

SUSTAINED YIELD FORESTRY POLICY IN B.C. TO 1956:  
A DETERMINISTIC ANALYSIS OF DEVELOPMENT.

by

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Note: Forest Management Licences are incorrectly called Farm Management Licences throughout this thesis. The two new forms of tenure that arose from the 1945 Sloan commission (upon which sustained yield legislation was primarily based) were

- (1) Forest Management Licences (F.M.L's)
- (2) Public Working Circles (P.W.C's)

Partly correct - there were three sustained yield tenures:

Legislation enabling Forest Management Licences took the form of a new section of the Forest Act in 1947. These became known as Tree Farm Licences in 1958.

Two other forms of tenure were also created to operate on a sustained yield basis - Farm Woodlots (1948) and Taxation Tree Farms (1951).

Public Working Circles, later renamed Public Sustained Yield Units, were without legal status (being administrative in nature), and set up in the mid-1950s.


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Abstract

This thesis has two main purposes: 1) to demonstrate the shortcomings of the voluntarist, neo-Marxist theory currently dominant in Canadian political economy writing and 2) to demonstrate the superiority of the traditional, determinist Marxism more characteristic of Soviet political economy than of Western Marxism.

The empirical content of the thesis concerns the topic of business-government relations in British Columbia, and focuses on the adoption of sustained yield forest policy and its implementation. This policy marked the end of uncontrolled exploitation of the forest resource in British Columbia. It was adopted shortly after World War II.

Following an introduction to the issues raised at the 1945 Royal Commission hearings concerning B.C.'s forestry conditions, the thesis starts by outlining methodological and analytical differences between determinist and voluntarist studies. Sustained yield policy is then placed in its economic and geographic context. It has been suggested that the policy has contributed to economic concentration and to the disadvantage of smaller firms. This argument is evaluated by documenting the competitive advantages of larger firms over smaller, independent firms, in terms of cost structure, product quality and value, and locational factors, prior to the implementation of sustained yield. The thesis then examines the origins of the 1945 Royal Commission, and the reasons why business plans for sustained yield were necessarily rejected, while the government's plan was adopted. Subsequent sustained yield policy necessarily deviated from the recommendations of the Royal Commission, yet the analysis indicates that sustained yield did not have any main independent impact on the economic position of small firms. Finally, the thesis returns to the question of voluntarist versus determinist analysis, focusing on selected studies of the B.C. forestry sector as well as "classical" sociological, etc., studies in Canadian political economy.

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## Chapter I

### INTRODUCTION TO THE PROBLEM

#### Introduction

This thesis has one main theoretical purpose: to demonstrate the shortcomings of the voluntarist, neo-Marxist approach currently dominant in Canadian political economy writing[1] in relation to the traditional, determinist Marxism more characteristic of Soviet political economy than of western Marxism[2]. Empirically the thesis deals with business-government relations in British Columbia as these relate to the development of the forest industry. In particular, it focuses on the adoption and implementation of the sustained yield forest policy.

Certain Canadian political economy writers have taken the position that the development of the British Columbian forest industry has been critically influenced by the actions of government. They argue, for example, that the concentration of capital in the forest industry after World War II can be directly related to a more or less wilfully chosen government policy supportive of sustained yield. The inference is that different policies, perhaps adopted by a different political party, would have resulted in less concen-

tration. Small Canadian business would have done better at the expense of the largely foreign big business which currently dominates the scene. Such an analysis involves a voluntarist interpretation of British Columbian political economy. In contrast, the position taken here is empirically determinist since increasing concentration of ownership and wealth is an inherent characteristic of capitalist economic development. Concentration has taken place regardless of political attempts to aid or hinder it, regardless of the conscious perceptions of individuals and their voluntarily motivated actions. Thus the adoption and implementation of the sustained yield forest policy in British Columbia can have had little or nothing to do with the concentration of the forest industry. So long as British Columbia had a capitalist economy, this concentration was bound to take place. Government policy, the election of one particular party or the other, and the motivations of key individuals are all virtually irrelevant to the explanation of a development inherent in the logic of capitalist development, whatever their short-term significance. To recognize this, one must move away from the relatively voluntarist approaches characteristic of neo-Marxist political economy, and adopt the more determinist approach characteristic of Soviet political economy. The thesis will demonstrate the validity of this position.

Basic sources for empirical information concerning the development of the sustained yield forest policy are to be found in Royal Commission Reports from 1945 and 1956[3]. Two other Royal Commission Reports (those of 1910 and 1976) are also of some utility. Furthermore, the Provincial Archives in Victoria have an oral history collection which is of value: in particular, the interviews given by C.D. Orchard, who was the civil servant responsible for the sustained yield program.

The paper will begin with a brief introduction to the problems and circumstances related to sustained yield policy, because these are central to the empirical consideration of our topic. The Royal Commission recommended the sustained yield policy which eventually became law. After consideration of these problems, the remainder of the thesis will be outlined briefly.

#### Conditions Pertaining to Sustained Yield Policy

The economic significance of the forestry industry for British Columbia was apparently initially unknown. The 1910 Royal Commission on B.C. forestry stated that "little is known concerning the extent of logging operations in the province". Forestry statistics in Canada had previously represented little more than the "wildest guesswork" (Final Report, 1910:D31, D14). By the time of the next report, in 1945, the accuracy of statistics had considerably improved. This report gives the ratio of the dollar value of forest

industry production to the total value of provincial production. In 1930 this ratio was 25.2%, increasing to 26.9% in 1938 (Sloan, 1945:Q10). In 1954 for the lumber, pulp and other wood and paper industries, the ratio increased yet again to 39.3% (Sloan, 1956:9, 11). These figures tend to understate the significance of the forest industries since yet other industries depend for their prosperity on the incomes and employment generated from forestry activity. Clearly these factors underline the need for policies which serve to maintain the forest industries. By the time of the most recent Royal Commission report, in 1976, the definitions had changed, and forestry production was measured against total manufacturing production. According to Pearse, author of the 1976 Royal Commission report, lumber, pulp and paper, and the veneer and plywood industries now produced about half of the value of the province's manufacturing activity (Pearse, 1976:B4-B5). Forestry thus remains economically significant in B.C.'s economy.

The thesis, among other things, examines the relationship between sawmillers and loggers as this reflects the decline of independent operators. Industry concentration occurred in consequence of economic competition in the context of forestry conditions. Concentrated holdings of land in private control was considerable, but this data does not distinguish one industry from another. However, concentration of production in logging was such, in the B.C. Coastal

region, that of 677 firms in 1943, 24 produced 60% of the output. The largest Coastal sawmills, producing over 20 million board feet of lumber per annum, accounted for slightly more than 60% of Coastal lumber production. Smaller firms progressively produced a lesser share of total output.

Until the advent of sustained yield, the logging industry was concentrated on the east coast of Vancouver Island, and sawmilling at Vancouver. To compensate for the reduced level of timber cuts in areas brought under sustained yield, loggers had to spread further afield to keep up the quantity of timber cuts. Logging operations spread northwards from Vancouver, and to the west coast of Vancouver Island. This trend coincided with increased market demand for previously less desired species of trees. Previously existing sawmills remained at their existing locations since it was more costly to relocate the mill than the loggers. However, new mills started up, and Vancouver became relatively less important than it had been, although it remained a major center (Hardwick, 1963:41, 47, 49, 102ff).

The underlying principles which guide the British Columbia governments forestry policies are that the government retains ownership of forest lands and obtains a fair share of the incomes generated by forestry operations. Pearse stated that "as long as most forest resources are to remain in Crown title, the central problem of tenure policy is to design methods of providing rights to users that will meet

the need of users while at the same time permitting the benefits of public ownership to be fully realized" (Pearse, 1976:59). A variety of tenure forms have been historically introduced by the government to deal with various situations, and the cumulative outcome has been a complex tenure system. Prior to sustained yield policy, forest land had commonly reverted from company to the government's control after the company had cut the timber on it. To implement sustained yield, companies had to have a long term basis for retaining land so they would be able to produce successive crops of trees.

Logging methods in use were destructive of young growth trees, and did not leave seed sources sufficient to assure satisfactory regeneration (Sloan, 1945:25). This is important because as Sloan observes, "logged-over lands are for the most part unsuitable for the growing of crops because of poor soil conditions, high clearing costs, distance from markets, etc. Thus if we do not grow timber on denuded land we grow nothing thereon except the so-called weed trees" (Sloan, 1945:26). Thus if commercial varieties of trees did not grow back, this would create a future danger to the industry as it would have meant either a reduced land area on which industry could work or a significantly increased burden of costs for clearing the land. This would have a potential adverse impact on B.C.'s economy, the more so because agriculture could not replace the role of forestry. In addi-

tion to these problems, wastage in the logging process represented a significant portion of the resource, amounting to 19.5% of the merchantable value of the standing tree (Slcan, 1945:44, 48). The lower the wastage, the the fewer the trees that would need to be cut. These problems, however, had not been significantly affected by the form of tenure which the company held.

The Forest Branch had been established in 1912 to enforce government regulations concerned with forestry operations. These duties included that of revenue collection, conservation and reforestation, and control over the sale and tenancies of timberlands. The combination of Forest Branch understaffing and excessive timber resources in relation to industrial need meant that conservation and reforestation were not effectively carried out. Prior to sustained yield policy, little control was exercised by the government over forestry practices. When timber supplies were perceived to be in decline, and the regional concentration of industrial timber cuts was perceived to be a threat to the industry's future, then government acted to correct this situation. As it was, operators were forced to "cut out and get out", with harmful consequences for forestry conservation, and entailing abandonment of logging communities as companies moved on to new timber areas. According to the 1945 Royal Commission report "responsible operators with large investments in sawmills and pulp and paper plants re-

alize that this process <cut out and get out> cannot continue indefinitely" (Sloan, 1945:143). These firms held the view that in order to have secure supplies of timber, a new industry on a sustained yield basis must be created. However to force firms onto a sustained yield production level from existing production levels would make the firms uneconomic (Sloan, 1945:144). Thus the allocation of government timberlands to private industry was necessary. In general, however, neither these nor other companies, approved of the compulsory cut controls in the government's sustained yield plan. Firms not holding land turned out to be eager applicants for land under the sustained yield policy.

The problems involved in protecting the forests, as part of sustained yield, were indicated in the case of the duty of the Forest Branch to fight fires. The Chief Forester, C.D. Orchard, stated that in 1937 fire protection funds averaged two-thirds of a cent per acre of land to be protected. Few fire-fighters could be employed on this basis, let alone the purchasing of the necessary equipment to protect over 60 million acres of forest land. In consequence, industry and townships competed regionally for the benefits of fire protection. Forest fires had to be controlled before sustained yield could be introduced. There was also a need to replant land that had been logged but was not growing more timber. In the Coastal region this amounted to 9% of the area suited for growing forests, 918,000 acres, and to

29.5% in the the Interior, or 19.1 million acres (Sloan, 1945:22). Taking timber losses from logging, fire and insects into account, "Coast depletion far exceeds increment <in growth> because of the high percentage of forest land adding no increment..." (Sloan, 1945:126). Another problem was that of productive sites on the Coast, 78.4% were of mature forests, aged 81 years and up. Since it takes 60 or more years for a tree to become merchantable, the danger existed that the industry might exhaust the accessible old growth before sufficient young growth existed to replace it. Since logging practices contributed considerably to forestry problems, and government policy contributed to bad logging practices, it was necessary to change government policy.

\* The rationale for holding the 1945 Royal Commission was that it was in the public interest, connected with the responsibility for administering good government (Sloan, 1945:7). The Oath of Office for the Commission stated that the "government is desirous that all possible methods and means are or will be taken to secure the perpetuation of our forest wealth" (Proceedings, 1945:insert, vol. 1:1). This was a one-man Commission, under Judge Sloan. It was announced in June, 1943, and held its first hearings in February, 1944. Summations occurred in July, 1945. Since the previous B.C. Royal Commission had been held 35 years previously, it was necessary to update existing knowledge concerning B.C.'s forestry situation. The terms of reference for the Commission were:

1) The extent, nature, and value of the forest resources; 2) The conservation, management, and protection of these resources; 3) The establishment of forest yield on a continuous production basis in perpetuity; 4) Forestation and research; 5) Forestry education and instruction; 6) The utilization of the forest crop and its relationship to employment and social conditions (Sloan, 1945:7).

Other concerns were considered: e.g., multiple forest use the maintenance of wildlife, and parks, taken in relation to forest administration; how forests related to soil conservation, the control of erosion and the water levels of lakes and streams; the question of forest finances and government revenues from forestry; the rights to acquire timberland and the tenure system.

The 1945 Royal Commission made 40 recommendations. By 1955 the government had implemented 35, in whole or part. Those most related to sustained yield policy follow below.

- 1) Fire protection had to be greatly increased to ensure young growth would survive, and to allow sustained yield to work.
- 2) The effort directed to replanting trees should be greatly increased.
- 3) Logging methods should be regulated to ensure regeneration of trees.
- 4) A new tenure holding for sustained yield was to be devised, the <sup>Forest</sup> ~~Farm~~ Management Licence, and alterations in taxation were required to make sustained yield economic.
- 5) Management plans for individual sustained yield areas, called working circles, should be formulated and implemented by regulation.
- 6) A Forest Commission should be set up responsible for all forestry man-

agement. This was rejected by government. 7) An expansion in forestry training was required as was more research into the growing of trees.

Having briefly reviewed problems associated with sustained yield policy, discussion now turns to an overview of the remainder of the thesis.

Chapter two is concerned with the methodological approach of the thesis. It provides a basis for contrasting relatively voluntarist with determinist analysis based on dialectic logic, which constitutes the analytical basis of the thesis. The chapter concludes with a description on the main sources of data used for the thesis.

Chapter three provides the historical background for the subsequent chapters. In particular, it provides an account of economic-forestry conditions existing up to the Royal Commission hearings. It follows Marx's precept of analyzing conditions starting from economic production itself, and draws upon Marx's theory of capitalist concentration. The objective is to provide a comparative basis for consideration of the relative importance of economic forces and of government policy in the decline of small forestry firms in B.C.

Chapter four initially considers whether business or government had the strongest motive for calling the 1945 Royal Commission into being. This analysis forms a basis on which to critique relatively voluntarist Canadian political

economy writing which portrays government policy as intentionally harmful to small firms. The analysis also illustrates a determinist approach to the process of development.

In the context of the trends and circumstances outlined in chapter three, the Royal Commission debated the issue of sustained yield policy. Business favored voluntary timber cut controls, government did not. These differences were the outcome of the capitalist development process as it differentiated between the concerns of business and government. The analysis reinforces the determinist position taken by the thesis.

Chapter five concerns the implementation of the sustained yield policy and its necessary consequences. The determinants of government policy are considered, such that <sup>Forest</sup> Farm Management Licences (F.M.L.'s) - allowing individual firms to practice sustained yield - were preferred to public working circles (P.W.C.'s) which existed for the smaller operators. Deterministic analysis is applied to the problems confronted by small firms in P.W.C.'s.

Chapter six examines and rejects the arguments of two Canadian political economy writers on the origins of the 1945 Royal Commission and of sustained yield policy, and summarizes the methodological objections to Canadian political economy writing.

The reader has been introduced to overviews of the intent and analytical goals of the thesis, and has been ac-

quainted with issues about sustained yield. The next chapter introduces in more detail theoretical and methodological concerns underlying the thesis.

## Chapter II

### LITERATURE REVIEW

The major issues of this chapter concern the question of how best to understand socio-economic processes and related human behaviour. The two approaches considered are voluntarist and determinist. These approaches yield research conclusions which differ, and it is suggested that voluntarism represents a relatively incomplete analysis. Two factors serve to differentiate these approaches to analysis, namely, the organization and also the range of data employed in explanation. Dialectic logic is the basis for the deterministic integration of all available data to reflect a process which undergoes development. The argument focuses on the differences between voluntarist and determinist analysis, which are significant.

Certain Canadian political economy writers are taken to represent the version of voluntarist analysis which states that an individual may be portrayed as having choices within the limits of certain constraints. This would imply that government could have chosen a different forestry policy than it did (within limits). By contrast, determinist analysis would have to show that the pattern of these outcomes occurs regardless of the wishes of particular individuals

considered in isolation from each other. Thus the question concerns the degree to which constraining influences operate in a given situation. This contrast of analytical approach is illustrated by relatively voluntarist Canadian political economy writing in the case of B.C.'s forestry industry. At this point these studies will be presented without critical comment, which is mainly reserved for the last chapter of the present study. In subsequent sections determinist analysis itself will be introduced and then applied to the same material.

K. Reid and D. Weaver

Keith Reid and Don Weaver (1974) are political economists at the University of British Columbia, who wrote about the events and conditions leading up to the introduction of sustained yield forest policy in B.C. The article cited appears to have been intended as a preliminary account of these events. The thesis also covers much the same ground as these writers, but from a deterministic perspective.

Reid and Weaver are concerned as to the origin of the 1945 Royal Commission on B.C. forestry which supported the adoption of sustained yield forestry. According to them, the question to be asked as to the calling of the Royal Commission is, "who pushed the government into it?" The purpose of the analysis is to determine which vested interest would have gained the most from the adoption of sustained

yield. This interest group would be judged to have most motivation to press for sustained yield policy and the Royal Commission in the first place. They reject the view that the B.C. government's Forest Branch itself was the prime mover in the calling of the Royal Commission;

Forces external to the Forest Service were undoubtedly more important...in the calling of the inquiry...it was not a change in the policy or activities of Orchard <the Chief Forester> and the Forest Service that caused the Commission to be called, but rather, changes in attitudes of other groups that allowed the B.C.F.S. <B.C. Forest Service> to play its observed role (Reid and Weaver, 1974:17)

They state that by 1940 there was a clear split in the industry; large firms had a greater vision of the future than small firms, since the latter were faced by much shorter deadlines in which to profit on their investments. Small firms especially opposed restrictions on the quantity of timber they could cut. Larger firms could continue to succeed under more controlled operating conditions. Reid and Weaver also point to the threat constituted by the C.C.F. (Co-operative Commonwealth Federation) political party. This party threatened to nationalise the industry unless it considerably improved upon its wasteful forestry practices. With this inducement, both large industry and government had reason to support the calling of a Royal Commission; industry to avoid nationalization, and the government to appease conservationists. Small business opposed this conservationist trend to sustained yield because of the added costs in-

volved in sustained yield as well as the limitation on the cutting of timber.

In order to undermine the political power <of small firms> a few large corporations attempted to ally their cause with the conservationists by placing advertisements and special features in local newspapers prior to the calling of the Inquiry characterising themselves as concerned corporate citizens. After the barrage of propaganda the large corporations had no longer to fear the collective political 'muscle' of the small operators; their credibility had been destroyed (Reid and Weaver, 1974:18).

Reid and Weaver also cite economic factors as leading to the calling of the 1945 Royal Commission; there was a decline in accessible timber; a trend towards the enforced use of inferior grades of logs, cuts having been concentrated on the better-quality timber; and increasing transport costs. The attraction of capital depended on the securing of tenure for the firms. A "new system of forest tenure that would provide a continual supply of wood was, therefore, necessary" (Reid and Weaver, 1974:17). Sustained yield policy was adopted by the government. Government also saw in the holding of the Royal Commission a way of diverting voters from the C.C.F. Although more could be said, Reid and Weaver's conclusion as to sustained yield policy was that it "succeeded because it both neutralized opposition and ensured the large firms continued dominance in the industry for future years" (Reid and Weaver, 1974:21).

Canadian political economy writers make various errors as an outcome of the failure to examine the empirical basis

for the views held by the groups involved in the given process of historical development under study. The logic of class, group, or individual behaviour must be reflected in the evidence presented, that is, the interaction between a group's objectives and the actual situation confronting it.

R.T. Naylor is a leading Canadian political economy writer. For example, D. Drache, in a book co-authored with W. Clement, asserts that the publications of "Ryerson, Clement and Naylor constitute the beginnings of a major new statement in Canadian political economy" (Clement and Drache, 1978:40). Naylor's methodology is, however, questionable. In his History of Canadian Business he wrote that "an effort has been made throughout to analyze the evolution of economic structure and state policies by taking explicit cognizance, wherever possible, of the economic interests that they furthered. Hence the 'muck' has certainly not been spared" (Naylor, vol. 1, 1975:xx). It is far from clear that corruption is analytically relevant to the evolution of the economic structures of capitalism or mercantilism. This does not explain why the given policy would actually have been adopted since, from the government's point of view, presumably other policy alternatives could have been devised which would have been equally conducive to corruption. Thus, in fact, graft would not appear to have much analytical bearing on policies or economic evolution, yet it obtains much space in Naylor's accounts. Naylor's failure to exam-

ine the empirical basis for the viewpoints of the groups under study in his book has misdirected him. He could have more fruitfully studied more pertinent causative factors.

Drache holds a subjectivist perspective in arguing that Canadian government policy has been based on an "anti-national logic. That the Canadian economy has thus been placed at the disposal of American capital and in the hands of American capitalists substantiates the general truth of Grant's argument" (Drache, 1970:5). Leaving Grant aside, an interesting methodological point arises. Drache emphasizes the importance of external factors in explaining the Canadian situation, (Drache, 1983:27), but he appears here to focus on the Canadian elite. This elite is presumably an internal factor, subject to Canada's international economic relations irrespective of the personnel which constitute the elite. Drache's objections to the policy of the elite overlooks the problems which would confront the elite if it tried to adopt a "national" policy. The establishment of high tariff barriers induced U.S. firms to locate in Canada so as to gain access to Canadian markets and raw materials in competition with existing local industry. However the absence of such tariffs would have allowed U.S. firms to compete without having to locate in Canada, with the extra cost of transporting goods being the only disadvantage. Tariffs would at least lead to the creation of employment within Canada.

The basic problem in encouraging local manufacturing from the elite's perspective would be external and historical factors. Both Britain and the U.S.A. were more advanced in manufactures than Canada, and neither country had anything to gain by encouraging manufacturing competition from Canada. They were, however, willing to buy raw materials. Thus the Canadian elite would cooperate with foreign elites because, among other things, there was nothing to be gained by producing more Canadian manufactured goods when no additional export demand existed. These circumstances would not change merely because the personnel of the elite might change. In this sense, then, Drache is inconsistent in the application of the thesis of the importance of "external" factors in understanding the situation of Canada. Drache has commented that "Analysis leads to strategy. Ideas require testing in practice. The central political issues facing the people of Canada are the historic role of the bourgeoisie in selling the country out..." (Drache, 1970:22). Clearly strategy based on inconsistent and subjective analysis will be self-defeating, especially when the actual situation to be changed is incorrectly understood.

Lastly, Wallace Clement will be cited as part of the trio of writers working to create, in Drache's words, "a major new statement in Canadian political economy". Drache describes Clement as having "provided us with a map of elite power" (Clement and Drache, 1978 :39). In his Canadian Cor-

porate Elite, Clement states that interlocking corporate boards of director further corporate concentration by means of the influence exerted by the elite through these boards of directors. Clement fails however to empirically examine the relationship of the board of directors to the operations of management, and the relative influence of each in the decisions that are made (cf. Mace, 1971; Ross, 1980). It is unclear why management would tolerate elite directors who acted against the company's interests regarding its competitive position in the market and the opportunities existing for the company. In short, why would the board of directors significantly change company behaviour from what it would be in the absence of such directors? (Lipsey, et.al., 1982:350; cf. Bain, 1968; Menshikov, 1968). Clement, however, neglects to address this fundamental question. This omission again indicates the need to examine a situation from different points of view, and also reveals significant weaknesses in Canadian political economy writing.

#### Classical Marxist Analysis

Classical Marxist analytical principles, as applied in this thesis, are used to concretely examine observed behaviour. That is, the results of a process are known to a given point in time, and the intent of the thesis is to reconstitute the process which produced the observed results. For example, if landholding concentration increased, it would be asked why this necessarily occurred, as opposed to some oth-

er theoretically possible result (e.g. say, that concentration had not increased). The assumption underlying analysis is that if it is known why a given set of conditions has evolved as it has, this knowledge may be used to develop strategies to try to alter the situation in question. Lenin was concerned to do this with respect to the Russian revolution, although this approach is obviously widely applicable to other situations. Therborn comments, "The essential point is...the following: if you want to change something fundamentally and in a definite direction you have to know how it works; if you only want to sit on it, then no such problems arise" (Therborn, 1978:18). In this context it is relevant to note that, according to Lenin, dialectics "is the theory of knowledge of (Hegel and) Marxism. This is...the essence of the matter" (Lenin, 1976:360). The question then is, how does this theory of knowledge differ from conventional approaches to analysis?

The following account is not intended to be empirically or conceptually complete, but is simply to orient the reader to concepts underlying the actual organization of data in the main section of the thesis. In the following a "given" situation assumes that all relevant circumstances are given initially, or as they become relevant. The focus of analysis is upon those forces and relationships occurring in any given situation which together necessarily function so as to produce changed relationships. The given situation is con-

ceived as a system of components interacting over time, a web of interrelationships. Thus dialectical logic is a form of systems analysis[4]. For example, assume the system for research purposes is constituted by the B.C. government and large and small forestry firms. Conceptually the following question may be posed: what would be the inter-relationship of economic forces and other circumstances operating on business and government, such that necessarily the role of small forestry firms would decline historically and the role of large firms increase? The data of the thesis have then to be organised in such a manner as to be able to answer this question. To do this, analysis is chronological and focusses upon the origins and development of specific end results of the the process in question, e.g. to show why it is that these specific results necessarily came about.

However, since people collectively create this development process there needs to be first a transition from the individual's or group's viewpoint to the deterministic perspective of the process and its necessary results. The relationship needs specification. It is further necessary to specify the individual's relationship to the microenvironment - the individual's particular situation - and how this is to be understood. For purposes of analysis, the impact of operative economic forces and other conditions may be traced as they are conveyed through these relationships. In this way an impact can be shown to affect both the microenvironment

of the individual (or group, etc.), and the overall development process. It can then be shown how these deterministically interact.

Concern turns to the individual's or group's relationship to the overall process of development. Conceptually the effort of individuals, derived from their economic and occupational roles, interact in ways and with combinations of effects that yield through time some overall outcome that no one specifically desired. (However some may have more cause for satisfaction with the results than others). The development process is advanced as people attempt to ensure the adequate satisfaction from their own viewpoint, of their various interests and concerns. For example, in an assumed competitive business struggle, capitalists strive to keep their firms viable, and government, as it affects business, tries to ensure that its policies succeed, etc. These actions produce unintended results. This is due to the impossibility of foreseeing all of the eventual ramifications which develop from an action taken in such a context. Since the system components cannot escape their objective situation, and insofar as gains for one group create difficulties for another, these conditions produce a supply of problems into the future. This necessitates continued efforts at adjustment on the part of those involved in a developing situation. It is also a criterion of the relevance of the data used that they contribute to forwarding the explanation of the development process.

According to Lenin, dialectical logic "is the science not of the external forms of thought <as, say, represented by formal logic> but of the laws of the development...of the entire concrete content of the world and its cognition" (Lenin, 1976:92-93). This is best understood in terms of goal-oriented activity. This cognition reflects the need for knowledge in order "to keep ahead of the game", so to speak (research and development in industry serves this function, for example). Lenin also holds that, "...it is only insofar as it contains a contradiction <conflict of interest within a whole> that anything moves and has impulse and activity" (Lenin, 1976:139). Regarding the relationship of individuals to their microenvironments, analysis continues to be impersonal (deterministic).

Ilyenkov, a Soviet philosopher, writes: "Dialectic logic is pinned to the discovery and investigation of the objective laws governing the subjective activity of individuals, and those forms in which...they were forced insofar in general as they thought, to express the results of their subjective efforts" (Ilyenkov, 1977:202). The term "law" is to be understood as an "essential relation" (Lenin, 1976:153). The development process, governed as it is by these objective laws, is independent of the wills of the individuals concerned. The following example is perhaps banal, but it is preferable to an over-simplified example which could cause protest due to its obvious exclusion of data.

Assume some electrical object needs repair. Objectively, assuming intent to repair, it is necessary to identify what went wrong and why, e.g. a person must consider how the fault can be located, evaluated, etc. This itself represents a "law" governing one's subjective activity. Obviously the relationship of repairer to the object repaired is "essential" if repair is to occur at all. The ability to carry out repairs would be governed by other factors, e.g. the person's relevant knowledge, the available tools to carry out repairs, time available, and so on. These also represent "laws" governing subjective activity insofar as the person intends to carry out repairs. The form in which the results of subjective efforts occur would be governed by the preceding, and also by such factors as the accessibility and extent of damage as well as the urgency and cost of such repairs, etc.

Comparing this example to more general situations of human activity, however, requires notice of two significant differences which would serve to make the analytical principles indicated more diffuse in their operation. The first is that reactions occur more prominently when people are involved than in this case of a passive object which undergoes repair. Second, there is very often insufficient available information about a social situation to be assured of the adequacy of an action undertaken to control the situation. Of necessity, then, an increased degree of uncertainty oc-

curs in such situations viewed from an individual's perspective.

Notwithstanding these caveats, in regard to the overall development process there is a continuity of causation (determinism) even if from the individual, group, or other viewpoint there is uncertainty. These concepts, then, represent conceptual premises underlying the present analysis, of how it is that change occurs in a system containing interactive components. What has not been presented, of course, is a set of specific causative factors which produce change. This occurs with regard to the forestry chapters in the thesis. What all this involves, then, is the conceptual basis for developing a blueprint of a developing situation, of how its various components function in relation to each other to produce the specific outcomes that have evolved to a given point in time (cf. Blauberger, et. al., 1977).

It might seem simpler to say that something took place and more or less leave it at that. For example, that Mr. Smith moved his hand is surely easier to state than to enumerate the processes involved in such an act. However if a doctor were examining an injured hand analysis of the process of movement of various finger joints, the wrist, etc. would contribute toward learning about the nature of the damage. This knowledge could then contribute to bringing about improvement. An equivalent concern underlies Classical Marxism (Soviet style) with regard to its concerns[5].

Having introduced the method of dialectical logic we are now in a position to consider business-government relations and the question of determinism and constraints on action.

### Business and the State

The relationship between the capitalist state and business has been the topic of discussion by sociologists, political economists, and others. Among neo-Marxists, the emphasis has been on elites and their powers of decision-making while the economic-structuralist element has been viewed as problematic as to the degree of influence it exerts. One problem has been to account for the freedom of individuals to act and another has been to account for the relative autonomy of the state from the interests of the ruling class. This situation is also reflected by the statement from the Communist Manifesto that "the executive of the modern state is but a committee for managing the common affairs of the whole bourgeoisie" (Marx and Engels, 1968:37). Emphasis on different aspects of the statement has led to different schools of thought concerning the role of the state; namely instrumentalist and structuralist. Instrumentalism refers to the view that the state is directly manipulated by those in control to favour their own special objectives. The problem of freedom and determinism is involved since instrumentalism assumes that the decision-maker is autonomous in his or her actions; indeed this position would make little sense as a basis for analysis if the decision-

maker were determined in his or her actions. The present discussion focuses on neo-Marxist attacks on determinism, since if determinist analytical principles can be shown to be valid, a determinist view of the state is upheld and instrumentalism is by implication refuted.

Miliband appears to hold to a modified version of instrumentalism, whereas the Canadian political economy writers earlier cited more directly hold to an instrumentalist view, evident for instance in Reid and Weaver's conclusion that sustained yield policy succeeded because of the benefits ensured to large business as against others. In his attack on economic determinism, Miliband informs his readers that determinism is alien to Marxism (Miliband, 1977:73). He does this in a justified critique of simplified economic determinism. He writes that "Marx's own cast of mind was strongly anti-determinist and led him to reject all trans-historical and absolute determinations, beginning with Hegel's 'determination' of the historical process..." (Miliband, 1977:9). This rejection of determinism by Miliband, however, degenerates to the point that he assigns himself the right to "attribute to political forms and forces whatever degree of autonomy is judged in any particular case to be appropriate" (Miliband, 1977:8). The context in which he writes would appear to be that of autonomy from the economic base.

On the contrary, it is necessary to demonstrate, rather than argue about, the degree of freedom which does exist in a given case, and such demonstration only becomes possible by use of the very deterministic analysis (dialectic logic) which Miliband implicitly rejects. Ilyenkov writes: "logic, artificially separated from dialectics, is inevitably converted into a description of purely subjective methods and operations, i.e. of forms of activities depending on the will and consciousness of people...and therefore ceases to be an objective science" (Ilyenkov, 1977:315) This statement further illuminates the determinist emphasis on the objective conditions governing subjective behaviour, as in repairing an object or asking for a pay raise. Dialectics is a logic of such goal-oriented behaviour, even if, perhaps, academic theory is not.

Miliband states that Marx rejected the Hegelian 'determination' of the historical process (Miliband, 1977:9). Martin Nicolaus, in contrast, comments in the foreword to the Grundrisse, that

If one considers not only the extensive use of Hegelian terminology in the Grundrisse, not only the many passages which reflect self-consciously on Hegel's method and the use of the method, but also the basic structure of the argument in the Grundrisse, it becomes evident that the services rendered Marx by his study of the Logic <by Hegel> were very great indeed. The terminology is the least and most fleeting of these services (Marx, 1973: 32).

Marx, in short, accepted Hegelian logic as a principle of logic, but reworked it into a materialist analysis. Miliband's claim that Marx rejected Hegel's 'determination' of the historical process is rather comical when it is considered that the term has a specific meaning in the science of logic, namely "the act of defining a concept by giving its essential constituents" (Webster's, 1959). It would be of interest to see if even Miliband could carry on his research without defining the essential constituents of his own concepts, or of the process of historical development itself. It would appear then, that Miliband has not provided a basis for rejecting determinist analytical principles as previously expressed, although this position is distinct from reducing all phenomena to economics.

The debate continues concerning structural analysis. In Marxian theory, the state's existence depends upon the division of labor. This implies a disparity of interest between the individual and the interest common to all. The state represents the common interest as against that of the individual interest. The state thus requires in theory and fact a relative autonomy from individual bourgeois interests, among others, in order to sustain its own actions (Marx and Engels, 1976, p.52).

Poulantzas, a French Marxist, stresses the role of structure in determining government action, instead of the role of elites. In his view, social class is a concept

"which shows the effects of the ensemble of structures <economic, political, legal and ideological> ...of a social formation on the agents which constitute its supports: this concept reveals the effect of the whole on the part of a socio-economic system" (Poulantzas, 1973:67-68). Leo Panitch, a Canadian political economist, notes of Poulantzas, "the state's activities on behalf of the capitalist class are determined by deep structural relations..." (Panitch, 1977:7). Panitch accuses Poulantzas of establishing by definition the relationship between state and bourgeoisie (Panitch, 1977:8).

The problem isn't quite so simple for these critics of Poulantzas. Miliband comments: "There are structural constraints - but how constraining they are is a difficult question; and the temptation is to fall into...a hyper-structuralist trap, which deprives 'agents' of any freedom of choice to manoeuvre and turns them into 'bearers' of objective forces which they are unable to affect" (Miliband, 1977:73). Miliband poses the structure problem as an abstraction, as distinct from the need for concrete analysis in particular cases - leaving aside the problem as to the mode whereby analysis is carried out. The position of this thesis is that it is correct to view 'agents' as bearers of objective relationships. However they are also able to react to a set of determining conditions, and so affect them. Miliband accepts the existence of structural relations

but he is left with the unsolved problem as to the degree of impact they exert. Yet this is unsatisfactory, and the question of choice (free will) needs to be resolved in this context. Free will is the opposite side to the question of structure (determinism). In other words, dialectical logic is required to resolve this problem of a contradictory unity of structure and choice.

Marx comments in Capital, "...here individuals are dealt with only insofar as they are personifications of economic categories, embodiments of particular class relations and class interests" (Marx, 1967:10). Marx goes on to say that the individual remains the 'creature' of those relations however much he may subjectively raise himself above them. The fact that Marx says he deals with people only insofar as they represent economic categories, etc., means that he excludes the possibility of an individual raising himself objectively above his own economic role - a logical impossibility. For example, what would a capitalist have to do to raise himself above his own economic role? If he paid his workers wages higher than the average in his industry in his subjective view he may feel more humane than other capitalists. However in his economic role he would possibly put his firm at a cost disadvantage, or perhaps his workers would reward him by loyally increasing productivity. As a capitalist (economic role) his actions still have impact, affecting his economic position. If he supports reform for

the disadvantaged, whether intended or not, he reduces social discontent and so contributes to stability which benefits capitalists. If his efforts fail, the disadvantaged will at least feel less aggrieved than if they had no capitalist ally at all. In any case the capitalist remains enmeshed in his economic role[6]. Thus there remains a need for an analysis which can resolve these difficulties by taking a specific case for study.

A concern of this thesis is with the means whereby the power of dominant interests in an economy find their influence on government policy perpetuated. This is in response to Kerin's comment that the "main fault of a Marxist theory of power is that there is a failure to specify, in systematic fashion, the modes whereby the economic hegemony of the capitalist class becomes translated into the political dominance of a ruling class" (Kerin, 1977:20.). The answer provided by this study is imperfect in that it results from analysis of a specific case only, and does not explicitly focus on the concrete political process involved. The study does however, provide an account of the adoption of the government policy in question (sustained yield forestry policy), and the process by which large firms benefitted as the end result. Miliband comments[7]: "...the fact that governments accept as beyond question the capitalist context in which they operate is of absolutely fundamental importance in shaping their attitudes, policies and actions in regard

to specific issues and problems..." (Miliband, 1973:68). It is the question of being able to go beyond this belief that is important. Miliband cites Lynd as stating:

Industrial capitalism is an intensely coercive form of organization of society that cumulatively constrains men and all of their institutions to work the will of the minority who...wield economic power; and...this is less and less the result of voluntary decisions by 'bad' men or 'good' men and more and more an impersonal web of coercions dictated by the need to 'keep the system running' (Lynd in Brady, 1943:xii).

Miliband comments that "this is even more true today than when it was first written..." (Miliband, 1973:68). The thesis is concerned with the 'web of coercions' and the question as to how coercive they are, taking a specific case. This of course leaves open the question of all other cases. But nonetheless a successful attempt to answer this question of the 'translation' of economic into political power, judged by the results of a policy, would have implications for theoretical analysis on this point more generally. In this context it may be noted that the relative autonomy of the state from the influence of particular bourgeois interests does not weaken the analysis. The balance of forces involved, and the ties of the state to the economy as a whole, continue to operate. In this regard also, the present case study exemplifies what O'Connor (1973) has termed the "accumulation function" of the modern capitalist state, whereby the state serves to support business interests as the mainstay of the economy.

The analytical contrasts and concerns of the thesis have now been laid out. Discussion now shifts in the next section to the question of the materials used for research in the case of this thesis.

#### The Range of Data

The following is intended to orient the reader to specific considerations in reading the thesis, and its evaluation. It also considers the materials used.

The main sources of information for the thesis were the transcripts and exhibits resulting from the Royal Commissions on B.C. forestry of 1945 and 1956. Research involved piecing together a wide variety of information in accordance with the analytical process of the thesis. The groups represented in the thesis are business (large and small, sawmilling and logging) and government, mainly the Forest Service. These categories are further divided in chapter five into Coastal and Interior B.C. regions. It is not anticipated that the reader will (or should) try to assimilate the mass of material presented. However due to the low status accorded in the West to determinist analysis it is necessary to document the development process closely in order to demonstrate the validity of such analysis of socio-economic processes. This means also that the origin and implementation of B.C.'s sustained yield policy until 1955 are closely examined. The reader may find it easier to focus more on one than the other, according to his or her interests, while

satisfying himself or herself that each step of the analysis is adequately explained. An object of covering an extensive subject area is that determinist analysis will be seen to be applicable to a variety of conditions, and so become more believable to a doubtful reader. A shorter account would allow less opportunity for the reader to consider the adequacy of the determinist explanations given here as against possible explanations featuring voluntarist accounts. In view of the considerable number of Western academics using a relatively voluntarist approach, it is relevant to ask how accurate their accounts actually are. It is also relevant to point out that determinist analysis is cumulative, reflecting the actual development process. Later developments are viewed as the product of earlier stages in the unbroken development process. As such, the whole weight of historical development, as part of the given development process, bears upon present action. This should be kept in mind when reading the thesis, to facilitate understanding, since later chapters arise out of the context of earlier ones. Discussion now goes on to the materials used for the thesis[8].

#### Materials Used

The materials used are primarily the Proceedings, Transcripts and exhibits to the two Royal Commissions on B.C. forestry which reported in 1945 and 1956. The final reports were also used, and some differences between the two are

mentioned in the thesis. In particular the proceedings for 1945 give a different picture of the positions of big business and government with regard to the mode of regulating sustained yield than does the final report of the 1945 Royal Commission.

The research effort was aided by the fact that witnesses were subject to cross-examination by a lawyer for the Commission and by lawyers and non-lawyers representing other interests. This meant that statements were challenged from differing perspectives which, in turn, aided the present researcher. Although not all statements were challenged, those of importance to the Commission hearings were bound to be put under question sooner or later. The Commission lawyer or another vested interest favourably or adversely affected by the possible contribution of the statement to the formation of the final recommendations of the Royal Commission would have reason to express their concerns.

The 1945 Commission was intended to cover a considerable range of topics, including the "establishment of forest yield on a continuing production basis in perpetuity, and the utilization of the forest crop and its relationship to employment and social conditions" (Sloan, 1945:7). It covered also existing land tenure relationships. Other topics covered were more technical. References were scattered throughout the record of the Proceedings (1945) which, with summations at the end by lawyers representing various inter-

ests, amounted to 20 volumes of testimony. Not all of this material was relevant to the thesis. The number of volumes for the 1956 Royal Commission was considerably greater, but the quantity of basic issues to be examined did not increase nearly so rapidly. Thus much testimony was redundant in the sense of covering the same ground from the same basic perspective (e.g. small operator protest, given a rapid increase in the number of small firms). The final report of 1956 was concerned much more with administrative matters than was the earlier report. This was due to the fact that a principal concern of the later report was the evaluation of the implementation of the policy recommended in 1945.

Except for the statistics on landholding and production concentration, other statistical data should be understood more as estimates, of varying accuracy, rather than as precise values. The landholding data were derived from official records, while concentration for logging companies was from the B.C. Logger's Association. They stated that their figure was close to reflecting the actual situation, even though some small firms may have been left out. Resource inventory data turned out to be substantially incorrect, but improved over time. Average log prices conceal the wide fluctuations in log prices. The point is emphasized by the representative of the taxation department at the 1956 Royal Commission hearings. The problem was that of arriving at a fair evaluation of the value of logs produced in connection with the

Logging Tax Act, when sawmills owned their own resource. There was no problem when the logging firm was independently producing logs. The Tax Department tried using the Vancouver log market prices as a basis for evaluation for tax purposes, but had to give up due to the wide fluctuations in prices. The representative stated:

A sample was made by our department, representing approximately 5% of the sales in the Province for a two-year period, and...it was found that the price on any day for any grade or species of log was such that it was not practical to use that as a guide for the purpose of the Logging Tax Act. We were faced with working within a formula that on the one side provided a fair market value and on the other side provided a ceiling of \$8 a thousand <feet> as the maximum profit allowable in logging. You can see how that would work out - a maximum of \$8, and on the other side there is a \$10 variance in the selling price... In other words, the variance at times exceeded the profit (Transcript, 1956:16615-16616).

This does not invalidate the use of averaged log prices but serves as a caution as to their meaning. Such data is useful in pointing to trends over time, however, as is witness testimony.

With respect to the analysis of sustained yield policy, the researcher has nothing to show "in advance" as it were. Analysis begins without assumptions, unless the assumptions are that a place called British Columbia exists, that it has trees, a forest industry and government, etc. The significance of the methodology of dialectical logic is its use, first to understand why a particular historical process is occurring or has occurred, and to discover ways in which

change could be brought about. Once a situation is understood, it is time, assuming the researcher's objectives are established, to consider the strategy for achieving those objectives. The case of sustained yield, aside from representing an important policy development in B.C., exemplifies the considerations stated above, but from the viewpoints of those actively concerned with B.C. forestry.

The methodology of the thesis has been explained previously, and depends at the initial stage of establishing the analysis upon some conceptually unifying and pivotal factors that mutually affect the participants in the development process under study. Capitalist competition serves this role in the thesis, for example, since it provides a basis for explaining the interaction between businesses and economic concentration, and between business and government in terms of government policy problems and objectives. Evaluation of the competitive position of small as against larger forestry firms depends on a number of comparisons: the effect of capitalist competition as it produces advantages to some firms over others; the analysis of the cost structures of B.C. sawmills; and the different quality of products as between larger and smaller firms is considered, and so on. If advantages for larger firms consistently appear, then conclusions can be drawn in the context of other information, e.g. would the decline of small firms have taken place irrespective of sustained yield policy? In turn, the answer to this ques-

tion would have bearing on voluntarist arguments attributing responsibility to government policy.

### Chapter III

#### THE ECONOMIC CONTEXT OF B.C.'S FOREST POLICY

In this chapter Marx's prediction of capitalist concentration and centralization, and thus of the decline of smaller firms as against larger ones, is considered in terms of the cost structure of sawmills in B.C. and its implications for their competitive position. Rather than viewing the process as one of victimization of small business, it is seen as an inevitable product of the capitalist development process, taking the B.C. case, as it has so far occurred. This helps to show that sustained yield was not, as Reid and Weaver suggest, a policy intended to protect the interests of large firms. Ultimately large firms did benefit the most. However their benefit will eventually be seen to be a by-product of other factors. It may be noted also that the material of subsequent chapters presupposes the conditioning of the economic analysis of this chapter. This is the case since it is intended that the thesis chapters merely reflect the actual process of development, and the process whereby actual cut-comes have been determined. The present analytical approach allows economic concentration, the decline of independent

small operators, and government policy to be seen as outcomes of the same set of developing conditions, as these differentially affect the interests of different groups.

The Marxian explanation for capitalist development - and thus of economic concentration - has two main elements: surplus value and capitalist competition. The concept of surplus value indicates that workers spend part of the working day labouring for their own support, while the capitalist obtains an unpaid portion of the workers' labour. This results since workers produce a total value of goods greater than that needed for their own support. Part of this surplus goes towards capital accumulation, through re-investment in some form. Historically seen, the factory system allowed this in contrast to handicraft production, as it was based upon greater output per person due to the advantages of factory organization and technology.

Historically, capital takes control of the two main producers of wealth, people and land (Marx, 1967:604). Competition between businesses takes the form of raising labour productivity by increasing the scale of production (and, from the perspective of the individual business, increasing shares of market sales). This increased productivity reduces the share of wages in the cost of the product. Competition is harsh in hard economic times, when overall sales decline (Marx, 1967:453). The outcome of competition is that some firms consolidate advantages over others. For example,

by cutting the production costs of goods as against that of the industrial average a new technology gives a temporary gain to the firms using it. This occurs in the form of greater profits and the ability to undercut the selling price of competitors lacking the technology. Thus the competitors come under pressure to adopt the new technology themselves. Technological innovation, however, often requires enormous investment in retooling existing, or the purchasing of new, fixed capital. (The sawmill industry is not characterized by huge investments, although some mills represent relatively much greater investments than do others). In this competitive process smaller and also weaker businesses tend to be driven out of business, to be replaced by larger and stronger firms. Marx wrote that "with the development of the capitalist mode of production, there is an increase in the minimum amount of individual capital necessary to carry a business under its normal conditions" (Marx, 1967:626). The individual proprietorship, as opposed to the joint-stock company or corporation, thus becomes confronted with barriers of entry into an industry.

In general capitalist competition results in an increasing scale of production and output. By the same token, firms competing successfully are able to increase their control of markets as capital centralizes. Given that total market demand is limited, weaker firms tend to be squeezed out of competition. Marx wrote that the "battle of competi-

tion is fought by the cheapening of commodities. The cheapness of commodities depends...<other things being equal> on the productiveness of labour, and then again on the scale of production. Therefore the larger capitals beat the smaller" (Marx, 1967:626). In the Marxian schema, accumulation depends on the use of surplus value for re-investment, which includes that in the form of borrowed funds. Weaker firms tend not to be able to compensate for lower productivity, with less surplus value for re-investment, by arbitrarily charging higher prices. The cost of carrying on business in its normal conditions increases over time, and would increase the minimum size of firm that can compete in an industry. The necessary result is that increased concentration of industrial capital occurs over time.

#### The Economics of Concentration in the B.C. Forest Industry

We may ask if the theory conforms to reality. That is, are there significant advantages from large scale operations in the B.C. forestry industry which favour larger over these smaller sawmills? Although these data reflect a managerial perspective, they are compatible with Marx's theory. The intention is to point out a range of relevant dimensions along which large and small firms can be compared, again as a comparative backdrop to the impact of government's sustained yield policy.

It is relevant in this context that the footnoted table indicates that averaged over the four years, the largest

category of firms produced 63.5% of the lumber produced for the B.C. coastal region, while smaller firms produced, in descending order, ever smaller parts of the total lumber output. Similarly, the total value of lumber produced to the value of all products by firm size shows that smaller firms increasingly rely on non-lumber products as sources of revenue[9].

Let us consider the comparative cost structures of B.C. Coastal region sawmills, particularly those of the second and third largest productive categories relative to that of the largest productive category. Differences in the proportions of expenditures for a given item to the total dollar value of all products will be given. Then the monetary value of that proportion is given in terms of the gains or losses that would accrue to the largest category of firm if the cost structure of the smaller firm category prevailed in the larger firm. The result, called "ratio contrast" in Table 1, indicates within the limits of the data, the net financial advantage to the larger firm category. It may be noted that Table 1, below, gives figures for circulating capital (wages, salaries, fuel and electricity, and logs and other materials), to the total value of products. These costs range from 88.9% of the total value of products in the smallest category of firms producing from between a half million and 999,999 feet of lumber annually, and steadily decreases to 71.5% for the largest firms. The largest firms produced 20

million board feet or more of lumber per annum. This means that as a share of the total value of products, the largest firms make a proportional saving of 17.3% on circulating capital as compared to the category of firms producing from a half million to nine hundred and ninety nine thousand feet of lumber per annum. This saving can be employed to further enhance the competitive position of the firm in the largest category. In monetary terms, this would amount to 17.3% of 2.6 million dollars, or, using the tabled figures, to 455,888 dollars. This amount represents the annual average for the four year period for which data were available, and is aside from other advantages held by the largest category as opposed to the .5-.99 category of firms. Comparisons are in dollars. A minus sign before a figure indicates a cost advantage to smaller firms over the largest firm category.

These gains to the largest firm category represent annual averages over the four year period[10]. Differences in costs between the two largest categories of firms was only .001 which, however, translated into \$16,067 annual average over the four years, to which the proportional gain in the value of lumber cut is added. The advantage of the category of firms producing 20 or more million feet of lumber over those producing from between 5 to 14.99 million is more pronounced. This gain to the largest firms takes into account the disadvantage in this context of paying higher wages and salaries.

TABLE 1  
Financial Advantages by Firm Size

	ratio contrast	15-19.99/ 20 up	ratio contrast	5-14.99/ 20 up
Salaries:	.001	-60	.001	-60
Wages:	.027	-15837	.036	-21117
Logs, etc.	.026	31946	.054	142300
Fuel, etc.	.002	18	.008	73
Net gain to big firms \$:		16067		121196
ratio: lumber cut to value	.005	11787	.006	14144
total \$ gain to big firms:		27854		135340

The term, "Ratio: Lumber Cut to Value" refers to the point that for equal quantities of board feet cut, some categories of firms gain greater financial returns than do others. The term "ratio contrast" compares the financial structures of firms; that is, how much greater are the relative costs of smaller than larger firms assuming the cost structure of the smaller firm prevailed in the larger?

Increased bureaucratic influence in the larger firms is suggested by the increased value of the salaries paid in the largest category of firms compared to that category producing from between 15 and 19.99 million feet of lumber per annum. This category paid one third as much on salaries in absolute terms according to the table in footnote nine.

However Table 1 shows that, in relation to the overall cost structure, the differential impact of salaries was insignificant (.001). Regarding research and development, lumber as a product doesn't lend itself easily to research as compared to other products such as pulp and paper. In any event, an editorial from a trade journal in 1978 noted that the forestry industry "...spends a pitiful 0.1% of sales revenue on research..." (Canadian Forest Industries, 1978:4)[11]. In 1944 C.D. Orchard noted that Elcedel, Stewart and Welch set up a forestry department of their firm which consisted of one forester. Other firms, he stated, were thinking similarly, "without having actually started a forestry department" (Proceedings, 1945: 549)[12]. According to Orchard in 1945 very little research was being done by industry (Proceedings, 1945:546). With regard to the cost structures advantages of larger firms, then, much of these savings would be available for competitive uses.

In terms of Marx's theory, it would appear that it is not wages which form the key element in cost reduction in the forest industry, but savings in raw materials. Data from the footnoted table show that raw materials make up a notably larger share of costs than do wages. However from the perspective of surplus value, there is a relatively reduced share of the labour in producing the logs - felling and transport - in the value of the final product, lumber (based on the tabulated values). This then would be the actual

source of the savings to the capitalist who, however, is concerned with accounting gains in the process of running a business. It may be noted additionally that data for the period 1915-1942 indicated a trend of increasing productivity for the logging industry in B.C. (Department Trade and Industry, 1944).

Many of the smaller mills in the industry were portable, used especially in the Interior for "seasonal or occasional employment only" (Proceedings, 1945:9539. cf. 613-614). A "large number of marginal producers can go back and get <i.e. re-log> perhaps inferior material, and bring in logs that cost very much more money...", than for another operator, and still "live on a certain price" (Proceedings, 1945:2605). Mills of this type continue to operate primarily during good conditions only. Stationary mills are larger, normally, and thus tend not to be seasonal. A study reported in the British Columbia Lumberman in 1952 concluded: "Generally speaking, the larger mills were found to be more efficient than the smaller ones, but there were exceptions both ways" (B.C.L., 7/1952:39). Sloan, the Commissioner to the Royal Commissions on B.C. forestry in 1945 and 1956, comments: "You have many small operators, operating in hemlock, who cannot afford to put in dry kilns, and cannot afford to have their stock tied up in the form of hemlock drying" (Proceedings, 1945:3368). Smaller operators shipped inferior green lumber. In the green condition lumber

shrank, and could decay more easily (Proceedings, 1945:2709). Hemlock weighs 41 pounds per cubic foot before drying, and declines to 29 pounds at 12% moisture (Proceedings, 1945:2709). These shrinkage and decay characteristics reduced its usefulness. One operator estimated that dried hemlock sold at \$10 per thousand feet more than the green (Proceedings, 1945:7796). A sawmill consultant estimated that the costs to establish a kiln and carry out related organizational changes would cost his client \$275,000 to \$300,000, and that a daily production of between 100 and 150 thousand feet of lumber would be necessary to make this pay, at processing costs of between \$2.67 and 3.20 extra per thousand feet for drying (Proceedings, 1945:7712-7713). The premium on dried lumber was \$10. In consequence of their weaker costs structures, smaller firms would have to make do with inferior methods of drying lumber.

By way of contrast, "High grade cedar mills" would not be suited to a small operator. According to testimony, such mills "use a short lumber, with much dry-kiln and planing mill capacity. None of the lumber is shipped rough...and we have a large investment in plant, and large amount of labour per thousand feet of output" (Proceedings, 1945:3315-3316). Reportedly, an "ordinary" fir mill will have trouble in using cedar economically, while Flavelle says of his cedar mill, "we could not possibly cut fir economically in competition with fir mills" (Proceedings, 1945:3316). The signif-

icance of this lies in the historically lower prices for hemlock as against fir and cedar (although hemlock's position improved considerably with World War II). The ten year average (1929-1938) price per board foot of lumber was \$1.28 for fir, \$1.23 for cedar, and 0.75 for hemlock (Forest Service, 1938:N35). The small operator was not able, then, to alter the species cut so as to readily take advantage of the best prices.

#### Improving Transportation and Concentration

Marx's general theory of economic development and concentration, indicated earlier, needs to be expanded if it is to adequately explain B.C.'s particular historical situation. Thus Marx wrote of the development of transportation, which would apply to the geographic expansion of B.C.'s economy also:

The first to increase is the frequency with which the means of transport function...as existing places of production produce more, become greater centers of production The development tends in the direction of the already existing market...towards the great centers of production and population, towards ports of export...Along with this concentration of masses of men and capital thus accelerated at certain points there is concentration of the masses of capital in the hands of a few (Marx, 1956:254).

An important reason for this, additional to previous material, is in Marx's view the turnover of capital: the more rapidly a firm's output sells, other things being equal, the greater is the profit. Marx wrote:

Changes in the means of transportation...engender local differences in the time of circulation

<transport and sale> of commodities, in the opportunity to buy, sell, etc....The importance of this circumstance is evidenced for the turnover of capital by the wrangling of the commercial and industrial representatives of the various localities with railway managements (Marx, 1956:254-55).

The reader may find evidence of the "wrangling" in B.C.'s case in P. Roy's, Railways, Politicians and the Development of the City of Vancouver (1886-1929). According to Roy, and confirming Marx's comments, Vancouver was recognized to have had an excellent harbour, and the city soon became an entrepot for trans-Pacific shipping. The creation of Vancouver as a metropolitan center was dependent upon the development of hinterland regions in B.C. (as well as on Prairie grain). "These resources had to be tapped by Vancouver through the construction of a transportation network to draw trade to Vancouver and away from rivals" (Roy, 1963:12-13, 19). Vancouver's changing position is indicated by its share of B.C.'s total imports and exports through the city. These amounted to 54.4% of imports in 1908, increasing to 82.5% by 1929. Export figures for the same years were 24.9% and 76.3% (Roy, 1963:appendix).

This development is indicated further by the fact that Vancouver and New Westminster had 18.7% of B.C.'s population in 1901, while these including North Vancouver had 39.2% of B.C.'s population in 1931 (Canada Yearbook, 1910, 1940). This area formed a concentrated market with low distribution costs compared to other areas in B.C., for firms which could

capture the market. Vancouver-New Westminster forms only a small part of B.C. as a whole. Thus the 1918 Report, The Forests of British Columbia, stated that the Vancouver area, "which includes New Westminster, is the largest milling center. Nearly 75% of the lumber and shingle production of the province is in that district" (Craig and Whitford, 1918: 179). In further support of Marx's analysis, data for the 1920's confirm a definite trend towards concentration (Canada Yearbook, 1925, 1932).

TABLE 2

## Concentration of Industrial Production

B.C., 1923, 1929.

employee category	1923		1929	
	%firms	%production	%firms	%production
0-50	67.4	7.8	64.2	4.8
50-500	26.7	30.8	29.6	27.9
500-5000	5.5	47.1	5.8	43.0
5000 up	.2	14.2	.3	24.0

Only the largest category of firm in Table 2 increased its share of production in this period of time. The Vancouver sawmills undoubtedly were involved in this trend: to un-

derstand why requires a closer examination of the Coastal forest industry.

### The Coastal Forest Industries

The importance of Coastal B.C. forestry is indicated by the fact that in 1938, 86.9% of B.C.'s timber cuts originated in this region (Forest Service, 1938: N29). According to Hardwick, for the period to 1945, Vancouver represented the central region from which sawmills could "tap accessible Douglas fir forests...Arcs, representing distances of about 120 miles from Vancouver, represent both the log supply area of Vancouver and the apparent transition zone between the predominant Douglas fir and hemlock forests" (Hardwick, 1962:148). Fir was the more valuable species. It was estimated by one operator that from Vancouver, the north end of Vancouver Island represented a maximum towing distance for logs given the margin between a firm's costs and returns to the firm" (Proceedings, 1945:4975). By estimation, 70% of the timber in the Vancouver Forest District, which included Vancouver Island and the mainland about opposite the northern end of the Island, was on the Island (Proceedings, 1945:10726). According to the Minister of Lands, by about 1945 "...roughly 76% of the population of B.C. <was> within a 100-mile radius of the Vancouver Post Office..." (Kenny, 1945). Accordingly the industry was centered in the Vancouver-New Westminster area, pulp mills partly excepted (Proceedings, 1945:4163).

Various advantages existed for a location at the Vancouver-New Westminster area until the adoption of sustained yield which brought about alterations. The weight of lumber, and its neatness for packing was an advantage over the shape of logs, since less space would be wasted in shipment. Logs lost weight in processing into lumber, which waste was estimated by the 1945 Royal Commission on B.C. forestry to amount to 30% of the volume of the log (Sloan, 1945:51). These would be important considerations to a firm shipping millions of feet of lumber annually by sea and rail, while the location would also allow lower handling costs than a more remote area. An urban location would allow larger markets, access to a skilled workforce, and closer contact with customers also, and so greater adaptability to their needs than would a distant location.

Briefly, these were the markets for logs: from northern Vancouver Island, pulp wood went to Powell River and Elk Falls, while sawlogs went to Vancouver. From Ladysmith south, Vancouver was the main market (Hardwick, 1962:63). Mills in Victoria had to bring in their supplies by truck or scow (Proceedings, 1945:3371). Along western Vancouver Island, it was only from 1945 that forestry activity increased considerably (Hardwick, 1962:102). Within this context a further restraining influence on the location of small firms is considered in consequence of the value of their products.

A log broker stated to the 1945 Royal Commission, that there are "very few stands of fir left available for the independent logger", in the Vancouver district. He added that there is "a great deal of hemlock available and cedar" (Proceedings, 1945:991). This however underlines the squeezing of the smaller operator mentioned by Marx, tending to reduce the relative size of the assets they control. Thus the price per board foot for fir was \$1.28 as against \$1.23 for cedar and .75 for hemlock (Forest Service, 1938:N35). Testimony about the economics of hemlock use at the 1945 Royal Commission wasn't encouraging:

Up until 1940 we were logging hemlock at a loss...sometimes the fir carried both the hemlock and the cedar and sometimes it carried the hemlock only, and it is only recently that we have been able to break even on hemlock, and now, although the price of logs has gone up, the price of getting them out as followed very closely (Proceedings, 1945:8631, 2639).

However the witness may have underplayed the benefits of wartime conditions. As noted later, hemlock log prices went up by 89% between 1939 and 1943, while fir prices had increased only 41%. However the lower prices for hemlock would restrict its shipment to a greater extent than would be the case with fir, and so affect the location of firms to the disadvantage of smaller firms.

The cost of "handling and moving most forest products was high in relation to value", therefore, "for either rail or ocean shipment, the conversion plants <wood to lumber;

wood to pulp, etc.> had to be located where extra handling costs were reduced to a minimum" (Hardwick, 1962, cites Powell River Co. Brief, 1955:123). For smaller firms with a higher cost structure this increases the necessity to obtain good locations for their operations so as to ease their cost structure disadvantages. However these various disadvantages impede attainment of this objective since more efficient firms may outbid them for these locations.

The situation of small independent loggers was stated by the representative of the Independent Loggers Association to the 1956 Royal Commission although competition had increased by then: "It has been demonstrated time after time that the only successful way to log these small patches is by small owner-operated outfits where the owner has an interest in each piece of equipment, and probably does three mens' work. It is the only way it can be made to pay" (Transcript, 1956:3752-53). Larger firms would not be interested in such small logging areas. Thus small firms survived - but with a tendency towards contracting - and the declining independence of small firms.

#### Declining Industrial Independence: Contracting

The regional concentration of industry has been noted, with the main markets at the Vancouver area, serving also as a major export point. The northern end of Vancouver Island was estimated as the maximum log-towing distance from Vancouver, although a small proportion of logs came from the Queen

Charlcttes. From 1938-1943 nearly 88% of the timber cut came from 1.25% of B.C.'s productive land (Proceedings, 1945:1182). This provides one dimension in conjunction with the adverse cost structures of smaller firms tending to constrain them to contract work as accessible timber was cut, burnt, or attacked by insects. Sloan reported in 1945 that of 10,051,000 productive acres of forest land on the Coast, 918,000 acres were not reforesting, of which only 400,000 could be economically replanted. This excludes 12.5 million acres of scrub forest of "little or no commercial value" (Sloan, 1945:20). Trees take 60 or more years to become a merchantable product although this varies by the specific product involved, and demand. Except "for restricted areas near Powell River, the mainland was too steep and the timber limits too small..." for the typical operations on the east coast of Vancouver Island (Hardwick, 1962:42). Hence the actual location of these operations. The west coast of Vancouver Island was too exposed and distant from all but local markets to be attractive to small firms in general.

Within this context the question of landownership takes on an increasing relevance to the development of contracting as it serves as a constraint on the ability of small firms to use forest land while remaining independent. The following quote points up both the problems of locating suitable land for the smaller operator, with reference to western Vancouver Island, and refers to concentrated landholdings.

The statement is by J.G. Gibson, to the 1945 Royal Commission on B.C. forestry. He operated in the area in question.

If you care to set up a logging camp tomorrow you might wonder where to start. There is...very little data available or contour maps or cruises <timber surveys>...of any government timber. The privately-held timber, you can get data on it, but it is held by two or three or a few more companies, and unless you buy a big block of timber and if you were in small timber, there isn't any use - you cannot start in unless you get a gasboat and spend a few months looking for a piece of timber and then you have to buy it from the government (Proceedings, 1945:5025).

Accordingly, an area with trees and without loggers would not necessarily be a suitable place for a small logger. The reference to small timber presumably has reference to the fact that different equipment is needed for small and large timber.

The contribution to this situation of past government policy may be briefly reviewed. The B.C. government, under pressure of acute financial need, granted some 15,000 timber licenses between 1905 and 1907. With an estimated 200-300 years' supply of timber at the time, it is not surprising that as the 1910 Royal Commission remarked, timber had "little or no value in the public estimation" (Royal Commission, 1910:D11). It would seem that an excess timber supply combined with financial need produced the observed result, which returned very considerable revenue to the government. The 1918 report states of the effect of granting the licenses:

By the end of 1907, there was little accessible timber not staked and much, with slight prospect of ever being exploited by means then known...As surveys were not required, except as the land was to be logged, much confusion has resulted from overlapping claims, and considerable additional revenue has accrued to the Crown as a result... (Craig and Whitford, 1918:90).

These licences remained stable, however, on the west coast of Vancouver Island, judged by the maps at the Provincial Archives. With respect to concentration, some 70% of the timber cut came from independent operators in 1907 (B.C. Loggers Association, 1908). According to the 1918 report, the "greater proportion" (Craig and Whitford, 1918:170) of the cut came from the same group. The number of timber licences declined: there were 14,202 in 1913, 8,242 in 1926, and 3,616 in 1932. The same Report of the Forest Service stated in 1934 of these licences:

A large portion of timberland in B.C. has been alienated under a licence to cut. These areas revert to the Crown after being cut or burned. Many others have reverted either through the inability of licencees to pay the annual carrying charges or through dissatisfaction with their investments (Forest Service, 1934:28)

The report does not say what proportion returned to the Crown uncut. However if in absolute numbers such licences became less important, their relative importance may not have declined as much. Timber licences covered 1.79 million acres in 1944, and provided an average 26.8% of the timber cut from 1934-1943 (Sloan, 1945:81). As with Crown Grants, going mainly to the E and N Railway Company, the timberland

was not supplied to the industry in a concentrated state. Concentration simply reflected the need, and greater ability of larger firms to accumulate holdings (this presumes, obviously, the financial solvency of the firms in question). In this way government policy contributed indirectly to the later trend to contracting, by way of limiting the land available to the smaller operator wishing to retain independence. It may be noted from Table 3 that the concentration of holdings increased, comparing 1938 and 1944 (Bureau of Economics and Statistics, 1945, Table 4).

TABLE 3

## Landholding Concentration: 1938, 1944

## Coastal Region

(percentage of totals)

<u>Cumulative</u>	1938 <u>holders</u>	<u>acreage</u>	1944 <u>holders</u>	<u>acreage</u>
5 largest	.15	16.97	.17	19.36
10 largest	.29	24.87	.35	26.76
20 largest	.58	35.18	.70	35.79
75 largest	2.19	59.90	2.61	55.98

In 1938, 3391 holders of tenures accounted for 55.4% of privately-held acreage, which included temporary alienations from the Crown, while 36 people or corporations held 44.6%

of the 4,728,846 acres (Bureau of Economics and Statistics, 1945, Table 1). The table above shows that between 1938 and 1944 concentration of landholdings took place. Whereas the 5 largest holders of land, .15% of the total, held virtually 17% of the land in 1938, by 1944 this had increased to over 19%. The table shows a shift in the concentration of holdings, with each descending category, of increased numbers of landholders, doing less well than the one above. By estimation, the Crown had unalienated 39% of merchantable timber on the Coast, or 53% of the acreage (Sloan, 1945:Q79). How the Crown disposes of its timber in regard to sustained yield is thus obviously important for the independence of small firms. In the Vancouver Forest District in 1943, of the 677 firms engaged in logging, 236 produced 1% of the cut. This reveals the economic insignificance of such small firms as producers. Five firms accounted for 32% of the cut and 16 firms for 52% of the cut (B.C. Loggers Association, 1944). This does not distinguish between small firms as independents or as contractors. This is made more difficult to achieve since firms might engage both in contract work on some operations and independently on others. It was reported that in B.C. by the end of World War II:

there is an important independent logging industry, some units of which conduct logging operations on a very large scale. About 40% of the coast output is produced by independent loggers <a decline from 1918> who sell to the so-called 'log-buying' sawmills and for export. The remainder is produced by companies which own and supply their own sawmills (Department Mines and Resources, 1947:12)

Accordingly not all independent firms were small. L.R. Andrews, a member of the B.C. Lumber and Shingle Manufacturer's Association, acknowledged that there was a tendency to concentrated ownership of Douglas fir trees. He "does not think that <trend to concentration> would be the cause for the small independent operator to go out of business, because I don't think he ever had a chance to log these big holdings. The <small> independent operator has been living on more accessible, small tracts up and down the coast, and has been contracting..." (Proceedings, 1945:2611-12). Cowan, the representative ostensibly of small sawmills in the Western Lumberman's Association, but here speaking for himself as a logger, said in reply to a question:

Q. Now, carried to its logical conclusion, that <concentration> is going to force the small man out of business sooner or later, isn't it? A. That depends on a good many factors than merely concentration of timber in large holdings. In a good many cases a big outfit will provide work for a small one; for instance there is quite a tendency amongst the large logging operators to subcontract...part of their logging operations to small operators (Proceedings, 1945:3550).

Cowan adds that "in these large areas being purchased now, the small man could not get up there anyway until after the big man opened up the country" (Proceedings, 1945:3550-51). In short, smaller firms were dependent upon the actions of larger firms in opening up new areas while concentrated holdings would lead to a declining prospect for the independence of these firms[13].

The next step is to bring loggers and sawmillers together. This reflected the development process as part of economic concentration and the growth in scale of capitalist development. Consideration of the forces involved, as it affects the industry, provides a partial answer to later objections that small firms lost their independence as a consequence of sustained yield policy and were forced into contracting.

The concentration in Douglas fir holdings was spurred by the economically significant facts that in 1937 this species constituted an estimated 24% of the total volume of all species on the Coast, yet it accounted for 49.9% of the cut (Sloan, 1945:34). It was also the most valuable of the major species. What was the response of large firms to this situation? The representative of one of the largest sawmills commented in reply to criticisms of those with large holdings of land: "Well, a large company such as ours, with a great deal invested in plant, must of necessity carry a large inventory of raw material which is the standing trees. The investment in plant would have comparatively little or no value if we were not assured that we had an inventory of standing timber" (Proceedings, 1945:10273). This needs some amplification. "Most of the sawmills...on this coast are of necessity designed to handle large logs. If they were not so designed, they would be precluded from converting the best class of material" (Proceedings, 1945:2790). This would in-

clude Douglas fir. The average log in several booms of better-grade fir, scaled at Vancouver in...1935, was found to measure 32 feet in length and 45 inches in diameter...and to weigh 21,530 pounds" (Carrothers, 1938:246). For firms with their own loggers, C.D. Orchard pointed out with regard to wasted material but applicable here: "According to studies made in the U.S., it costs nearly three times as much to log a 20" <diameter> tree as a 40" tree, one of the largest factors in this being the use of machinery designed to handle large timber" (Orchard, 1945b:11. cf. Proceedings, 1945:10260). Thus firms of this size would not wish the risk of being forced into the use of smaller sized timber for economic reasons. The representative cited above was asked to estimate the extra logging and milling costs of working with small timber. He replied that this would be very difficult indeed:

When you come to itemized costs in either logging or lumbering you find yourself up against an insurmountable obstacle. You can only speak generally and I would say guess at a figure... I would say it costs 6 to 8 dollars a thousand <feet> more to log 6 and 7 inch timber than that larger timber; and in some types of mill it would probably cost \$3 to \$5 more to sawmill it and completely refine it for the market (Proceedings, 1945:10260).

This firm's sawmill is variously stated as having an output, operating on two shifts, of 2 million and 200 million feet of lumber annually (Proceedings, 1945:10249, 10257). Since small mills can produce more than 2 million feet, the larger

figure is taken as correct (and it is used twice). Minimising the extra cost to be \$3 per thousand feet extra and considering the firm's output as 200 million feet, it is obvious that the cost factor would still provide strong incentive to increase holdings. If, however, they increase the size of their holdings, less area is likely to remain for small firms to remain independent. It is assumed that purchased areas would include at least incidentally areas suited to small firms. This situation is emphasized by H.R. Macmillan's comment in his own case: of 16 firms that had acted as suppliers for his sawmills, 9 were logged out of supplies between 1939 and 1942, while 7 had been purchased by other firms seeking to protect their supplies of timber (Proceedings, 1945:1264-1265). Thus reliance on suppliers, as distinct from having one's own timber supply, was decreasingly desirable. Macmillan commented that an outcome of the competition for resource control would be that "those who have to buy the most <through the log market> will be in the weakest position" (Proceedings, 1945:3709).

Q. Now, is there a tendency at the present time for some of the larger mills - log-producing and log-buying mills - to enter into a contract with firms of loggers to secure the whole of the log production? A. I think that is very much so as the present time...I think a great many of the log-buying mills are actively in the logging business themselves, in order to protect their supply of raw material. That is a trend that occurred after the last war (Proceedings, 1945:2612-13).

This statement was by L.R. Andrews, who had compiled some reports for the 1945 Royal Commission. The log-buying firms, then, had their own strategy for coping with timber shortages, although this obviously doesn't preclude buying up land as well. If the actions of the larger firms put an indirect restriction on the opportunities for small loggers to remain independent, in this case the erosion of independence is more direct. Independent operators would of course be freely able to enter such contracting arrangements - as independent actors - but they were on a course which would in fact serve in time to erode this independence. Other factors contributed to this result. A timber broker agreed that the open log market was "produced by a number of small log-holders" (Proceedings, 1945:990). The timber, particularly fir, available to these operators was said to have been "steadily reduced", while the use of hemlock was increasing in log-buying sawmills. Conflict was expected to develop in time with the pulp companies which were buying up hemlock as large sawmills were buying up fir (Proceedings, 1945: 996-997). In this respect the future prospects of independent operators to remain independent were not good.

World War II prices offered considerable encouragement to small loggers. Comparing 1936 and 1946, log prices averaged a 46% price increase. Fir had increased 41% and hemlock 89% (B.C.L.M.A., 1945, Tables 11, 12). At the 1945 Royal Commission hearings, Welch, representing the Truck Loggers

(a group of small firms) stated: "...the conditions of our industry have changed so materially over the past ten years that it just makes our type of operation possible" (Proceedings, 1945:2939). Truck loggers could work at higher altitudes and less accessible timber given the steep gradients the trucks could manage.

The preceding pages, then, serve to characterize the conditions of B.C.'s forest industry up until World War II and the situation of small firms within it. It is within this context that the government's sustained yield policy was considered, and later implemented. Accordingly, the thesis now considers the conceptual relationship of the state to economic development processes so as not to leave voluntaristic gaps in the analytical procedure as does relatively voluntarist Canadian political economy writing.

#### The State's Role in the Development Process

The following passage illustrates of what is meant by the 'structure' of the development process, although it takes the case of forest fires. The quote is from the 1910 Royal Commission on B.C. forestry.

As settlement progresses in each thickly timbered country public opinion goes through the same inevitable changes. At first forest fires are looked upon as a natural accompaniment to the routine of progress and development; indeed they may even seem a desirable means of opening up a new territory. Then, as the lumbering industry obtains the control of small areas of timberlands, there fires appear as a vague menace to private interests, a menace, however, that arouses little anxiety since, when timber is destroyed, there is no

difficulty in obtaining elsewhere in the immense unused forest the grant of fresh sources of supply. <This was written, of course, when the supply of timber was estimated to be sufficient for about 250 years in B.C.> After this comes the time when men realize how limited is the amount of merchantable timber and how valuable it must become. The holding of timber becomes a profitable form of investment and in consequence most of the accessible timber passes into private control. <This would seem to correspond to the B.C. situation just discussed as to timber holdings>. At this stage fires cause direct injury to private interests by actual destruction of timber held; they damage a source of public revenue; and their prevalence deters investment and acts as a drag upon the rise in stumpage values <payments to the Crown for timber>. The attention they thus arouse soon causes the remarkable discovery that it is often possible to minimize the damage they can do by spending money upon fighting them. The lumbermen and government co-operate, money is actually obtained, and the protection of the merchantable forest is begun (Royal Commission, 1910:D59).

As an indicator of government concern, it may be noted that in the fiscal year 1908-1909 less than 2% of the revenue from forestry was spent on the provincial forests. In 1912-1913 this proportion increased to 10.4%, and in 1942-1943 it was 33.3% (Forest Service, 1945). C.D. Orchard stated in 1937 that "three-quarters of our forest revenue amounting to \$50 million in the last 25 years <to 1937> have been going to balance the provincial budgets while such essential forestry activities as protection and research have been inadequately financed" (Orchard, 1945b:8-9).

The perspective of the thesis is more accurately reflected by the following quote which serves to reinforce the deterministic perspective of the relation of the state to the economic base. Soviet economist Burdjalov writes:

Modernization of the capitalist system of production relations, and improvement of the machinery of centralized management of the economy do not by any means come about through the will of individual politicians and statesmen. The process is subject to certain laws and patterns, and the concentrated aspirations of the class occupying the dominant position in the economic and political structure of society to adapt as far as possible to changing domestic and external <international> conditions of its existence (Burdjalov, 1978:8)

This does not mean that capitalist countries have fully centralized planning, but rather that problems such as represented by the 1929 depression or international trade have forced governments to introduce planning measures in varying degrees. The 'laws' reflect dominant trends operating in a given economy, such as those 'laws' leading to the declining role of small independent firms in B.C.'s forestry industry[14]. Soviet economic planners may be thought to have more control over their economy than capitalist planners do over capitalist economies, so the following passage is of interest:

Emphasizing the limitations imposed on the planners' will by objective necessity, Strumlin <a Soviet economist> contrasted the nature of juridical and economic laws. The former are enforced by state organs. 'Economic laws also do not lack an enforcement mechanism, even though this is not laid down in any code...Economic sanctions operate independently, without the help of any kind of coercive apparatus, as a result of the very fact of a breach of <economic> law. To put it another way, economic laws take their own revenge on those who break them (Nove, 1968:18).

This accounts, in broad perspective, for the success of B.C.'s sustained yield policy: it was compatible with the

trend towards larger-scale production and away from smaller scale production. An attempt to suppress this trend in forestry would have come up against the obstacles of the competitive position of small firms domestically and in the international market. How would B.C. fare in international trade if dependent on small mills with higher production costs? Marx stated that the "industrial capitalist faces the world market; <he> therefore compares and must constantly compare his own cost-prices with market prices not only at home, but also on the whole market of the world. He always produces taking that into account" (Marx, 1971:470). Presumably those who do not take their cost-prices of production into account in a competitive business situation need not expect to survive economically. Assuming this to be the case it would appear that not only would there be major obstacles to aiding small firms as a whole to hold their own against economic forces, but that now it would appear to be undesirable to be too successful at carrying out such a policy.

So far the thesis has examined the operative forces in the B.C. economy, with emphasis on forestry, up to World War II. This served to differentiate the situation of large and small firms in the industry, and in particular to demonstrate why it was that the trends underway were occurring, and what scope for action existed for various interest groups during this period of time. This is necessary in or-

der to account both for future actions taken by the various interest groups concerned, and for the constraints that have developed on their possible actions in the context of the thesis[15]. As will become clear in subsequent chapters, the preceding is required to show how it is that actions by the government arise out of existing conditions and that they do not represent arbitrary and voluntaristic impositions to the disadvantage of other groups, although disadvantage may occur.

The following points were made. Marx's theory of concentration appears to be applicable to the data on B.C. sawmills. Larger mills have distinct advantages in terms of cost structure over smaller mills. This occurs in terms of the reduced proportions of revenue spent on circulating capital (wages, salaries, fuel and raw materials). The proportional savings thus achieved can then be used by the larger firms to improve their competitive position. Smaller firms obtain progressively smaller shares of market sales for lumber.

Large firms are advantaged with respect to industrial location and transportation. Vancouver New Westminster represented a centralized commercial and market area which facilitated the development of concentrated industry. This occurred both regionally and in terms of market control for those firms able to win increased shares of market sales. This coincided with good access to raw materials from the

point of view of sawmilling, and this area served as a good processing and transshipment point for lumber.

Within the industry itself, since economic factors limited the spread of the industry geographically, there was a trend to contracting and away from the independent status of logging firms. This trend occurred in the context of concentrated landholdings and a concentrated logging industry in which somewhat more than a third of firms produced only an estimated 1% of output. Smaller firms, with inferior cost structures, were decreasingly able to hold their own as firms operating independently in the effort to secure timber supplies. These processes are part of the competitive nature of capitalist development in British Columbia.

The latest part of the chapter served to conceptualize the role of the state as part of the development process, a topic to be pursued further in subsequent chapters.

## Chapter IV

### THE ORIGIN AND DEVELOPMENT OF THE ROYAL COMMISSION

This chapter is concerned with the Royal Commission, its origin and the hearings it held. A basic, but general, purpose of the chapter is progressively to show why, while business and government proposed different plans for sustained yield, the business plan for sustained yield was necessarily rejected and government's adopted. The first part of the chapter, on the origin of the Royal Commission, is concerned with the question of whether business or government was more concerned to call the Royal Commission into being, and why. Government's strategy for sustained yield policy is considered later, e.g. why did government expect to rely on large landholders in implementing its sustained yield plans? In relation to the next chapter, the question of which plan for sustained yield was to be implemented would affect the position of small as against large business.

#### Origin of the 1945 Royal Commission: Questions of Community Stability

Most of the Vancouver District's timber was on Vancouver Island, and discussion concerns the eastern portion of

the Island since the western portion was little developed. The Duncan Chamber of Commerce was concerned for the future viability of the communities in the area, given their dependence on logging and lumbering, and the estimates of future timber supplies. The area to which the brief referred "extends roughly from Shawnigan on the South to Chemainus on the North, and includes the country surrounding Cowichan Lake, and the Nitinat on the West Coast of the Island" (Proceedings, 1945:1061) In this area, in 1941, 16 mills employed 1400 men, and another 1200 were involved in logging. A crisis in forestry would involve other economic sectors in the crisis. The Chamber of Commerce in discussion with industry men, however, was given to understand that the local timber supply was likely to last only 25-30 years (Proceedings, 1945: 1062, 1067). What would happen then?

The brief states the attitude of business in the area to replanting logged-over land: "We find a definite consensus of opinion in favor of a vigorous policy of reforestation and we commend the work done in this direction by the Forestry Department..." (Proceedings, 1945:1063). However planting was viewed as a government responsibility. The cited statement indicates a business unwillingness to be responsible for one element of the sustained yield solution under existing conditions, namely replanting on a sufficient scale. However, this attitude would depend upon the terms offered as an inducement. Cut-over lands reverted to the

Crown which had originally temporarily alienated the land for cutting purposes. (This doesn't apply to Crown Grant lands, but neither were these owners responsible for replanting). These tenures reflected the historical conditions of an over-supply of timber in an underdeveloped British Columbia. A likely element in the business perspective was suggested from the earlier writing of Karl Marx: "...the tenant farmer avoids all improvements and outlays for which he cannot expect complete returns during the terms of the lease" (Marx, 1977: 620). Renewal of the lease might then be at a higher rate due to the improvements made by the tenant. Here business is the tenant to a landlord government. Thus the cost of replanting would not benefit the firm since the logged-over area would revert to the Crown. Further there would be no assurance the firm would exist in the 60 or more years it would take a new crop of trees to grow to merchantable size, nor that it would get the land again anyway. Hence replanting was generally seen as a government responsibility.

The problem for the communities in the area was starkly but ungrammatically put by a witness to the Royal Commission, Mulholland, who had worked for the Forest Service: "we are faced ...with a number of companies, maybe the majority of them on this Island, which by no possibility can find any more timber to keep them going indefinitely..." (Proceedings, 1945:3015-3016). While business could view the situ-

ation as one in which they have to take into account the cost of writing off their businesses when they ran out of timber, this would be less satisfactory to both the communities and the government.

\* The prospect of timber shortages could act as an inducement to support such a Commission in some cases at least. Also, appropriate government legislation would appear to offer a way out of the impasse, to induce business onto sustained yield and also protecting community stability. However the legislation was in the future, as yet only partially defined.

Outside of Vancouver Island, in the Fraser River Valley, there had been increasing demand for accessible second growth (younger) timber since

practically all of the readily accessible mature timber has been previously utilized. Some rather extensive stands of second growth occur in the locality of a size just large enough to render them merchantable...The privately owned material of this nature is being rapidly utilized and the demand for similar Crown timber will increase as private holdings are harvested (Forest Service, 1/1941).

This demand for younger trees as resources declined was important regarding government-business differences as to how sustained yield should be implemented. Looking ahead, business wanted a voluntary sustained yield plan, which would be regulated by government on the basis of the rate of timber supplied to business. This last quote indicates the problems government would face if business actually overcut exten-

sively - that is, withholding Crown timber would adversely affect both business operations and the level of economic activity, thus arousing protest. However if the government supplied the timberland, complete with timber of course, resource depletion would simply continue although the protests would subside. The problem of resource protection would be shifted into the future as the situation continued to worsen. It can be seen that government had a motive for wanting to change the legislation in order to encourage sustained yield - to encourage replanting. However the business plan would appear to be risky seen from a government viewpoint. The rest of this chapter will consider, on the basis of the events that transpired, if the differences between the government and business view on this issue were resolvable. However it is useful to present the Forest Service view of the development process requiring the need for sustained yield. This is followed by the government's perspective which differs in some respects.

#### Perpetuating B.C.'s Economy - Forest Service View

The 1910 Royal Commission estimate of 250 years' supply of timber had been considerably reduced by 1945, on a regional basis at least. Reliable estimates were not possible due to the relative lack of data. This was an outcome of the gradual evolution of the status of the forest resource from a hindrance to one that is valuable, requiring, at a specific stage of socio-economic development, a break from past

practice. In 1912, Minister of Lands, W.R. Ross, concluded a speech: "An epoch, sir, is drawing to a close - the epoch of reckless devastation of the natural resources...that rugged, rudimentary phase of pioneer activity is doomed to end. The writing is on the wall; the writing - to put the simple fact - is this forest bill" (Ross, 1912:24)

However, with an estimated 250 years' supply of timber the economics of the situation prevented much improvement. The Forest Branch was set up with fires being the principle concern, along with data collection. Inevitably with the growth and development of population, markets, and increased demand for resources, this situation changed. C.D. Orchard's view:

Forestry has many uses and objectives but primarily it's a business proposition of growing a crop of wood and it must be able to show a credit balance. As long as we had more old growth timber than the mills could use there was no excuse or function for sustained yield. Caverhill <Chief Forester, 1920's> saw the day it would be necessary and started laying the foundation with inventory surveys, research, etc. (Orchard, 1960a:65).

From the Forest Service view, C.D. Orchard presented his main concerns about the forestry situation to the government in August, 1942 (Orchard, 1960a:83). Although industry had been informally consulted, this memo represented "the inception of sustained yield forestry in B.C. and, for that matter, in Canada" (Orchard, 1960a:85). It led to the 1945 Royal Commission. As to industry reaction to his sustained yield proposals, Orchard said it was varied but that he was

heard with interest. However Orchard's concerns were not new: a newspaper reported in 1940 that, in the legislature, Orchard "reiterated the warning the Forest Service has been giving each year to the legislative committee on forestry, "'Protect the forests before it is too late'" (Province, 19/1/1940).

Going into World War II, Orchard was concerned about regional overcuts. For the period 1938-1943 nearly 88% of B.C.'s cut was derived from 1.25% of the productive forest land, thus allowing a limited area for re-growth in the future. The consequences of not acting were presented:

without sustained yield management, our present rate of depletion cannot be maintained. That is to say, the industry as a whole will shortly strike a downgrade which will continue over the course of years to some minimum, far below our present cut, that nature can sustain in spite of us... Obviously, up to the present time, we have been following the usual history of pioneer forested countries the world over, with only a few minor and inadequate brakes which have served only to slow up the process of depletion in some small degree, and with the obvious end in store <if continued> (Orchard, 1945a. cf. Proceedings, 1945:1182).

Orchard's concern was no doubt reinforced by the long term trend towards increased cuts in B.C.'s Coastal region.

Labour shortages contributed to the decline during World War II. The Forest Service view, then, led to the conclusion that sustained yield was necessary.

TABLE 4

Timber Cuts: 1915-1943

Coastal Region

(billicns cf board feet)

	1915	1920	1925	1930	1935	1940	1941	1943
(Sloan, 1945:Q32)	.830	1.59	2.16	2.24	2.36	3.32	3.26	2.52

The data in Table 4 are in billicns of board feet of lumber.

The envisaged threat to the provincial economy was clear from the fact that in 1938, 26.9% of the total value of B.C.'s production was contributed by forest products. The trend was of an uneven increase in the economic contribution from this source (Sloan, 1945:Q10). Forest industries in 1942 provided an average for the year of 31,686 jobs and this does not include an unknown additional number indirectly dependent on the forest industries (Sloan, 1945:Q12).

However a further aspect of the dependence of B.C. on forestry, and so of the threat posed by industry decline, is essential to note. The 1937 inventory report, in the context of forest depletion in the U.S.A., stated:

Even so, where the denuded land could be put to other uses a sound social structure could still be built up; but where, as in British Columbia, four-fifths of the productive land is suitable only for forestry, permanent communities can only be maintained upon permanent industries sustained by the yield of well-managed forests (Mulholland, 1937:10).

Soil classification, as of 1980, classed 7% of Crown forest land as being 'good' sites; 35% as medium sites; 50% as poor, and 8% as 'low' or not worth replanting (Ministry of Forests, 1980:4). In terms of business location, if forestry isn't on-going, what is? The concentration of population and business in the lower mainland has been noted. It may be asked why generally business would wish to locate elsewhere in B.C., away from main markets, in the absence of forestry and the population supported thereby? (Mines would provide exceptions). To some extent this provides common ground for concern as between business and government respecting sustained yield, but the considerations in running a firm - in competition with others - would mean the subordination generally of the government perspective on this issue to the concern as to the situation of the individual firm. It would be an unusual businessman willing to sacrifice his business to the common good. Rather he would have to be mainly concerned with the terms on which such a settlement for the social good would occur if he intended to keep the firm running on a sound basis. Here it will simply be noted that, for example, the representative of Canadian Forest Products held the view that sustained yield "should not serve to handicap the manufacturer" (Proceedings, 1945:7814ff).

These concerns serve to differentiate industry and government with respect to the adoption of sustained yield policy, and indicates that the more substantial stake is held

by government. Before continuing, it is necessary to mention the phenomenon of ghost towns.

#### Ghost Towns In the Interior of B.C.

Concern for abandoned towns formed part of the government's motivation to act on sustained yield. The phenomenon was less common on the Coast due to availability of water transport as against expensive land transport in the Interior, as mills cut out of accessible supplies. The regional aspect of the problem separates this discussion from the earlier one concerning Vancouver Island and threats to communities, since the latter had not been abandoned and the Interior in industrial terms was much less important at this period of time than the Coast.

An Interior businessman, Turner, attacked the existing policy. Under this policy an operator would apply for timber from the government (timber sale), by assumption obtain it, and proceed to pay the costs of establishing a mill and community in the area, etc.. Other firms might then decide to move into the area, and want timber auctioned. The original firm would have to outbid the new firms to exclude them. If it was unsuccessful, competition would be established in the area and further firms might enter. It is incumbent upon the Forest Service to put the timber up for auction.

The result of this policy has been that within a measureable time the original investors and those that followed find themselves out of timber. This

means the closing down of all of the operations and moving to other locations where the vicious cycle is repeated. It has meant also that the community that has been established in this area has to be abandoned...the inducement to operators has been definitely in the direction of cutting and marketing their capital in the shortest possible time, thereby contributing to demoralized markets (Proceedings, 1945:9470-9471).

The conservation aspect of this problem would logically be dealt with by a sustained yield policy, and change in a policy based upon historical conditions of surplus timber. The government's view of the situation differed from the view of the Forest Service in some degree.

#### Government View

The government's view of the situation was offered in a speech by the Minister of Lands and Forests, E.T. Kenny, in 1948. The following applies, presumably, both to individual communities or if the industry cut itself out of accessible timber supplies.

Settlement and land use call for large expenditures of money on roads, bridges, schools and rural electrification, and other conveniences and amenities...which few of the provinces, if any, can afford to complete at once. We have had too many examples of haphazard settlement and this has resulted in the past, in developmental costs beyond the means of our sparsely populated provinces. These costs have been underwritten, in no small measure, by proceeds from the liquidation of our virgin forest resources (Kenny, 1948).

Additionally

Only about 80% of the province's population comes under the administration of local governments. The organized areas - mainly in the South-Central and Southwestern sections - comprise only about 1% of the area of the province. The 20% of the population scattered over 99% of the area is adminis-

tered by the provincial government (Carlsen, 1961:3).

Thus sustained yield forest policy becomes joined to the question of community stability. Although this provides further reason for government to endorse a change in previous policies, this reason would be of lesser importance than the fundamental importance of maintaining the industry in existence. Rationing spending on shifting communities, by contrast, could not ensure continued timber supplies. Again it appears that government has the bigger stake than business in introducing sustained yield. If the government had solid grounds for the policy, then it cannot reasonably be accused of arbitrarily introducing the policy in order to benefit large firms. So far, at least, government concerns would appear to be well-founded.

#### Public Attitudes: An Obstacle to Sustained Yield

Public attitudes appear to represent a lag in adjustment to changing economic conditions. According to C.D. Orchard, lack of public support had been the major handicap in introducing "adequate forestry measures". The public failed to realize the economic importance of forestry which generated more revenue for the government than any other single industry. "Those interests which are receiving public support - the tourist, the sporting, the recreational - are at present of minor importance..." compared to the forest industry (Orchard, 1945c:3). In Orchard's estimation the pub-

lic viewed the forests as inexhaustable. Of course, the public elected the members of the legislature who voted on the appropriation of public funds. In this, the quality of systems analysis can be perceived, as well as the development process of B.C.'s economy which began to require changed attitudes. This is underlined by a U.S. study which compared forest protection conditions in the U.S and B.C.. In B.C., for forest protection purposes, there was an average of "one man to each 500,000 acres" as against one per 22,000 acres in the U.S.A. (Sloan, 1945:Q130). The 1940 study estimated that 50 to 100 times as much damage was caused in B.C. from fires, largely in the Interior (Sloan, 1945:Q131). These considerations led to H.R. Macmillan's comments about the important connection between fires and sustained yield.

In the Coast district in the past 40 years fire has destroyed relatively little merchantable timber...In the same time, in the same district, fires, frequently repeated over the same ground, have destroyed large areas of valuable young forest growth, together with a serious proportion of the fertility of the soil (Proceedings, 1945:3607).

MacMillan pointed out that fires start after the loggers departed (Proceedings, 1945:3609). However logging waste remained at the site, and dried out during hot summers. For about the first 20 years of life, the young coniferous forests are extremely inflammable. Forest Branch reports 1934 to 1943 inclusive show that 77% of fires in the coast dis-

trict are caused by the public and only 7% from logging operations" (Proceedings, 1945:3617). The reader will recall that 88% of B.C.'s timber cut came from 1.25% of the productive land, the same area in which the public caused fires. Since trees could be expected to require 60 or more years to reach maturity, the risks of growing trees to harvest can be seen as unacceptable under the conditions outlined.

Royal Commission Called: Government's Dominant Role

The following constitutes a contrast to the view of the origin of the 1945 Royal Commission discussed in detail by Canadian political economy writers Reid and Weaver. They downplayed the role of the Forest Service in bringing about the Royal Commission and argued that industry had the more important role. Their account begins with the announcement of the 1945 Royal Commission in June, 1943, while Orchard gives August, 1942, as the date of a key memo sent to the Minister of Lands. Orchard stated that there was much Crown timber land in the inventory but that "most of it was remote and unattractive". The Crown also held much burnt and logged-over land which generated no provincial income. "Already the coast industry was feeling or could clearly foresee the pinch of timber famine. Now, before it was too late, it seemed to me...was the time to do something about it..." (Orchard, 1960a:76).

Orchard's view was that sustained yield policy "would inevitably trample on a few corns but every year of delay

would make the problem worse until it was practically impossible" (Orchard, 1960a:77). In the 1942 memo Orchard had noted that after a "lapse of 29 years our visible <timber> resources have shrunk from a 250 years' supply to 33 years' supply". He noted that this reasoning is unreliable "as the sole guide for forest management" (Orchard, 1942:2). Orchard wrote: "When an estimated 250 years' timber supply existed the problems of the timber disposal system could be left safely...for the attention of a later generation" (Orchard, 1942:14). The capitalist development process as it affected B.C. eventually made it necessary to deal with this situation. The solution Orchard proposed was that adopted in B.C. It is submitted here that the rational solution is to

give the operator, whenever possible, an interest in the area he is working that will permit him to make long-term plans in co-operation with government... Adoption of this principle would involve the pooling of private and Crown forest lands in sufficient area to support in perpetuity, if managed in accordance with sound forest practice, the industrial unit it is desired to stabilize. The primary object would be to secure perpetual and uninterrupted yield from our forest lands (Orchard, 1942:15)

What impact did the views of the Forest Service have upon government itself? This is a structural consideration, expressed as follows in a bourgeois statement which needs placement in the context of the process of socio-economic development. It concerns the question of inputs into government policy-making.

The range of modern invention has imposed on us not only new ways of living but new problems in

social and economic accommodation. This has meant two things of great importance: first, modern government is now beset with an increasing burden of problems in highly specialized fields, more particularly in economic relations, and in the social by-products of modern industry; secondly, the impossibility of legislating in extreme detail to meet every possible variation in conditions... (Proceedings, 1945:7495).

Orchard commented: "in my experience, up to the advent of the Social Credit government in 1952, the Minister almost without exception accepted the recommendations of his technical staff (Orchard, 1960b:121). The Minister of that government, Sommers, was eventually convicted of corruption.

In contrast to Orchard's 24 years in the Forest Service, Minister of Lands and Forests E.T. Kenny remarked of his position in 1944 as to carrying out sustained yield policy: "Just how this is done, I am willing to leave in large measure to the Royal Commission and my technical advisors in the Forest Service. I can hardly be expected to have had an opportunity to study a question of this magnitude and importance in any detail in the two short busy months I have occupied my present position of responsibility in this matter" (Kenny, no date). As will become clear, Reid and Weaver failed to specify the role of the Forest Service in calling the Royal Commission except to say that it was important.

Briefly, some determinants of Orchard's willingness to act on sustained yield may be noted. Orchard was committed to a forestry career. Historically viewed, as regards forestry, government's responsibilities towards maintaining the

economy evolved in B.C., existing in latent form in earliest periods. It was a matter of evolving socio-economic conditions developing to a stage at which conservation of the forest resource would become essential, so forcing government action to protect the resource. This process would correspond to Orchard's general rationale for remaining as a government forester over many years, which would involve attributing value to his occupational role as protector of the forests in the public interest. For this to be a viable rationale would require that he acted on it as such action became historically necessary and desirable. In other words, Orchard's volition corresponds to determining forces and conditions, including his occupational duty to inform the government of his views concerning the necessity to adopt sustained yield forestry policy.

An important problem was that business lacked incentive to carry out reforestation of their land (or of sustained yield). Forestry formed a significant part of the economic base of communities on Vancouver Island and in other areas. The duration of timber supplies was a matter of considerable concern for these communities. From a business viewpoint it could simply be matter of taking into account the eventual cost of having to write off the business when timber supplies ran out. An outdated government forestry policy itself contributed to the business attitude of "cut out and get out" and lack of regard to forest protection. The policy derived from a period of great excess of timber supplies.

From the Forest Service view, the regional concentration of industry was the main problem, with 88% of the cut coming from 1.25% of B.C.'s productive forest land. As timber supplies declined from an estimated 250 years in 1910 to Orchard's estimated 33 years in 1942, Orchard's conclusion was that it was necessary to take steps to protect B.C.'s economic position. This threat was underlined by the fact that, in 1938, 26.9% of the total value of B.C.'s production came from forestry. Other industry would be dependent, in varying degrees, on the income forestry generated for its customers. Orchard's view was that B.C.'s forestry industry would go into a steep decline unless action were taken, while the productive forest land of B.C. was of little use for anything but forestry. This meant that no means of livelihood could adequately replace forestry in B.C.'s circumstances. Orchard proposed the solution, namely the pooling of Crown and private land to ensure the stabilisation of industry and communities on the basis of sustained (perpetual) yield. The Forest Service functioned as an advisor to government on forest policy and related technical issues. Government had predominantly accepted their advice in the past. Further the government was concerned about its heavy expenditures on infrastructure for shifting communities for which it was administratively responsible. Sustained yield would serve to resolve this problem also. As to the calling of the 1945 Royal Commission into being, the

evidence indicates that government had the stronger motive to bring this about than did business. Orchard's willingness to act was an outcome of forces and circumstances shaping his volition in this regard. Discussion now turns to the question of the Royal Commission as a research tool, and the context of analysis.

### The Royal Commission

The previous sections were intended to show the necessary basis for the adoption of sustained yield. This section is intended to show the necessary basis for the particular sustained yield plan that was adopted. Obviously, one plan could have different impacts than another when implemented. Thus determinist analysis has to show why one plan was accepted, on the basis of necessity. The previous B.C. Royal Commission occurred 35 years earlier, in 1910, so there was much room, so to speak, for new data to be collected. Two instances are given with respect to data, that is, inventory estimations of timber, and the records kept about companies operating in the forestry sector.

### The Search for Data

There was much to investigate, and the Royal Commission was not some sort of conspiracy between government and large firms. The 1937 inventory of timber resources formed an important basis for Orchard's arguments favouring sustained yield. He states:

Now we were perfectly justified in those days <circa 1912-1916> in postponing - that being the best of our information....regulating the <timber> cut for another 150 or 200 years....in about 1925 we seriously went into the business of trying to compile an inventory. Now that project was pursued steadily and the more was learned about what we had, a little more concerned we got...that report of 1937 was the first reliable, comprehensive view we had of what our resources were, and it is only since that time we could cite chapter and verse and quote figures,..and know something about our problem (Proceedings, Feb.24, 1944:9).

This however is not as clear as it seems. Mulholland noted that the inventory had been compiled over the nine or ten years prior to 1937: i.e., during the depression years. There wasn't enough money to pay for a full survey of B.C.'s resource which Mulholland in passing referred to casually as costing four or five million dollars upwards, if it were to be done. "What we did first was to get in touch with all the owners of timber, some 2,000 of them. We sent letters out, to get estimates or any cruises <surveys> that they had of their timber licences or Crown Granted timber lands" (Proceedings, 1945:2253 (2364)). Often they were referred to brckers or forest surveyors whom they interviewed, and whose surveys they checked as seemed necessary, as well as carrying out some surveys of their own. This meant, however that, though checked reportedly, surveys dating back to about 1926 would be part of a report which formed the main source of data into the 1940's. Clearly some estimating problems would arise from renewed growth of trees in the intervening period, and of differing standards of measurement.

(This depended on personal estimation in the context of prevailing standards of operation). The figures on economic accessibility of timber were to be "disregarded entirely" according to Mulholland unless another depression returned (Proceedings, 1945:10557, 10566). This was due to the contrast between depression conditions and the war-time boom. The 1945 Royal Commission report stated that Mulholland

Frankly conceded the 1937 report to be a very conservative estimate and would add 10% to his Coast estimates...<less what had been cut between 1937-1944>. A number of highly qualified and experienced witnesses were of the opinion that the present volume of coast timber amounted to from 180 to 200 billion feet. <The 1937 report gave 155 billion board feet>. Mulholland while not accepting this increase did not seriously challenge its accuracy (Sloan, 1945:31).

Accordingly this issue became something of a political football and figures were produced to support one argument or another. These will be considered later. Mulholland's statement concerning the discrepancy in estimated increases was: "I just stand by this inventory because I have no evidence to prove that it is any more wrong than the 10% will cover" (Proceedings, 1945:10564). Thus a number of questions cloud Orchard's clarity. The next question, of data on concentration of landholdings - the figures for which were given in the previous chapter - can be covered more briefly.

Orchard was asked about landholding records. In the case of licences, the recording of assignment of output from those licences was legally required, "but has not been kept

up, so that in the case of licences we really don't know <who> does own them" (Proceedings, 1945:1810)[16]. Orchard had stated previously: "Let us say that we want to know what one company's holdings are. It might take a man a day, or two or three to get it, but multiply that say by 1600 operators (the number varies from 1100 to 1600) it gets to proportions which are rather forbidding" (Proceedings, 1945:1809). Orchard is asked, given these problems, whether the information existed to show whether timber holdings were becoming concentrated. Orchard's reply: "...we don't know with any degree of accuracy whatsoever" (Proceedings, 1945:1811).

These two cases - inventory and landholdings - indicate the potential and need for the role of data-gathering by the Royal Commission. By the same token during the hearings positions taken at one point in the hearings might be changed in the face of new information at a later date.

#### Strategy and Landholdings

It has been noted that sustained yield involved allocating Crown land to industry - although retaining Crown ownership - to enable firms to have sufficient timber supply to carry on sustained yield. Sloan stated that "I think I can safely say, upon the evidence before me, no operator has a sufficient supply of lumber in reserve to permit him to maintain an economic production of lumber from those areas under his control if he were compelled to cut on a sustained

yield basis..." (Sloan, 1945:144). Accordingly Orchard is compelled to confront this point in his considerations.

Orchard's view of the situation was as follows: "...the larger part of our privately owned lands is concentrated, and you just couldn't have rational <sustained yield> management without... <large owners entering> in" (Proceedings, 1945:9640). Based on his recollection of the data, about 1% of owners controlled 50% <actually 42.5%> of the privately owned land. This meant that, given the existence of 2,877 landholders of all sizes in 1944, the remaining holdings were fairly small on average. Orchard comments that he does not see

any way to get those <smaller owners> on a sustained yield basis other than first, for the government to buy them out, which does not seem very practical to me; second, to absolutely regulate them <removing the owners' freedom of choice>...and that does not appear to be a very practical solution...I doubt if the Government would consent to collect taxes for 20 or 30 years <the time the owners might remain> on property in which the man has no property rights. So that the only way to deal with those small holdings is by some minimum regulation... (Proceedings, 1945: 9640-9641).

The regulation would be that they had to keep their land continually in a productive state. Clearly from the perspective of the Forest Service, which was under-staffed, and presumably government, the optimal course of action would be to introduce the regulations and let the owners decide upon their own priorities. When planning the introduction of a major step, it would seem preferable to work on the basis of

a group of large owners as the foundation to sustained yield, and to consider smaller owners at a later date. In view of staff shortages, to do otherwise might threaten simply to overwhelm the Forest Service with work. This writer went through the landholding records. Generally, smaller owners obtained their timber supplies by means of timber auctions from the government. Of this class of tenure, namely Timber Sales, only about 25% owning rights to timber in 1938 remained as holders in 1944. Turnover was high, and larger owners were more stable (Dept. Trade and Industry, 1944).

Orchard expected large and other owners to voluntarily adopt a sustained yield plan which would be compulsory in its operation once accepted. He noted that five large holders were interested, including "two of the biggest holders" (Proceedings, 1945:9642). Orchard agreed that if those large owners continued on a timber liquidation basis that would enhance the risks of running out of accessible timber. In Orchard's opinion, however, this would only considerably slow the development towards sustained yield practice rather than prevent it (Proceedings, 1945:9644-9645).

Q. Now, unless you have some basis of compulsion by which the Province exercises control over those 31 holders, are they not in a position to dictate the forest policy of the province as a term for entering into a sustained yield programme? A. I don't think so. I think the dictation is going to resolve itself into one of economics (Proceedings, 1945:9645-9646).

Orchard cites the pulp companies, of which three combined held 658,440 acres in 1944 (Dept. Trade and Industry, 1944), as being interested in sustained yield. Orchard says that they will have to adopt sustained yield "or else in the long run lose out very badly" (Proceedings, 1945:9647). The firms had to protect their supplies of timber in order to perpetuate their conversion units (sawmills, pulpmills, etc.). It was Orchard's view that such considerations would compel the industrialists to support sustained yield, although he admitted that he couldn't prove that he was correct. However it has logic to back it up: to go on a liquidation basis would mean, eventually, to run out of timber while the plant would need more supplies to continue. This would undermine private investments. Pulp mills are expensive.

Orchard states that sustained yield based on Crown land which had not been alienated would be insufficient to sustain existing industry. The 1937 inventory report had estimated that 39% of the Coast's merchantable timber had not yet been alienated to industry, which percentage must have declined by 1944 (Sloan, 1945:79). Accordingly, to achieve his objectives, Orchard had to focus on the large owners in introducing sustained yield policy. This analysis takes into account that B.C. had not managed to elect a socialist government, so that the range of policy options was limited to those consistent with the operations of a capitalist economy. Having indicated Orchard's focus on large owners

it remains to be seen how this worked out in terms of the positions taken by business and government at the Royal Commission hearings.

#### Perspectives on Sustained Yield

In 1945 Orchard pointed to the advantages of sustained yield to a firm, although with cuts controlled, as compared to a situation of uncontrolled exploitation of forests:

What inducement, then, is there for business to enter into such a contract, which so narrowly restricts its liberty of action? The chief inducement is the long-term security of tenure on supplementary Crown lands, which has a score of attendant advantages. Amongst these, are the possibility of long-term planning of operations, and capital investment, flexibility in logging, infinitely better protection possibilities and better utilization better graduated at all times to current market conditions (Orchard, 1945d:8-9).

The reader should note that Orchard refers only to advantages. At the Royal Commission hearings he had added restrictive conditions. He regarded the basis of his views as well documented (Proceed., 1945:9587). Various principles associated with sustained yield would reflect upon a business predicated upon unrestricted timber cuts, such as:

5) Owners of denuded forest lands at the date of coming into force of laws or regulations in this regard shall plant or rehabilitate such lands at the rate of not less than 1,000 acres per year, or one-tenth of the total acres of such land, whichever annual rate of planting shall prove to be the less. 9) The Chief Forester shall, in conference with the industry draw up a code of minimum requirements in forest practice designed to maintain forest lands in a continuously productive state. Once published, this code shall, without exception be enforced on all sales of Crown timber and on all operations on privately-owned or controlled lands. 10) For failure to comply with the

terms of the code described in 9., above, the Chief Forester may suspend any logging operation in the Province (Proceedings, 1945:9608).

Although this is only a selection of principles, it is obvious that it represents a drastic change from a situation as in the past, in which little state control was exercised over companies. It represented a considerable increment in the influence of the Chief Forester in the running of a firm. Its possibly bureaucratic tendencies were expressed in the extreme by the following: "The licensee's foresters shall be responsible to, and shall take instructions from the licensee or his general manager, and shall not be responsible to, or take orders from any other employee or officer of the licensee" (Proceedings, 1945:9610). While it can be accepted that such a regulation would make it difficult for a firm to avoid its responsibilities by allowing the general manager to deny issuing an order, the regulation might also be expected to obstruct the operations of a firm. What would be the result, for instance, if a problem arose while the general manager was away on holiday or on business?

Not surprisingly, industry reaction was to object to these various conditions, on the grounds that they did not take into account the variability of conditions that might well occur, and that a company might well know more about its own operations than did government foresters. An industry brief was drawn up in response which represented an es-

estimated 80% of Coastal operators producing about 95% of total production on the Coast. Industry was also concerned about the following statement by Orchard:

Now we must engage in the business of growing and conservative harvesting of timber. Just what this will cost, we are unable to say because we lack the necessary any experience. We do know that it will cost very much more to grow timber than it has cost merely to realize on an existing "gift" resource; that it is a business analogous to farming; and that the first charge against the income of any business must be the cost of maintaining the business itself (Proceedings, 1945:9598).

This implied to business that they were expected to pay rather than the government. They state:

It must be obvious...that immediate sustained yield management is far beyond the practical means of the majority of present logging operators on the basis of their individual holdings and resources, if they are to survive. This is particularly true where minimum requirements for sustained yield would involve arbitrary regulation of cut, arbitrary utilization standards or other arbitrary requirements... Except in the case of a relatively few of the larger units of the industry so situated economically as to make possible voluntary adoption of approved working plans, we are of the opinion that the primary steps in a practical approach to sustained yield on the Coast must be in the nature of an overall working plan for areas such as watersheds or drainage basins, in the hope of eventually attaining sustained yield for the region (Proceedings, 1945:10319).

The brief was supported by the E.C. Loggers' Association, the Pulp and Paper Association, and the Truck Loggers Association. It may be noted in passing that this situation does not conform to Reid and Weaver's account which stresses identity of interest between large business and government as to sustained yield. Still other differences distinguish

the views of business and Orchard. The cut regulation format as proposed by Orchard was obviously rigid as compared to a situation in which the cuts are unregulated. "The annual cut may be varied as circumstances dictate, but shall not in any one year exceed...% of the planned amount, or in any one year be less than...% of the planned amount and shall not in any...consecutive years exceed the total planned cut for those...years" (Proceedings, 1945:9611). The blanks reflect the fact that a decision had not then been made as to the values in question. The deviations must cancel out, so that initial choice is replaced by compulsion. Thus if an economic boom lasts several years, and assuming the cut period is five years, the firm will lose out if it has initially overcut by being then forced to reduce its production level which could profitably have been kept higher. If the good period is replaced by a poorer one, the firm may similarly lose by having to keep production higher than desirable from a business viewpoint, and face reduced prices from overproduction. This is emphasized by the "highly cyclical" market for lumber and plywood (McKillop and Mead, 1976:xvii). Opposition to cut controls was not absolute, but was susceptible to influence by other concerns arising from changing conditions. The significance for business of the interaction of profit variability with restrictive rates of timber cuts, as proposed by Orchard, is indicated by the following statement by a logger. He gave

his profits per thousand feet of timber logged for the years 1938-1943. There were losses in 1938 and 1939 of 24.4 cents per thousand feet, and 31.8 cents in 1939. Profits for 1940 to 1943 were: 45.2 cents, 13.1, \$1.25, and 74.6 cents per thousand feet of output Proceedings, 1945:9437-9438)[17]. This example serves to emphasize the importance of flexible response to market conditions from a business viewpoint. Orchard managed to observe that there "seems to be an undercurrent of fear that sustained yield management will mean the closing of a good many mills...". He continued: "the simple truth is that we do not know what our sustained yield capacity is...we probably never will be able to predict <sustained yield capacity> with any degree of accuracy...All this argument about what our capacity may be is merely serving to cloud the issue" (Proceedings, 1945:9682-9683). However, the sustained yield level of production decided upon would be of considerable significance with regard to the timber supplies made available to business by the government, and so of the viability of businesses dependent upon that supply. The inability to accurately predict B.C.'s actual sustained yield level thus translates into insecurity among business people. This leads back to the conditions which necessitated the adoption of sustained yield in the first place, e.g. the dependence of B.C. on forestry and the state's overarching role in sustaining the material premises for the capitalist accumulation process. Mills would close,

Orchard stated, without the adoption of sustained yield (Proceedings, 1945:9684). "Perhaps mills will close down on sustained yield management simply because we do not in fact have the production capacity to maintain them; on the contrary, sustained yield will keep in operation numbers of mills that would otherwise have to close" (Proceedings, 1945:9684). Specifically, with capitalist development and regional concentration of industry, a threat existed that industry - left to its own devices - might cut itself out of supplies, with strongly adverse economic repercussions on B.C.'s economy if this threat was realized. The state in acting to prevent this eventuality would ensure that mills which would otherwise eventually go out of business, would remain in business even if some did go out of business as a short-term consequence of introducing sustained yield.

A further set of problems presents itself. Business activity reflected and contributed to the development process. This activity had obviously been predicated on operations and conditions that had existed throughout the century. The same development process, however, separated government concerns for the economy as a whole from that of individual businessmen looking after their own businesses. The threat of government power also made itself felt, but reflected Orchard's view that the policy had to be practically enforceable. The problem to be resolved is how and why did the development process take the specific course it subsequently

followed? Why couldn't business and government find common ground? It is at this point that the question of the mode of regulating sustained yield - cut controls or not - is a key question. Prior to this, however, we require explanation of other factors, outside of forestry concerns, serving to support the government position as against that of business.

#### Other Government Interests

Minister of Lands and Forests, E.T. Kenny, stated of the legal position as it had historically developed in B.C. "the result has been that today B.C. probably has more effective control over its resources, and is probably in a better position than is any other state or province to introduce really effective measures designed to perpetuate this resource" (Kenny, 1945:2). This was due to Crown ownership of the land. Thus the 1937 inventory noted that total unalienated Crown timber for the Coast, in acres, was 53% plus another 32% on temporary alienation to industry. Fifteen percent of the acreage was listed as "other owners" (Sloan, 1945:79). C.D. Orchard commented that at the time B.C. was introducing sustained yield, the "U.S. Forest Service was dabbling in it without much public support and less industrial support. The eastern provinces had good laws and beautiful working plans in their offices but nothing whatever cut in the woods..." (Orchard, 1960a: 84)[ 18]. A

more general context should be recognized with regard to the position of the provincial government. "Economic regulations...constitute an important part of the growth of provincial government since 1945" (Chandler and Chandler, 1979:10). The basic long-term shift in Canada to manufacturing and services from agriculture, the associated urbanization, and the related development of health education and welfare bureaucracies increased the provinces' power vis-a-vis the Federal government. Of these social policies, one effect "has been to augment the position of the provincial government by increasing the scope of provincial policy-making, and the development of these new services has helped to create provincial bureaucracies that can compete with experts in Ottawa" (Chandler and Chandler, 1979:237, 22.) The 1940's represent an earlier stage in the development of social policy than is emphasized by these authors, yet the same process is found with regard to increased regulation of the forest industry. Government regulation of the rate of cut, once established, constituted an important government regulator of provincial economic activity, taking into consideration also the secondary economic activities affected by forest industry activity. A 1980 Ministry of Forests publication states: "The size and location of the forest industry is effectually controlled by the Ministry setting the annual allowable cuts and administering the harvest. It is therefore important that Ministry programs be realistic and

in keeping with overall provincial economic policies (Ministry of Forests, 1980:26). Thus new tools of economic planning are thrust by history into the hands of government. This takes into account the need to establish sustained yield policy.

To balance this view of state policy it should be noted that the "British Columbia economy is particularly open to outside influence because of the overwhelming importance of export and import activity" (Lewis, 1976:6). This also serves to place in perspective F.T. Kenny's response, according to Sloan, to the 1945 Royal Commission's recommendation that a powerful, independent Forestry Commission be set up, namely that "...he wasn't going to preside over the liquidation of governmental jurisdiction" (Transcript, 1956:2144). What would be the result if Sloan's commission body wanted to pursue an economic policy at variance with government's? Accordingly, then, government had a set of important interests leading it to support its own position as against that of business, with respect to sustained yield regulations. These considerations tell us the fate of the proposal by Smith of Bloedel Stewart and Welch to Orchard in response to Orchard's suggested sustained yield policy, namely that Crown land should be sold outright to business, giving up the policy of Crown control of the timberland (Orchard, 1960a:85-86). However it is not just a case of bureaucratic interest: there is value in government being able

to develop policy to suit the needs of changing conditions, including those of capitalist accumulation.

Government would have another reason for wanting to control the rate of cut, namely, stability of revenue, so far as this could be achieved. Ross, Minister of Lands in 1910, suggests this point: "From the forestry point of view, revenue should be collected when the forest crop was cut. Collected that way however, the revenue was spasmodic, since it depended upon trade conditions, and that was an unsatisfactory revenue to support the public works necessary for the opening up of a new country" (Ross, 1912:6). Other concerns existed by the end of World War II, including the expansion of social services, all of which could more easily be funded with a steady revenue so far as possible. The qualification is due to the fact that enforced overproduction in recession years would tend to force down prices, so that limits exist as to the stability of income that can be ensured[19]. To repeat, then, these other considerations favoured government's position over that of business at the 1945 Royal Commission hearings.

#### The 1937 Inventory

Prior to the discussion of non-forestry issues related to the government's position on sustained yield, discussion had considered Orchard's proposals for forest policy, which were rigid as seen from the business point of view. The question was posed as to why business and government, as an

inevitable outcome of the development process, could not find common ground on the question of sustained yield policy implementation? The preceding section on non-forestry trends filled in part of the answer, and the present discussion of the inventory data will provide more of the answer.

It has been noted that the 1937 inventory report was conservative in consequence of being carried out during the depression period. The industry brief cited earlier argued that the 1937 estimate of timber reserves could be increased by 25%. Lack of data on a systematic basis prevented the industry from proving its case. The lack of data was an outcome of the relatively low-priority placed on forestry historically, combined with a too-sudden turnabout in this context, in which extensive data would have been useful. The change from depression conditions to boom conditions however lent some credence to business views.

The inventory level is relevant to the sustained yield level of production that can be calculated as safe for B.C.'s economy. Mulholland, representing the B.C. branch of the Canadian Society of Forest Engineers, calculated with industry that the Coast could stand an annual cut of 3.5 billion board feet. He noted that the cut from 1935-1944 had been less than 3.5 billion feet annually, from a low of 2.41 to a high of 3.26 billion. "The situation", he said, "therefore must be considered as not unfavourable and there is no justification for the restriction of production at this

time" (Proceedings, 1945, vol. 20:661). But this position does not adequately take into account the long-term trend towards increased cuts and, as such, does not meet the concerns of government. The survey ending in 1952 (Forest Service, 1952) confirmed industry's view insofar that timber was considerably more plentiful than the 1937 inventory suggested, but then that was still in the future, while the government was more concerned about regional concentration of industry.

Industry used the question of inventory levels to argue against cut controls. The government response was that with 88% of the cut coming from 1.25% of the productive land, whether the stated inventory levels were higher or lower was largely irrelevant given the extended problems of industry relocation, and the consequences for the Provincial economy, if industry cut out of supplies. This position again indicates the structure of differing interests between government and business as part of the development process. Nor is this instance one which permits compromise on the issue, given the important nature of these differences. It is a question also of considering the likely consequences if cut controls were not established. Care must be exercised in investigating the concrete problems involved, rather than making the dismissive statement: "Of course government bureaucrats were out to extend their power. Look at the decision that was made". It remains correct that the decision to

adopt sustained yield represented an extension of government influence in the economy. This fails to explain, however, why such a decision would be necessary, which is an important omission.

The 1945 Royal Commission had a valid role to perform in gathering data. Inventory data was most problematic and Orchard had to back down from direct reliance on the 1937 inventory. Ownership concentration was high. About 1% of owners held 42.5% of such land. Further the turnover of smaller owners was high. Only about 25% remained holders between 1938 and 1944. The Forest Service suffered staff shortages, thus hampering supervisory ability. Larger owners were more stable. No firm had sufficient timber reserves to go onto sustained yield without the further allocation of Crown land. Land not alienated itself represented an insufficient basis for a sustained yield policy. Orchard's view was that larger owners would, for economic reasons, be forced onto sustained yield.

There were significantly differing views between business and government as to the proposals for achieving sustained yield. Orchard listed a variety of advantages that sustained yield could potentially achieve for a firm despite cut controls. Business wanted to protect its ability to respond flexibly to market conditions. Flexibility of operation was uppermost in the minds of businessmen at the hearings on this subject. An Industry brief noted that only

relatively few large firms were in a position to adopt sustained yield voluntarily, especially in the face of "arbitrary" government regulations (concerning the rate of timber cut, minimum forestry standards, etc.). Business held fears that government policy would put certain firms out of operation. The government view was that in the long term sustained yield would serve to preserve the conditions necessary for capitalist accumulation within B.C.'s forestry sector. The government's specific problem, however, was that industry might cut itself out of supplies while the timber outside these concentrated areas, however plentiful, would not be economically accessible on a scale that would maintain B.C.'s economy in the short-term in the event of a massive industry crisis (but not one due to the usual economic cycle). Cut regulation would serve to protect the resource and had potential as an economic regulatory tool. The increase of provincial bureaucratic influence was also promoted, vis-a-vis the Federal government, as part of a more general trend operating after 1945. What now, is the situation with respect to the plans for sustained yield put forward by business?

#### Business Plans for Sustained Yield

It is clear that to influence the development of sustained yield policy, business interests had to devise their own plan for a transition to sustained yield practice which would have a reasonable chance of success.

H.R. MacMillan wanted a sustained yield policy which allowed free movement of goods. Mills situated where water transport could be used to bring them logs "enjoy great natural advantages from the standpoint of <the> raw material available to them, as compared with mills which have been built inland, to liquidate a fixed point of timber..." (Proceedings, 1945: 3789). The manufacturing plants were "nearly all built on salt water" and specialist industry would develop in these areas (Proceedings, 1945:3707). With implicit reference to restricted supply zones, MacMillan said: "I think if the log operators were not free to sort the logs for their various customers or users, that the revenue of the logging operator would suffer, and consequently, his ability to be a productive citizen..." (Proceedings, 1945: 3791). The argument suggests that to have restricted resource zones would be to misallocate the provincial resource as firms would be prevented from obtaining the maximum use of the raw materials since the flow of raw materials across these zones would be prevented.

Under MacMillan's plan, inland mills would have timber allocated to them while mills at salt water locations would not be fixed as to resource location. In MacMillan's view, "the free movement of goods in no way interferes with the management of the forest on a sustained yield... The Forest Branch <Service> might consider that a series of small valleys could be logged out after a certain length of time and

nobody return to them for 60 or 70 years except to protect it..." (Proceedings, 1945:3863). MacMillan felt that control of the Coast as a whole unit would be reasonable from an administrative viewpoint, and that having many geographic divisions would create administrative difficulties. He had not discussed this with the Chief Forester, C.D. Orchard (Proceedings, 1945:3863). (This plan was presented before Orchard's points on forest policy). Given the emphasis on transport and mills located at salt water sites it should not be surprising to learn that those were the location of his own mills.

Orchard later made it clear that MacMillan's proposal was unsatisfactory.

If it <the working circle or sustained yield geographic unit> is too large there is no difficulty in confining <resource> to production, but there is a danger that your cut will be badly distributed, and you invite the migration of manufacturing plants and in some measure defeat any object you may have had of stabilizing communities, or you concentrate your industry and community into some one or two centers. In other words, if your working circle is so big that it will support several industries, it can not be reserved to any one plant; several will compete for the cut and any thought of the regulation of industry to form with the productive capacity of the land will probably have to be abandoned (Orchard, 1945:26-27).

Thus, MacMillan's proposal would allow resource use to be controlled for B.C. as a whole, but not for regions within B.C.. It was however, precisely regional concentration of industry which concerned the government, as well as exces-

sive spending on community services for shifting communities.

Another business plan was later submitted by J.D. Gilmour, forester for H.R. MacMillan. This plan concerned the establishment of "working circles". As used by Gilmour, sustained yield implied a more or less even distribution of trees by age-classes. Accordingly he could state that sustained yield is not possible for most owners, due to the imbalance of tree ages in the Coast, with 80% at 81 years upwards, which imbalance becomes worse moving further away from Vancouver (Proceedings, 1945:10063, 10066. Sloan, 1945: 23). Of some ten million productive forest acres on the Coast, private working circles in Gilmour's proposal would hold two million acres, while Government and others would hold the rest. Entry into the sustained yield programme was to be voluntary, and the then existing tenure system would remain unaltered (Proceedings, 1945:10102). A new form of tenure was proposed to allow sustained yield. The company would have to devise a working plan for dealing with sustained yield, ensuring a reasonable age distribution of trees as the end result. Once the firm had determined its requirements for sustained yield production, it would apply to the Forest Service for land to make up its shortfall in acreage, age-distribution of trees, etc. The government would then make the decision to approve or not. Gilmour anticipated that such land transfers could be complete by

1960. The best lands and best sites insofar as they were on private land should be cut first; to this extent cuts would begin on private land which had been held prior to government contributions. Government control would exist in that young trees were mainly in the hands of government. Thus firms that did not in fact operate on a sustained yield basis could be refused young growth. Gilmour accepted that government control would have to be exercised if firms ignored the nature of the working plans on a big scale (Proceedings, 1945:10200). Sustained yield was to exist on government land, while some restriction of timber sales would have to occur to ensure that existing mature growth was not cut out before young timber matured (Proceedings, 1945:10105). As before, the Coast was to be considered as a whole economic unit (Proceedings, 1945:10067).

Orchard's comments about this have already been given. A problem to note is that some firms would have an unrestricted cut insofar as they were not limited by sustained yield working plans, clearly giving them an economic advantage. Commission lawyer, Davey, comments to a witness: "It has been the history of voluntary schemes in B.C. that they fail because the recalcitrant man pulls out the prop that supports the price structure" (Proceedings, 1945:7780). Business representatives disputed this, but the statement at least had apparent validity as applied to sustained yield. Then resource competition begins between the high and for-

merly lower rate-cutting firm. The dependence of firms on government for young trees might not under these conditions be an adequate counterweight. To what extent could the government refuse to supply such trees if an important element of the industry required them to continue operations? It is relevant here to repeat also part of the quote from the Industry brief cited previously:

Except in the case of a relatively few units of industry so situated economically as to make possible voluntary adoption of approved working plans, we are of the opinion that the primary steps in a practical approach to sustained yield on the Coast must be in the nature of an overall working plan...in the hope of eventually attaining sustained yield for the region... (Proceedings, 1945:10319).

Accordingly it would appear that arguments from MacMillan's forester are unconvincing, in particular because they do not represent the economic position of the rest of the industry. However, it may be added that it was Orchard's view that economic forces would push firms into sustained yield, and he referred to five of the largest owners of forest land as being interested. His plans were for the voluntary adoption of a sustained yield plan which operated on the basis of compulsion. In view of the economic position of business there would appear to be problems with Orchard's analysis, but these will be considered later. Discussion continues presently with the business perspective that underlay Gilmour's presentation.

The dominance of the business perspective in Gilmour's proposal is illustrated by an exchange at the the hearings. Under the system of sustained yield he proposed, a firm could entirely cut out an area and move on, provided the Coast as whole was not overcut. Gilmour responds to a questioner:

G. That would seem to be good forestry, because they would be on good sites. Q. And what about the social implications involved? G. The social implications involved in closing a logging operation after 20 or 30 years, that, too is such a flexible affair, I don't think it matters much. Q. Well you put it in the form of logging outfits, but when you have large communities that are depending upon the continuity of logging operations such as we have at Ladysmith and Chemainus and in dozens of other places, under your system the operators could completely log out...and close those towns down... G. <instancing a 60% cutback in production in consequence of sustained yield, he states:> you have immediately produced a considerable social effect on the town (Proceedings, 1945:10164-10165).

The alternative is then the allocation of lands to firms so that output does not have to be cut back. Gilmour accepted this option where possible. However this leads back to the problem of having too large a working circle, namely, that of lacking control over the geographic concentration of the forest industry (cf. Orchard's statement on p.130). Mulholland comments during the exchange that there is the problem of alternate sources of employment; if the firm cut out and alternative employment possibilities did not exist, the situation as to letting firms move was "more arguable" (Proceedings, 1945: 10166-10167). It can be observed that from

a government viewpoint the easiest solution to this problem would be to control the rate of cut by business from the start. Orchard was willing to allow an adjustment period for firms confronted with too sharp a drop in production to meet sustained yield criteria (Proceedings, 1945:9650-9651). However it is necessary to consider how it was that Orchard's unpopular voluntary plan gained "supporters". Respecting the current discussion as to mobility of firms, Mulholland recognized the problem in regard to the size of sustained yield unit, but constructed it differently, distinguishing between areas according to alternate employment possibilities. Apparently he did not recognize the problems from a government perspective. Thus, under Gilmour's plan as modified by Mulholland's observation, some firms would be allowed to relocate given that alternate employment possibilities existed. However, as more firms left an area there would probably occur a point at which further movement would be prohibited with the progressive drying up of alternate employment possibilities. By what criteria could the government decide to favor some firms over others if several firms had decided to close down or leave an area at the same time, with some, but insufficient employment possibilities to absorb the displaced employees?

Possibly, government might require that before firms would be allowed to move they would have to see that their displaced employees were re-employed. But for what percent-

age of employees and over what period of time and under what conditions would business be obliged to work at meeting the obligations imposed by government? Thus to allow business movement would tend to undermine the controls directed to ensuring reemployment, encouraged also by business competition and the interests generated thereby. This is reinforced by the possibility of a firm's decline if it remained in an area of declining resource supply (since cut controls by government were not part of this modified business plan). The more exceptions that are allowed, the less enforceable the original protections would become. This suggests the systematic nature of the reality with which governments have to deal and which must affect the nature of the decisions made, but which as we shall see is weakly represented in the relatively voluntarist Canadian political economy writing. It also indicates another reason why government would simply prefer to regulate cuts.

Thus from government's viewpoint, this last business plan for sustained yield did not deal adequately with the problems that might arise if it was adopted. In particular, the firms desiring sustained yield seemed not to be sufficiently representative of the interests of other firms to help ensure that a business plan for sustained yield would work under existing conditions. There were administrative problems also, particularly in relation to the size of the working area for the sustained yield unit, as proposed by

business. Accordingly the government's plan for sustained yield was the one adopted, although not identical in form to Orchard's original proposals. One more sustained yield plan may be mentioned below for completeness, that proposed by the Canadian Society of Forest Engineers.

The Forest Engineers wanted "to establish some law of sustained yield over the whole coast, by dealing with a small working circle, and building it up from one to the other, and so have sustained yield eventually on the whole coast in about 60 years. But it will be a slow process..." (Proceedings, 1945:2500). They opposed cut restrictions, and proposed reducing Crown timber sales to counterbalance the overcutting of working circles (Proceedings, 1945:2502). The objections to this approach from a government view have been essentially covered by previous material.

To summarize this section, examination of the ramifications of various business proposals on the issue of forestry management has shown the necessity both for adopting sustained yield, and why government's plan was adopted. The analysis continues with regard to the question of the regulation of the rate of cut by size of firm.

#### Cut Regulation

With respect to the attitudes of large and small firms to cut regulation, Reid and Weaver stated that while large firms could plan for the future, smaller firms "were faced by much shorter deadlines in which to recover their rela-

tively heavy capital investment and make a profit. Hence, for the smaller firms, the fewer the restrictions the better. In particular they opposed any restrictions on the volume of timber cut" (Reid and Weaver, 1974:17).

One problem for Reid and Weaver is that very few witnesses to the Royal Commission hearings favoured government being allowed to control the rate and volume of cut by firms. This was indicated by the Industry brief cited earlier. Further as to the position of large firms, a representative of the pulp and paper mills opposed in principle government power to control the rate of cut by industry (Proceedings, 1945:4386). H.R. MacMillan remarked: "I do not see any necessity likely to arise in the next few years...for a sustained annual yield in order to reduce the annual consumption of logs in this district" (Proceedings, 1945:3694). A questioner indicates that policy might include control over logging methods, "second, the restriction of the cut; and third, the allocation of the cut". Macmillan responds: "You might have that". Q. "That is a long way ahead, though, apparently". M. "I think so". Q. "You hope so?" M. "I don't mind it"

MacMillan appears unenthusiastic about cut controls, rather out of keeping with Reid and Weaver's view that large firms could continue to prosper under cut controls. This would suggest that a more positive view on MacMillan's part would be appropriate. The representatives of Bloedel Stewart

and Welch appear not to have been specifically asked as to cut control. The following indicates however, that they would not accept such control, since he proposes that sustained yield involve rental of land from the Crown. The company grows the timber. Q. "...so long as the rental is nominal, it wouldn't seem a very substantial return to the Crown for its part in the venture". A: "The Crown isn't taking any part in the venture. We are taking all the venture" (Proceedings, 1945:5174). R. Filberg, representing another large firm, the Comox company, a subsidiary of Canadian Western "doesn't hold" with the view that government should "have the power to control the rate of cutting..." (Proceedings, 1945:9663, 9875). Bentley of Canadian Forest Products seems to have to have accepted cut control, but with qualifications as to the rate of cut: "Nobody could be compelled to cut timber year after year if it has to be done at a loss" (Proceedings, 1945:7779-7780; 7793). Thus opinions are mixed, but the lack of enthusiasm for - and even opposition to - cut controls do not justify Reid and Weaver's statement about the prospering of firms under controlled conditions.

Further problems exist as regards Reid and Weaver's distinction between large and small firms in regard to sustained yield cut control. Reid and Weaver cite as a small businessman, J. Gibson, of Gibson Brothers, saying: "We have been here for 50 years now and we've cut only 20% of

this stuff...Let the logger go ahead and cut" (Proceedings, 1945:5101; Reid and Weaver, 1974:19). Two questions of interest are, 1) was Gibson in fact a "small" businessman and, 2) how was sustained yield to be regulated? In 1956, Sloan could write that a "medium-sized logger is usually regarded as one having an investment of between \$400,000 and \$1,000,000..." (Sloan, 1956: 159). However in 1944, Gibson estimated his investment as between \$700,000 and \$1,000,000 which would mean that he was at least a medium-sized logger, and not a small one. With reference to sustained yield, Gibson was asked about regulating the cut: Question: "But supposing we double our cut, would that be all right with you?" Gibson replied that "You must let these things be governed more by the law of supply and demand" (Proceedings, 1945:5105). By contrast, the pulp mills' representative favoured sustained yield but, it would appear, worked on the same regulatory principle: "if any company were operating a working circle on the sustained yield objective, they would be in a position to plan their cut without arbitrary regulations, and certainly during certain boom periods they will overcut and expect to retract during poor periods" (Proceedings, 1945:4388-90). Presumably the same regulating principle will produce generally similar results for each firm within an industry as regards the timing of cutting intensities, and their duration with respect to the overall impact on sustained yield. It has been noted that "relatively few"

of the large firms were in a position to adopt sustained yield, and reasons for this have been considered in presenting business views of Orchard's proposals.

Gibson stated in reference to provincial timber, that it "would be logical to me <that> to get a proper yield you should have half regrowth and half old stock..." (Proceedings, 1945:5103). A stronger motive is reflected in the following: "... we need the prosperity and I would say it is a whale of a good time to cash in on some of our <timber> assets because we have gone through very trying conditions with the war..." (Proceedings, 1945:5101). This position is similar in principle but less subtle than the position of the industry brief cited with the stress on continuing cuts of the mature timber in order to move towards sustained yield - equal classes of age-divisions of trees - without cut restrictions being imposed (Proceedings, 1945:10383).

In his summation the lawyer for the B.C. Loggers Association - the same lawyer who helped in drafting the Industry brief - stated (based on industry's estimate of inventory resources):

It is obvious that the 7.5 million acres of mature and overmature forest land must be cut over rapidly in order to get, first, a cut of 100,000 acres per year which would take 75 years, or carrying you to the year 2020. We cut today approximately 65,000 acres a year, so that by that time very large acreages now immature would be over 100 years old with a possible waste of increment occurring from year to year <annual growth> (Proceedings, 1945, vol. 20:842).

This does not sound like Reid and Weaver's version of events in which large firms intended to prosper under controlled conditions. In terms of the industry brief, cut controls would occur only after sustained yield has been achieved - some 75 years of increased cut away, judged by the summation. The representative of the pulp firms was asked about loggers who might prefer to liquidate their holdings rather than practice sustained yield. He replied: "I don't believe you have any right to step in and arbitrarily put that man out of business or force him to do something he has not been doing, if he has been allowed tenure and rights under statutes which permit him to carry on his business as he has" (Proceedings, 1945:4389-4390).

With respect to Reid and Weaver's distinction between large and small firms, we may ask, if both expect to be regulated on the basis of economic conditions and both groups oppose cut controls by and large, what is the actual difference likely to be in terms of the final outcome?

The Truck Loggers Association, of small firms, favoured sustained yield. Welch, their representative, noted: "We are looking at it <sustained yield> of course differently than the large operator who has tremendous property holdings. There is not a good deal of possibility of the small operator retaining his holdings in such a way he can expect sustained yield" (Proceedings, 1945:2945-2946). He opposes cut restrictions, but favours regulation of logging methods

to ensure regeneration (Proceedings, 1945:2963). A smaller operator gave his view that the small operators could participate under sustained yield with "the right to have the government supervise the re-forestation of their land" (Proceedings, 1945:3277). This witness stated of reforestation: "I am very much against only the corporations doing the reforestation, because you have lots of men in logging operations that only employ six to fifteen men...; they are not interested in it and you are locking a long way ahead, and they cannot afford personally to do it" (Proceedings, 1945:3277-3278).

In other words, the mentioned government supervision could serve to overcome the problem of short-term perspectives and render the interests of small firms compatible with sustained yield production. The public working circle, when established, represented such a solution. This however is an incomplete statement of later affairs. The preceding does, for this point in time, invalidate Reid and Weaver's distinction between large and small firms as regards sustained yield.

This discussion also brings out the considerable differences in viewpoint between business and government as to how sustained yield should be regulated. In so doing, it further indicates why the business plans for sustained yield were rejected by the government in favour of their own sustained yield plan. The absence of firm cut regulations in

the business plan necessitated its rejection by government given their concerns to protect E.C.'s economy.

Although a clear field for government might have been expected, some short term obstacles to cut control were pointed out by H.R. MacMillan: post-war demand for lumber and other production by countries wanting materials for post-war reconstruction, as well as returning soldiers who would want employment. To hold down production under these conditions, MacMillan asks, "wouldn't you think we would require to be very firm in our opinion of our inventory before we could do those things?" (Proceedings, 1945:3704). Could such negative actions designed to protect B.C.'s timber resources actually succeed? Political emotion might have been expected to favour the shipment of construction materials to Europe to help our war-time allies rebuild their battered economies. Profits, incidentally, would accrue as well. This then suggests the basis upon which firms would be forced into sustained yield: a post-war boom would enhance the value of obtaining and holding timber reserves and so counter-act the resistance to cut controls, as competition for supplies was enhanced. Discussion now continues with regard to industry's lobbying against the sustained yield legislation actually proposed.

#### Industry Opposition to Legislation

The B.C. Logger's Association and the Canadian Society of Forest Engineers (C.S.F.E.) put in briefs opposed to the

draft of the law introducing the new sustained yield tenure, Farm Management Licences (F.M.L.). The C.S.F.E. brief is used here.

The following traces the steps required in applying for an F.M.L.. The applicant would apply to the Minister of Lands and Forests for an F.M.L.. If the application seemed reasonable to the Forest Service, notice of the application would be published to allow for protests, if any. The C.S.F.E. wanted publication to occur upon receipt of the application, thus allowing more time to apply pressure, although the C.S.F.E. simply stated the application should be public information (Sec. 33 of the 1947 Forest Act). Once an F.M.L. had been granted, a working plan had to be devised before cutting could begin. The plan had to be approved by the Chief Forester, who could refuse permission to cut. The C.S.F.E. objected to the power of the Chief Forester and wanted the power to reside with the Minister as his decision could be appealed. The next section said that the company had to pay the Forest Service for its efforts in checking surveys and working plans. The C.S.F.E. objected on the grounds that the company had already paid for its own surveys, and that government should pay for its own. The reason for companies to devise their own working plans would be that "every operation has problems of its own" (Proceedings, 1945:7697), but mainly due to the inadequacy of the Forest Service staff to do this, and it also saved the government

this initial expenditure). The Forest Service was far from having the ability to replace company responsibilities for drawing up working plans by doing the work instead. Tierman, Assistant District Forester for the Vancouver District agreed that at his office, in 1944, there were two foresters - a decline of one - and that these two in 1944 had "nearly fifteen hundred reports <each> to deal with" (Proceedings, 1945:9273). These reports come in from the field. As a consequence "very little" time is left for field work. Thus many company operations "are never visited by a forester?". Tierman agrees (Proceedings, 1945:9263- 9264). Accordingly companies were required to devise their own working plans subject to Forest Service examination.

Returning to the legislation, the F.M.L. applicant had to provide such information as required by the Minister, while following provisions related to the inclusion of private land in F.M.L.'s. Land could be added or subtracted from the F.M.L. by the Minister (subsection 14) in accordance with sustained yield principles, and the C.S.F.E. wanted to require the Licencee's consent. Conformity to the working plan required "the purpose of growing continuously and perpetually successive crops of forest products to be harvested in approximately equal annual or periodic cuts adjusted to the sustained yield capacity of the licence area..." (Sloan, 1956:50). The C.S.F.E. objected to the wording after "products" and wanted it deleted. This would

be in conformity with industry's earlier proposals. As to the appraisal and assessment of payments due to the Crown, the C.S.F.E. wanted specific direction that all costs of management and protecting the crop be included. This assessment was based on current methods - which could change over time - used by the Forest Service. They wanted a standardized method of stumpage appraisal, since profit levels depended upon it. (Stumpage is based on a calculation of costs versus returns expected to a firm based on sales prices of cut timber. The Crown charges are based on what is considered a reasonable return to the firm. Thus, allowing a profit of 15%, say, the Crown charge would be the balance between costs and returns not included in the 15% figure). In the event a licence was cancelled for non-compliance with licence conditions, the C.S.F.E. wanted to ensure that the former licensee was compensated for his investments under the licence. Subsection 13 provoked attack, as it required that all land except Crown-Granted land would revert to the Crown after logging, although remaining part of the licence. The complaint was that this would lead to a Crown monopoly of the land (Crown Grants could revert by request). The C.S.F.E. comments overall as to the legislation: "We are convinced that no private person or operating company, owning or holding productive forest land in this province, could afford to accept voluntarily the terms as set out in the bill" (C.S.F.E. in British Columbia Lumberman, 3/1947).

Companies without land of their own proved to be eager applicants for F.M.L.'s. Large landholders already had secure timber supplies, and could to some extent afford to be less interested in F.M.L.'s. With respect to the C.S.F.E. brief, it is clear that the thrust of its intent was to protect the financial position of business and to reduce or remove the influence of government.

The development process, as it served to differentiate between the interests of business and government, is reflected in the rejection of business plans for sustained yield. From the government viewpoint these plans inadequately coped with such problems as the regional concentration of industry, the size of sustained yield unit suggested, and the question of cut controls. A voluntary plan could not be accepted by government, then, considering its grounds for wanting to adopt sustained yield in the first place. Business safeguards for sustained yield regulation were unreliable from a government viewpoint.

Both large and small firms opposed cut controls - with few exceptions - and expected the cut to be regulated on the basis of economic conditions, and not by government control. Government control, in the business view, was perhaps sixty or seventy years of increased cuts into the future. At this point, with a balanced distribution of forests by tree-age, sustained yield would have been achieved in the busi-

ness view. The time required to achieve this result would depend upon the existing rate of timber cuts and the imbalance of tree-age distribution in B.C. In contrast, government wanted to restrict timber cuts to the sustained yield capacity of the land under actual production, or as new areas came into production, rather than to work on the basis of unreliable timber resource estimates which included areas not in production. The unreliability of the statistics was an historical fact. This situation contrasts sharply with Reid and Weaver's analysis, since in the view of capitalists - large and small - it was expected that small operators could get replanting help from the government under sustained yield. The preceding chapter has accounted for the necessity to adopt sustained yield policy, and this chapter has accounted for the necessary basis for the adoption of the plan actually implemented. Business lobbied against the new forestry legislation, trying to weaken government powers and owners' responsibilities. They were unsuccessful.

## Chapter V

### THE IMPACT OF SUSTAINED YIELD

This chapter considers the inevitability of the Forest Service preference for a form of sustained yield tenure which involved the building up of company landholdings (e.g. <sup>Forest</sup> Farm Management Licences), instead of implementing Public Working Circles for smaller operators. Government's administration of sustained yield is then considered, and the basis for its necessary deviation from the recommendations of the 1945 Royal Commission. Public Working Circles are considered: their establishment, complaints by smaller operators, and the historical determinants of their condition. Smaller operators claimed that the presence of F.M.L.'s served to put small firms out of business, and this leads to an examination of post-1945 business concentration in the forestry context. Discussion begins with a brief comment on how government policy was affected by post-war economic expansion.

It is important to observe that from the end of the 1945 Royal Commission until the establishment of the first public working circles for the smaller operators, there had been a sharp increase in the number of mills operating. For example, in the Vancouver District the numbers of mills had been 214 in 1939, and reached 485 by 1950. In Prince George,

the most extreme case, there had been 61 mills in 1939, which reached 532 in 1950 and continued to climb. In Kamloops there were 407 sawmills in 1948 and 829 in 1956, and it was predominantly an increase of small mills (Forest Service, various years). These increases adversely affected government's ability to meet promises of protection to smaller operators. The Minister of Lands and Forests, E.T. Kenny, had given assurances to smaller operators in 1948. Accordingly, Forest Service replied to complaints about its policy administration as regards sustained yield that there was an excess of firms for available timber supply.

The quantity of timber cut increased very considerably in this period. The Coastal cut was 2.5 billion board feet in 1946, 3.26 billion in 1948, and by 1956 reached 3.89 billion feet. The Interior cut was 673.9 million board feet in 1948, reaching 2.4 billion feet in 1956. Thus while the Coastal cut remained considerably greater for these years, the Interior cut was catching up (Forest Service, 1948, 1956).

The booming postwar period also made it economical for the Coastal industry to expand both northwards and on the West Coast of Vancouver Island (Hardwick, 1963:41, 49). This was aided by the development of the self-dumping log barge (British Columbia Lumberman, 1957:18). This barge aided the transport of logs through unprotected waters. Vancouver became "relatively less important in terms of log consumption"

(Hardwick, 1963: 154, 160). The forest industries accounted for 28.64% of the net value of provincial production in 1946, increasing to 39.3% in 1954. Taking this total as 40%, the lumber industry accounted for 14%, logging 13.5%, pulp and paper 7.5%, and others for 5% (Sloan, 1956:9). Discussion now turns to the problems of land tenure and sustained yield.

#### The Introduction of Farm Management Licences

The government had the problem of allocating Crown land to industry. The reliance upon large owners had been accepted as necessary by the Forest Service. Discussion starts with the determinants leading the Forest Service to rely upon the Farm Management Licence tenure (F.M.L.) rather than on public working circles (P.W.C.'s) for smaller operators. It should be noted that small firms were entitled to apply for F.M.L.'s tenure as well as large firms.

One factor, particularly applicable to the B.C. Coast, was the previously established pattern of landholdings themselves. Hughes, of the Forest Service Management Division, agreed with the following statement by a questioner: "...where the ownership pattern...dictated the form of management, that...has in large part been because there have been large quantities of the best and most accessible timber already under the private control of the applicant". Hughes adds the following: "We are extremely interested in maintaining our present industry, and if you don't provide for

that industry with management licences <F.M.L.'s> where the companies' holdings are of the greatest intensity, you have to provide for them somewhere else" (Transcript, 1956:3089-3090;cf.17530ff, 17543-17544). Orchard commented in response to a question, that if sustained yield policy had been introduced prior to the alienation of Crown timber

when the government and the people still held control of the lands, then I agree with you, there is too much <land> in management licences and too little in public working circles. But starting when we did start <when sustained yield became important>, then you are governed by the circumstances in a great many of these cases, there was nothing to do but permit the public a management licence (Transcript, 1956:1915).

He refers, for example, to a MacMillan Bloedel licence in which there exists excellent timber, but he states that the area is "just plastered with timber licenses that were awarded in 1907" (Transcript, 1956:1915).

Another important factor favouring the F.M.L. tenure would be the division of responsibility as between Farm Management Licences and public working circles. Orchard states: "In the public working circle, we <Forest Service> are doing the managing. We have to supply the Ranger and the Forest Protection, and the Foresters, and make the working plans and oversee them and see that the working plan is complied with on the ground. In the management licence, that responsibility rests right on the licensee" (Transcript, 1956:1904). Orchard stated that the "ambition" was to have half the Crown land under private management and half in

public working circles. "Now the public working circle is reserved and held for the benefit of those people who do not want to take on the responsibility of the management of those lands..." (Transcript, 1956:1882). Hughes stated of the public working circles: "Primarily <they> were established to provide timber for the independent operator's use..." (Transcript, 1956:2971). Accordingly the division of responsibility was no surprise to the Forest Service. This division of responsibility involved, however, a distinct set of administrative and forestry problems.

A Forest Service brief to the 1956 Royal Commission stated:

due to the lack of fully trained staff our performance since the end of the war has not been good. During the last two years a drive has been made to improve this situation, with encouraging results <to that point in time>. In actual practice every active <forest> operation should be inspected once a month, otherwise improper forestry practices are allowed to develop to the point where they are difficult to rectify and they can only be dealt with by the assessment of a penalty" (Forest Service, 1955b:6).

Sloan states: "The evidence clearly establishes that the Forest Service has not the staff of trained men required to manage the Crown forests. The Service generally is understaffed, overworked - measured in terms of responsibility - underpaid...many of the best men in the Service are finding more remunerative employment in industry..." (Sloan, 1956:545). Correspondingly, of course, industry needed trained people due to the obligations involved in carrying

out sustained yield, since additional responsibilities were involved. The Powell River Company brief to the 1956 Royal Commission stated: "Since 1952, 39 professional foresters and engineers have left the Service, 29 of them have left since the beginning of 1954, and the rate of resignations is increasing - 16 had resigned up to October, 31, 1955. The loss is so great that about half the present professional staff have 5 years or less of practical experience" (Powell River, 1955:43). Accordingly, the ability of the Forest Service to manage the Crown lands, which was not good, would be a factor leading the Forest Service to favour F.M.L.'s over public working circles. The importance of being able to oversee operations emerges from the following description of northern Interior operations:

the problem of managing the spruce-balsam type <of tree stand> was changed by the advent of heavy machinery. It now became possible to extract whole trees instead of portions thereof, as had hitherto been necessary in the case of horse-logging. Moreover, since the 'cat' was a relatively new machine and the post-war boom was creating a boom of lumber, the new mills, which were rapidly springing into being, had to draw on an unskilled woods population for assistance. In terms of the stand left after logging, the result of heavy machinery in the hands of unskilled operators was disastrous. Immediately studies were initiated to determine the effect of this problem, and Fraser in 1948 and DeGrace in 1949 found that up to 65% of the reserve stand was liable to be destroyed in logging, as compared with a possible 65% survival after horse-logging (Forest Service, 1955c:2).

It was noted that, with skilled tractor operators, logging damage "should be comparable to horse-logging". Subsequent

studies showed little improvement. While the Forest Service instituted a requirement for a logging plan as a condition to obtain a timber sale, the results were not altogether satisfactory: "...many operators still regard the submission of a logging plan as another irritating regulation, and having submitted the minimum requirements, proceed to operate in their own way..." without improving on earlier outcomes (Forest Service, 1955c:3). The Interior Lumber Manufacturer's Association offers a more moderate view of Southern interior operations: "The mechanization of logging, particularly in connection with skidding sometimes results in greater damage to residual stands and has, if anything, increased the silvicultural problems of felling" (I.L.M.A., 1955:35). However, the Interior would have more public working circles than the Coast because the area of the Interior is much greater, and private holdings had built up on the Coast[20].

By 1955, 2.07 million acres of productive forest land was under F.M.L. on the Coast, and 2.59 million in the Interior. Total productive acres for the Coast was 14.6 million, and for the Interior was 76.06 million (Slcan, 1956:106, 105. This does not mean that all this timber was economically accessible.) Further, the Forest Service was not in close control of the forestry situation. This would make the Farm Management Licence, which could be controlled on the basis of its formally-approved working plans, more

attractive to the Forest Service. The distance of the Forest Service from the field of operations is indicated by the following letter by a Forest Service forester in 1948. This applies to the Prince George area: "the present District administrative staff is so loaded with office work that they do not have the time to spend in the field that would ordinarily be spent. The same is true of staff from headquarters" (Forest Service, 1955d:1-2).

Orchard did not accept a suggestion made by a lawyer during the Commission hearings that public working circles should have been developed before Farm Management Licences. "All we have to do in a management licence, particularly where the licensee is...conscientious...<is> take a good look a couple of times a year...That is all it needs to be assured that he is living up to his working plan. But on a public working circle with 25 or 30 timber sales, we should make 25 or 30 inspections a month" (Transcript, 1956:1901). In 1948, the average annual number of inspections per logging operation in B.C. was 1.74 in 1948 and 1.87 in 1957 (Forest Service, 1948, 1957).

A further major set of reasons favouring the development of the F.M.L. tenure was that the F.M.L. holder was responsible for the development of his holding, which was both time-consuming and expensive. In the instance of Columbia Cellulose, which had a particularly large holding of 668,400 acres in its F.M.L., it took three years to complete

the study necessary for its working plan, at a cost in 1951-1954 dollars of \$200,000. This plan had to be completed before the trees could be cut. Columbia Cellulose, 1955:7-8). This did not include actual development costs, including the building of roads. Most F.M.L.'s were fairly small, with an allowed cut of under 15 million board feet (14 of 23 F.M.L.'s were in this category. Sloan, 1956:183). However from the government viewpoint it is preferable to have the licensee pay out for inventory and development expenditures, rather than for the government to pay out initially. Compensation to the licensee would be in the form of lower charges for timber than in public working circles where this was a government responsibility (Transcript, 1956:2201-2202). This is emphasized by the factor of road costs. The provincial government proposed a "15-year road building programme to complete 4,400 miles of major all-weather forest development roads... for public working circles. This programme would cost approximately \$123 million..." (Sloan, 1956:605).

The result was thus that most F.M.L.'s were granted even though the firms in question had little to contribute in the way of privately-controlled land. Of 38 F.M.L. applications approved, including those awaiting the development of working plans, the ratio of private contributions to Crown contributions of productive forest acreage to the F.M.L. was either zero or less than one percent in 22 cas-

es. This ratio was in the range of from 1% to 1.5% in 5 cases. There were five more cases where the private contribution ratio ranged from 10% to 22%. In the remaining cases the ratio of private contributions was 43% and upwards, including one case in which the private owner contributed more than the Crown (Forest Service, 1955a:39-40). The proportions of private contributions would be even less if temporary alienations of Crown land to companies had not been included in the calculation of company contributions to the F.M.L.'s.

Could government have transferred enough funds to be able to rely more on the Forest Service and less on F.M.L.'s? "Revenues increased slowly during the war <1939-1945> but at an unprecedented rate beginning in 1945. Expenditures, held down during the war through shortages and Federal controls, expanded to meet the backlog of needed capital improvements and the larger demands of a growing economic structure (Carlsen, 1961:81). Capital expenditures were financed by government out of loans, at an increasing rate: 1945, \$600,000; 1948, \$20,642,000; 1951, \$32,992,000; 1952, \$47,473,000 (Carlsen, 1961:91) "Loan expenditures for the most part were for roads, bridges, ferries, the expansion of the P.G.E. <Pacific Great Eastern>, and the creation of a publically-owned power commission in 1945. A considerable sum went into university and school building construction" (Carlsen, 1961:92). Years not given fit the pattern

indicated. By 1950, the Minister of Finance was expressing doubts about the expenditures on social services which increased the most rapidly. In 1939-1940 they represented 34.3% of government expenditures, and in 1951-1952 worked out to be 51% (Carlsen, 1961:93, 150). Education costs went up rapidly "due to the school population explosion and as a result of implementing the Cameron Report (Carlsen, 1961:94). The hospital insurance programme cost more than anticipated. There was an impact on the Liberal-Conservative coalition government because both trends in expenditure could not continue to be financed at the existing levels. "The Liberals insisted on a broad welfare program; the Conservatives, on extensive development of natural resources. Unwilling to finance huge capital costs by loans, the Conservatives hoped to secure some funds from current revenue by containing the growing social expenditures (Carlsen, 1961:96). 1953 brought with it an emphasis on debt reduction (Carlsen, 1961:150, 80). In all, it was hardly likely that the large capital transfers to considerably enhance the Forest Service role in public working circles would have been forthcoming, due to the costs involved and reactions from various interest groups. While the theory of reducing dependence on F.M.L.'s might have been accepted probably it would be on the assumption that some other group paid the costs required to protect small firms than the group approving the theory. For example, would academics approve except

on the condition that no sharp cuts in university or education spending be carried out? Would they accept the loss of employment opportunities as a fair price to pay to help small business? If academics wouldn't accept such penalties, and couldn't demonstrate their superior worth to other relevant segments of the population, why should other groups be less self-interested?

In short, dependence on farm management licences worked to the disadvantage of small independent operators since, as more land went into F.M.L.'s, there would be relatively less land available for public working circles. Thus in theory, if a firm had 1,000 acres of land, sufficient for one year's production, and the tree rotation from seedling to maturity was 60 years, operation on a sustained yield basis for the firm would require that it hold 60,000 acres of land. This assumes among other things that the added land is similar in productivity to the land originally held by the firm. In general, this principle explains the large acreage granted to firms. Government intended to protect existing industry, and this principle governing the size of holdings served as the basis for charges that the government was creating monopolization in the forest industry. The same policy also served as a basis for capital gains for interested firms and thus as a temptation to sell out to larger firms. Yet no alternative was available from the Forest Service perspective, and so the smaller operator desirous of independence

was inevitably placed at a disadvantage. The earlier position of the small logger, however, judged by reports in the British Columbia Lumberman, was not one of active opposition to the government's policy intentions.

The correspondent of the B.C.L. reported on the Truck Loggers' meetings. In 1948, C.D. Orchard was cited as stating that while many small operators would be doomed during the normal course of business competition, those that would be able to survive this competition would be able to survive under sustained yield. The B.C.L. correspondent at the Truck Loggers' meeting cited W.L. Keate as expressing the anxieties of small operators.

Would they <small operators> cease to exist? Would they ultimately become just contractors, working for the big fellow?...He was afraid that the present incumbents would grab and hold about 2/5ths of our timber forever...He urged more concentration on reforestation, and forest fire protection, and that before any management plan could be undertaken intelligently an inventory of our timber resources would have to be made (B.C.L., 2/1948:57).

These concerns were not expressed again in the reports of the B.C.L. correspondent until the Truck Loggers' convention in early 1952. It was reported that most of the approximately 1000 members present were small operators (B.C.L., 2/1952:30). The mood, in contrast to previous years, was grim. The chairman in his opening remarks stated that the Association "...came seeking information and discussion, as fair and impartial citizens", and not to praise or condemn government actions (B.C.L., 2/1952:90). The public working

circle program had barely begun during 1951, while to that point in time only 6 F.M.L.'s had been granted (B.C.L., 2/1952:34). Apparently developments to that point in time were still inadequate indicators of the future for protest to have formed strongly as it had by the time of the 1956 Royal Commission hearings. However remarks by the correspondent suggest small loggers were less alert to their situation than they might have been.

There were a great many questions from the floor <directed to Orchard>, and this writer was impressed by the number of people who did not have the slightest idea of the difference between a management licence, a public working circle, and a long-term timber sale. Time and again, questions were asked which would have provided their own answers if the askers had taken the trouble to inform themselves about the these different forms of tenure ahead of time (B.C.L., 2/1952:90).

The lack of active protest would serve to facilitate the ability of government to carry out its policy. The following moves on to the administrative problems in granting F.M.L.'s.

#### F.M.L.'s and Forest Service Planning

The preceding discussion indicates why Farm Management Licences were favoured by the Forest Service. It also indicates how impersonal socio-economic forces determined the Forest Service's ability to cope with this situation. The following is intended to indicate the ways in which policy administration inevitably developed in some undesirable ways. The state did of course succeed in introducing the new policy, despite the failings.

The problems of granting these F.M.L.'s and of policy criteria, requires mention. Despite the Royal Commission recommendation in 1945 that prospective F.M.L. holders significantly contribute their own private holdings to the licence, the Forest Service's actual policy was that it was "not necessary that the applicant own any timber, nor that he own any mill prior to application, but that existing industry will have priority in application" (Sloan, 1956:55). The preceding material should alert the reader to the response from the Forest Service viewpoint, namely (1) sustained yield had been adopted as policy for known reasons; (2) if land was not to be kept from sustained yield management as a consequence of the 1945 recommendation, it would have to become part of a public working circle. There were forestry and financing objections to this. The obvious result was to drop the 1945 recommendation as to private contributions as a step towards getting the maximum of land under sustained yield management.

Another criterion for policy was also significantly dropped, namely that the earliest applicant received preference over later applicants. This would seem to have come about after Orchard wrote to H.B. MacMillan asking for his views about sustained yield policy. MacMillan had at one time been Chief Forester in B.C. and was now an influential businessman. Orchard would hardly be in a position to ignore potential sources of useful advice given the scale and

radical nature of his policy objectives in B.C.'s forestry context. MacMillan wrote (in part):

The company which follows literally the Forest Service's directions respecting making application for management licences might submit a studied and informative application some months later than a blanket application put in by some other Company after no greater preparation than a look at the map; therefore it seems that priority of application should be a consideration only when in the public interest all other factors are equal (MacMillan, 1947).

If the first application was to be accepted, then this would put a premium on hasty applications. The combined change of these two criteria, Sloan's as to contribution of private holdings, and MacMillan's as to priority of application, however, had some unforeseen and negative consequences. Orchard said:

It turned out to be that almost at once we were deluged with applications <for F.M.L.'s>. Industry saw, in an assured timber supply, a chance for capital gain that I had quite overlooked and which no one in the government or civil service had detected <he noted the existing timber supply shortage>. Companies that operated on a hand to mouth basis clamored for an assured timber supply safe from competitive sale (Orchard, 1960b:98).

Possibly, government was too wedded to its own perspective of forest industry problems to foresee this eventuality. Taken in conjunction with dropping the time priority criterion in applying for for F.M.L.'s, this contributed to another problem. Orchard was asked as to the criteria on the basis of which F.M.L.'s were granted. He replied: "There are so many circumstances that enter into decisions as to

whether this man should have or should not have a forest management licence that everyone just has to be considered on its merits". Sloan observed that Orchard was "unable to define what constituted merits or demerits..." (Sloan, 1956:72). Sloan's account is inaccurate: Q. "Can you give us any idea as to what merits and demerits are?" Orchard: "If you will give me a written statement of the exact situation, I will tell you what my opinion would be on the basis of the facts" (Transcript, 1956:2157-2158). As presented in the question, merits and demerits are abstractions separated from the actual conditions of any given case. For them to have meaning as applied to reality would require that reality itself be consistent in its characteristics to some significant degree. Orchard, however, has already stated the existence of widely varying factors affecting decisions, and so the lack of consistency in the reality to which the abstract concepts of merits and demerits would have to apply.

Orchard gave an example of his planning in the case of Merrit and Princeton, located east of Cascade mountain. An unsatisfactory forest inventory for the area was noted. He set up a composite map with the following overlays which suggest the complexity of the variables involved:

- 1) Ownership overlay - Crown granted land, mineral claims and timber licences;
- 2) Transportation overlay, above; of railways, roads suitable for log haulage, etc.
- 3) F.M.L. applications;
- 4) Proposed public working circles;
- 5) "An ov-

erlay showing the recommended division of the region into public working circles and Farm Management Licences on the basis of information already compiled", including population and payroll figures for communities, active forestry operations and their cuts, and log shipments. The first major question was that of the sustained yield capacity of the area, and its relation to existing industry's rate of cut. Factors involved in the location of public working circles included ease of access, since excessive access difficulties would prevent its use by small business, the (economic) transport distance from the communities, etc. This was followed afterwards by the relationship of the public working circle to the F.M.L. Included under the F.M.L. heading were such factors as the location of the firm's present operation, extraction requirements, established ownership in the area, and potential conflict with non-resource users (Orchard and Hughes, 1953:46ff).

Thus, given Orchard's priority concern, that the forest land be brought under sustained yield controls, the various circumstances which confront Orchard do so as intermediate problems which have to be dealt with so as to facilitate the achievement of his main goal. Where an excess of F.M.L. applications covered a given area - i.e. where these claims were not reconcilable - then a public working circle was created so that the Forest Service did not have to choose between different firms competing for the same timber (Transcript, 1956:15537).

It seems clear that Orchard's varying circumstances did not allow the criteria of merits and demerits to be presented as uncontingent. Topographic characteristics and the degrees of remoteness of variously-sized valleys or regions would impose on the decision-making situation that each case presents its own problems and its own trade-offs. Thus conflicting yet desirable sets of conditions could not be achieved simultaneously, thus necessitating compromises. Looked at from this perspective, Orchard's response to the question as to what constitutes merits and demerits would appear justified, i.e. that the level of abstraction required to articulate common criteria would be so high as to be meaningless as critical policy guidelines.

But Orchard's view of defining merits and demerits was unsatisfactory in the following sense. Sloan wrote of granting F.M.L.'s: "There has been no clear principle to guide this selection, no 'set of rules' whereby a prospective licensee could assess his own qualifications and know that these qualifications would be recognized by the Government and required of him and other licensees on an equal basis. Nor have the particular merits which justified each award been made public..." (Sloan, 1956:91). Not surprisingly, unsuccessful F.M.L. applicants would be dissatisfied with such a situation. It suggests also that defects resulting from a policy may be unavoidable, a point not considered in Canadian political economy writing. The government's atti-

tude towards selecting between F.M.L. applicants is indicated by Orchard stated that "personally, I have thought of Licences more in the the category of managers on behalf of the Government...As long as we have a good manager on there, what do we care?". In response to a question, he accepts that firms may compete for the job as manager (Transcript, 1956:1911;cf.2884). By 1954, for example, 30 Farm Management licences had been granted, while there were "approximately eighty-five applications...in various stages of review". By 1956, the number of applications had increased to 136 (Forest Service, 1954, 1956).

However there were also problems of political power involved in consequence of this administrative morass. In this context it is relevant that Orchard had a "large part" in drafting the 1947 Forest Act and introducing sustained yield. The dependence of the government of the day upon his advice, and differing industry-government views on sustained yield as part of historical development have also been noted. The outcome - in this context - was legislation directed towards achieving forestry objectives, while in 1956 Sloan objected to a lack of policy direction in other ways.

Sloan writes in the 1956 Report about the legislation introducing sustained yield:

The <Forest> Act gives great power to the Minister and his Department in the award of Crown timber and also in the control of management in these licenced forests afterwards. But it expresses no general policy...there is no economic limit, and there is no legal limit, to the size and number of

management licences that may be held by the same licensee on the Coast (Sloan, 1956:61).

Regarding Orchard, the need to introduce sustained yield and industry preference for a voluntary version of sustained yield would no doubt have convinced him of the need to have the legal powers to ensure sustained yield policy could be carried out. With respect to the number of licences a company could have, Orchard's view presumably would have been that if a company, as part of existing industry, owned three or four plants why shouldn't each plant be placed on a sustained yield basis, instead of say, only one out of three? This would, of course, be subject to the "merits" of the application. The government had intended to involve large private owners in sustained yield management from 1945, and large firms were important in the economy. Why not, then, accept those that exist? This leads to the question of public working circles as the counterpart of F.M.L.'s and then to objections to F.M.L.'s from the perspective of smaller operators. Prior to this, however, is a relevant point by G. Gibson concerning the lack of policy guidance in granting F.M.L.'s (this is structurally dependent on previously identified conditions).

in forest management licences, it boils down to the fact that the Minister finally has to make a decision between one man and another. By this decision he may be putting one man out of business and giving the other the right to a profitable operation from Crown resources for many years to come... We would indeed be simpleminded if we did not concede that where arbitrary powers of economic life and death are concentrated in a political

office that it creates a system which is patently open to abuse (Sloan, 1956:68).

The administrative confusion contributed to the ability of the Minister of Lands, R. Sommers, to engage in corrupt activities. One public working circle disappeared into an F.M.L., for example, and so helped create distrust of government's sustained yield policy.

Let us summarize the forces behind the government's adoption of Farm Management Licenses as a concrete means of realizing sustained yield forestry policy.

The post-1945 period brought about a very large explosion in the numbers of sawmills, especially small ones, in the Interior of B.C. This impeded government's ability to protect small loggers as it had committed itself to do.

There were various determinants of the Forest Service's reliance on F.M.L.'s. These licences served to allow firms to carry on private sustained yield as opposed to public working circles which primarily served smaller independent operators. The concentrated ownership pattern of landholdings, especially on the B.C. Coast, meant that some F.M.L.'s at least had to be granted in order to stabilize large firms. The Forest Service was understaffed and had extensive supervisory responsibilities in public working circles (P.W.C.'s), but not F.M.L.'s which were regulated by contract. This provided another reason for reliance on F.M.L.'s. A major concern would be that the owners of the

F.M.L.'s had to pay out for the development of their holdings, which was expensive (although 14 of the first 23 F.M.L.'s were fairly small). Government could compensate them by charging less for Crown timber, and the Crown revenue not spent on F.M.L.'s could go to other purposes. Government spending was heavily directed to the fields of health, welfare, and education, as well as to infrastructure. Concern about increasing public debt was rising at the start of the P.W.C. program. It was decidedly unlikely that funds could have been diverted on a sufficient scale to reduce reliance on F.M.L.'s, and so aid small independent firms to remain independent.

Government's administration of the F.M.L. tenure drew criticism from various critics, including the Royal Commissioner himself. In 1945, Sloan had recommended that to obtain an F.M.L., a firm would have to make a substantial contribution to the new holding before the Crown contributed its share of land. This was not adhered to by the government, presumably because if attainment of sustained yield was not to be retarded, then there would have to be greater reliance on P.W.C.'s against which there were various forestry and expenditure objections. Another criterion with regard to applications was also dropped, namely, time priority, giving the earlier applicant preference. This would have encouraged hasty applications in a rush for land had it remained. The result however was administrative confusion,

and an outpouring of applications from firms seeking secure timber supplies and capital gains.

Sloan observed that the merits and demerits on the basis of which F.M.L.'s were granted were not known, and that Orchard was unable to define what constituted merits and demerits. In fact, Orchard's view was that due to the complexity of issues involved each case had to be decided on the basis of the particular circumstances involved. In short, consistent definitions in the abstract would not correspond to concrete reality. Orchard's views appear to be correct, despite the problems they entailed for applicants. Partly dependent on this uncertainty, the Minister of Lands, R. Sommers, engaged in corrupt activities, and raised suspicion among smaller operators as to government's policy. So far, then, this chapter has shown the necessary basis for Forest Service reliance on F.M.L.'s, and commented upon criticism of the administration of the policy. Discussion now continues with regard to the situation of smaller operators in public working circles.

#### Public Working Circles

It is now time to examine the situation of public working circles, of which there were 29 in 1954, covering 8.67 million productive acres. (Forest Service, 1954:45). A Forest Service brief states that the public working circle "activities in 1950 and 1951 were largely confined to reconnaissance surveys by two small field crews under the

direction of the forester in charge of management" (Forest Service, 1955a:12). Data were required to supplement existing inventory studies, while the shortage of data retarded the development of sustained yield (Forest Service, 1955a:13). Concentration of Forest Service effort was then directed to the public working circles.

In 1952, soon after the Working Plans Division was set up, it was realized that additional professional staff was urgently needed at the District level to put the working circle program into operation <four men were transferred, one each to four districts>. The preparation of working plans for all of the 'circles' in operation has not as yet been possible. The one forester assigned to the administration of working circles in each District simply does not have the time, or the necessary help, to follow through with this part of the program. The initial effort has been devoted to maintaining a balance between actual cut and the productive capacity of each 'circle' (Forest Service, 1955a:14).

A basic problem was the development of access roads. Orchard stated in 1955: "It is within very recent years that we have built any of these access roads. We could build 20 miles of road a year. Now that is hardly a drop in the bucket" (Transcript, 1956:1164). Orchard could not visualize a "great road building...division of the Forest Service. It would have to be bigger than the Public Works" (Transcript, 1956:1165). If by the end of 1954 there were 29 working circles, by the end of 1957 there were "fifty-eight such areas in the Province, comprising approximately 29,000,000 acres..." (Forest Service, 1957:37). The staffing and financing requirements of the Forest Service thereby also expanded.

The access road problems of small operators are of course an historical product, a result of capitalist development as it produces advantages to larger firms as well as the need for sustained yield. A declining timber supply, in conjunction with the limited development of infrastructure and concentrated landholding and markets for timber products, gradually served to squeeze small firms wishing to remain independent. Sustained yield, to return to the public working circles, meant a rapid decrease in the area in which unrestricted cuts could occur. Smaller firms were obviously less capable of financial expenditures commensurate with their needs in order to remain independent under these conditions, and problems of timber supply for them were exacerbated due to the very rapid increase of such small firms in the period after 1945.

#### P.W.C.'s: Roads and Small Operators

In the Coast, the small independent loggers produced, by 1956, 5-10% of total Coastal output, and numbered about 300. Contract or tied loggers numbered about 1,000, and both groups together produced about 30-35% of the Coast's log output. The balance came from private holdings, timber sales, and F.M.L.'s (Sloan, 1956:157-158). The Interior had "few if any, independent loggers" (Sloan, 1956:158). Interior sawmills did their own cutting. The smaller Coastal operator had little capacity to influence competitive bidding, which occurred more on the larger timber sales, but then his

disadvantage is clear (Sloan, 1956:161, 167). The Interior condition differed from the Coastal one, by its increase in small sawmills concentrated along areas of easy access. The Forest Service view of this situation:

The harvesting of timber in E.C. began a comparatively short time ago, in the late <18>90's, and naturally commenced in the areas of easiest access along the waterway, railways and highways of the Province. The very natural trend has carried on through the years. The result has been a ribbon of development following the main transportation routes. With the increase in the numbers of sawmills from 931 to 2,413 in the last 10 years, the areas close to the mainlines of transportation are rapidly being cut out. Many of the smaller types of operators, in localized areas are becoming desperate for timber. The end of the road has nearly been reached and the remaining stands of timber are back in the hinterland. The smaller operations, of which there are many, cannot finance the expensive roads required to tap this timber.

It is safe to say that even reasonably satisfactory forest management will be impossible without an adequate system of access roads (Forest Service, 1955b:38-39;cf.Quesnel and District E.O.T., 1955:2).

According to the brief by the Engineering Department of the Forest Service, access road development began with enabling legislation in 1948.

Finally efforts to implement recommendations in regard to the development of public working circles culminated in a small start being made...with actual road construction...commencing in 1950...The Government has been forced into the construction of roads in the public working circles to enable forest management practices in these areas and to make large tracts of inaccessible timber available for small operators (Forest Service, 1955a:2, 25).

The reader is reminded of the earlier government indifference to forestry prior to sustained yield. Road development

by government was on the principle that the road has "to be paid for out of the timber that goes over that road" (Transcript, 1956:15675). Hence no roads in remote areas. As to investment, the Finance Dept. representative (of government) stated to the 1956 Commission: "I think the prime consideration has been given to capital investment by the Province in those areas where the richest resources are in the form of effective transportation.... The important factor is to make the exploitation of the resources economically useable to which private industry can make a profit and pay decent wage returns" (Transcript, 1956: 16732). In the forestry context, from a government view, the roads enhance the value of the timber, since firms exploiting the timber do not have to build the road (i.e. the government is enabled to charge more for such timber). To repeat, for smaller operators to be able to enter new areas readily, access roads would have to be much more plentiful than in fact they were.

A proposed solution to the access road problem was for government to help industry build roads. This solution failed as, among other things, the Forest Service wanted enduring roads so that they would not have to be rebuilt when it came time to cut the next crop of trees. Industry, by contrast, was satisfied with roads sufficient to get their current job done. This refers to firms in P.W.C.'s since they were not tied to a piece of a P.W.C. in the way another firm would be tied to an F.M.L. They had little expectation

of cutting timber again in the particular area they were logging (Forest Service, 1955a:26-27).

The following raises questions as to the position of Patricia Marchak, a sociologist at U.B.C., and of those who similarly prefer smaller to larger firms. The Prince George brief states: "We do question the wisdom of implementing an 'experimental conservation' program <i.e., sustained yield is claimed to be an experiment> which would further increase the costs of production.... The small operator in particular plays a very significant role in our economy...he mustn't be forced out of business" (Prince George B.O.T., 1955:1-2). In passing, it should be asked of those such as Marchak who favour small business, how far this support goes? Would it have involved, under the concrete circumstances implied, opposition to sustained yield forestry? While Marchak favours sustained yield in the current (say, 1970-1980) context, one wonders what position would she have held at the earlier period? Discussion now continues to the problems faced by operators in public working circles.

#### Public Working Circles: Operator Problems

The representative of the Sechelt Forest Loggers Association stated that while his remarks pertained to his working circle, "I understand from conversation with loggers engaged elsewhere in the Province that roughly the same problems affect them as well" (Transcript, 1956:7203). He stated:

The fact no timber in the Sechelt Working Circle is likely to be made available to loggers in the

near future places the logging operators of that area in a most difficult position. Loggers are quite unable to plan any sort of integrated logging operation. Nor can they maintain a proper plant with adequate equipment, or maintain the necessary roads or dumping or booming ground facilities, except at great expense, which of course, results in a more expensive logging operation. When it is considered that the independent logger must sell his product on the same market as the logger operating with the benefits of an F.M.L. <Farm Management Licence> his comparative disadvantage must be obvious" (Transcript, 1956:7205).

However the statement as to the F.M.L. is incorrect; i.e. there is little evidence that F.M.L.'s sold to the open log market (Transcript, 1956:7217). The Sechelt representative asserted that timber was "needlessly withheld from logging operators" in the area (Transcript, 1956:7205). The Stuart Lake Forest Association observed that this "shortening of <timber> supply has led to additional applications for timber. The period of processing timber sales is unduly long..." and business planning difficulties were increasing (Transcript, 1956:7957). The Forest Service perspective as to the preceding was that small firms "gravitated" to the public working circles; "This being the case, working circles normally are rapidly fully occupied and committed to the full capacity of the annual cut. At least ten of our established working circles have already developed to this point..." (Forest Service, 1955b:23). Accordingly, Forest Service policy as to granting timber sales under such conditions are classified as follows: applications are listed by

date of application; preference is given to established operators who "have not at least 2-4 years' supply of timber. New operators are then considered on the basis of application date. The policy is based on the fact that it would not be possible to grant all applications and remain within the sustained yield capacity of the public working circle" as calculated by the Forest Service (Forest Service, 1955b:23). It was the Forest Service view that

to abandon the cutting budget <i.e. sustained yield cut limits> to favour an operator or operators who find themselves in difficulties would be abandon all of our sustained yield management principles adopted 10 years ago and only now beginning to exercise the restraint on <timber> liquidation for which they were expressly designed. The fact that the Province as a whole may very well have a growing capacity and an overall allowable cut in excess of present use is of no significance whatever in the local problem <given the policy objectives of sustained yield>...industry, in order to take advantage of profitable markets, has moved into the more accessible stands proposing a cut in excess of and in many cases, far in excess of, the productive capacity of the forest to produce. With a regulated cut limiting what would in any event be a regional short supply, it does not take much clairvoyance to predict intensified competition for available supply and bitter accusations that the Forest Service is ruining small industry by withholding timber" (Forest Service, 1955b:25-26).

It is accepted that sustained yield precipitates supply problems sooner than they otherwise would occur. As to helping out firms in difficulty, once started, where would such concessions end? The problem would be that of access roads for development, while concessions would just run down the timber supply sooner. The problem was complicated by in-

creased inventory estimates of provincial timber; in billions of board feet, 1937, 254 billion, 1945, 303 billion, and 1955, 760 billion (Sloan, 1956:211). Regions, however, should be distinguished from E.C. as a whole to which the figures apply. Thus as the improved inventory was being developed, an understaffed Forest Service was working with conservative figures. Some of this increase was due to improved utilization of timber. This means, however, that it was quite possible in specific cases for company estimates of available timber for an area to be more accurate than the figures used by the Forest Service (Cf. Anton Pole, 1955). Orchard stated his view that it is "infinitely better" in the B.C. case, as a matter of public administration, to keep cuts to a conservative limit than to be too generous in the allowed cut, and then be forced to reduce the levels of cut at a later date; "you just can't do it" (Transcript, 1956:1684). This would be due to the impact on the economy, in terms of employment and production levels if a high rate of cut had to be sharply reduced when industry had predicated its activities on the basis of the high levels of cuts. Again, government action doesn't seem to be arbitrary. However the emphasis on competition for timber supplies should be put into perspective.

For the Vancouver District as a whole, the number of timber (auction) sales not competed for declined from 90% in 1952 to 86% in 1956, and so claims of severe competition ap-

pear to be invalid. In 1953, 92% of timber sales went uncontested, representing 98% of timber by volume. In 1956, 14% of timber sales were contested, representing 30% of timber by volume (Sloan, 1956: 164). As this represents larger sales, it would appear to exclude the smallest firms. In the Interior, in Kamloops and Nelson, competition was more evident. Between 1953 and 1956, in Kamloops the volume of timber not competed for declined from 89% to 67%, and in Nelson from 92% to 52%. In Prince Rupert the figures were 98% in 1953, declining to 70% in 1956. For Prince George the figures were 100% and 90% (Sloan, 1956:164).

The Sechelt Forest Loggers Association (among others) proposed that a limit be set as to the number of firms permitted to operate in a public working circle (Transcript, 1956:7210-7211). Orchard did not "believe this can be done under our political set-up, which we all like..." (Transcript, 1956: 1988).

Orchard stated of government policy:

in formulating policies and draughting legislation a determined effort has been made to find ways and means of protecting and encouraging private initiative and holding bureaucratic regulations to the ultimate essential minimum. To effect this, much that would have been very good forestry...and in the long term profitable business, has been bypassed in the hope and belief that the industry itself will find the right additional solutions through experience...and enlightened self-interest in the normal working of selective competitive business. At the same time the government has had to fend off pressure on the part of sections of industry...to regulate free competition out of existence in the interests of a minority group, or a certain class of operators, in the interests of

industry of a certain region" (Transcript, 1956:233-234).

Various contending groups are mentioned: small versus large operators, the established firms versus newcomers, and pole operators versus sawlog operators. From a government point of view, presumably, there is little need for licencing of firms and "socialism", since competition would lead just as much as licensing to the reduction of the number of firms in existence to match the available timber supply. Orchard commented also: those advocating timber allocation (licensing) "for the most deserving firms overlooked three things: 1) in crowded working circles, ... some firms would be unable to continue operating economically <i.e. not enough timber to around>; 2) allocation violates free competition which such advocates say they favour", while 3) "...one can't help feeling that the advocate of licensing feels his own position is assured...", but would the authorities agree? (Transcript, 1956:15548).

In short, licensing would benefit particular firms but not small operators taken as a whole. The reader will note that the inter-relation of problems rules out relative voluntarism of the kind represented by Miliband: that constraints on government policy exist, but that one cannot state how constraining they actually are. The reader should have become aware of the differing nature of the conclusions at which the present process of analysis arrives. In short,

relatively voluntarist Canadian political economy writing (and not this alone) is inadequate as a means for fully understanding reality. From another viewpoint, the thesis material indicates how it is that the state helps business to accumulate capital - involuntarily.

The pooling of Crown and private land to create Farm Management Licences of course benefitted large firms in absolute terms more than small firms which obtained F.M.L.'s, but this outcome cannot be construed as "wilfully" favouring large firms, as Patricia Marchak might have it. For example, given the conditions and objectives which led government to favour Farm Management Licences, how much difference would it have made if an administrator was either unsympathetic or sympathetic to small firms? In either case, the financing and staff shortages of the Forest Service could not have been ignored, nor could the impact of actual logging practices nor the desirability of shifting the financial cost of development to private holders of F.M.L.'s.

It may be further asked: given the actual conditions involved, what use is it to criticize government's policy in place of understanding the necessity of its adoption given the actual development process involved? Marx and Engels noted the deviation of "critical" history from real history (Marx and Engels, 1976:12). The problem, apparently, reduces to the question as to why, i.e. with what objective, academics carry out studies in the first place. Although the the-

sis analysis is subject-specific, it is thought unlikely that its implications can be avoided by suggesting that B.C. forest policy in principle represents an unusual situation, and hence is unhelpful in understanding the state-business relationship. Such a view would have to assert in effect the absence of a development process in some cases to support its argument.

The preceding pages have covered a variety of topics in connection with public working circles, including: roads as these affect small operators, handicaps to carrying on business (planning and investments, etc.), timber supply problems, and licensing of firms as a proposed solution. These problems are the historically determined outcome of: 1) capitalist development as it created the dominance of large firms in B.C.'s economy, and also timber supply difficulties; 2) inadequate infrastructure for smaller firms as an outcome of industrial location factors (population, markets and export opportunities, etc.) which limited the areas in which it was useful to build roads and which interact with the adverse cost structures and financing of small firms;. 3) the decline in the timber supply relative to increased population and demand for timber products in the long term, which required that at some stage the resource had to be protected. These results would go together with increased levels of industrial production as part of capitalist development. This need for resource protection is tied

to provincial dependence on forestry and the inadequacy of the land in general for uses other than forestry. The role of government in forestry had to increase, whereas historically the Forest Service had a minimal role to play. This condition interacted with industry in that the Forest Service was dependent on industry to a significant degree to carry out sustained yield policy. The inadequacy of the Forest Service to carry out sustained yield on its own was an historical product. This resulted from an insufficiently rapid socio-economic adjustment from times of excessive timber supplies in relation to industry need, to a period in which timber shortages threatened the industry in government's view. Firms unable to carry out sustained yield operations on F.M.L.'s were forced into public working circles, and faced the historically inadequate level - according to the then greatly expanded current need - of infrastructure development.

A fourth important determinant of the fate of P.W.C.'s may also be discerned from the preceding discussion. Sequentially, once resource protection (sustained yield in this case) became necessary, the conditions under which it was implemented have to be considered. These include concentrated landholdings and the significant role of large firms in the economy - as well as the rapid post-war increase in the numbers of small firms pressing on easily accessible timber supplies. This constraint functioned in conjunction with the

need to restrict the rate of timber cuts. The result in public working circles was that of over-crowded and under-financed small firms competing for timber, and suffering investment and planning problems. This situation was combined with conditions of regional short supply (competition was more severe in the Interior). If then the result is that complaints were made by representatives of small firms about planning and investment problems etc., who can be surprised?

#### F.M.L.'s: Their Impact on Smaller Firms

It was claimed by smaller operators that the land granted to F.M.L.'s meant that other firms were deprived of timber by reason of the area of the F.M.L.'s and the reservation of this land for the F.M.L. holder. F.M.L.'s produced 3.3% of B.C.'s total cut in 1951, increasing to 6.7% in 1955 (Taxation Dept., 1955) This proportion of cut would increase as more firms completed their working plans, required before cutting could start. These figures have also to be considered in relation to the extensive increase in timber cuts in the Interior. In 1948 by the Minister of Lands, E.T. Kenny, said that the position of the small logger and operator would be protected. However the number of operations had since considerably increased, thus invalidating the promise. It was also stated that the contract terms could be manipulated by the large firm to the disadvantage of the smaller, and that the existence of F.M.L.'s had led to increasing competition outside their boundaries (Transcript, 1956:3644,

3672). However Fletcher, the representative of the Truck Loggers' Association, makes important retreats from this position in various ways. Q. <If no F.M.L.'s had been granted at all> "wouldn't we be in 20-30 years...in exactly the same position as you can see coming sooner, just through the natural forces of the economy?" Fletcher agrees, but notes that timber "would have been more tradeable" with other forms of tenure (Transcript, 1956:3642). It is not obvious that this point is significant, since as investments increase, firms would require secure holdings of timber, and the trend towards integrated utilization would contribute towards this (as being more profitable). This does not suggest why small firms would do as well in such "trading" of timber as large ones.

Q. Since the advent of F.M.L.'s, has the cut of any of your members been diverted to different conversion plants than it was being diverted to before the advent of the F.M.L.'s? A. Not to any degree that I have knowledge of... Q. ...it is fair to say that the Truck Loggers need the establishment of large conversion plants for their own continuance in business? (Transcript, 1956:3652, 3654).

Fletcher agrees. Q. "Is there any trend you know of <on the part of the conversion companies> reducing the number of truck loggers working for them either be the first refusal system or contract or what have you?" A. "I don't think there is" (Transcript, 1956:3656). The questioner points out that F.M.L.'s have insufficient timber from their management licences to meet production requirements, and that

even with purchases from the open log market an insufficiency remains.

Q. So...we are not talking, really about whether we can sell logs or not, we are talking about the available cut. <This leads to the role of the Forest Service and its view that "we are up to our available cut">. So, this in mind, do you think the Truck Loggers would have been able to cut more without F.M.L.'s? A. I do not believe so (Transcript, 1956:3675).

Assuming that increased competition occurs, would this be affected by F.M.L.'s if the overall cut of the Truck Loggers had not been reduced in respect of F.M.L.'s.? It is more logical to attribute this competition to sustained yield cut restrictions in conjunction with the increased numbers of firms. Lastly, it is crucial to note that, the future developments feared would come even if F.M.L.'s were not granted at all. With respect to contract terms, it is to be noted that Fletcher reported no specific complaints from member firms. Nor is it clear why contract terms would change just because an F.M.L. was granted as distinct from the impact of changing economic circumstances, which operated both before, during, and after the granting of F.M.L.'s given the differing conditions of the economy. (This is a different question from the pressure exerted by F.M.L. applicants to get local operators to support the firm's application). Discussion continues in regard to the increasing costs of carrying on business and the position of smaller firms. This is then related to the impact of sustained yield policy on the position of smaller firms.

### Business Costs

For independent loggers, equipment costs eventually increased to the point that subcontracting was a necessity, with required investments of about \$400,000 in the Interior and \$500,000 on the Coast. This had occurred by the end of the 1960's (Nagle, 1971:102). The representative of a medium-sized log-buying sawmill, expressed the situation as follows at the 1956 Royal Commission:

Because of the increased demand for timber the loggers had to move into higher elevations, into more inaccessible areas which required expensive machinery and costly roads. Because of increased labour costs partial replacement of labour by machinery became essential. All this required large capital, very often beyond the financial reach of the average logger. The independent logger therefore had to turn to a sawmill to get the necessary finances (Pacific Pine, 1955:6).

This, then is a continuation of a trend noted at the time of the 1945 Royal Commission towards contracting.

As to sawmilling, the problem of independent mills (log-buying) was stated by the same representative, Mr. Heller, of Pacific Pine. An assured timber supply was necessary. The only possible way to make money was to invest in order to produce chips for pulp. Other firms did it: "it became part of their calculations" and so they could buy more logs. "Unfortunately the sawmill business is such that the additions you put in to take care of the byproducts, very often each one of them exceed the total value of the original mill" (Transcript, 1956:13069-13071)[ 21]. Accord-

ing to Heller, the difficult position of sawmills without secure timber supplies was aggravated by different interests of loggers and sawmills resulting from differences in taxation, leading to instability in log supply to the mill. High prices were charged to mills for logs by some loggers in a position to do so, and who required that the sawmill take on the full risk of logging. In consequence, "a great part of the normal milling profit had to be passed on to the logger..." (Pacific Pine, 1955:7).

The mills had been moving into logging themselves. This is partially supported by the brief of the B.C. Lumber Manufacturer's Association. It had 53 sawmills among its members, which produced 87% of coastal lumber production of 337 mills (B.C.L.M.A., 1955:3,4). It stated that despite increased recovery of wood, "...the increased financial returns to the mill resulting from the sale of chips have been largely cancelled out by the increased cost of raw material" (B.C.L.M.A., 1955:4). Nonetheless the disadvantage of firms without assured log supplies is clear, given high log prices, since F.M.L.'s did not have to pay the profits of loggers in their employ[22]. Heller of Pacific Pine:

In the hope of maintaining a profit potential the medium-sized sawmill operations have been compelled to modernize their mills, integrate their operations, and try to achieve the maximum utilization of their raw materials through the production of chips, veneer, and compressed sawdust logs. The volume of logs available on the open market has dropped to a point where it can be used only occasionally... (Pacific Pine, 1955:6).

The logs were said to be of poor quality and, in that period, over-priced due to sawmill competition. This applies more to the Coast than to the Interior of B.C., while probably the Coastal log-market decline was over-stated (Transcript, 1956:16583, 3575-3576). Assuming goal-oriented behaviour, these conditions are independent of individual wills.

As to the decline of the independent operator on the Coast, Sloan, the Royal Commissioner, wrote as to the testimony of the Truck Logger's representative:

Fletcher admitted that his members' chief difficulties were caused by competition for timber, and that causes other than forest management licences were responsible for the competition. The increase in total cut on the Coast, the incursion of many new operators, and the gradually diminishing volumes of Crown old growth timber available for purchase made the position of an independent operator, dependent upon Government timber sales more difficult. Although some operators would rather log for themselves than work for someone else, this practice of open-market logging has been decreasing in favour of the greater security offered by contract and "first refusal" logging (Sloan, 1956:70).

The decline of independent operators follows from the principles in operation of capitalist development initially outlined. Nothing in the thesis has suggested that the owners of small firms wishing to remain independent could counteract the various trends specified, as is also indicated by the actual decline in the position of small independent firms and the development of contracting as necessary adjustment to changing conditions.

What is more problematic is the time period involved in answering the question as to how much more quickly sustained yield brought about the inevitable decline of the small independent operator. The lawyer cited gave the period as between 20-30 years. As the data then existed, it would seem to suggest this was a reasonable estimate. In 1908 the independent loggers, large and small, produced an estimated 70% of production. The following estimate found was published in 1947, but did not specify a particular year to which it could be applied, although clearly intended to be current. Thus it could apply to several years towards the end of World War II, say, since the estimate referred to "about 40%" of production as being from independent loggers. Thus in about 35-37 years the share of production from independent loggers fell an estimated 30%. If this trend continued - though straight-line projection is unreliable due to what it excludes - this suggests that by about 1980 the share of the independent logger would have been down to 10% of output. At the 1956 Royal Commission, the share of the independent logger was estimated to be about 5-10% of total production. Thus sustained yield may be estimated to have hastened the inevitable decline of the independent operator by about 24 years to a point that would have been reached anyway. However if the impact of increased business costs is considered, the period of estimated hastened decline may have been up to 10 years less, since it was stated that by the end of the 1960's independent status was too costly.

As against the disadvantage caused to small firms, the advantages of adopting sustained yield in the first place would have to be weighed. Protection of the economy as a whole, of course, would serve also to benefit other small business whose incomes depended on the ability of customers to earn money from forestry or forestry-related activities. Further, even if sustained yield hadn't been adopted, with intensifying timber shortages and the consequent spur to a build-up of holdings, it is hardly likely that small firms would have fared better than actually occurred with the introduction of sustained yield. Further, under these conditions, the threat to B.C.'s economy would probably be accentuated over time, requiring the eventual allocation of Crown timber to industry to bring about stabilized conditions. Criticism of government policy, after the fashion of Marchak and others, would not appear to have much value in these conditions. Discussion now turns to the subject of business reaction to sustained yield policy. This partly serves to answer Reid and Weaver's claim that big businesses and government had an identity of interest respecting sustained yield policy and forms also a brief review of business reaction to government policy.

#### Business Reaction to F.M.L.'s

H. R. MacMillan's by now former forester, Gilmour, stated in early 1949:

In practice management licences, as presently proposed are not likely to be applied except in pe-

culiar circumstances which they favour. To date it is seen that they favour especially those who have no timber of their own, and those who can acquire age-classes <of trees> which shorten the period during which they must pay full stumpage, or taxes, or royalties (British Columbia Lumberman, 2/1949:99).

At the same time L. R. Andrews, Vice-President of the British Columbia Lumber Manufacturer's Association, pointed out various problems in the way of taking up F.M.L.'s. These included taxation and "the problems of surrendering a large measure of control over the destinies of the enterprise, <and> the problem of providing the large additional fixed capital investment required to convert their present financial set-up to sustained yield over the period of the first rotation of 60 to 100 years;..." (British Columbia Lumberman, 1/1949:51). Other problems were mentioned also. It is perhaps unfortunate that the writers Reid and Weaver were not present to reassure Andrews that sustained yield policy was designed to ensure the future success of large firms. Andrews suggested that the F.M.L. "proposals, frankly, are an administrative device designed merely to 'enable' the practice of sustained yield..." but not to encourage it. Of course, if government terms for sustained yield had been unacceptable to business, the business proposals in 1945 had been unacceptable to government. At the 1956 Royal Commission it was suggested that "some of the largest operators are opposed to the Farm Management Licence, but have had to apply to protect their timber supply" (Transcript

1956:3773). The following, later, statement by S.G. Smith, formerly of Bloedel Stewart and Welch (which merged with H.R. MacMillan) doesn't seem to help the claims of Reid and Weaver:

I was never whole-heartedly in favour of the management licences...I kept hoping there could be some way in which that thing <forest management> could be done. But it got to the point the company just had to go through and make that licence number 21 <at Alberni. Sloan, 1956:102> or otherwise somebody else would come right in on our doorstep (Orchard, 1960c:31).

In this way, then, it would appear that Orchard's earlier supposition that big business would be forced into sustained yield was correct. MacMillan-Bloedel had two of the first twenty-three F.M.L.'s listed in the 1956 Sloan report as awarded, and the contracts completed. In both cases, letters of intent to apply were sent in 1944, applications made in 1947, but the contracts, allowing cutting to start, were not finalized until 1955 (Sloan, 1956:104). No other firm took so long. It may further be noted that the Alaska Pine Company cited earlier initiated none of the first twenty-three F.M.L.'s which had approved working plans, despite the number of its F.M.L.'s (Sloan, 1956:102).

Trading in F.M.L.'s also took place. Orchard had commented: "There is just too much money to be made by capital gain to keep small licences..." (Orchard, 1960b:99. cf. Transcript, 1956:2264-2265; 1980). This was due to the increased timber reserves in time of shortages, while such

timber was also "safe from competitive sale". Orchard stated: "The security of tenure and other features <of F.M.L.'s> were enormously valuable but I had never been able to evolve any alternative scheme under which the public treasury could have collected directly the sums involved" (Orchard, 1960b:99). Corporate taxation was predominantly a Federal concern. To prevent large firms from buying up small F.M.L.'s, such holders could sell only to other small firms (Orchard, 1960b:99), although large firms could avoid this restriction. This restriction, however, was not meant to stop amalgamations. The sale of company shares did not constitute a transfer of the Farm Management Licence in Orchard's view. He cited a case: maybe Powell River now owns the company, "but that licence still stands in the name of the Salmon River Logging Company. It <the F.M.L.> was issued to to support certain mills, and those mills are still operating" (Transcript, 1956:2265-2265A). Capital gains would represent a motivation for business to trade in F.M.L.'s. This would result since allocation of timber to firms as part of sustained yield policy would also serve to ensure the profitability of the firm insofar as an assured source of timber protected the mill's raw material supplies in times of shortages. This case serves as an instance of how capitalist laws of motion (e.g. centralization) in practice take precedence over the state's attempt to control the development process in the case of the sale of small firms to

yet larger ones. The brief to the 1956 Royal Commission by B.C. Forest Products offers another motivation for trading in F.M.L.'s:

As a result of the marked trend in the past ten years toward amalgamation and mergers which results in a greater integration within the industry, there has been a drying up of some sources of supply of logs previously available...The sawmill operator who lacks integration of a pulp mill division is at a serious disadvantage in the open market and <log> exchange market (B.C.F.P., 1956:22).

Integration also involved increased profit. Thus a Manitoba study disclosed that "on this area neither the production of sawlogs alone nor pulpwood alone is as profitable as the combination of the two...". (British Columbia Lumberman, 100). This is not the only dividing line that could be drawn. A U.S. study broke down the pulpwood and sawlog factors by tree age and product: "It is to be noted that the value rises sharply with the intensity of integration..." for diversified utilization. (British Columbia Lumberman, 1952:100). This also suggests that B.C. government policy of encouraging pulp mills in the Interior of B.C. was coincident with economic trends operating to the disadvantage of small firms. These trends promoted concentration in the industry.

#### Concentration

According to Schwindt, writing in 1979, factors leading to forest industry concentration were the following: "...the pursuit of technical efficiency, the pursuit of market pow-

er, and the existence of barriers to entry. The primary barrier to entry is restricted access to raw material, and the restriction is in large part the result of past forest policy" (Schwindt, 1979:18). It has, of course, been observed earlier that the position of smaller firms and relatively free access to raw material would not have been improved in the absence of sustained yield policy in the long term. However regarding government policy, the F.M.L.'s represent such a restriction of access to raw material by new firms. As regards the Interior a similar trend was mainly in the future. It was implied by the excess of firms to timber supply and the trend due to the economic benefits for firms of integrated utilization. Later government policies contributed to this trend. Concentration would result in part from the fact that the buying out of firms would be the only way a forest industry firm could expand, given the restriction to the availability of timber resources. Soviet economist Shemyatenkov comments - keeping in mind Schwindt's three factors leading to concentration - "To reduce the problem of monopoly to its individual and secondary aspects (product differentiation, collusion of several sellers, etc.) is to ignore the socio-economic essence of monopoly as a special historical form of capital" (Shemyatenkov, 1981:85). This is based on the development of large scale production in the first place, which is subject to its own development process.

Taxation Department data showed that concentration measured in terms of landholdings had increased from 1945. Large firms carried on "a constant programme of research...such as the perusal of tax roles, and visits through the country to find out what timberland might be available" (Transcript, 1956:16653). As to holdings, in 1944, of the timberland licence group, the acreage was close to four million of which 51.7% was held by 58 persons or corporations, while 2,800 shared the remainder (Transcript, 1956:16655). For 1954, for the area west of the Cascades - the Coast - it was reported: "10 companies hold 75% of the acreage of assessable timber leases and licences in amounts in excess of 20,000 acres. Two corporations hold 35.6% of the total acreage and eight corporations jointly hold 72%" (Transcript, 1956:16655). As of December, 1954, holdings of less than 20,000 acres formed 9.16% of the total.

These data do not represent the only way to view increased concentration in B.C.'s forestry industry, but they do so in a way consistent with the landholding data first cited in chapter three for the years 1938 and 1944. This consistency occurs both in terms of the comparability of the data, and in terms of revealing an actual long-term trend towards increased landholding concentration in B.C.'s Coastal forestry industry. As such, it reveals statistical evidence in support of the explanatory thrust of the thesis as it pertains to economic concentration. Attention now turns

to some recommendations by the 1956 Royal Commission relevant to the concerns of the present thesis.

### Policy Recommendations

Respecting the recommendations of the 1956 Royal Commission report, the reader is referred to that source. A few recommendations of interest regarding the thesis will be stated: 1) No new F.M.L.'s should be awarded for a five-year period while improved surveys and inventory data are developed, although some specific exceptions are permitted. This provision did not affect F.M.L.'s awarded already and awaiting working plans (Sloan, 1956:94-95). 2) Contract loggers should be allowed to log 30% of the allowed cut of a licence, but the "annual volume should not exceed the percentage of Crown mature timber allocated to the licence". Previously, from F.M.L. number 14, this did not apply to the private land in a management licence (Sloan, 1956:99-101). 3) F.M.L. holders should not be allowed to cut timber from public working circles or unalienated Crown land unless they accept the contract clause (Sloan, 1956:101). 4) Large business received support as being necessary to the economy (Sloan, 1956:94). Statements two and three obviously reflect an adjustment to industry trends respecting contracting. With respect to point two, Orchard made a later, related, comment:

Small operator protest has brought the granting of management licences practically to a halt. At the same time it has hurried the partition of the re-

maining Crown forests into working circles. A disappointingly hollow victory since all such <timber> liquidation is halted and sales <of timber> confined to what they <P.W.C.'s> are able to grow (Orchard, 1960b:113).

A hollow victory at least where there is an excess number of firms to timber supply, and access road development is slow.

Smaller operators claimed that the granting of F.M.L.'s reduced the timber available to them. This position, however, was not viable in the specific historical context in which it was articulated. It appeared that F.M.L. holders had not reduced their level of business with small firms. Sustained yield limitations on the rate of cut together with the sharply increased numbers of small firms caused the major problems faced by smaller operators with regard to obtaining supplies of timber. However, if small independent operators faced a bleak future as independents, the position of surviving smaller operators willing to work as contractors was considerably better. (Contracts, of course, could be made between companies of varying sizes, and not just between smaller and much larger companies).

Equipment costs increased so that by the end of the 1960's, with a required \$500,000 investment on the Coast, independent status was prohibitive due to equipment costs. Other increased costs, such as that of roads to obtain otherwise decreasingly accessible timber, contributed to create a trend towards contracting also. The position of independent sawmills concerning timber supplies was making them

less profitable as compared to firms with secure timber supplies. The need to obtain better raw material utilization involved equipment costs possibly greater than the cost of the original mill. The mills, then, moved into logging (or contracting) to protect their timber supplies. Increased raw material costs also confronted these mills, while the secure timber supplies of F.M.L.'s meant that their supplies were protected from competitive business conditions. However, to have an F.M.L. did not ensure that all of the firm's timber supply needs were met.

The decline of independent operators, from bourgeois towards proletarian status, follows from capitalist development and competition, which produces advantages for some firms over others. This would be reflected in the cost structure of smaller firms and their limited degree of market control compared to larger firms, etc. The time period by which sustained yield hastened the decline of small independent forestry operators can be roughly estimated as between 14 and 24 years. The longer period just represented a projection on the basis of estimated data from 1908 and 1947. The shorter period is preferred as a definite statement from an interested small business group. As against this disadvantage to independent operators, the need for sustained yield itself has to be balanced.

Business reaction to the F.M.L. tenure was cautious among representatives of larger firms or business organiza-

tions. They were concerned as to the limits that would be imposed upon the defence of business interests if sustained yield were accepted. Eventually they had to apply for F.M.L.'s to protect their own timber supplies. Landless firms, by contrast, readily applied for F.M.L.'s to obtain secure timber supplies and/or the associated capital gains. Trading in F.M.L.'s took place with the sale of company shares. However the Forest Service did not object so long as the company to which the F.M.L. had been granted itself continued to operate and run its mills.

Forestry concentration was seen as an historical development, and not just as the pursuit of technical efficiency or market power. Landholding concentration had increased from 1945. With reference to the Timberland licence group, the 1945 Royal Commission Report had shown that 58 persons or corporations held 51.7% of the land in private control (including temporary alienations from the Crown). In 1955, ten companies held 75% of the holdings of 20,000 acres or more. Holdings under 20,000 acres accounted for only 9.1% of the total.

Some recommendations of the 1956 Royal Commission included that no new F.M.L.'s should be granted for a five-year period while improved surveys were carried out. Contract loggers were permitted 30% of the cut from F.M.L.'s proportional to the Crown's contribution of mature timber to the F.M.L. C.D. Orchard commented that while small logger

protest had halted the granting of F.M.I.'s, the increased expansion of the area under public working circles meant that limited cuts continued to restrict smaller operators.

## Chapter VI

### CANADIAN POLITICAL ECONOMY REVISITED

This concluding chapter is concerned with bringing the lessons of the earlier analysis to bear upon Canadian political economy writing. In particular Reid and Weaver's analysis of the development of sustained yield forestry policy is re-examined and criticized.

These writers were concerned with the political circumstances surrounding the origin of the 1945 Royal Commission report on B.C. forestry. Reid and Weaver presumably were misled by Sloan's statement in the 1945 Royal Commission report to the effect that big business supported sustained yield as did the government. As we have seen, Sloan left real differences of views unstated. Nor did Sloan in the 1945 Report address the question as to the timing of the 1945 Royal Commission, although the 1956 Royal Commission report attributed the origin of the earlier Commission to the Chief Forester's efforts (Sloan, 1956:765). Discussion begins with the origins of the 1945 Royal Commission.

Reid and Weaver state that the initial mention of the inquiry was in June, 1943. The stated purpose of government action was to protect the forest resource. Reid and Weaver rule out a sharp increase in the rate of timber cuts as a

reason for calling the Royal Commission into being. Cuts had declined from 1940 to mid-1943 when the Commission was announced. Since dialectical logic compels the question - "why do things necessarily work as they do?" - it can be readily noted that Reid and Weaver's logic has not ruled out other possibilities. Thus, while the decline in cuts can be taken as removing a cause for calling the Royal Commission into being, another question may be asked: given that the decline in cuts from 1940-1943 represents a short-term trend, what is the relation of this short-term trend to problems which would necessitate a major long-term policy change for their solution (e.g. sustained yield)? Was the trend merely irrelevant? If this were the case, Reid and Weaver's point would be primarily theoretical rather than practical. Reid and Weaver then continue with the question as to who pushed the government into calling the Royal Commission, presumably as a way of asking who had the most to gain from sustained yield.

The Forest Service is ruled out as a prime mover in calling the Royal Commission into being because it had long supported sustained yield. The result was that this body was viewed as a constant in the causative equation, so to speak. However, as we noted in chapter 3, the concern was about the regional concentration of industry - in conjunction with an estimated declining regional supply of timber. B.C. was unable to replace the forestry industry in the economy, and so

it became necessary for the state to act to protect B.C.'s economic base. Thus, a short-term decline in timber cuts would have little relevance in the face of a long-term trend towards increased timber cuts, which was the actual case.

Continuing with Reid and Weaver's account, after discounting the role of the Forest Service in calling the Royal Commission, they turn to the relationship of large and small firms in the industry: large firms had a greater vision of the future than small firms, since the latter "were faced by much shorter deadlines in which to recover their relatively heavy capital investment and make a profit" (Reid and Weaver, 1974:16). These firms especially opposed restrictions of their right to cut timber (in terms of quantity). Large firms had a greater vision of the future and could prosper despite the introduction of cut controls[23]. The next group introduced by Reid and Weaver is the C.C.F. political party. This party threatened to nationalize the industry unless it considerably improved its wasteful forestry practices, while the industry would not be nationalized if its member firms made the improvements. With this inducement, both large industry and government had reason to support the calling of a Royal Commission; industry to avoid the possibility of nationalization - if the C.C.F. was elected - and government to appease conservationists. Authors Reid and Weaver assigned this as "one very pressing reason for change", and for the timing of the Royal Commission (Reid

and Weaver, 1974:18). They cite Colin Cameron, then forestry critic for the C.C.F. (Co-operative Commonwealth Federation). However, why was it necessary for the C.C.F. to issue the threat? Presumably it would be because industry was not paying sufficient attention to C.C.F. views. The C.C.F. threat in this regard is then not a sign of strength in regard to industry, as suggested by Reid and Weaver, but an attempt to exert influence arising from a condition of little power initially. Cameron stated:

due in large part, I believe, to the effort at public education on the part of the late Chief Forester, Mr. E.C. Manning, and his successor, public opinion has been roused to the point where today not even the most rabid individualist among our lumber operators fails to pay at least lip-service to this idea of forest conservation... However, we need be in no doubt as to the viewpoint of industry in the matter of footing the bill. Various spokesmen have expressed either openly, or by implication, before this commission, the contention that the responsibility for maintaining and re-establishing the forest rests on the shoulders of the public. Not content with this, some have even advocated a reduction in contribution industry makes to government... (Proceedings, 1945:5335, 5343).

Evidence as to the continuing disagreement between government and business - opposition to cut controls and government's "arbitrary" regulatory schemes - has been given previously. Cameron's statement indicates industry's adjustment to the proposed sustained yield policy, as he sees it. It does not suggest the accuracy of Reid and Weaver's views regarding the influence of the C.C.F. on industry, but states the obvious: business need not oppose sustained yield if

someone else foots the bill. This has implications for Reid and Weaver's further statements on the differences by firm size in attitudes to sustained yield. If industry did not pay, it would appear that any firm could afford sustained yield. According to this principle small firms would have no need to object to sustained yield, contrary to Reid and Weaver's position. But this undermines the account of the role of the C.C.F. in bringing about the Royal Commission. Reid and Weaver assumed that this role was based on the influence exerted by the C.C.F. on firms in the industry. By contrast, C.C.F. influence was not strong, as evidenced by the slowness of large firms to take up F.M.L.'s. The most eager applicants were landless firms. Neither does Cameron's statement suggest that business was unduly influenced by the C.C.F., nor the summation to the Royal Commission by the lawyer for the B.C. Loggers' Association, which proposed that timber cuts be increased by 35,000 acres a year. Reid and Weaver's views in the following are necessarily unfounded, since they proceed from the incorrect downgrading of the role of the Forest Service in the calling of the 1945 Royal Commission. This approach serves to suppress the reasons the Forest Service had for their actual role in the calling of the Royal Commission.

Given the alleged split in the industry between large and small firms, a political propaganda war is said to have occurred. Naturally, since the events did not occur as they

claim, Reid and Weaver find a certain difficulty in providing evidence for their account. Readers are told that the "smaller firms did pack considerable political muscle" and used it to oppose sustained yield (Reid and Weaver, 1974:18). However a "barrage" of propaganda from large firms defeated them. According to Reid and Weaver:

In order to undermine this political power a few large corporations attempted to ally their cause with the conservationists by placing advertisements and special features in local newspapers prior to the calling of the inquiry characterizing themselves as concerned corporate citizens. After the barrage of propaganda the large corporations had no longer to fear the collective political 'muscle' of the small operators; their credibility had been destroyed (Reid and Weaver 1974:18).

The reader should consider the following dates: 1940, the split in the industry; 1941, the election in which the C.C.F. did relatively well; 1943, the Royal Commission was announced. Four advertisements were cited by Reid and Weaver. One was dated 1941, and three were dated 1943. Hence there occurs a two-year gap of silence in this propaganda "barrage". The evidence of small logger opposition to sustained yield is a quote dated to September, 1944. Why can't Reid and Weaver tie their evidence together more adequately? Was it only in 1944 that small loggers thought to say anything in opposition to sustained yield (and only one statement at that)? Post hoc evidence of this sort is unacceptable, and Reid and Weaver provide no evidence of a relationship between the advertising and small loggers. Fur-

ther, the authors mislead by a reference to a few large firms placing advertising. This applies only to the 1941 advertisement which in fact was an industrial supplement to a local newspaper, mainly of forestry firms, but not exclusively so. The article cited by Reid and Weaver contains an address by the logging manager of Bloedel, Stewart and Welch. He stated:

In recent years there has been much cooperation between the provincial government and logging operators in reforestation. Many of the problems that must be met before 'sustained yield' can be realized were discussed... For many years 'selective cutting' and 'sustained yield' forest management have been discussed as the logical solution of our forest problems... (Vancouver Province, 29/5/1941:8).

Thus an on-going topic of discussion is turned into a propaganda "barrage" by authors Reid and Weaver. Further advertisements cited were in fact placed by only one firm, Bloedel, Stewart and Welch. Thus the "few large firms" placing advertising could truthfully only apply to the 1941 industrial supplement. One advert stated: "Bloedel's have lent their resources in skill and capital in support of this <replanting> programme to the extent of planting thousands of seedlings supplied by the Forest Service - many of these in acres belonging to the Crown" (Vancouver Province, 26/6/1943:3). This represented an effort against "waste and future want". What, however, does this say about sustained yield. The advert is dated several years prior to the adoption of sustained yield and so logically refers to a pro-

gramme pre-existing sustained yield. How does this constitute a threat to small firms? Another advert contained the following message essentially: "Timber is valuable - prevent forest fires" (Victoria Times, 17/8/1943:4). Elsewhere it has been noted that the public, in the B.C. Coast region, constituted the main cause of forest fires. Reid and Weaver fail to explain how this helps to further their case concerning an industry split and the propaganda "barrage" against small firms. Why couldn't they find advertisements placed by small firms, or is it to be assumed that these operators lacked the resources or fortitude to defend their interests even to the minimal extent of placing counter-advertising in the newspapers? Based on the evidence provided by Reid and Weaver concerning newspapers, a mere three counter-advertisements would perhaps have sufficed to make the case for small operators.

Respecting the propaganda "barrage" the question becomes why just one firm placing the advertisements in 1943, namely Bloedel Stewart and Welch. That is, a counter-hypothesis to Reid and Weaver is required. A possible hypothesis is suggested by the following, February, 1944, from the Royal Commission hearings:

Q. "By the way, Bloedel Welch and Stewart <sic.> are instituting a programme of research into reforestation, aren't they?" A. "They are starting a proposed division of forestry within their company set-up" (Proceedings, 1945:547).

Orchard's comment allows it to be asked if it is surprising timing for the firm to advertise close to the time the Royal Commission was announced - one advert just before, two later - when also it was establishing its own forestry section at about the same time? In short, the advertisements would allow the firm to proclaim how much in step it was with new developments. Thus the advertising - as logical analysis implied - is unrelated to the events claimed to have occurred by Reid and Weaver. The establishment of a forestry section supplies an answer as to why this firm, and not others, placed the advertising in 1943.

If for some reason it might be suggested that extra advertisements existed which brilliantly support Reid and Weaver's case - one supposes that Reid and Weaver overlooked them - the following will serve in reply. It is, of course, the responsibility of researchers to substantiate their own case. To release them from responsibility would just encourage incompetent work.

It is necessary to ask why the large firms would find it necessary to campaign against small firms on the issue of sustained yield? Reid and Weaver's position is that smaller firms had shorter deadlines to meet their capital costs than larger firms, and so they opposed limitations on the rate of timber cuts. The firm which placed the advertising was, later on, obviously unwilling to voluntarily accept C.D. Orchard's plans for sustained yield. Also noted in chapter

four of the present study was the statement contained in an industry brief to the Royal Commission. This represented an estimated 80% of Coastal operators, accounting for about 95% of production. This brief attacked as "arbitrary" the proposed right of government to control the rate of timber cuts. Only a "relatively few" of the large firms were said to be in a position to voluntarily adopt working plans for sustained yield (Proceedings, 1945:10319). Working backwards, then, from the Royal Commission hearings to the public announcement that a Commission would be held, it is not clear what basis there would be for large firms to go public against smaller ones. This is especially the case in view of the plea for increased cuts. A significant logical problem is overlooked by Reid and Weaver. What was the advertising campaign to be about? Orchard's 1942 memo had proposed that pooling of Crown and privately-held timberlands would occur, but the specific terms on which this would occur had remained undecided. The C.C.F. representative has earlier been cited as saying that a number of industry representatives wanted government to pay the costs of sustained yield. Clearly these terms, if they had been accepted, would have had quite different implications for business than the policy actually adopted. In any case, it was not until well on in the Royal Commission hearings that Orchard announced the general terms on which sustained yield policy was to be introduced by the government. A result of this was that busi-

ness representatives got together to draft their brief in protest. Reid and Weaver, however, assume that these problems had been clarified for the participants at an earlier stage of development. There are considerable problems, then, with Reid and Weaver's concept of a "propaganda war", among which is that it lacks a cause.

Further, it seems likely that an advertising campaign, given the issues on which it was purportedly based, would have had spillover effects into the Commission's hearings themselves. No evidence for this has been found. What, however, was the position of small firms in regard to the exercise of political "muscle"?

#### Small Firms' Position

It is clear that for Reid and Weaver's claim to be meaningful, small loggers must have known about the conflict in the industry regarding sustained yield prior to the Royal Commission hearings of 1944-1945. However, Gibson, whom they cite as being opposed to sustained yield, made no reference in his testimony to the events that Reid and Weaver allege took place (Proceedings, 1945: 5016ff.). In fact small firms were isolated from events in ways not considered by Reid and Weaver.

This isolation of small operators is indicated from testimony from the Royal Commission hearings. A small logger, in a discussion about working circles, stated of this subject matter in January, 1945, eleven months after the

start of the public hearings: "The small logger - the independent logger did not know anything about it. I didn't know anything about it until I heard it before this Commission here. I knew it was practiced in other countries" (Proceedings, 1945:7613-7614; 7551). Working circles were renamed sustained yield units after 1956. This seems regrettably non-political as regards service to Reid and Weaver's arguments. The following indirectly raises problems for the Reid and Weaver argument - namely that the open-market logger appears isolated from events in ways not allowed for by those authors. Most open-market loggers operated on a small scale. Jackson, a logger, states:

I would mention...that I have not seen any gypso <open-market> loggers around this Inquiry either at Victoria or here at Vancouver. I expected that there would be some of these large open market loggers at this sitting, but I have not seen any so far...When I say market loggers, they are all operating on the lower mainland. D. <lawyer>: Might I suggest this, Mr. Jackson, that the difficulty is largely because nobody has come forward. J. These men don't know anything about it. <Jackson offers some names to the Commissioner, who shortly remarks...> C. You see, if they have not enough interest to come to this Inquiry, or to instruct counsel, we cannot subpoena the whole countryside. J. <In response cites a person who can't afford to leave his work. He states also that there were strong feelings about some issues.> C. That may be so, but...we have been sitting many weeks and sitting at times to meet the convenience of these men...The Press have given the Inquiry considerable publicity (Proceedings, 1945:4896-4898).

Jackson's statements were made September 1, 1944 (Proceedings, 1945:4828). The first public evidence was taken on

February 21, 1944. The operators cited fail also to refer to the events claimed to have occurred by Reid and Weaver, as was the case of all witnesses to the 1945 Royal Commission whose testimony this writer has read. In all, including the material previously related, it would appear difficult to revive Reid and Weaver's account of events since no evidence supports it[24].

This "distance" from on-going events reflects also the tendency of the petty-bourgeois to decline into proletarian status. This is an outcome of capitalist competition as it results in an increasing scale of production and changing technology, as some firms gain advantages over others. The capital resources of the petty bourgeois become, historically, increasingly inadequate to compete effectively, so that they take on increasingly a dependent status vis-a-vis larger companies.

During the period of time covered by the thesis, the number of small, independent firms on the B.C. Coast initially increased, and then notably declined. (The Interior decline came later). Some smaller operators became contractors, since contracting had become more profitable than retaining independent status. Other formerly independent businessmen would have to find work with others. These latter most clearly would have lost their class status as bourgeois, and become, perhaps reluctantly, members of the proletariat. Even the contractors would have become more

directly dependent on the firms for whom they contracted, although they would not be classed as employees of such firms.

In the context of the present analysis, this shift in class membership is in conformity with Marx's stated theoretical contradiction between the social nature of production, which brings under its control widening segments of a given population, and the private appropriation of the profits resulting from such production. That is, an increasing number of people, in absolute and relative terms, become dependent upon employment by others, rather than controlling their own, independent means of production. In turn, their continued welfare depends upon the ability of the employers to achieve profits. Marx's theory anticipates that eventually the contradiction will become so intense as to cause an anti-capitalist explosion. The thesis has identified the causes of a small segment of this trend.

#### Methodology: Concluding Commentary

The data of this thesis have been collected and organized in accordance with the principles of dialectical logic. This necessity results from the fact that these principles have to be consistently applied if they are to be judged for their methodological value in an empirical context. Further, however, these principles are immanent in reality itself as the forestry section of the thesis indicates. This is because the process of socio-economic development is created

as a result of the application of logic (reasoning) by individuals, who all try to relate the means available to them to whatever objectives (ends) that they hope to achieve. This effort occurs within the limitations of their consciousness and of other empirically-given circumstances.

A collective outcome of these individual efforts is the presence of a logic of the process of socio-economic development. The actions of individuals, groups, etc., impinge upon others, leading to counter-actions being taken, and so on into the future. Thus the principles of dialectical logic in the researcher's mind are a reflection of the dialectical nature of the socio-economic reality of which the researcher is a part. Not only that, but nothing contradicts the developmental principles of dialectical logic except an absolutely static situation (since the pace of development can range from very slow to very fast). Such a static situation cannot happen in the presence of life processes with the associated struggle for survival, so that there is an identity between the dialectical principles and the active content of reality.

However, the situation is different when the methodologies of determinism and relative voluntarism are compared. In this context, certain differences are apparent.

Dialectical logic as a form of deterministic systems theory is all-sided, e.g. it considers the evidential basis for the viewpoints of the different groups, etc., involved

in, say, the development process of B.C.'s forestry sector. By contrast, the relatively voluntarist writers, as typified by those cited, were much more one-sided in their presentations. It has been indicated also that further examination of relatively voluntarist writings, in terms of the all-sidedness of dialectical logic, has meant that these arguments foundered when confronted with the further information developed on the basis of dialectics. Thus Reid and Weaver, for example, omit an explanation of government's viewpoint, and the empirical basis for holding it.

Analysis based on dialectical logic is more practical, and better fitted for application in the real world, than analysis which is one-sided. The dialectical analyst can more accurately judge a situation and what objectives can realistically be achieved than an analysis, such as Drache's, which neglects for example to present the government's reasoning, and evidence, regarding the basis of its policies. (This is not to suggest, of course, that even by their own criteria, government's policies are necessarily always well-founded). Social action based on such analytical neglect is disadvantaged since it would not be adequately understood on what basis such demands were rejected, if they were, or what basis for compromise could be anticipated. However, some gains would be better than none, and if achieved, would provide an advance on the basis of which further efforts could be carried on. For example, Patricia

Marchak states that corporations support superficial changes in society, but not fundamental ones. She writes that to go beyond superficial changes, "Canadians would have to identify their own distinctive interests and learn how to act on them" (Marchak, 1979a:273). However the interests of Canadians are very diverse, and divisive, taken as a whole. What would it mean in practice for Canadians to take the control of technology away from the corporations: more insensitively-run Crown corporations? If she means a form of socialist organization, how is this to be defined, and which Canadians would benefit? Would these objectives be consistent with the direction of capitalist socio-economic development? The lack of precision reflected in Marchak's sentence above is sufficient to constitute a major initial obstacle to the general acceptance of her objectives due to the questions it would raise. However, clear answers also might lose support from some quarters for those objectives. Dialectics, as a form of systems analysis, would force a considerable clarification of the relationship between the objective course of socio-economic development, and the means and the objectives, that Marchak had in mind. This is the case even though her book did not specifically study this point, since the clarity could have been reflected by the nature of her comments. Thus the empirical nature of dialectical analysis applied to reality provides definite advantages over that of relatively voluntarist analysis.

There has been some movement in Canadian studies towards a more deterministic conceptualization of analysis, as exemplified by a recent Leo Panitch article (Panitch, 1981). The main difference in this regard, is in the treatment of empirically-given conditions constraining the actions of elites. Such constraints are treated not as conditions which decision-makers, for example, are criticized for failing to transcend, but as factors serving to explain an existing or historical state of socio-economic affairs. This represents a significant step in the direction towards improved analysis.

The advantages of dialectical logic as a form of systems analysis in contrast to Canadian political economy writing are indicated below. These advantages have been indicated, in another methodological context of which this writer does not approve, by Talcott Parsons.

Above all, the treatment of the society deliberately and systematically as a social system, taking care to consider every problem indicated by the conceptual scheme as being germane to the functioning of a complete social <socio-economic> system, constitutes an extremely powerful instrument of analysis. It permits us to mobilize and apply, in the proper place and order, the empirical and theoretical knowledge we possess. But just as important, it forces us to recognize the gaps in our knowledge, to locate the unsolved problems, and to state accurately just what these problems are, and what we have to know in order to solve them (Ritzer, 1975:205)

With Orthodox Marxism, practice is the criterion of truth and, in this context, the recognition of errors is es-

essential. That "Marxist" academics can produce unreliable material appears to make a statement about their class/occupational position, namely that they do not find it necessary that their efforts be directed towards Marx's goal of changing the world, rather than just interpreting it. Only the correct understanding of a situation coupled with the objectively existing opportunity and need to move towards this objective can serve Marx's goal. An emphasis on the reliability of research should be the hallmark of genuinely Marxist analysis. In the absence of this characteristic, there is little basis for the "Marxism" of Drache's "new" Canadian political economy to be taken as representing a serious attempt to alter - let alone understand - socio-economic reality. Who listens to such writers beyond the confines of the various universities? It may be wondered also, for example, why "Marxist" research is not designed to help the working class overcome its existing divisions. However, those Marxists motivated by the spirit and intent of Marx's analysis, will locate those tasks which are historically necessary to solve, in the same sense as B.C.'s sustained yield policy represented an historically necessary solution in its particular context. By way of contrast, Anderson comments of Western Marxism: the "first and most fundamental of its characteristics has been the structural divorce of this Marxism from political practice" (Anderson, 1976:29).

### Methodology - Applications

There are two main concerns regarding the application of the methodology of the thesis: one, the objective of bringing about change must be accepted as valid for socio-economic analysis; and two, there must be a willingness to go beyond the limitations of particular academic disciplines in studying actual situations. For example, an analytical contradiction is exemplified by the sociologist who attributes motives to the behaviour of elites after the fashion of Clement (1975) while ruling out counter-evidence from an elite perspective, on the grounds that such data goes beyond the purview of sociology.

The researcher, assuming the points above are accepted, need only consider the objectives for undertaking a particular study, and the subject matter in question. These points are essential since they provide focus and clarity for the research. Data collection is not necessarily a significant problem regarding the various groups involved in some given situation. To gain information it is probably only necessary to ask their representatives, visit government agencies, read newspapers, etc. Questions for further information will soon suggest themselves as the researcher counterbalances one viewpoint against another, trying to uncover the empirical basis for reconciling the viewpoints as representing different aspects of one situation; e.g. asking, "this group argued that this was the case, but why do

you think their argument is weak (good, etc.)"? Such questioning is usefully combined with other methods of research. The methodology would be useful for social impact studies, i.e. evaluating the impact on environments and communities of, say, new government-sponsored development projects, or in many other situations. This is aside from contexts more readily associated with Marxist analysis, while the methodology could be applied usefully in other fields of study besides sociology.

The present writer recently produced a report for the Community Council of Greater Victoria (Aylen, 1984). This concerned the impact on low-income tenants of the B.C. government's recent economic restraint program. This housing study began with comment as to the economic rationale for the government to abolish rent controls in B.C. Discussion then followed of the impact of rent deccontrol on low-income tenants, as well as the short-term prospects for the alleviation of their problems. This concerned the state of the economy as it affected government's spending power, the ability of builders to provide housing, and so on. Discussion was fairly brief on these points, but was important for understanding the prospects of tenants. The final half of the report was based on a survey of social service agencies, asking them to report on their perceptions of the problems involved in meeting the needs of low-income clients. This was done in the context of economic restraint policies and

the economy, as these affected both agencies and tenants. The report, then, delineated the interrelationships of existing problems and set some expectations for the agencies as to what the short-term future will bring. Given this context, they are aided in deciding upon their priorities in planning for the future.

Concerns such as those above hardly exhaust the possible applications of dialectical logic. Primarily, research based on this methodology is a matter of thinking in terms of concrete socio-economic problems and in terms of working out solutions based on the framework of existing conditions. One assumes that such concerns have a valid place in an academic environment.

Notes

1).

Contemporary Canadian political economy writing, as understood in the thesis, conforms to the account offered by D. Drache (Clement, and Drache, 1978:32ff). Broadly, it sees Canada as a staple-producing dependency (dependent first on Britain and then on the U.S.A.). It is nationalistic and would prefer an "independent" Canada. The studies of this new political economy are, it is alleged, mainly Marxist in character. To the extent that other schools of writing share the same methodological characteristics, they can be considered as subject to the methodological scrutiny of the present thesis.

The present writer, although strongly Marxian-influenced, dissociates himself from such "Marxism" as is indicated above, for reasons reflected in chapter six, and elsewhere, in the thesis.

2).

The thesis uses the methodology of Marxism-Leninism (Orthodox Marxism) common in the Soviet Union as compared to the West. Particularly, the Soviet approach is more sensitive to the perspective of government administration in consequence of Soviet governmental experience, than is commonly to be found among Western Marxists. Since the thesis is concerned largely with government administration and economic

policy the Soviet economic analysts cited have provided a desirable conceptual flexibility of perspective suited to the needs of the present thesis. They do this while retaining methodological consistency and a realistically empirical approach to analysis, as distinct from more theoretically oriented Western Marxists who also rarely adhere to this methodology. Theory, of course, does not necessarily correspond to reality.

The bridge between this thesis and the Soviet studies cited is that the thesis is intended to demonstrate the validity of determinist analysis by the detailed reconstruction of a series of events. This is required in the present case since determinist analysis is not accepted in the West. Soviet writers, who already accept determinist analysis, are freed to pursue other analytical concerns. For example, an historical approach is used to establish a "definite sequence of states" of being over time of the object of study.

The central problem here is not that of establishing a definite chain of causal dependencies determining changes in the object <as occurs in the thesis> but rather that of revealing the inner relationships within that object, its structural and functional characteristics (Blauberg, et. al., 1977:234-235).

The thesis represents an intermediate stage in determinist analysis, bridging the gap between a lack of belief in determinist analysis in the West and the more abstract, but conceptually determinist, analysis of structure and function of the object of study. In the case of the thesis, such ab-

straction would have served to provide an analytical "working model" of the operation of the interactive relationships of the forest industry (logging, sawmilling) with government over a given time period. Mechanisms such as capitalist competition, leading to monopolization, and timber shortages, determine the evolving, mutual adjustment of business-government relationships in the B.C. forestry sector. Without wishing to over-stress the analogy, the analysis is comparable to asking how the parts of a machine inter-relate so as to perpetuate, or undermine, its operation.

The thesis is written in opposition to the revision of Marxist-Leninist (Orthodox Marxist) methodology. This occurs in sociology by reason, in significant part at least, of the divorce of the "sociological" from the more strictly economic analysis occurring on the basis of Marx's methodological procedures. This divorce has an impact on the resulting sociological studies.

The characteristics of Western Marxism as understood by the present writer are presented by Anderson (1976) and Batalov (1975). Anderson focuses to a greater degree than does Batalov on an analysis of the writings of Western Marxists, while Batalov focuses more on their class origins as a means of understanding the character of what they write. The characterization by Anderson is compatible with Batalov's account.

3).

The Final Report of the 1956 Royal Commission was published in 1957, but is referred to as the 1956 Report for convenience.

4).

System, determinism, and logic are qualities of dialectical logic. However, in some circumstances it is preferable to emphasize for example, the deterministic systems quality than the quality of logic. In particular this is useful given the division in the West between logic as a branch of study, and systems analysis. The first has more philosophical connotations as compared to applied or practical concerns (such as the control of military systems). The logic of dialectics as it occurs in this study shares in both the aspects of logic and systems analysis. However, given the understanding in the West, it is desirable to associate dialectical logic with a meaning most closely associated with its practical (applied) use in the thesis.

5).

Various other points may be briefly made. A. From the perspective of the individual, determinism comes into play with the establishment of an objective to be achieved which occurs in some specific set of circumstances. With respect to the particular choice of goals, this may be said to depend also on the individual's socialization process and life

history as these affect preferences and desires in the present. As the individual exhibits behaviour, this produces interaction and feedback, tending to result in the reinforcement or modification of existing behaviour patterns. This at least indicates the general approach deterministic analysis would take regarding individual behaviour.

It may be objected to the thesis that only one basic decision is deterministically studied, namely the adoption of sustained yield policy. Yet millions of decisions are made, and in each case people make choices as to their courses of action. However, choice is forced on the decision-maker. This results from an inadequate supply of information available to the decision-maker as regards how best to achieve his objectives. If the best course of action to a desired goal is known already, what is the purpose of looking about for "choices"? B. In regard to determinist explanation, the intent is to show sufficient cause for something to occur. This may mean that not everything possible has been included. Further, research needs to be amended/updated as conditions change over time. Thus an alert person known to be careful about money would presumably avoid actions that would result in unnecessary financial penalties, e.g. by reason, say, of court action in consequence of unpaid debts. It might be that the person was also status conscious, and a court action would impair his or her standing. However the first would constitute sufficient cause for his

actions, meaning that the second would not strictly require mention in terms of the analysis, although it could be stated. This assumes, of course, that other factors would not serve to invalidate this conclusion in the given case, i.e. that the analysis would be empirically correct. In analytical terms, then, it is possible that an over-sufficiency of data may exist in order to explain a particular outcome or event. The outcome is not the less determined for that. C. Determinism, when applied to a class of events, is probabilistic as regards specific instances of the class. D. If determinism is insufficient as a mode of explanation, it is anticipated that this will become apparent in the course of the analysis itself. E. Statements, especially in the forestry chapters of the thesis, are comparative. This means that one statement doesn't exclude others (or other comparisons). Thus the meaning of a statement depends on the particular context within which it occurs. Further, this means that conclusions cannot be drawn, except tentatively at best, regarding material that isn't directly part of the development process being explained in the thesis.

A determinist explanation of the development of business-government relations in the case of sustained yield cannot, for example, be taken as a denial that groups besides business and government exist. Insofar as these other groups might affect business-government relations, this can only be taken into account in this thesis to the extent that

their actions are implicitly present in the pattern of business-government interaction recorded. Conceivably, thus, union demands might have put up wages, and thus lowered the threshold of business sensitivity to the costs of adopting sustained yield, and hence condition business reaction to government proposals. This does not alter the pattern of business-government interaction as it actually took place, which is the concern of the thesis. F. The various theoretical assertions made pertaining to dialectic logic constitute premises upon which analysis is built. Reconciliation of data depends on the hierarchy of cause and effect as this operates in any actual situation, e.g. on estimating the relative degree of influence exerted, from trivial to major, by any factor in any given situation. In line with this circumstance, statements based on a materialist dialectic logic refer only to those empirical conditions which conform to the statement. The assertion, "Businesses succeed", accordingly refers to those firms that do succeed by some standard. "Businesses fail" refers only to those that fail, regardless of those that succeed. Reference is further only for the time period in which success or failure occurs for the specific firms involved. Reconciliation of the two assertions - that "Businesses succeed" and "Businesses fail" - would be in terms of the numerical distribution of success and failure among the total number of firms concerned. Conclusions may be drawn only insofar as they first constitute

premises, regardless of whether or not the premises are directly stated or implied. Empirical analysis is thus developed in accordance with the premises and the method of dialectical logic. However dialectical logic serves to direct attention to inadequacies of explanation since it compels an explanation as to why each step of the development process necessarily (logically and empirically) occurs as it does. Thus readers should not assume that although the thesis contains a great deal of empirical material, it is empirical in precisely the conventional sense of "hypothesis testing".

G. Since the thesis is orthodox Marxist in methodology and approach, some comment on its alleged dogmatic character should be made. A potential danger of dialectic analysis of the development process is that the researcher might tend to substitute his or her own vision of what the world is moving towards for the actual course of development. The present writer has been at pains to closely document the the analysis as a means of circumventing this problem. The approach taken here is "orthodox Marxist" in the sense of methodology. Lukacs's comments are important in this regard.

Let us assume for the sake of argument that recent research had disproved once and for all every one of Marx's individual theses. <For argument's sake the information available to Marx could have been inaccurate, thus yielding false conclusions>. Even if this were to be proved, every serious 'orthodox' Marxist would still be able to accept all such modern findings without reservation and hence dismiss all of Marx's theses in toto - without having to renounce his orthodoxy for a single moment. Orthodox Marxism, therefore does not imply the uncritical acceptance of the results of Marx's

investigations. It is not the... exegesis of a 'sacred' book. On the contrary, orthodoxy refers exclusively to method (Lukacs, 1971:1).

Violation of these methodological principles would weaken the analysis, although the reader will have to infer this fact from the forestry section of the thesis.

6).

The reader should not assume that because of the presence of conditional statements that this passage represents a concession to voluntarism. The statements are only those of theoretical possibilities, not of determined outcomes in specific cases.

7).

Miliband's statement, to repeat, is as follows: "...the fact that governments accept as beyond question the capitalist context in which they operate is of absolutely fundamental importance in shaping their attitudes, policies, and actions in regard to specific issues and problems..." (Miliband 1973:68).

A complex set of questions are raised by this assertion. First, there is the claim that the beliefs of people shape their actions. This, however, would obviously apply to anyone in the daily activities of their lives. (The statement, "I believe that Shopwise is a good place to make my purchases", coincides with the fact of buying from Shopwise). There is no reason to assume that government offi-

cials are exempt from this characteristic human activity. As such, Miliband's claim in this respect is true, if also trite.

Miliband goes on, however, to assert that such acceptance of the capitalist context is "of absolutely fundamental importance" with regard to the actions of government officials and their policies. Miliband fails to provide evidence to substantiate his claim. His book focuses on the beliefs of government officials while accepting also that constraints affect their actions. The assertion of "fundamental importance" is, however, a relative statement, e.g. fundamental in relation to what? For example, what would have been the relative degrees of contribution to policy action of beliefs as against objective economic problems in combating the 1929 depression? It is quite possible that government officials had to modify their earlier opinions of the appropriate role of government in the economy in order to cope with the economic and social problems which existed. This sort of comparative analysis is not undertaken by Miliband. It is also unacceptable to state that beliefs and economic forces are of importance, since this may imply that they are of equal importance. In any case, the required evidence is not provided, perhaps because Miliband is unaware of the issues not being discussed. This is evidenced by Miliband's reference to his statement as "fact", as being substantiated. In truth, he has not constructed the problem to

be analysed in such a way that valid conclusions can be drawn.

One may ask as to the conditions under which the "capitalist context" would be accepted as being "beyond question". There were doubts during the 1929 depression. Current international factors, such as Soviet power and wars of liberation, etc., suggest that it might be rather difficult to take the international capitalist context as "beyond question". If the third world is taken as the frontline defence of the capitalist homeland, doubts of the "capitalist context" could be fairly widespread even if this has not significantly eroded confidence at home. That is, the question of a threat to capitalism is acknowledged, and therefore the security of capitalism cannot be "beyond question".

The question as to the relative importance of causative factors cannot be by-passed in causal explanation. The result of such an effort would be a shopping list of causative factors, each undifferentiated from the others in terms of their importance as causative factors. If this situation were to be upheld in the social sciences, these fields of study would be deprived of almost all of their explanatory value.

In the above context, what must be questioned is the logical relationship between Miliband's statement concerning the "fundamental" importance of a commitment to the "capitalist context" by government officials and the following, of which Miliband approves also:

Industrial capitalism is an intensely coercive form of organisation...This is less and less the result of voluntary decisions by 'bad' men or 'good' men and more and more an impersonal web of coercions dictated by the need to 'keep the system running' (Miliband, 1973:68).

Miliband believes that this is increasingly the case. Which of these two views may be considered of "absolutely fundamental importance" in determining policies and actions in "regard to specific issues and problems?" The answer to this problem itself would oblige Miliband to redefine his study, and what it purports to explain.

There is, however, a further question worth a brief mention, namely the question of research priorities. The above is concerned with what might be considered a quantitative approach to analysis, i.e. with substantiating the degrees of relative importance of various causative factors in bringing about some given situation. How about the qualitative aspect? The question as to how something affects something else, rather than how important it is as a causal factor, is secondary to the consideration of importance. This is due to the fact that researchers normally intend to look for important, rather than unimportant, causal factors. In actual research, of course, both the questions of "how" and also of "importance" are addressed. How something brings about its affect on the object can be answered without regard to the question as to its causal importance. This indicates the priority to be given to the question of importance

- unless the researcher is content to accept trivia as a basic ingredient of his or her work. The question of quality is implied by the nature of the causal impact itself, e.g. is it harsh, mild, or whatever? It would be logically and empirically impossible to have a causal impact devoid of at least some potentially identifiable quality or qualities.

The context with which Miliband is actually concerned is that capitalist governments, even those supposedly radical, do not go beyond the constraints that operate on them. The premise that they could do so is problematic. According to Miliband, the policy bias favouring capitalism in capitalist societies has great significance, "for the resolution or at least alleviation of a vast range of economic and social problems requires precisely that governments should be willing to act in 'fundamental opposition' to these <capitalist> interests" (Miliband, 1973:71). Is the need implied from Miliband's anti-capitalist position that capitalist governments should bring about what presumably would be de facto socialism, in consequence of solving these social and economic problems? Governments in fact oppose capitalist interests from time to time and lend support to other interests (e.g. to workers, say). Presumably, however, this does not constitute "fundamental opposition".

Miliband is greatly concerned that capitalist governments devise policies which further the operations of the capitalist economic system. He does not think it helpful to

provide a working definition of socialism, etc. This makes it difficult for the reader to judge what would constitute actions leading to socialism, and so the validity of Miliband's analysis. This presumes that the need for "fundamental opposition" by capitalist governments against capitalist interests in order to solve various social and economic problems has more than just a superficial meaning, but has implications for the transition of capitalism into socialism. Even Miliband should know that "fundamental opposition", because of the meaning of "fundamental", would be directed at the foundations of capitalist interests, their essential characteristics as capitalist interests. Perhaps capitalist governments should be consciously introducing communism? Miliband does not explain this problem for the reader.

Miliband's position is relatively voluntarist when he writes that government should go beyond existing constraints. A problem exists in this regard: by what means is it possible to objectively determine the limit of existing constraints? In the absence of such delimitations the result will be arbitrary claims that governments could have achieved more than they actually did.

Further, how are the terms of the problem to be defined? For example, if it is to be claimed that the actual holders of government power could have done more in some direction than was actually done (if anything), would the pos-

sibility be considered that this was not the government's objective? If so, it would then be necessary to investigate the processes whereby one policy was rejected and another accepted. This however assumes that what would be Miliband's preferences were even considered as alternative policies. If his preferences were not even considered, the constraints operating against them would appear to be rather complete. If the objectives of government are taken as a given, and not a variable (i.e. that they could have gone further than they did), then it appears that Miliband's claim would be excluded from consideration. He does not explain why it is legitimate analysis in this context to make this analytical shift, since it appears crucial in determining the nature of the results at which analysis will arrive. Miliband, in making this shift from taking government objectives as a given to that of taking them as a variable, ignores all those conditions which determined that the particular government was initially elected. He further ignores those determining which political outlooks and policies would thus be predominantly represented in government actions. Are these empirically-given conditions also to be turned into variables by Miliband? If so, social "science" would become fiction.

8).

The writer has been able to locate sufficient data to present a deterministic interpretation of the development

process under study. Alternative interpretations of the data were considered and rejected in the process of compiling the analysis which occurs in the forestry chapters of the thesis.

Only the decline of small firms and the course of development with regard to sustained yield policy is subject to determinist analysis. Other data, however, while they have a function in explanation are not subject to determinist analysis since to do so would lead to a continuing regression away from the subject of intended analysis in the thesis. Thus the role of government regulation of social and economic affairs in general formed part of government's interest regarding sustained yield policy. While this is mentioned, the writer does not give a determinist explanation of the origin of government's role in this regard outside the forestry sector.

The perspectives of the disciplines of social psychology and psychology are not incorporated in the thesis because the data are both unavailable and beyond the scope of the thesis.

9).

The first table provides much of the information from which Table 1 is derived. Explanations follow the second table below.

Comparison of the Cost Structures of  
Sawmills on the B.C. Coast, 1944-1947.

Productive Capacities of Sawmills, in decimals

(millions of board feet per annum of lumber produced)

<u>Costs</u>	<u>.5-.99</u>	<u>1-4.99</u>	<u>5-14.99</u>	<u>15-19.99</u>	<u>20 up</u>
Salaries	1862	5326	16813	19530	60218
Wages	12016	37254	92616	175198	586592
Logs, etc.	63295	163764	258779	449472	1228723
Fuel, etc.	771	1667	5941	9773	9138
Average number of Wage Earners:	7.98	21.56	48.40	90.85	290.55
Lumber cut (in '000 of feet)	705.1	2529.3	8742.9	16189.2	49174.1
Lumber value \$:	28064	105374	404029	763304	2357463
All products \$:	87706	244139	497164	913249	2635196
Average wage:	1505	1727	1913	1928	2018
Ratio: Lumber/ all products \$:	.319	.433	.572	.835	.894
Share of total cut shown:	.009	.032	.113	.209	.635
Ratio: costs/					

\$ output totals: .888      .852      .752      .716      .715

The number of firms used in the calculations are as follows:

Number of Firms in Production Groups

<u>Year</u>	<u>Groups</u>				
	<u>.5-.99</u>	<u>1-4.99</u>	<u>5-14.99</u>	<u>15-19.99</u>	<u>20 up</u>
1944	9	38	25	7	27
1945	17	45	30	10	21
1946	23	49	33	10	21
1947	34	68	32	6	29

(Source: D.B.S. 35-204, years 1944-1947).

The data refers to the B.C. Coastal region, as does the data in the body of the thesis.

Data for the Coastal sawmilling industry were published in an appropriate form during the years 1944-1947 (D.B.S., 1944-1947). The D.B.S. publication, The Lumber Industry, provides information about the productive capacities of sawmills, and these yield a fairly suggestive indication of the cost structure of such firms. The very smallest, up to half a million feet per annum production, are not included here. The data presented here

represent an average for the four year period in order to cope with annual fluctuations in costs, number of mills, output variations, and so on. Comparison will be made mainly between the two largest production categories of firms, followed by comparison of the largest category with the smaller ones. The first table above represents, as it were, idealised firms of different productive capacities, in millions of feet per annum output of lumber. With respect to the comparison of costs, reference can only be in respect to those for which data was given. Values have been given without decimals for monetary values for easier presentation.

The term "wage earners" refers to those employed by sawmills and paid wages, rather than salaries. This, however, has little significance for the cost comparisons actually made since the application of the term is uniform, and is taken from the D.B.S. report itself.

The average number of wage earners is arrived at by taking the four-year total of such employees in a given productive category of firm, and then dividing this total by the total firms over the four year period in this productive category.

The difference between the dollar value of lumber cut, as against that of all products produced, implies obviously that sawmills turn out material other than lumber which has saleable value. This would include

selling waste materials for heating, producing shingles, etc.

Logs, etc. includes the various raw and other materials used in sawmills. Fuel, etc., includes the cost of electricity. "Share of total cut" indicates the share of total lumber output produced by the given category of firm size shown in relation to the total output of all firms shown, where total category output has been divided by the number of firms in that category. Four-year averages are used.

"Ratio: lumber/all products \$:" refers to the ratio, based on dollars, of the value of all lumber products produced by this idealized firm, to the total dollar value of all of its various products.

"Ratio: all costs/\$ value all output" refers to the ratio of the costs of wages, salaries, logs and raw materials, and fuel and electricity, to the dollar value of all output produced by this idealized firm. The data is averaged over the period, 1944-1947.

The "idealized firm" results from averaging the data for each category of firm size over a four-year period (1944-1947), and dividing each of these results by the average number of firms in the appropriate size category for the same period. Thus average total wages, etc. would be calculated, and this average would be divided by the figure for the average number of firms to

obtain the wage figure for the idealized firm. A similar process holds for other data.

10).

The cost structure analysis does not include depreciation costs. This is due to the fact that such data was not collected for the years under consideration. However two levels of comment are possible.

The first is that depreciation costs are not relevant to the comparison made. The analysis merely states that if larger firms expend proportionately less on circulating capital than smaller firms, then a proportionate saving has been made. If, say, \$400,000 a year less is spent by the larger firm, then in the absence of this saving it would have to spend \$400,000 more on circulating capital than it actually does. To compensate for this assumed lack of advantage, it is likely that the larger firm would have to divert funds from other intended purposes.

Given the presence of an existing proportionate saving on circulating capital - which the tabled data indicates - what happens to the financial resources involved? Assuming that the funds are used to help purchase capital equipment, depreciation charges will arise with respect to wear and tear on such equipment. It may

be further assumed that such equipment is intended to benefit the firm's competitive position in some way, i.e. to be productive of further benefits. It does not seem to follow, however, that the firm is without benefit from its proportional saving on circulation capital simply because it employs the funds saved for other purposes. If however, such investments were anticipated to produce higher long-term costs than benefits, i.e. costs exceeding the savings on circulating capital, for example, it is not clear why the investments would be made. Such a concept, however, appears implied by the suggestion that depreciation costs from investment could cancel out the advantages from a proportionate savings in the costs of circulating capital. Rather, a dynamic reinforcement of benefits, including that from increased productivity, may be expected to accrue from careful investments.

This is suggested by a cost estimate offered to the Pearse Commission on B.C. forestry as part of an economic background paper by Quadra Economic Consultants. They compared, as of the mid-1970's, the capital investment required for two mills: one requiring a \$6 million capital investment, and producing 50 million board feet of lumber per year, and the other which cost \$9 million with twice the output. This, it may be noted, raises some question concerning Marx's claim of an increasing

organic composition of capital, at least as regards saw-milling. This is because an increased production involves costs which are less than proportionate to the increases in output. The affect on manpower levels, however, is not straightforward as implied by this change.

Further, however, the larger mill would recover its extra capital investment costs within about 7 years, based on the estimates Quadra Economic Consultants present. Thus costs, including depreciation, amount to \$112 per thousand feet of output for the smaller firm producing 50 million board feet of lumber per year, as against a hundred million board feet per annum at \$100 per thousand feet.

11).

The statistic is relevant on the assumption that if that is the level of expenditure on research and development after sustained yield was introduced - since this policy increased the responsibility of business in the field of forestry - then research and development would have been at lower levels in all probability in the 1940's and earlier when business had no responsibility for sustained yield.

12).

The Proceedings to the 1945 Royal Commission contain a number of pitfalls regarding page references. Vol. 1 is paged consecutively only for the duration of the day's hearings. Vol. 2 onwards is consecutively paged up to Vol. 19, when the numbering begins again. Pages normally are numbered at three different points down the page, while bracketed page numbers do not refer to the same pages as unbracketed page numbers even if the number is the same. It is desirable to check a reference both by the name of the witness cited as well as the page number.

13).

A broader context in which to view this would be to state that as world population and markets expand with capitalist development, so also there is increased pressure on resource use and increased holdings become necessary to firms to protect their position.

14).

The development process is both determined by, and determining of, certain 'laws' or patterns. Thus such 'laws' may vary both by time period, and across different development processes.

15).

Some writers have attacked the Forest Service as being overly conservationist and ideological in that the Department exaggerated B.C.'s dependence on the forests. This attack would be more convincing if its proponents demonstrated a viable alternative.

16) .

The text has "we" instead of "who".

17) .

Further supporting evidence of the variability of business conditions is provided at the end of chapter two.

18) .

The final number, in the case of references 1960a, b, and c, refers to the page number of a transcript which accompanies a tape recording. The tape number is given in the bibliography.

19) .

Partial forms of compensation may exist from government's view such as keeping employment levels higher than they would otherwise have been. This would reduce payment levels for unemployment. Business apparently, sees in this one reason to increase productivity and reduce dependence on labour.

20).

However the Interior was less adapted to the Farm Management Licence tenure. This was reportedly due to the poorer climate, and consequent slower rate of tree growth, in the Interior (Transcript, 1956:5345-5346).

21).

In the case of their mill, a chipper and barker (to remove bark from logs) together came to \$350,000 and installation required further costs (Transcript, 1956:13069).

22).

However uncertain log supplies would also adversely affect the ability to supply customers, while further, without raw materials the mill cannot operate.

23).

The concept of independent small firms has undergone historical changes to the present time. First, "independent" referred to the control of their own resources by firms large or small as used in the thesis, while the term "contracting" referred to those firms working on resources controlled by another firm. However the journal of the Central Interior Logging Association

for November 1983-January 1984 refers to "independent contractors" (Interlog, p.9). Similarly the concept of "small" is historically relative, small firms existing today being possibly much larger than "large" firms at the turn of the century.

24).

Reid and Weaver's account is little better when it comes to dealing with analysis of more properly economic data, e.g. they get much of this wrong as well. Discussion of this material was omitted so as not to bore the reader. Passing comments in earlier chapters of the present study, in particular chapter 4, provide further evidence against their account.

25).

The possibility that liberalism (individualism), rather than academic specialisation with its various associated characteristics, is responsible for the academic situation observed by the present writer can be dismissed.

Writers from various disciplines coexist within the same national cultures. Nagle (1970) can be compared with Reid and Weaver (1974). Nagle may have been an American - he did his Ph.d at Yale - but certainly U.S. culture reflects individualism (as well as its then lib-

eral establishment). Both Nagle and Reid and Weaver wrote about the same number of pages related to the 1945 Royal Commission. However Nagle's summary of the issues is excellent. By contrast, Reid and Weaver get almost everything wrong, including material not directly cited in the present thesis. Since both Nagle and Reid and Weaver originate from individualistic cultures, it is hard to see how this cultural individualism explains the academic differences. Although the case of Reid and Weaver may be extreme in terms of the unreliability of their account, nonetheless this pattern of unreliability appears to be a characteristic of a certain range of writing, as this chapter may serve to suggest.

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Glossary of Names and TermsNames

Gilmour, J.D.

He was a professional forester, and had been in the B.C. Forest Service from 1912-1916. Since then, he had been engaged in private forestry in B.C. and elsewhere. He gained employment with MacMillan in 1944, but had left his service by 1947. He presented a plan for sustained yield at the 1945 Royal Commission, which is examined in chapter four of the thesis.

MacMillan, H.R.

Born in 1885, he was a prominent businessman, involved particularly in forestry. He obtained a Master of Forestry degree from Yale, and was B.C.'s first Chief Forester from 1912-1915. During World War II he was a member of the War-time Regulations Board. At the 1945 Royal Commission hearings he presented, especially through his forester, J.D. Gilmour, a detailed plan for sustained yield forestry in B.C.

Orchard, C.D.

He was the civil servant in charge of carrying out B.C.'s sustained yield policy. He was a trained forester, having a Master of Forestry degree from the University of New Brunswick. By 1944, he had already been in the B.C. For-

est Service for 24 years, and had become Chief Forester in 1941. He was further promoted to Deputy Minister in 1945 a sign, among many others, that the government took sustained yield policy seriously.

Sloan, McG.

Born in 1898, he was called to the Bar in 1921, and was in legal practice until 1933. He had been elected to the B.C. Legislature, and was B.C.'s Attorney-General from 1933 to 1937. He was the Commissioner of two Royal Commissions on B.C. forestry, which reported in 1945 and 1956 respectively. As such, it was his responsibility to ensure that the tasks of the Commissions were carried out.

#### Terms

Board Feet.

This term refers to the square feet of board, one inch thick, that a sawmill can cut from a log.

Forest (bad error)  
~~Farm~~ Management Licence.

These licences could be applied for by any size of firm. Successful applicants would then be responsible for carrying on sustained yield on what became land under their control, but not ownership. Government land was contributed to private holdings of timberland so as to ensure that the company in question would be enabled to operate in perpetuity at a given capacity of output. In practice, firms did not

always receive their full timber requirements from the F.M.L.

#### Public Working Circles.

These were later renamed sustained yield units, and were established primarily for the benefit of the smaller operators who did not wish, or could not afford, to carry on sustained yield. Here government was responsible for developing an area and for replanting cut timberland. There were restrictions on the rate of timber cuts according to the estimated capacity of the land to regenerate timber growth.

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A Deterministic Analysis of Development.

Author



Signature

Peter G. Ayles

April 22, 1984