an economic venture.[37]

Gradually, over time, Kerr maintained that consolidation and centralization would occur as entrepreneurs reinvested profits and upgraded their plants, thereby making opportunistic ventures increasingly inefficient. In Kerr's long-term plan, consolidation and growth would occur from within the sector rather than through imported capital. The government's goal of increased forest revenues would be achieved through a gradual increase in the "average efficient operation" level upon which minimum stumpage was based and by industry taking over the forest management role of developing the district timberland and improving the wood value of the forest cover. By putting the onus on industry to ensure that standards of operation constantly improved, and by rewarding efficient operators with a guaranteed timber supply, community development through industrial stability and growth could occur while contributing greater revenues to the provincial government through both stumpage and corporate tax dollars.[38]

## Wood Waste

The main reason for the Forest Service's unwillingness to grant long-term tenure to small bushmill operators was their wasteful logging

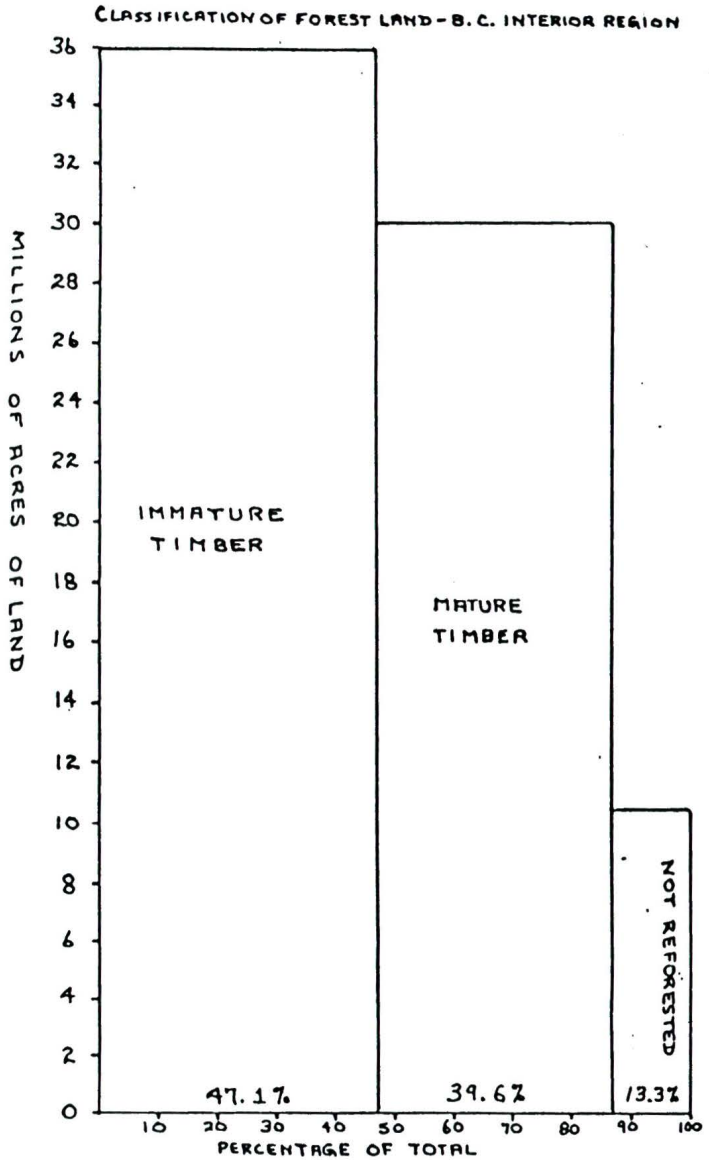
and manufacturing equipment and methods. While Kerr was very cognizant of needless wood waste, he pointed out that better wood utilization required relatively large investments in new logging and milling technology. Without any guarantee of a future timber supply and with the minimal capital requirements involved in gaining access to the existing accessible stocks, there was no incentive for any operator, including Lignum, to risk financing the necessary technological and organizational development.[39]

Wood utilization standards were an effective method available to the Forest Service for limiting access to the timber supply. As Kerr recommended, tenure length could very easily be correlated with the long-term investment plans of the operator. For opportunistic lumbermen who simply wanted to "cut and run," short-term tenures on smaller pockets of timberland could be identified by the Forest Service and made available for immediate liquidation. For entrepreneurial operators who wished to upgrade their facilities and establish permanent operations, tenures could be made commensurate with their long-term investment plans. In short, Kerr requested a flexible timber tenure system to encourage increased efficiency rather than carrying on with the existing policy that deterred operators from making the necessary capital investments in technological and organizational development.[40]

The government's laissez-faire timber allocation policies encouraged wood waste. In 1945 Sloan warned the Forest Service against hiding behind the excuse of "free enterprise," and allowing wasteful devastation of provincial forests by inadequate operations. Despite

effectively controlling entry into the Williams Lake District forests and encouraging improvement in wood utilization, the provincial Forest Service never developed any policy to control the waste of wood by primitive, badly managed sawing operations. Portable mills were the worst offenders and Sloan recommended implementation of minimum wood utilization standards. Every mill in the Williams Lake District was portable in design, although some were operated as stationary mills. However, no wood utilization standards were ever established. As late as 1956 anyone with one hundred dollars or so and who won the bidding at a Timber Sale could enter the industry, often at the expense of well-managed, relatively efficient operations. In 1956 Kerr demanded that government develop policies which made room for good operators by weeding out the wasteful mills that were throwing good wood away at a scandalous rate.[41]

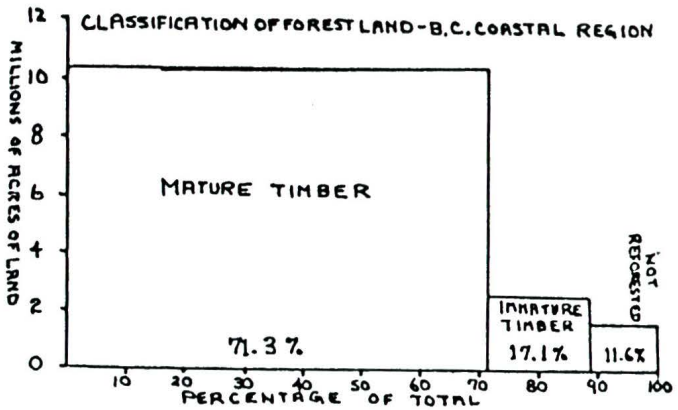
Undeniably Kerr was correct in saying much merchantable wood was wasted in the Williams Lake District by the "itinerant and irresponsible despoilers of good wood" that Sloan had warned against in 1945. However, Forest Service policies actively invited wastage of merchantable timber. In his 1945 report, Sloan claimed that, unlike the Coastal region, the British Columbia Interior forests were in good balance. When the Interior was considered as a whole, its forests contained almost optimal proportions of immature and mature trees. The same findings were graphically illustrated in a supplement to Sloan's 1956 report (see Graph 4.4). The British Columbia Forest Service had determined that sixty per cent of the total Interior acreage of forest




**Graph 4.4:**

Classification of Forest Land in the B.C. Interior and B.C. Coastal Regions

Source: Gordon McG. Sloan, "Diagrammatic Representation of Land Classifications, Coast and Interior", Report of the Commissioner, Honourable Gordon McG. Sloan, Chief Justice of British Columbia relating to The Forest Resources of British Columbia, 1956, volume 2. (Victoria: The Queen's Printer, 1957), [Map Supplement--no pagination]



land contained immature timber or was not reforested, while approximately forty per cent of the forest acreage contained mature timber. Based on those findings, the Forest Service established the 60/40 Formula for timber harvesting in the Interior. The assumption was that sixty per cent of the total wood volume was contained in the mature forty per cent of the trees. While the assessment may have been relatively valid for the Interior as a whole, it was quite clear to the Williams Lake District operators and the local Forest Service staff that such a formula was not appropriate for their district where there was a preponderance of overmature and mature trees compared with the immature stocks. Supposedly logged out timber tenures remained well stocked with trees that were ready for harvesting and were infringing on the growth of less mature timber stands.[42]

Effective sustained-yield management depended on the Forest Service's ability to bring the provincial forests into balance, so that they contained a full range of tree age classes, from seedlings through to mature timber. The government was well aware of the Coastal forests' overabundance of mature and overmature, or decadent, timber which was crowding out the immature stock. The Forest Service argued that all mature timber could not be harvested without, at some point, creating an extended period of excessive supply shortages while the immature trees reached harvestable age. In theory, it was a valid point, since the establishment of immature stocks had been severely limited by the overabundance of mature timber. Allowable annual cut calculations, however, were based purely on economically accessible timber stocks.

While, at the Coast, the majority of forestland had been developed, the Forest Service had done little in the way of providing access to the Williams Lake District forests.[43]

While the accessible forestland was being harvested at a greater rate than the allowable annual cut permitted in the Williams Lake PWC, it was not even being harvested to the allowable annual level in the Quesnel Lake PWC. Consequently, mature stocks were being retained as inventory, delaying the start of a new forest crop in the accessible areas. In addition, mature timber was totally untouched in the inaccessible areas that could have been made economic to harvest through a proper road-building program. Even more wasteful was the abundance of overmature stock that was left unharvested, due to lack of road access. Through underdevelopment of the timber areas, thousands of board feet of merchantable wood were destroyed through gradual rotting of overmature timber and through infestations of boring insects which were attracted by the dead wood and began spreading into healthy stocks.[44]

A specific example of wood waste is illustrated by the manner in which the Forest Service dealt with a very large block of merchantable timber in the district which had been killed during a cold snap in late 1952. The Forest Service Kamloops Forest District headquarters officials were well aware that the large tract of timber had to be harvested within a few years to avoid serious bug infestations developing in the many acres of dead and rotting wood. Suddenly, in 1955, amid claims of serious timber shortages, the Kamloops District Chief Forester announced that the stands suffering from "winter kill"

had to be logged off immediately in blocks that only very large operators could handle.[45]

When the inevitable protest from the district operators was levied against the Forest Service's decision, the District Chief Forester decided that the bug infestation was not as serious as had first been believed, and he held the final decision in abeyance. The obvious reason for balking at the prospect of many small operators harvesting the wood, rather than a few large companies, was the expense of providing basic access roads into the timber. With small Timber Sales, more roads were required. While the Forest Service continued to delay the decision, merchantable timber was being destroyed by rot and insects, even as the district operators' supply shortages increased.[46]

It was quite clear to the operators and to the local Forest Service staff that rigid sustained-yield calculations were totally inappropriate for the district forests. In his 1956 submission to the second Sloan Commission, Leslie Kerr questioned the whole basis for determining the annual cut, claiming it was inappropriate, inflexible and anachronistic. Kerr described Victoria's annual cut concept as being analogous to the kind of thinking that led to France's disastrous Maginot Line in World War II. He called the concept, based on natural growth of trees in unimproved forests, short-sighted and lacking in any allowances for improvements in reforestation methods that would hasten tree growth.[47]

In fact the active reforestation program that Sloan recommended

in 1945 was not instituted in the Williams Lake District. A passive program requiring that the best mature trees be left in the forest to throw seed for new growth simply did not work. In the first place, the crews marking the sales generally consisted of university forestry students who had little, if any, experience in what was a difficult task for well-seasoned foresters who had spent years perfecting the art and were well aware of how the logging of timber stands had to be carried out. The loggers were required to cut the specific trees that the amateur timber markers had designated under the sale's terms. The result was the loggers had to be masterful fallers if they were to remove all the trees that the licence demanded them to harvest without damaging the trees not designated for removal. In some cases it was impossible and the tenure-holder had to pay a penalty fee.[48]

In addition, seed trees, no longer protected by the support forest of large trees to break the wind, were often blown over in the first big storm. Douglas fir, which was the prime merchantable species in the Williams Lake District, has a relatively shallow root structure and was particularly vulnerable to "wind fall." Going back to log out the blown down timber sparsely scattered over large areas was a time-consuming proposition that cut into the profits derived from the sale, and was the result of an ill-devised, laissez-faire approach to reforestation which threatened the propogation of future timber stocks.[49]

Another Forest Service policy that resulted in large quantities of wasted merchantable wood was the rule for harvesting a tree. The

government department demanded that all trees be cut at a height of three feet from the ground. When, for example, Linde Bros. refused to do that, and cut the trees off at a height of one foot from the ground, the local Forest Ranger was outraged. However, Fred Linde, an American lumberman trained under the United States Forest Service regulations that had demanded such closer utilization by the 1930s, refused to change and the ranger finally left him alone. The extremely valid point that Linde made to the local Forest Service was that, since no tree with a base diameter under one foot was cut in the district, the existing policy required the logger to leave at least two cubic feet of the tree's prime wood in the forest to rot. In terms of finished lumber, that meant about seven to ten board feet at least per tree was thrown away, even after normal sawmilling waste.[50]

At the other end of the tree, the general rule was that the wood had to be used up to an eight-inch diameter top. Anything less than eight inches in diameter could be thrown away. To give an idea of the waste derived from that policy, today trees having an eight-inch diameter at the butt end are being logged and converted into excellent merchantable lumber.[51]

The policy of using the operator's average annual cut, or quota, to restrict access to district timber also encouraged wood waste. The only way for a timber holder to increase his quota was, quite obviously, to use more wood. With no minimum standard for wood waste, a badly-managed operation that processed more wood volume to attain the same level of output as a well-managed outfit, benefitted over the

efficient firm through having a larger quota. Furthermore, the quota policy encouraged small, owner-operated sawmills to react perversely to market downturns. Adding extra shifts using the owner's "free" labour spread fixed costs over a greater number of units of output and improved the operator's quota position. As already discussed in Chapter Three, that paradoxical reaction was somewhat ameliorated by the planer mill-shipper's system of payment and credit. Nevertheless, the quota policy provided a definite incentive to maintain a high rate of harvest through all market conditions.[52]

In terms of efficient resource allocation, the waste was enormous. Not only was rapid depletion of timber stocks encouraged, with little attention paid to wood waste, but timber holders were given a strong incentive to increase their levels of daily output, even when the wood's market value was significantly reduced. The revenue lost from the quota policy through its encouragement of both productive and allocative inefficiency was significant. In essence, whatever the sawmiller was wasting with his crude, badly-managed operation, the Victoria policymakers were doing a very good job of matching.

## Multiple Use Forests

The Forest Service did not fare any better in its stated objective of allocating the district forests to their most valuable economic and social uses. The Williams Lake District ranching community depended on the Forest Service's Grazing Department to provide grazing land and to ensure that their privileges were respected by other forest

users, particularly the lumbermen. Because of the rapid growth of the district lumber industry, the ranchers' needs were often overlooked by the local ranger staff. Victoria directives demanded that Timber Sale cruising and forest protection receive top priority and the rest was left until the local Forest Service staff found time. That spare time was virtually non-existent.[53]

The animosity of the established ranching community members against the incoming lumbermen and the local Forest Service staff at times grew into intense bitterness. The local ranchers felt neglected and were often justified in their complaints. During the 1955 Quesnel hearings of the Sloan Commission, the 275-member Cariboo Cattlemen's Association submitted a brief compiled with the assistance of their Member of Parliament, Davie Fulton. The association represented ranchers from throughout the region stretching from 100 Mile House in the south, Anahim Lake in the west, north to Macalister and west to Horsefly Lake.[54]

Carrying combined stocks of over forty thousand head of cattle and, in 1954 alone, representing sales of over $1.5 million, the cattlemen's association argued that the ranching sector deserved much more consideration than it had received. The main complaint was that the Forest Service had all but ignored the planning and control of forest use that was essential in the Williams Lake District as a result of the lumber industry's rapid growth. At the end of World War II, the cattle industry had represented approximately eight per cent of the economic activity in the region. By the 1955 hearings the lumber

industry had totally usurped ranching as the region's most important economic provider. The lumber and cattle industries, by their very nature, conflicted and the Forest Service had not paid due attention to ameliorating the inevitable problems.[55]

In particular, the ranchers were concerned about damage and loss of cattle, destruction of grazing land, and increases in taxation that had resulted directly from the rapid influx of lumbermen. Fences and water installations, like ditches, were often broken by careless lumber industry participants. Unless mended by the rancher, the repairs were slowly and shoddily done, if done at all. Therefore, the damage costs were generally paid by the cattleman. Gates left open, the noise and population of milling activities, and deliberate chasing of cattle caused serious disruptions in normal cattle grazing migration patterns, resulting in cattle losses and reductions in the weight and grade of beef produced. The designated range grazing sites were often rendered dangerous or inaccessible through the general debris left by milling and logging operations. Furthermore, the logging trucks, with their capacity loads, were seriously damaging back roads required by ranchers to carry out their daily activities.[56]

The time and effort provided by the Forest Service for Grazing Department duties had greatly diminished as the lumber industry grew. However, the costs for cattlemen in terms of school, hospital, and other taxes levied on their ranch land had increased as a result of the expanding lumber industry population. In short, the ranchers' costs were escalating while servicing of their needs and protection of their

interests rapidly diminished. Upon being questioned, the Kamloops Forest District Chief Forester fully agreed that Grazing Department duties had been sorely neglected in the district due to inadequate staffing. While Sloan had warned the government in 1945 that the multiple-use principle had to be actively implemented and enforced, the Victoria mandarins failed to provide the staff and the funding necessary to carry out that second main objective of sustained-yield management. The brunt of the anger arising from the Forest Service's inadequate planning was borne at the local level. The result was that an important and powerful economic sector in the district was antagonistic toward the growth of the local lumber industry. By 1956, virtually nothing had been done by the Forest Service to ameliorate the problems that had arisen from neglecting district ranchers' needs within the multiple-forest use framework that forest management was intended to entail.[57]

## Conclusion

The two main sustained-yield management objectives, community stability and planned multiple-forest use, were definitely not met by the British Columbia Forest Services policies governing the Williams Lake District. While the local lumber industry absorbed the costs of maintaining the district forests in perpetuity, the provincial government extracted the financial rewards derived from that industry's existence. The lumber sector's foundations were developed by entrepreneurial operators who were geared toward enhancing the stability

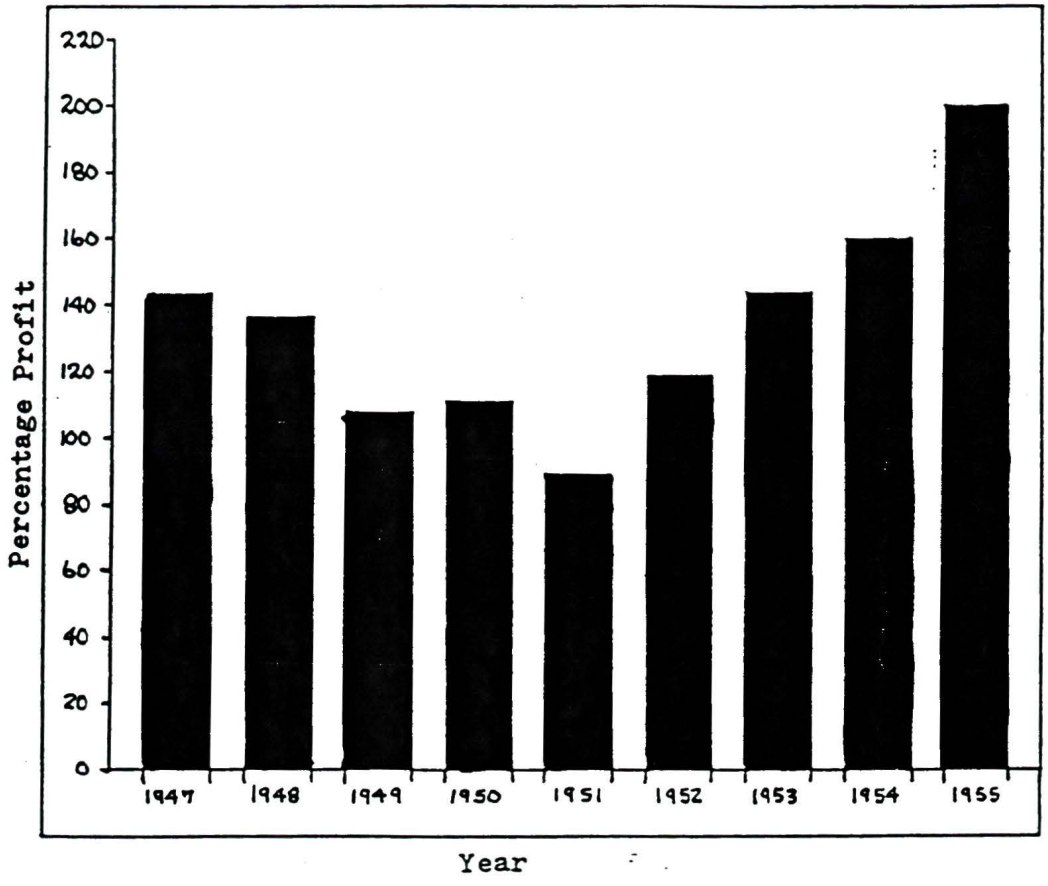
of their enterprises over the longer term, but were seriously undermined by the British Columbia Government's opportunistic management of the timber resource.

The Forest Service's primary role in the district was to extract profits for the government's coffers (see Graph 4.5). Virtually none of the revenue was reinvested in forest management and protection activities in the Williams Lake region. Forest restocking was left to the whims of nature. Forest protection consisted of fighting fires, and that task was delegated to the lumbermen, their employees, and other district residents who were drafted by the local Forest Rangers. What the operator did between the time he purchased his timber and the time he finished the Timber Sale harvesting was basically his own business, providing that his stumpage payments were regularly submitted and his log scale tallies appeared to be in order. By 1956, some operators in the district had not seen anyone from the local ranger staff in over two years.[58]

The British Columbia Government was a resource monopolist. There was no significant wood supply in the Williams Lake District outside government control. Until the 1950s, the timber volume that the Forest Service was willing to sell exceeded the local industry's demand. During those years the government appraised the timber's market value and sold the economically accessible stocks at that price. As the local industry expanded and developed, based on profit opportunities that district lumber production offered, the government failed to compile an accurate inventory of the timber supply. "Economically merchantable

Graph 4.5: Annual Percentage Profit for the B.C. Government Forestry Account, 1947-1955

** Percentage Profit = $\frac{\text{Revenue - Expenditure}}{\text{Expenditure}}$ x 100




Source: "Principal forestry revenues, Canada and each province, selected years 1933 to 1943 and 1945 to 1955" and "Gross ordinary and capital forestry expenditures, selected years 1933 to 1943 and 1945 to 1955", Historical Statistics of Canada, M.C. Urquhart, ed. (Ottawa: The Macmillan Company of Canada, 1965), pp. 338-339.

timber" was continually redefined as the industry operators developed access roads farther and farther into the region's forests. When industrial expansion began to exceed the supply of accessible timber, the government responded in a monopolistic manner.[59]

Entrepreneurial management of the region's timber required reinvestment of stumpage profits in adequate staff and appropriate planning capable of sustaining efficient development of the existing industry through encouragement of timber area development and increased allocative and productive efficiency. Instead, as the influx of new lumbermen caused an inevitable supply shortage in the accessible forest stands, the British Columbia Forest Service merely restricted the wood supply and allowed the excess demand to inflate timber prices rapidly. Government stumpage revenues escalated while industrial development was thwarted. Although the Forest Service effectively extracted monopoly gains for the provincial government coffers, the price was paid by the Williams Lake District, as a whole. Community stability, responsible forest management, and social and economic multiple-forest use values were significantly reduced as a result of the government's ill-devised resource policies. Sustained-yield management merely became the convenient excuse which the Forest Service used to rationalize the escalating timber prices.[60]

In 1938 C. D. Orchard's predecessor, E. C. Manning, forcefully reminded his employers that, in agricultural communities, farmers depended on additional income from employment in the local forest industry. Those communities relied on government to manage the forest

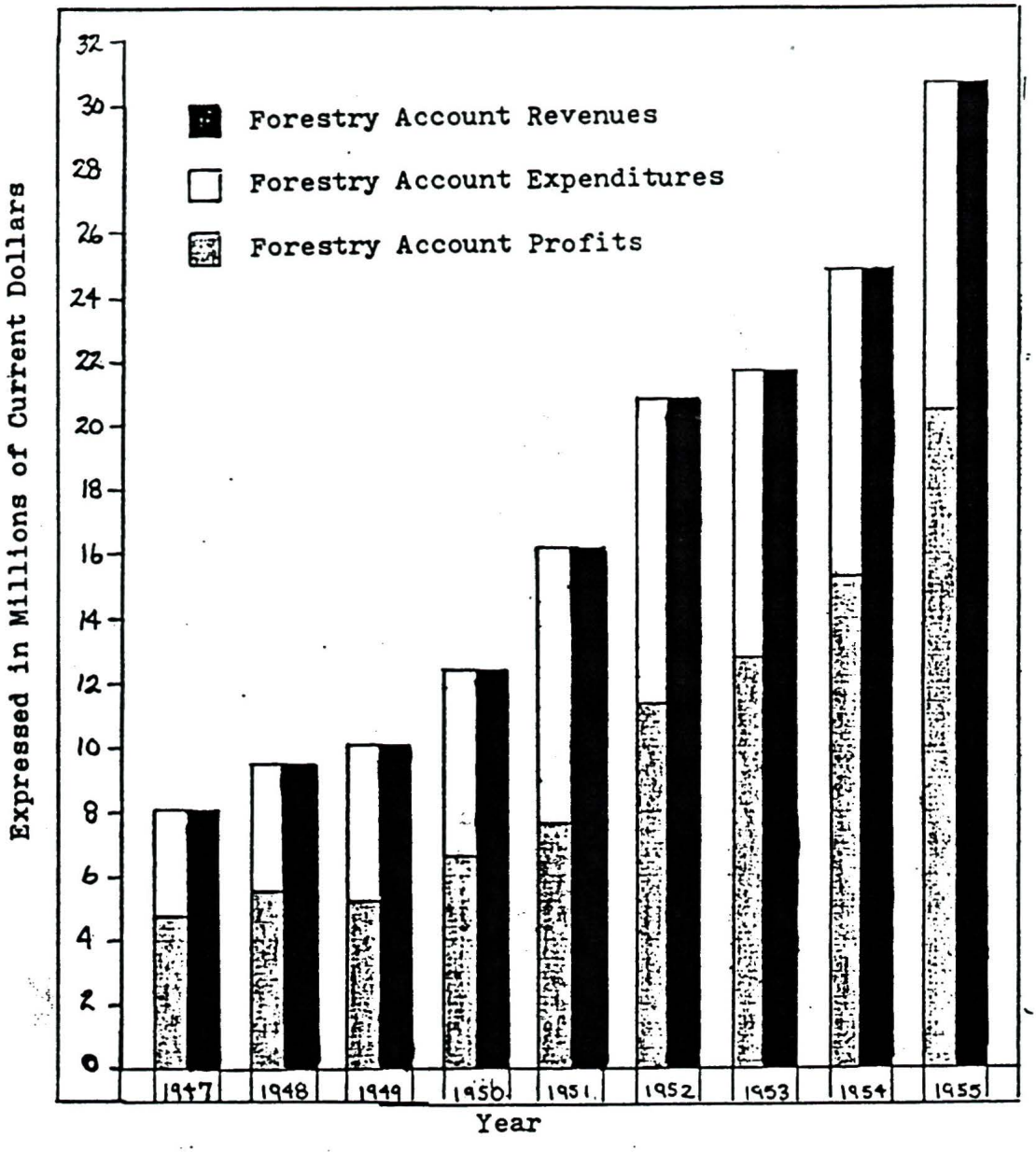
land in a manner that sustained the local economy. The former British Columbia Chief Forester emphasized the government's own reported findings that too often once prosperous mill towns were left "ghost towns and rural slums" through mismanagement of the forest resource. Manning recognized the underlying problem and warned government against reaping current profits from forest production when reinvestment in forest planning, management, and protection carried a far higher social and economic value for future generations.[61]

> Every dollar of forest capital needed to perpetuate the resource but turned into current revenues for other purposes will be lost many times over to industry, employment and government revenues in the years to come.[62]

It was the British Columbia Forest Service's responsibility, as a government department, to encourage the establishment and perpetuation of stable enterprise that was able to support those rural communities over the long term. As Manning argued, forest resource revenues were not profits for government to spend on politically expedient projects. Those returns were primarily reinvestment capital for use in a manner that improved and protected the forest crop in the future. Despite a vociferous commitment to sustained-yield management and to maintaining or increasing the forest crop in perpetuity, the British Columbia politicians continued to channel the revenues from forest resource utilization away from the forest sector (see Graph 4.6).[63]

The percentage of profits that the British Columbia Government reaped from its forests was higher than any other Canadian province

Graph 4.6: B.C. Government Forestry Account, 1947-1955




Source: "Principal foresty revenues, Canada and each province, selected years 1933 to 1943 and 1945 to 1955" and "Gross ordinary and capital forestry expenditures, selected years 1933 to 1943 and 1945 to 1955", Historical Statistics of Canada. M.C. Urquhart, ed. (Ottawa: The MacMillan Company of Canada, 1965), pp. 338-339.

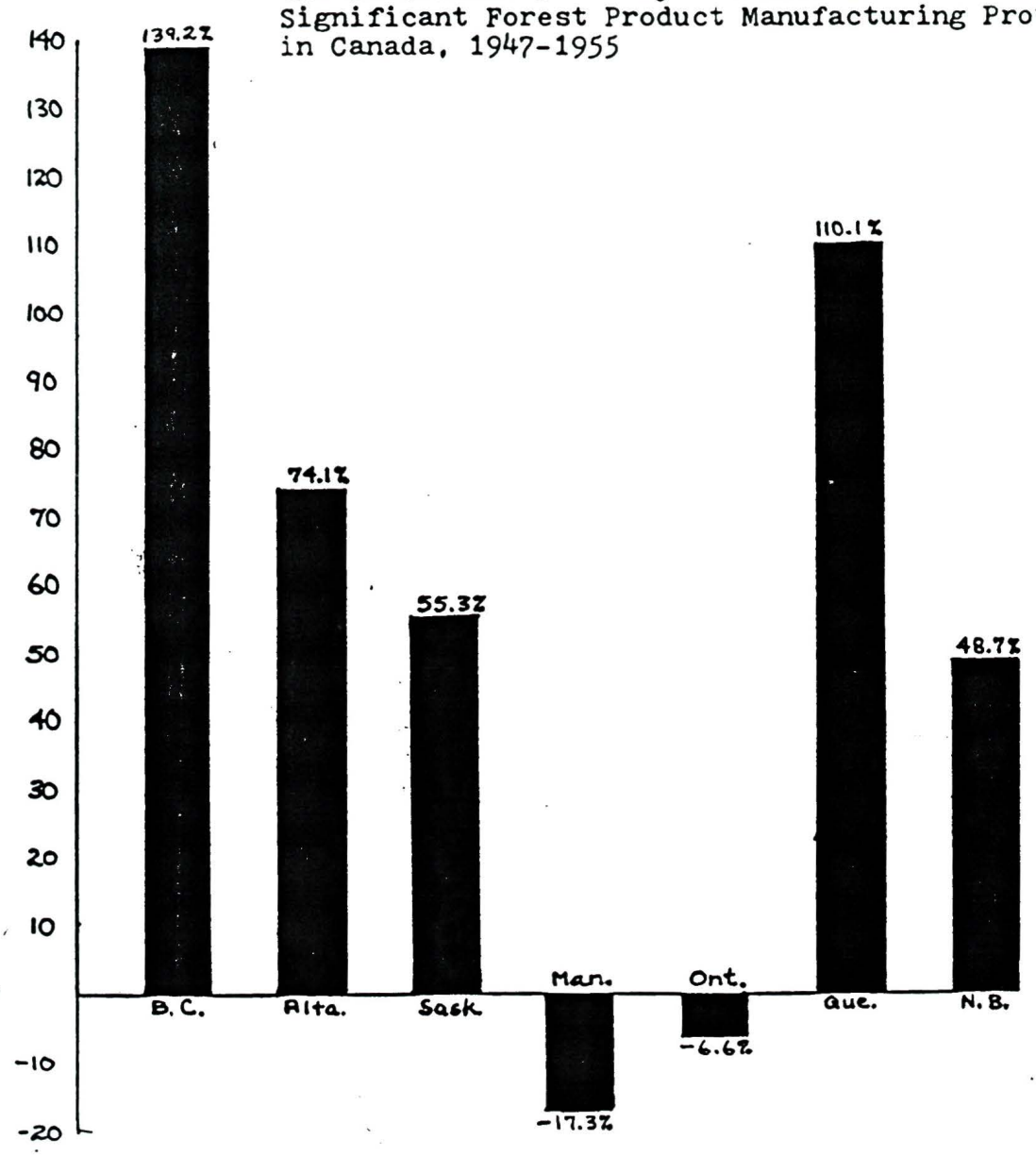
during the nine-year period from 1947 through 1955 (see Graph 4.7). It was not necessary to increase those profits in 1953 by increasing the tax burden borne by provincial lumbermen at a time when the entire industry was financially strained by a prolonged market slump. Moreover, with the large surplus of funds that government received from the provincial forest industry, there was no need for the pervasive understaffing and laissez-faire forest management that was evident in the Williams Lake District. The lumbermen were said to be exploiters of the forest resource prior to the Forest Act amendments of the late 1940s. However, the British Columbia Government, as the forest resource monopolist, was taking over the exploiter role.[64]

While the Coastal forest industry received a great deal of attention from government policymakers, the Interior remained somewhat forgotten despite the emphatic warnings of Gordon Sloan's 1945 report. Although Sloan felt that the whole province shared the same forest management objectives, he stressed that policies outlining the methods for carrying out the objectives had to be flexible and designed to suit the specific conditions of the region in which they applied.[65]

> . . . it is true the Coast and Interior forest present wide differences at almost every point of comparison, yet they are both composed of growing trees and both are subject to the same basic principles of forest management. It is in the application of those principles to the two areas that the distinction between them really lies.[66]

Whether the Forest Service rules and regulations were appropriate for the Williams Lake District was apparently of very little concern to

Graph 4.7: The Nine-Year Average Percentage Profit for the Government Forestry Accounts of the Seven Significant Forest Product Manufacturing Provinces in Canada, 1947-1955




** Percentage Profit = $\frac{\text{Revenue - Expenditure}}{\text{Expenditure}} \times 100$

Source: "Principal forestry revenues, Canada and each province, selected years 1933 to 1943 and 1945 to 1955" and "Gross ordinary and capital forestry expenditures, selected years 1933 to 1943 and 1945 to 1955", Historical Statistics of Canada, M.C. Urquhart, ed. (Ottawa: The MacMillan Company of Canada, 1965), pp. 338-339.

those who formulated and instituted them.

Conditions in the Williams Lake District forests were virtually unknown to the Victoria policymakers. C. D. Orchard was still unaware of the timber's commercial value by the 1950s. To the head of the Forest Service, lumber production in the district was a misguided venture that was doomed to failure. The Kamloops Forest District officials were directed to sell off the district's "weed trees" to any operators who were willing to harvest them and pay the stumpage. When supply shortages began to emerge, there were no plans in place to guide the industry toward stable sustained-yield management, and no financing was allocated to the local Forest Service staff for a desperately needed timber development program.[67]

The solution to the district supply crisis that Kamloops Chief Forester, Lorne Swannell, apparently suggested was an operators' association for each PWC in which lumbermen mutually agreed on each operator's supply area before they applied for Timber Sales. Once the timber areas were defined, the association could support its members against timber speculators and other interlopers. While the operators' associations came later in the district's development, it is important to note that the onus was placed on industry, rather than government, to find a solution to the systemic problems that the Forest Service timber allocation policies had created.[68]

The particular structure of the Williams Lake District lumber industry was not of the type that the Victoria mandarins sought to encourage and preserve. The basic notion shared by the government, the

British Columbia Forest Service and, to a large extent, by Sloan, was that economic development in the forest sector required offering large incentives that encouraged large investors to set up large, integrated forest companies. It was not acknowledged that small operators could build their enterprises into large concerns through continual reinvestment of profits over the long term. The Forest Service's first Chief Forester, H. R. MacMillan, had started his own massive Coastal operation from beginnings as humble as those of many entrepreneurial Williams Lake District lumbermen, but the provincial policymakers showed little interest in providing planned forest management policies that encouraged similar indigenous growth.[69]

Of the four Forest Management Licence applications for long-term tenure in the Williams Lake region, the only one that made any progress was that of Western Plywood, a large coastal operation which had moved into the Interior primarily to supplement the company's Coastal timber holdings used in its Vancouver-area manufacturing facilities. Although Western Plywood had opened a mill in Quesnel and company officials were planning to expand into pulp and paper production, none of Western Plywood's projects was destined to enhance community stability in the Williams Lake District. The only FML proposal that was cognizant of district needs was that of Lignum.[70]

It was quite clear by 1956 that the application Leslie Kerr had submitted in 1954 was not going to be approved. Kerr had proposed gradual consolidation through growth and integration of existing Williams Lake District operators rather than immediate investment in a

single, integrated, centralized manufacturing facility. However, cooperative development toward consolidation and integration was not an economic process that was encouraged or even appreciated by government, the Forest Service or Sloan. To the British Columbia Forest Service, small operators, like the Williams Lake District lumbermen, were temporary industry participants whose activities were intended to attract the large capital investors who, the Victoria mandarins hoped, would replace them. By 1956 the FML had come to symbolize Chief Forester, C. D. Orchard's belief that the small operator had no place in the industry's future.[71]

The FML clearly reflected the "bigger is better" economic philosophy of the British Columbia Government. Furthermore, growing innuendos in 1954 that the Social Credit Lands and Forest Minister, Robert Sommers, had accepted bribes from British Columbia Forest Products, a large Coastal forest company, in exchange for an FML licence in a prime location added fuel to the feeling that FML's were used for political, rather than economic, ends. When Premier W. A. C. Bennett stonewalled an investigation into that allegation, which the courts later proved to be true, animosity escalated toward the FML and its clear discrimination against small operators.[72]

The British Columbia Government, as virtually the sole owner of provincial timber stands, was obliged to ensure that the monopolist tendencies toward allocative and productive inefficiency were thwarted and that the economic and social goals of the state monopoly were achieved. During the post-World War II years that was not accomplished

in the Williams Lake District. Crop regeneration was all but ignored, supply was restricted unnecessarily, and prices were forced up to levels that extorted the local industry's portion of the conversion return. Rather than limiting industry participation to a workable level of competition that safeguarded the future of district communities that depended on the local economic sector, community needs were passed over in favour of increased profits for government. In addition, the ranching sector was threatened by the chaotic, poorly-planned management of district forests. Instead of encouraging multiple-forest use that favoured the highest social and economic values for the district, the British Columbia Forest Service allowed wholesale abuse which threatened the future of the two most important forest user-groups.

Of all opportunistic operators in the local forest sector, the most damaging and the most pervasive one was the resource owner, the British Columbia Government. The cost of timber threatened to price the local lumbermen out of their markets. The poorly-conceived policies of inefficient Victoria administrators further raised the price at which lumber could be produced. The investments of every business within the district lumber production and distribution system were threatened by the Forest Service's refusal to provide local operators with a long-term timber supply that maintained efficient production levels and accommodated efficient industrial development. The government policies and regulations ultimately undermined the Williams Lake District lumbermen's ambitions to establish a profitable industry that could be maintained and expanded in the years to come.

## Footnotes

[1]Gordon McG. Sloan, Report of the Commissioner, The Honourable Gordon McG. Sloan Relating to the Forest Resource of British Columbia 1945 (Victoria: Charles F. Banfield, Printer to the King's Most Excellent Majesty, 1945), 125-29; interview with O. J. "Whitey" Andersen; Eric Druce, "Forestry," Transcripts of the Second British Columbia Natural Resources Conference (Victoria: British Columbia Natural Resources Conference, 1949), 131; Gordon McG. Sloan, Report of the Commissioner, The Honourable Gordon McG. Sloan Relating to the Forest Resource of British Columbia 1956 2 (Victoria: The Queen's Printer, 1957), 222-38.

[2]Gordon McG. Sloan, Forest Resources of British Columbia 1945, 127, 149; Gordon McG. Sloan, Forest Resources of British Columbia 1956, 222.

[3]Gordon McG. Sloan, Forest Resources of British Columbia 1945, 34-43; Gordon McG. Sloan, Forest Resources of British Columbia 1956, I:222-38; Eric Druce, "Forestry," 131.

[4]Gordon McG. Sloan, Forest Resources of British Columbia 1945, 127-28, 162, 168; Gordon McG. Sloan, Forest Resources of British Columbia 1956, I:39-44; Hartley V. Lewis, "Objectives of Public Forest Policy in British Columbia: Some Economic Observations," Timber Policy Issues in British Columbia, William McKillop and Walter J. Mead, eds., (Vancouver: University of British Columbia Press, 1976), 6-7, 12-15; G. L. Ainscough, "British Columbia Forest Land Tenure System," Timber Policy Issues in B.C., 38-39.

[5]Gordon McG. Sloan, The Forest Resources of British Columbia 1945, 143-49; British Columbia Department of Lands and Forests, Forest Service, Forest Management Licences: An Explanation of the "Forest Act" Dealing with Forest Management Licences (Victoria: The King's Printer, 1948); Gordon McG. Sloan, Forest Resources of British Columbia, 65-66, 94-96, 123-25; Gordon McG. Sloan, Forest Resources of British Columbia 1945, 78.

[6]Gordon McG. Sloan, Forest Resources of British Columbia 1945, 124-25.

[7]Interviews with Reg Norberg and O. J. "Whitey" Andersen; Gordon McG. Sloan, Commissioner, Transcripts, XVIII (1955), 8614-31; Gordon McG. Sloan, Forest Resources of British Columbia, 689.

[8]Interviews with Reg Norberg, Gabe Pinette, Dollard Therrien, Harold M. Jacobson, and Fred Linde.

[9]Gordon McG. Sloan, Forest Resources of British Columbia 1956

II:454, 463.

[10]Gordon McG. Sloan, Forest Resources of British Columbia, II:465-67, 473-75; Laurie Milner, compiler, Miscellaneous Documents Relating to Stumpage and Volume Tallies 1951-1955, Location: Inland Timber Management Ltd., Williams Lake, B.C. [no pagination]. Note: There were two other ways of calculating stumpage: (1) multiply the royalty tax and other charges that private wood lot lowners paid in the region by 2.5 or (2) seven percent of the dressed lumber price. However, these two ways always produced a price considerably lower than the method described in this thesis. Since Forest Service policy demanded the method of stumpage calculation that produced the highest rate be used, these other two methods were not significant in the Williams Lake District.

[11]J. J. Juhasz, "Methods of Crown Timber Appraisal in British Columbia," Timber Policy Issues in British Columbia, William McKillop and Walter J. Mead, eds. (Vancouver: University of British Columbia Press, 1974), 64-67; interview with Reg Norberg; Gordon McG. Sloan, Forest Resources of British Columbia 1956 I:505-12; Gordon McG. Sloan, Commissioner, Transcripts, XXIII:10833-35, 10894-98; XVIII, 8361; Laurie Milner, compiler, Stumpage Appraisals and Volume Tallies [no pagination].

[12]Task Force on Crown Timber Disposal, Timber Appraisal: Policies and Procedures for Evaluating Crown Timber in British Columbia (Victoria: British Columbia Forest Service, 1974), 40-42, 47-48; Gordon McG. Sloan, Forest Resources of British Columbia 1956 II:507-8.

[13]Gordon McG. Sloan, Forest Resources of British Columbia, 502-9; Gordon McG. Sloan, Commissioner, Transcripts XVIII 91955), 8531; XXIII (1956), 10835, 10894-95.

[14]Gordon McG. Sloan, Forest Resources of British Columbia 1945, 97; Peter H. Pearse, Timber Rights and Forest Policy in British Columbia: Report of the Royal Commission on Forest Resources (Victoria: The Queen's Printer, 1976), A7; interviews with Reg Norberg and O. J. "Whitey" Andersen.

[15]Interviews with Reg Norberg and O. J. "Whitey" Andersen. Note: Advertisements of Timber Sales had to appear in the WLT. From that source it can be determined that sales by public auctions were rapidly replacing sales by sealed tender.

[16]Interviews with Reg Norberg, Gabe Pinette, Harold M. Jacobson, Dollard Therrien, and J. Stewart Smith; "Operators Fear Lumber Source Cut," WLT (January 27, 1955), 1; "Stabilization Necessary," WLT (February 3, 1955), 2; "Forest Policies Explained," WLT (March 10, 1955), 1; "A Disappearing Industry," WLT (April 14, 1955), 2; "Mills Cutting Twice as Much as Working Circle Can Stand," WLT (November 3, 1955), 1.

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[19]Gordon McG. Sloan, Forest Resources of British Columbia 1945, 148.

[20]Department of Lands and Forests, Report of the Forest Service for the Year Ended December 31st, 1952 (Victoria: The King's Printer, 1953), 18-31; Department of Lands and Forests, Report of the Forest Service, 1954, 44-45; interviews with Reg Norberg and O.J. "Whitey" Andersen.

[21]"Lumbering Contributing to Economy of District," WLT (May 17, 1951), 1; "Forest Policies Explained," WLT (March 10, 1955), 1; interview with Reg Norberg; Gordon McG. Sloan, Forest Resources of British Columbia 1956, 126-27; Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8361, 8512-14.

[22]Interviews with Reg Norberg, Gabe Pinette, Dollard Therrien, and Harold Jacobson; Gordon McG. Sloan, Commissioner, Transcripts XXIII (1956), 10822-25.

[23]Peter H. Pearse, Timber Rights and Forest Policy II:A14-15; interviews with Gabe Pinette, Dollard Therrien, and Harold Jacobson; Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 10836, 10884, 10886-87, 10891-92, 10894.

[24]Peter H. Pearse, Timber Rights and Forest Policy II:A14-15; interviews with Gabe Pinette, Dollard Therrien, and Reg Norberg; Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8357, 8386, 8409; XXIII (1956), 10820.

[25]Interviews with Reg Norberg, Fred Linde, Gabe Pinette, and Dollard Therrien; Peter H. Pearse, Timber Rights and Forest Policy II:A14-15.

[26]Interviews with Reg Norberg, Gabe Pinette, and Dollard Therrien; Peter H. Pearse, Timber Rights and Forest Policy, A14-15; Gordon McG. Sloan, Commissioner, Transcripts XXIII (1956), 10823-24, 10837, 10884, 10888; XVIII (1955), 8373, 8414-15, 8440.

[27]Interviews with Gabe Pinette, Dollard Therrien, Fred

Linde, and Harold Jacobson; Gordon McG. Sloan, Commissioner, Transcripts XVIII, 8361-62, 8373, 8414-16, 8440, 8496-6a; XXIII, 10823-24.

[28]Interviews with Reg Norberg, Gabe Pinette, and Dollard Therrien; Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8361, 8518-89; XXIII (1956), 10837, 10884, 10888, 10891-92.

[29]Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8355, 8366, 8387, 8396-97, 8413, 8476; XXIII (1956), 10890-91; Gordon McG. Sloan, Forest Resources of British Columbia 1956, 599, 605-7.

[30]Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8357, 8363, 8366, 8413, 8476; XXIII (1956), 10890-91; Gordon McG. Sloan, Forest Resources of British Columbia 1956, 603, 616.

[31]Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8355, 8357, 8363-64, 8366, 8387, 8396-97, 8413, 8428, 8476; XXIII (1956), 10890-91.

[32]Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8357, 8363, 8365, 8409, 8470, 8472, 8369, 8386, 10820, 10823, 10841, 1081-85, 10888-901. Note: The duration of Timber Sales in the district was provided in the sale advertisements that were required to appear in the local newspaper, the WLT. That source corresponded to statements made by district operators to Gordon Sloan during 1955 and 1956 commission hearings.

[33]Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8507-9, 8512-13, 8519-26, 8529-30.

[34]Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8384, 8413, 8426-27, 8438-39, 8448-49, 8485.

[35]Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8506-8, 8520-22, 8526-30.

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[37]Gordon McG. Sloan, Commissioner, Transcripts XXIII (1956), 10822-23, 10831-36, 10841, 10881-87, 10890-8.

[38]Ibid.

[39]Gordon McG. Sloan, Commissioner, Transcripts XXIII (1956), 10822-23, 10836, 10841, 10881-85, 10897-900; XVIII (1955), 8357, 8360, 8363-64, 8369, 8386, 8409-10, 8470-72.

[40]Gordon McG. Sloan, Commissioner, Transcripts XXIII (1956), 10820-23, 10831-36, 10881-902.

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[43]Gordon McG. Sloan, Forest Resources of British Columbia 1956 I:222-32, 243-44; II:599-610; Gordon McG. Sloan, "Diagrammatic Representation of Land Classifications--Coast and Interior," Forest Resources of British Columbia 1956 II: [Map Supplement]; Gordon McG. Sloan, Forest Resources of British Columbia 1945, 20-32; II:599.

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[46]"Winter Damaged Forest Will Not Be Sold This Spring," WLT (March 1, 1956), 1; Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8579-80.

[47]Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8400, 8403, 8446-47; XXIII (1956), 10820-26, 10844-46; interview with Reg Norberg.

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[50]Interviews with Fred Linde, Reg Norberg, and O. J. "Whitey" Andersen; Laurie Milner, Compiler, Stumpage and Volume Tallies 1951-1955 [no pagination]. Note: The conversion factor range used to convert cubic feet to board feet, accounting for normal sawmilling waste, was derived from Department of Lands and Forests, Report of the Forest Service [1947 through] [Supplementary Tables-- various pages]. In a discussion with Gordon Sloan during the 1955 Quesnel Sloan Commission hearing, Kamloops District Chief Forester, Lorne Swannell, says that a conversion factor of 1 cubic foot equals 6 board feet was "not far wrong" for the district. See Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8514-15.

1 cubic foot = 5 to 6 board feet (f.b.m.)
1 board foot = 12" x 12" x 1"
Calculations:
2 cubic feet = $r^2$ x height
= (3.14 x .5 ft.) x 2 ft.
= 1.57.
Conversion:
1.57 x 5 = 7.85
1.57 x 6 = 9.42.
Therefore, in board feet, roughly 7 to 10 f.b.m. was wasted through cutting trees off at the three-foot height instead of the one-foot height. No documentation has been found thus far to explain the reason for the three-foot high stump. It has been suggested that the regulaton ws intended for logging on the steep coastal mountain logging sites. The stumps apparently protected the hillside from ground water erosion that would have occurred if the stumps were removed. However, in the flat rolling land of the Central Interior such a policy was ill-conceived and resulted in unnecessary waste.

[51]Gordon McG. Sloan, Commissioner, Transcripts XXIII (1956), 10843; interviews with O. J. "Whitey" Andersen and Fred Linde.

[52]Peter H. Pearse, II, Timber Rights and Forest Policy, A14.

[53]Interview with Reg Norberg; Gordon McG. Sloan, Forest Resources of British Columbia 1945, 168; "Grazing Given Less Attention with Growth of Forest Industry," WLT (November 3, 1955), 1; Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8614-31.

[54]Interview with Reg Norberg; "Grazing Given Less Attention with Growth of Forest Industry," WLT (November 3, 1955), 1; Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8582.

[55]Gordon McG. Sloan, Forest Resources of British Columbia 1956 II:689-706; Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8582-604; 8614-31.

[56]Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8585-87, 8592-97; Gordon McG. Sloan, Forest Resources of British Columbia 1956 II:689-706; interview with Reg Norberg.

[57]Gordon McG. Sloan, Forest Resources of British Columbia 1956 II:441-42, 689-91, 706; Gordon McG. Sloan, Commissioner, Transcripts XVIII (1955), 8614-31; interview with Reg Norberg.

[58]"Local Forest Ranger Studied Engineering," [Lumbermen's Exhibition Supplement] WLT (November 3, 1955), S1; interviews with Reg Norberg, Gabe Pinette, and Dollard Therrien.

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[60]G. L. Ainscough, "The British Columbia Forest Land Tenure System," Timber Policy Issues in B.C., 37.

[61]E. C. Manning, Address by the Chief Forester to the Forestry Committee of the British Columbia Legislature [Location: University of Victoria Library, Victoria, B.C.] (November 15, 1938), 13-14; E. C. Manning, Address by the Chief Forester to the Forestry Committee of the British Columbia Legislature [Location: University of Victoria, Victoria, B.C.] (November 9, 1939), 12-14.

[62]E. C. Manning, Address by the Chief Forester (November 9, 1939), 12.

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[64]"Editorial," BCL (October 1953), 37; J. K. Nesbitt, "Victoria Report," BCL (October 1953), 88, 91.

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[66]Ibid., 168.

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[69]"The Industry Today," BCL (October 1951), 45; "Exit the Small Man," WLT (January 24, 1952), 2; "'Small Man' in Lumbering Will Disappear Stated Orchard," WLT (April 17, 1952), 9; "The Industry Today," BCL (March 1953), 35; J. K. Nesbitt, "Victoria Report," BCL (October 1953), 88, 91; James K. Nesbitt, "Victoria Report," BCL (April 1954), 102-4; "Northern Interior," BCL (May 1954), 30; J. K. Nesbitt, "Victoria Report," BCL (january 1955), 90; "Editorial," BCL (June 1955), 41; "Editorial," BCL (September 1955), 27; Gordon McG. Sloan, Forest Resources of British Columbia 1956 I:45-101; Donald MacKay, Empire of Wood: The MacMillan Bloedel Story (Vancouver: Douglas & McIntyre, 1983), 42-43, 93-99.

[70]Gordon McG. Sloan, Transcripts XVIII (1955), 8384, 8413-14, 8426-39, 8448-49, 8485, 8512-14.

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[72]Gordon Gibson with Carol Renison, Bull of the Woods: The Gordon Gibson Story (Vancouver: Douglas & McIntryre, 1980), 244-45; interview with Alex Fraser; "Northern Interior," BCL (may 1954), 30; J. K. Nesbitt, "Victoria Report," BCL, 102-4; "Rising Pressure in Forest Situation: Enquiry Due," BCL (December 1954), 50, 52-53; J. K. Nesbitt, "Victoria Report," BCL (February 1955), 95; "Editorial," BCL (March 1955), 53; "B.C. Briefs: FML Battle Goes to Electors," BCL (April 1955), 8; "B.C. Briefs," BCL (June 1955), 9; "Our Heritage--Our Concern," WLT (August 18, 1955), 2; "Around B.C. with the Editors," BCL (October 1955), 8, 10, 21; "Sloan Probe Draws High Interest Still," BCL (April 1956), 16, 18, 20; "Around B.C. with the Editors," BCL (April 1956), 98.

# CHAPTER FIVE

## CONCLUSION: GOVERNMENT AND ECONOMIC DEVELOPMENT IN THE WILLIAMS LAKE DISTRICT

The Williams Lake District lumber industry arose from a heightened demand in the residential construction sector following World War II. By the time that excess demand had somewhat ameliorated in the mid-1950s a quasi-corporate structure had emerged in the local sector. The production and distribution system, through its control mechanisms, encouraged development and growth which increased the system's ability to survive over the long term. The dominant structure of Lignum Limited was adopted by other entrepreneurial operators in the district, although the size and degree of formal integration varied. Although Lignum remained the largest enterprise, other competitors rapidly grew once they adopted the Lignum quasi-Multidivisional form.[1]

The British Columbia Forest Service policymakers were unaware of the district industrial structure and what was required to maintain its development toward more efficient levels of production and distribution. The policies instituted to govern the local sector were inappropriate as a result of the prevailing ignorance in Victoria of the district's economic development process. Rather than encouraging what, according to local industry members and community residents alike, was an economic sector that contributed greatly to the regional economy, the Forest Service bureaucrats sought to restrain the existing operators and

attract large capital investment from outside the district. The vehicle was the Forest Management Licence, the only form of long-term timber tenure available to the industry. The FML was only designed for large, integrated, centralized manufacturing companies. Forest Service policies provided no method of encouraging the establishment and development of indigenous industry from internally generated capital.

The mutually beneficial quasi-corporate district structure remained effective in the marketplace through rewarding cost-competitive producers based on their economic performance but it depended on all operators being given an equal opportunity to meet the volatile market's demands. By allocating timber arbitrarily through public auctions, the Forest Service created increasingly large discrepancies in the prices paid by district operators for equivalent wood volumes. Through that price discrimination, the Forest Service unfairly placed local lumbermen on unequal footing in their drive to increase cost efficiency. The Timber Sale method of timber allocation effectively disrupted the mutually beneficial production and distribution system through arbitrarily making district operations financially unsound, regardless of their economic performance. Although a government department charged with the responsibility of encourging the development of a strong forest sector, the British Columbia Forest Service was the major source of inefficiency in the Williams Lake District lumber industry.

The main question that arises is how the Victoria mandarins' lack of understanding continued to persist, despite the Williams Lake District sector's obvious ability to weather adverse market conditions

apparently as well or better than its Coastal counterparts, even with the environmental and locational disadvantages that the district operators faced. The answer lay in the pervasive notion that large companies, because of their size, were better forms of business enterprise. The concommitant thinking was that capital investment in large, formally-integrated corporations was the type of investment that it was the duty of government to encourage.[2]

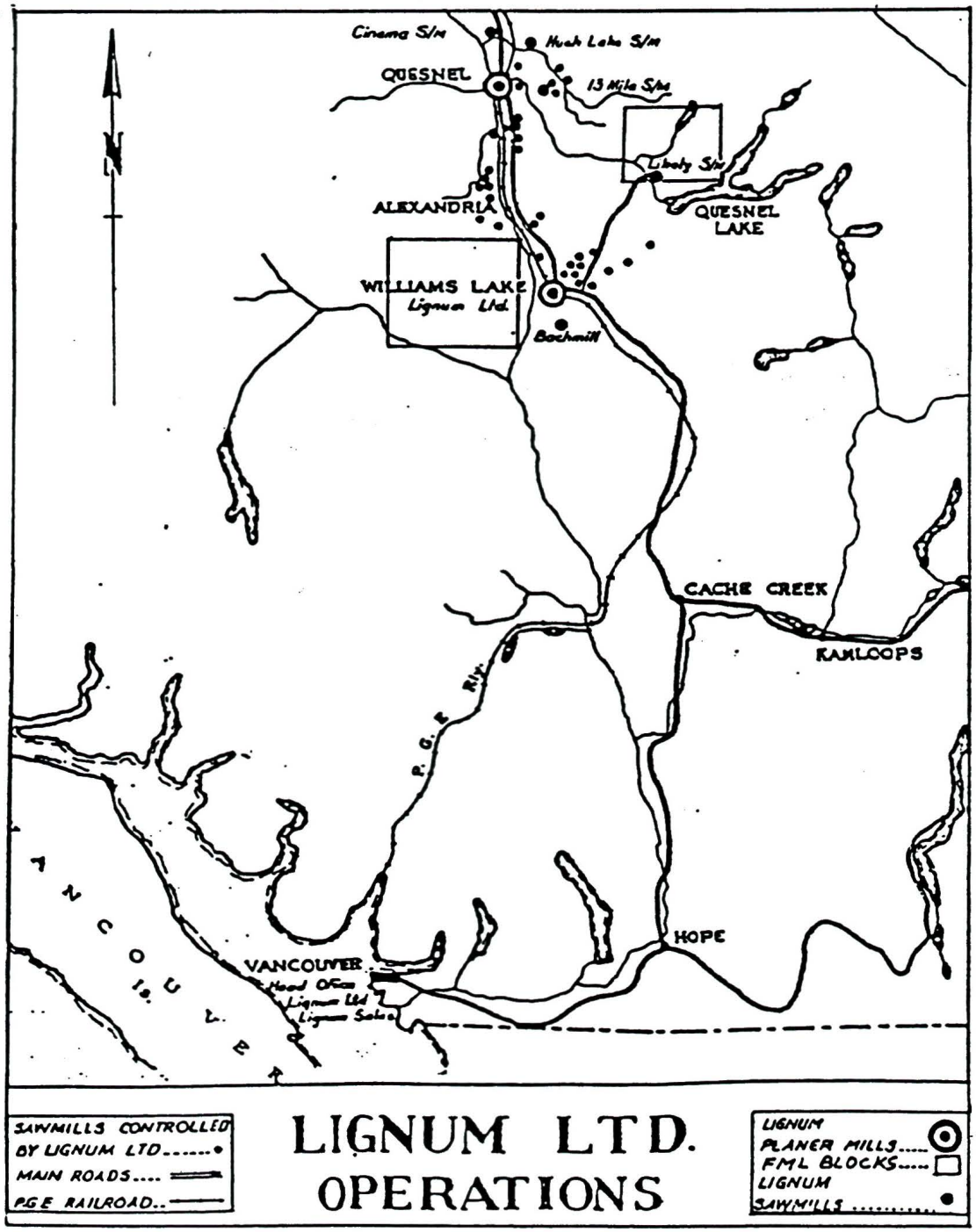
The benefits that large business provided for government were quite clear. There were definite transaction economies for government in negotiating single contracts for large blocks of timber in perpetuity. Furthermore, the costs of managing the forest resource could be gradually shifted over to private industry while the British Columbia Forest Service collected the revenues for the wood produced. However, with that transfer of control came relinquishment of government's power to safeguard the stability of regional communities which the forest resource was intended to sustain. Williams Lake, Likely, and Horsefly were only going to benefit from one of the FML proposls submitted to the Forest Service for timber in the district. From the line of discussion at the 1956 Sloan Commission hearing in Victoria, it was clear that the Forest Service rejected the Lignum application because Leslie Kerr intended to continue using small operators within his company structure.[3]

At the time of the Lignum FML application, the company directly employed 447 people, of whom 200 were in the Williams Lake District. Approximately 1,300 people depended on the Lignum organization for their

livelihood. The two blocks of timber that the Lignum FML application requested merely consolidated the company's existing quota, moving the cutting sites out of easily accessible, congested areas into more remote forestland (see Map 5.1.). However, Lignum's size was based on mutually-beneficial arrangements between many smaller business units. The Forest Service equated small enterprises with "itinerant despoilers" of the resource, rather than as they actually were: entrepreneurs who were mutually working toward a more efficient, stable economic structure able to survive over the long term. Ironically, the Forest Service had invited small firms to open up new timber areas in the district. Once the economic feasibility of lumber production was established, the public auction system removed those small operators and opened the region for subsidiaries of large, integrated business under the protection of the Forest Management Licence.[4]

Leslie Kerr clearly stated to the second Sloan Commission that consolidation in the interest of efficiency and stability was inevitable. The real question was whether to import consolidation through large capital investment, much of which was controlled from beyond Canada's borders, or to develop consolidation from within the existing industry structure in a manner that responded to the site-specific needs of the regional population that the local industry was intended to serve. District residents opposed the government's policy of handing over resources to large, integrated enterprises controlled by absentee owners or their designates. They felt that such enterprise detracted from the district's welfare. Using revenue

**Map 5.1:** Lignum Ltd. Operations as of June 1955




Source: Lignum Group of Companies, A Submission to the B.C. Forest Service. Location: B.C. Forest Service Forestry Library, Victoria, B.C. (June 1955) [Map insert--no pagination]

generated by district resources, large corporate business would purchase supplies in bulk from major urban centres instead of from local merchants. The firms that forest policy favoured tended to be more capital-intensive, meaning lower employment levels and fewer people to spend their earnings locally. The centralization of industry meant that peripheral communities, like Horsefly and Likely, would be sacrificed through loss of employment for many of their residents. The personal contact with mill owners would be eliminated, and the region's welfare would be decided by people who had little, if any, interest in its future.[5]

The multiple-forest use objective was also threatened by the FML. It was clear in the Western Plywood submission to the second Sloan Commission that company officials considered their existing FML holdings to be private property. Western Plywood urged government to provide FML holders with the legal right to bar other forest users from entering the FML area. The brief argued that the company was responsible for managing and protecting the timber crop. Other users posed a threat to the company's timber supply and, as a consequence, should not be allowed access to what the company considered was private property. Instead of assisting in the multiple-use objective, the FML quite clearly encouraged its holder to guard the timber area that the licence covered for the sole purpose of forest industry production. For a region that also depended on other forest uses such as hunting and ranching, the FML endangered important sources of community income.[6]

The Lignum brief to the second Sloan Commission essentially

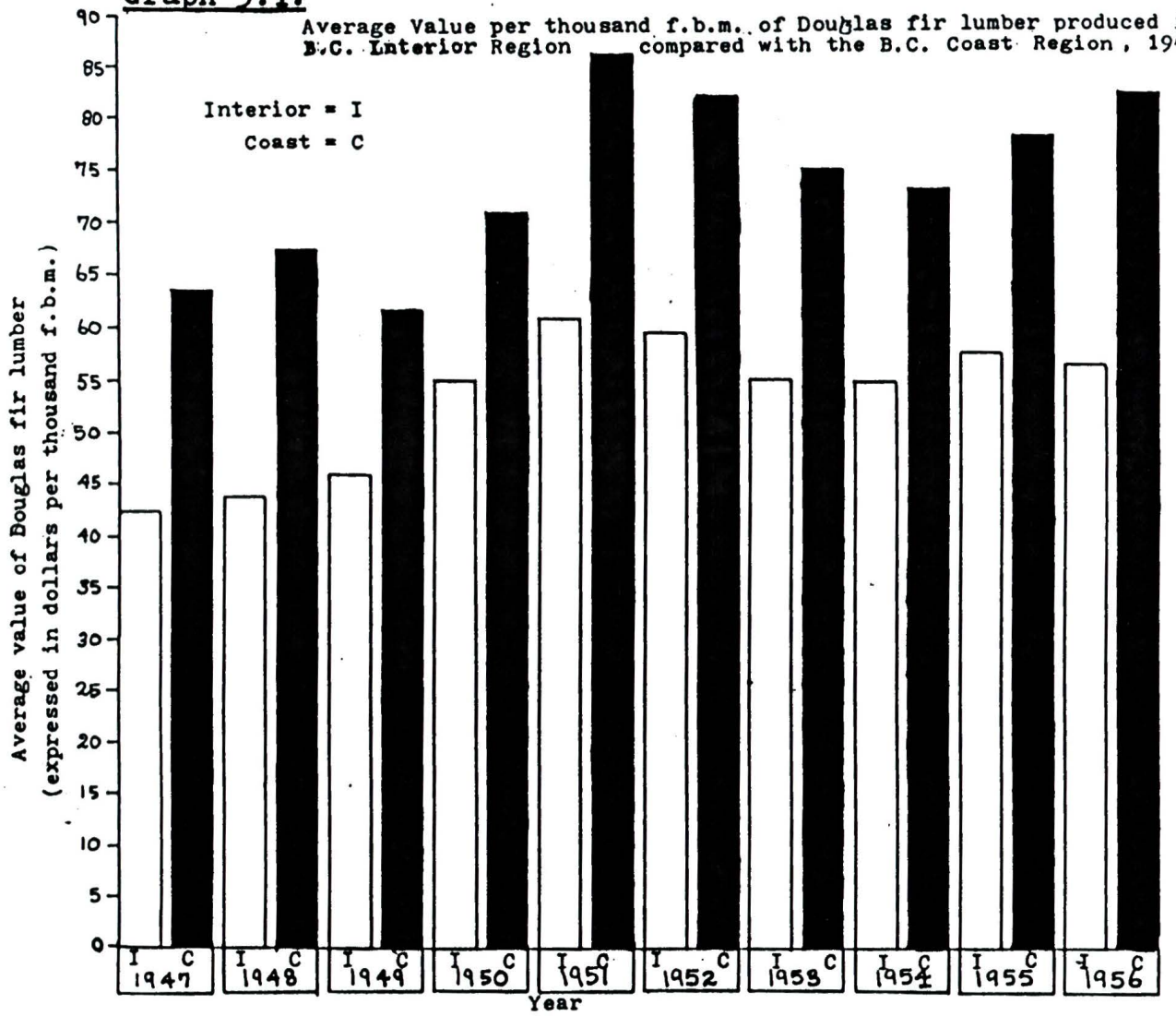
urged the Forest Service mandarins to reconsider their assumption that all small firms were, by virtue of their size, inefficient lumber producers who could not carve a future for themselves within the industry. That may have been true prior to Lignum's arrival in the district, when small sawmills had no direct access to lumber markets and no incentive to improve their operations. However, that was a spurious description of the many entrepreneurial enterprises that operated effectively and were rapidly becoming increasingly efficient within the district's mutually-beneficial quasi-Multidivisional structure.

The local lumbermen faced greater adversity than their Coastal counterparts through lower returns for their Douglas fir lumber (see Graph 5.1), higher freight rates, and a resource supply of smaller timber that boosted production costs significantly. Despite these and other cost disadvantages arising from environment and location, the efficient operators in the Williams Lake District developed entrepreneurial strategies which resulted in economic long-term profit margins. Those internally-generated revenues facilitated rapid technological and organizational advances and encouraged efficient business growth in their lumber ventures. During the same period even the largest Coastal Douglas fir manufacturer, MacMillan & Bloedel, was experiencing financial instability due to market conditions. However, the Williams Lake District production and distribution structure contained many of the advantages of big business, and eliminated some of the drawbacks that thwarted increased productivity.[7]

The Multidivisional structure was, as Chandler has argued, an

## Graph 5.1:

Average Value per thousand f.b.m. of Douglas fir lumber produced in the B.C. Interior Region compared with the B.C. Coast Region, 1947-1956




Source: Dominion Bureau of Statistics--Industry and Merchandising Division, "British Columbia Lumber by kinds of wood [1947 through 1956]", The Lumber Industry. [various pages].

efficient economic form of enterprise well-suited to the rigours of North American production and distribution. The corporate advantages of administrative coordination dovetailing production with market supply and demand, internal financing for the profitable business units, and reduced negotiation costs for large sales contracts at competitive prices that maintained high production levels reduced costs for all units within the structure. In addition, Lignum's structure tended to improve on formally integrated corporate enterprise. Profits were allocated to individual business units based on performance. Decisions regarding the expansion of each business unit remained the preserve of the unit owner-operator and that operator's future depended on the results of his own choices. There was no money removed from the system to pay returns to shareholders or other nonproductive investors. Any labour-management disagreements were sorted out immediately through face-to-face discussion.

Through the mutually-beneficial Lignum quasi-corporate structure that was adopted by the other larger planer mill-shippers and wholesalers, entrepreneurial lumbermen developed economically viable enterprises able to generate reinvestment capital for technological advancement and business expansion. The system of rewarding economic efficiency with larger profit margins and greater financial security motivated the individual competing units to improve continually on their past performances through upgrading facilities and devising more effective production methods. However, the motivation to reinvest production residuals and continue the upgrading process that the district production and

distribution structure supported was disrupted by the Forest Service timber allocation system.

Without question the British Columbia government, through its Forest Service, was not managing the resource in effective ways that promoted long-term stability among efficient, responsible district lumbermen. As Leslie Kerr correctly claimed, long-term timber tenure that provided wood at its market value allowed the natural selection of market mechanisms to eliminate the inefficient lumber operations. By ignoring Kerr's advice and by allowing survival to be increasingly determined through public auctions which arbitrarily sold timber to the highest bidder, regardless of economic performance, the Forest Service seriously undermined the efficient development of the Williams Lake District lumber sector.[8]

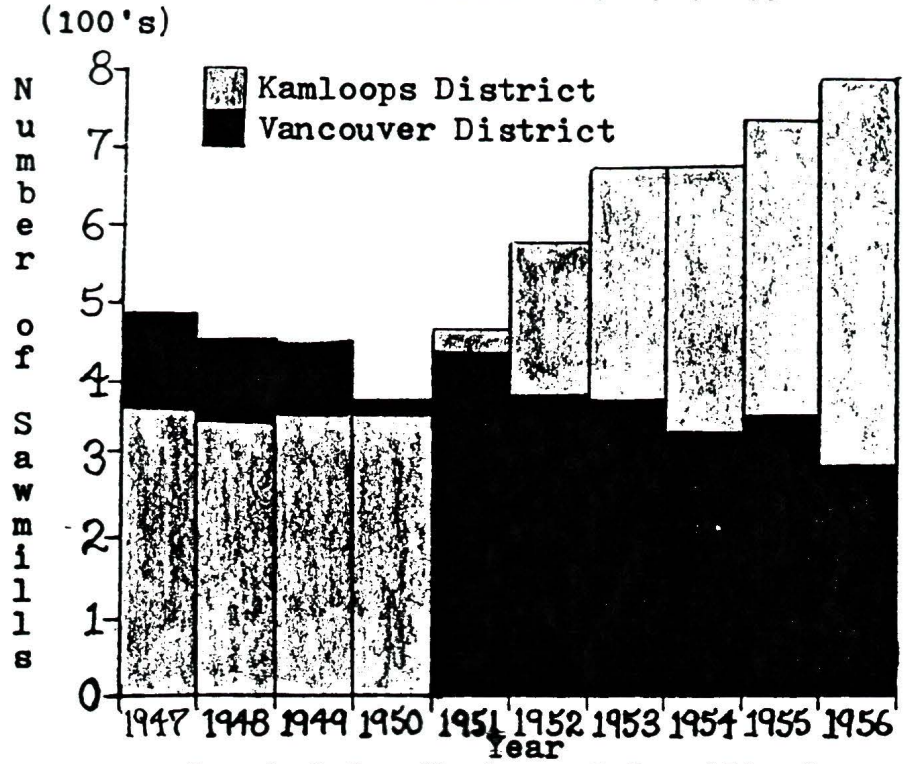
The only form of long-term tenure, the FML, represented a trade-off of the community stability and multiple use objectives for stable government revenues at somewhat lower administrative costs. Sustained-yield forest management, in practice, was never designed to meet its stated social goals in any concrete way during its first decade of existence. While it was a partnership between industry and government, "industry" really meant the large Coastal operators who pressured government into providing them with stable wood supplies at a time when competition from smaller operators threatened to erode their timber base. It was true that the industry, as a whole, required a more stable form of timber tenure. However, it was inappropriate to provide that advantage to only a few based on size of firm and, to an indeterminate

extent, on political expediency.

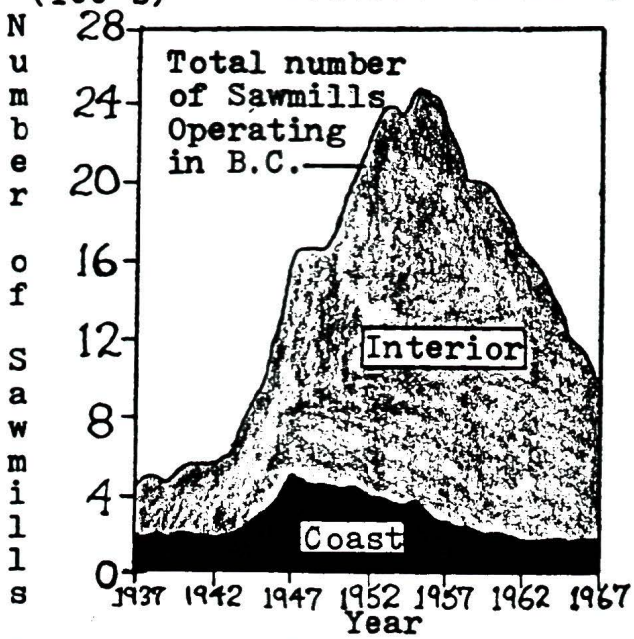
The Forest Management Licence and its successor, the Tree Farm Licence, were very effective in encouraging consolidation of the industry. During the decade that the FML existed, the number of mills rapidly decreased in the Coastal region where long-term tenures were primarily distributed. However, the Interior forests provided enormous untapped industry opportunities (see Graph 5.2). The Kamloops Forest District and other Interior areas attracted new milling operations at a "gold rush" rate. As the Interior forests rapidly filled with independent lumbermen who provided the wood's economic value, larger companies began to move in. Government-induced elimination of many smaller sawmilling ventures occurred rapidly and the trend after 1956 for the province, as a whole, followed the pattern that the Coastal region set during the previous decade (see Graph 5.3).

The Williams Lake District lumber industry provides insight into the process of economic development as it has occurred in hinterland sectors of British Columbia's most important industry. It also suggests why government policies to encourage efficient industrialization in the province's vast Interior region have been largely ineffective over the long term. British Columbia forest policy has continued to favour the large corporations primarily based in the Coastal region despite clear indications that large business enterprise may not be the panacea for the province's economic problems. While the Williams Lake District case seems to argue in favour of cooperative competition among smaller business units, that is a question which future research must investigate.

Graph 5.2: Number of Sawmills Operating in the Kamloops District and the Vancouver District, 1947-1956




Graph 5.3: Number of Sawmills Operating in British Columbia, 1937-1967




Sources: Department of Lands and Forests, Report of the Forest Service [1947 to 1956] (Victoria: The King's Printer [until 1953] The Queen's Printer [1953-1957]; George S. Nagle, "Economics and Public Policy in the Forestry Sector of British Columbia," Unpublished Ph.D. thesis (Yale University, 1970), 105.

In order to understand the process of efficient industrialization, however, it is essential to focus more attention on the forces which led to the establishment of industrial sectors and the factors that influenced those sectors' development over time.

The Williams Lake District case suggests that Chandler's dynamic model of economic development may provide a useful framework for historically analyzing all industrial sectors in capitalist economies. However, it also suggests that adopting his explanations for the particular structural forms he describes may lead to spurious conclusions. The structure of enterprise in the North American economy's many industrial sectors can only be analyzed and compared when research moves beyond individual, formally-integrated business enterprises to include both formal and informal exchange relationships that existed in the production and distribution process. When the focus is shifted to the production and distribution process and that process is assessed for the degree of influence that market mechanisms had on its technologically separable phases, the issues that Chandler raised can be more fully understood.

## Footnotes

[1]Interviews with Reg Norberg, Chuck Flint, Gabe Pinette, Dollard Therrien, and J. Stewart Smith.

[2]Note: Following the 1951 merger that made MacMillan & Bloedel the largest Coastal operation, the company fared no better in the marketplace than Lignum. As Leslie Kerr remarked to the second Sloan Commission, his fears that the Lignum Group was a marginal operation proved unfounded. The company performed comparatively well despite adverse market conditions. See Donald MacKay, Empire of Wood, 164-181; Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10897.

[3]Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1956), 10818-901.

[4]Lignum Group of Companies, A Submission to the B.C. Forest Service, 7.

[5]Gordon McG. Sloan, Commissioner, Transcripts, XXIII (1955), 10888-89, 10897-98; Patricia M. Marchak, Green Gold: The Forest Industry in British Columbia (Vancouver: The University of British Columbia Press, 1983), 38-40, 42.

[6]Gordon McG. Sloan, Transcripts, XVIII (1955), 8406, 8493; Gordon McG. Sloan, The Forest Resources of British Columbia, 1956 II:614-24.

[7]Donald MacKay, Empire of Wood, 169-81.

[8]Gordon McG. Sloan, Transcripts, XXIII (1956), 10832, 10839, 10889-901.

[9]R. Schwindt and Adrienne Wanstall, "The Pearse Commission and the Industril Organization of the British Columbia Forest Industry," BC Studies, 41 (Spring 1979), 3-35; W. T. Stanbury and M. R. McLeod, "The Concentration of Timber Holdings in the British Columbia Forest Industry, 1972," BC Studies, 17 (Spring 1973), 57-68; Lawrence Copithorne, "Natural Resources and Regional Disparities: A Skeptical View," Canadian Public Policy/Analyse de politiques, 2 (1979), 186-93; R. N. Byron, "Community Stability and Forest Policy in British Columbia," Canadian Journal of Forest Research, 8 (1978), 61-66; Alex G. Rankin, "Management of Capital in the Forest Industry of British Columbia," Forestry Chronicle, 37 (September 1961), 259-69; Keith Reid and Don Weaver, "Aspects of the Political Economy of the B.C. Forest Industry," Essays in B.C. Political Economy, Paul Knox and Philip Resnick, editors (Vancouver: New Star Books, 1974), 13-23.

## A Note on Sources

Any historical study of a sector composed of small businesses forces the researcher to confront the inevitable problem of scanty information. Company records dating back to the initial years of the Williams Lake District lumber industry simply do not exist. Extremely small operations maintained only very basic records and left virtually no documentation. However, there were other sources which, in combination, provided important details about the local sector and the conditions under which it operated. The Williams Lake Tribune provided a continuing account of the major issues and controversies that the lumbermen faced. While the daily conditions of the local sector were not very clear, the critical junctures were followed by the local newspaper.

The geographical boundaries of the Williams Lake District were unclear when statistics were quoted in newspaper stories. The name "Williams Lake District," as it was used at the time and as it is also used in this thesis, referred to the surrounding forest region which used Williams Lake as the distribution centre. Although Forest Service officials used the term to delineate the region, it was not a formal Forest Service administrative unit. Therefore the area to which the statistical data referred was never clarified and could only be used in a very general sense.

The IWA certification lists clearly indicated that the IWA had

little contact with the district industry during the study period. When the Kamloops IWA Local transferred the district over to Prince George's jurisdiction in 1956, there were certifications listed for mills that had gone out of business in the years following 1951, when Kamloops organizers had last visited the area. While those working at the listed mills could not remember any contact with the union, it became clear that the prevailing union contract for the Central and Northern Interior determined the wages received by employees in the district.

Private collections were also of some significance in compiling this thesis. In particular, Al Dupilka provided some interesting details from his own research pertaining to the Cariboo lumber industry. Reg Norberg, Ralph Fowler, and Clive and Irene Stangoe also contributed important data from their private records which was useful in this thesis.

Taped interviews with individuals who were involved at various levels in the industry's hierarchy were indispensable in providing the explanatory backdrop of day-to-day industry operations which made sense of the documented evidence. While precise dates were often lost, the memories of interviewees provided a wealth of details that, through other sources, could be firmly rooted in the chronological sequence of events. Furthermore, the same information tended to be repeated among interviewees, with very little contradiction in the accounts. Even more surprising was the similarity in interpretation of the industry's past, regardless of whether the person had been involved as an employer, an employee, in the Forest Service, or in the industry's service sector.

The most disappointing source was the B.C. Forest Ministry. Although the Williams Lake District office made a concerted effort to locate the basic data, the Forest Service records in the Kamloops Forest District, the District headquarters, apparently no longer exist for the period between 1947 and 1956, except for a few unconnected documents that form no coherent whole. Even the most fundamental data, such as the Kamloops Forest District Management Reports were missing for the years from 1946 through 1958. When sustained-yield management requires the formulation of policies to govern a tree crop only harvested once every sixty to one hundred years, it was surprising to learn that even the most basic management records from only forty years ago had been destroyed or lost. Apparently an indeterminate number of records were stored in boxes which were deteriorating in the Williams Lake Forest District warehouse, but public access to that evidence was not permitted. Some efforts are underway to retrieve and preserve vital documents and papers relating to the provincial forest industry. To date, however, no coherent record group pertaining to the Williams Lake District during this period has been made available for public access.

The B.C. Forestry Library in Victoria contained a very useful report that was submitted to the B.C. Forest Service in 1955 by the dominant lumber company in the district. In addition, provincial government reports and some statistical data were able to be gathered from that repository.

The transcripts from the second Sloan Commission hearings of 1955 and 1956 were an invaluable source of information regarding the

everyday lumber industry activities in the district, the reactions of other residents to the local industry, and the impact of government policies on the local sector. The district industry did not exist at the time of the first Sloan Commission hearings, but these transcripts were of some significance in that they indicated that many of the problems encountered in the Williams Lake area could have been ameliorated or avoided if the Victoria policymakers had used the evidence more judiciously. The two Sloan reports that were compiled following the two Royal Commission investigations were also extremely useful in determining the milieu in which the local industry operated and the prevailing attitudes toward the types of problems the district operators faced.

The monthly trade journal, British Columbia Lumberman, was an invaluable source of information regarding provincial industry issues, reactions, and market conditions. However, there was a surprising absence of information directly dealing with domestic and American market conditions and lumber prices. The majority of British Columbia's lumber was sold in North America during the period studied. In addition, economic predictions were often inaccurate and conditions in the industry were often spuriously described, then altered in later issues when previously unnoticed influences came to light. The focus was almost exclusively the Coastal lumber industry, with very little information on the Interior, especially the Cariboo region where the Williams Lake District was located. Therefore, local and provincial data required a great deal of re-evaluation.

The housing sector, the main market for British Columbia lumber, was also the most volatile sector in the Canadian, American, and British economies. Even the most basic discussions of short-term market demand and lumber prices constituted a very complex task that often resulted in erroneous predictions and explanations. Although written by those well-versed in the nuances of lumber industry supply and demand, the British Columbia Lumberman articles required comparison with other sources before the market trends became apparent.

The statistical data for this thesis were primarily drawn from the Forest Service Annual Reports, The Lumber Industry/L'Industrie du bois, British Columbia Lumberman, and M. C. Urquhart's Historical Statistics of Canada, 1965 and 1983 editions.

The International Woodworkers of America (IWA) records were in the best order of any of the primary sources consulted. However, the IWA was only beginning to organize in the Central Interior during those years. The more established lumbering centres drew IWA attention away from the nascent Williams Lake District with its scattered bush mills. Prince George IWA Local 1-424 did provide a valuable group of documents outlining mill certification dates and wage levels for the Central and Northern Interior, along with a taped interview that set the context for questioning former workers who participated in the Williams Lake area industry.

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# Appendix A

## LIST OF TAPED PERSONAL INTERVIEWS AND BRIEF BIOGRAPHICAL OUTLINE OF EACH INTERVIEWEE'S INVOLVEMENT IN THE WILLIAMS LAKE DISTRICT LUMBER INDUSTRY 1947-1956

An asterisk [*] beside an interviewee's name indicates that he was still involved in the Williams Lake District lumber industry at the time of the interview.

*Andersen, O. J. "Whitey" (July 1982)
Andersen was employed by the Forest Service in the Hixon area north of Quesnel during the early and mid-1950s. However, he moved to Williams Lake a short time later when he and Lawrence Milner became partners in the forestry consulting firm, Milner & Andersen.

Benson, Stanley (July 1982)
Benson moved from Quesnel to the Williams Lake District in 1951 to work for a local sawmiller. He worked in the 10 to 15-man mill and drove the company lumber truck.

Crosina, Roy (June 1982)
The son of a cattle rancher, Crosina was born and raised in the Williams Lake District. He worked for a number of small sawmilling operations in the late 1940s and early 1950s before becoming a lumber truck driver for various hauling contractors.

Crosina, Shirley (June 1982)
Born and raised in Williams Lake, Shirley Crosina was an interested onlooker, as the wife of one of the district forest industry's workers.

Elliot, Elton (June 1982)
Elliot worked for various marginal sawmilling outfits in the latter 1940s. He then became a lumber hauling contractor who owned a small fleet of trucks. Although he faced bankruptcy several times in the 1950s, he remained in the hauling business.

Fraser, Alex (June 1982)
Having lived in Quesnel all but three months of his life, Alex Fraser was a prominent Quesnel businessman, and that village's Board Chairman. He is currently Transportation and Highways Minister for British Columbia and Cariboo M.L.A.

*Flint, Chuck (July 1982)
Flint joined the government's Public Lumber Inspection Bureau as a lumber inspector. He worked in the Cariboo on "spare board,"

relieving permanent inspectors who were temporarily absent. In 1956 Flint accepted a managerial position with a large lumber operation which had holdings in the Williams Lake District as well as the 100 Mile District to the south.

Gardner, Herb (June 1982)

Gardner's father began the family lumber business in Quesnel during the Wells, B.C. gold rush that started in the late 1920s. The company's retail outlets in quesnel and Wells were expanded to include a building supply store in Williams Lake that opened in 1940. Herb moved from Quesnel to run the new retail store and to test the feasibility of sawmilling in the district. After locating small mills at several sites, the Horsefly area was selected and Herb's brother came to the district to manage the sawmill and planer mill operation when it opened in 1950. In the 1950s about 75 percent of H. J. Gardner and Sons' lumber output was sold through the company's retail outlets in the Cariboo.

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Jacobson, Harold M. (July 1982)

Harold worked in his father's lumber business until 1946 when his father sold out and retired. After several years of working at various sawmills on Vancouver Island, Harold moved to the Okanagan where he and two ranchers opened a sawmilling operation. He sold out in the early 1950s and in partnership with his brother, bought a small Williams Lake District bush mill at the end of 1954. By the spring of 1955, the Jacobson Bros. operation had expanded to include sawmilling, planing, and sales facilities.

Le Bourdais, Jerry (July 1982)

Le Bourdais entered the industry as a Lignum sawmill worker. In the early 1950s he and his two partners started a sawmill contracting operation through financing received from Lignum. He remained a Lignum contractor until he sold his share of the milling operation assets to his partners in the mid-1950s.

*

Linde, Fred (July 1982)

Linde's grandfather and father were sawmillers who had operated lumber businesses in several American states. When timber shortages threatened the future of his father's mill in Oregon, Linde and his two brothers moved to the Williams Lake district in 1951. The small 4-man bush mill was replaced with a larger sawmill with a planer in 1953. Although most of the Linde Bros. lumber production was sold to Lignum, the company remained totally independent. Linde Bros. still supplies Lignum with lumber.

Mason, Tom (July 1982)

Mason was born and raised in Britain. He came to the Williams Lake District as a travelling salesman for a large industrial machinery company. In 1955 he moved to Williams Lake to work as a salesman for a local vehicle dealership. Mason had a brief involvement in the industry as a lumber truck owner, but his main connection to the district lumber

sector was the sale of lumber trucks to local haulers.

*Mogensen, Toby (June 1982)
Toby Mogensen was a forest industry worker who was very involved with Prince George IWA. Local 1-424.

Norberg, Reg (July 1982)
Norberg's father was in the Forest Service. Upon graduating from high school, Norberg also joined and was posted in the Williams Lake District. He was soon promoted to the position of Assistant Ranger. In 1955 Norberg left the Forest Service and was employed by Allfir as manager of the firm's timber holding company, Northern B.C. Lumber Co.

*Pinette, Gabe (July 1982)
Pinette grew up on the Canadian prairies. He had worked in his brother's Ontario milling business running bush camps and had been employed by several B.C. coast lumber operations before he moved to the district in 1953. Pinette began in the local industry as a sawmilling contractor who owned a small 4-man venture in partnership with his brother-in-law, Dollard Therrien, and Therrien's cousin, Roger Therrien. The three men became independents and expanded their business to a 10-man sawmill in 1954, then, in 1955 built a planer mill-shipping facility in the distribution centre of Williams Lake. A small "gang" sawmill was added on to the planer mill in 1956.

*Routley, A. "Pete" (July 1982)
Routley started out in the lumber industry working on mill construction for an independent sawmill operation in the Vancouver area. In 1948, while visiting some friends, Routley was offered a job on the Lignum green chain. He has worked for Lignum almost constantly since then. Routley had a brief experience as a small sawmill owner in the district but, plagued by equipment breakdowns and poor market conditions, he sold out and returned to Lignum as a production worker.

Smith, J. Stewart (July 1982)
In 1950, Smith came to work at the Lignum planer mill as a bookkeeper. After several promotions, he became plant manager in 1955 under Lignum's general manager, Gordon Bruce. Smith's job at Lignum was his first employemtn experience in the lumber industry.

Stangoe, Clive (July 1982)
Having acquired newspaper experience on the B.C. lower mainland, Stangoe purchased the Williams Lake Tribune in 1950. As well as publishing and editing the local newspaper, Stangoe and his wife, Irene, wrote most of the articles that were printed in the 1950s.

*Therrien, Dollard (July 1982)
Born and raised on the Canadian prairies, Therrien came to the B.C. lumber industry after leaving the armed forces at the end of World

War II. He, his cousin, Roger Therrien, and his brother-in-law, Gabe Pinette, worked for several years in lower mainland mills before coming to the Williams Lake district in 1953. The three men started as contractors running a 4-man bush mill. A year later they had developed into a 10-man operation. In 1955 the Pinette & Therrien planer mill-shipping facility was built in the distribution centre of Williams Lake and a "gang" sawmill was added to the planer mill site in 1956. Although Pinette & Therrien sold exclusively to the Vancouver wholesaling firm of Battle & Houghland, there was no obligation to do so. P & T was an independent operation.

# VITA

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Publications:

McRoberts, Mary. "The Routing of Radicalism: The 1917 Cominco Strike." The Ascendant Historian, 3 (April 1985), 66-107.

McRoberts, Mary. "Corporate Structures and Local Economies: The Case of the Williams Lake District Lumber Industry." Canadian Papers in Rural History [forthcoming].

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Title of Thesis

"THE EMERGENCE OF A CORPORATE STRUCTURE IN THE WILLIAMS LAKE DISTRICT LUMBER INDUSTRY, 1947-1956"

Author [redacted]
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Dec. 24, 1986
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