

The Pearse Commission and the Industrial Organization of the British Columbia Forest Industry*

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The Royal Commission on Forest Resources, chaired by Dr. Peter Pearse, submitted its final report, *Timber Rights and Forest Policy in British Columbia*, in September of 1976. Twenty-one months later the Legislative Assembly of British Columbia approved Bill 14, which is simply titled the Forest Act.¹ This legislation, which repealed its predecessor, the Forest Act of 1912, sets the terms under which harvesting rights to Crown timber are granted. In British Columbia, where the Crown holds title to 95 percent of the forest land and where the forestry sector is of pre-eminent economic importance (it accounts directly for about 9 percent of the employed labour force and 14 percent of the Gross Provincial Product), the Act is of some consequence for it defines public policy towards the province's most important sector.

In British Columbia major changes in forest policy have traditionally been preceded by a Royal Commission investigation into the state of the sector. The first, chaired by F. J. Fulton, reported in 1910 and recommended policies to curb the speculative timber staking which characterized the industry at the time. On the basis of a crude inventory the Fulton Commission concluded that sufficient timber had been alienated to satisfy the industry's requirements for some time and therefore advised against further long-term allocations. The advice was incorporated into provincial forest policy and for the next thirty years demands for wood were met with short-term timber sales.

By the early 1940s this system was proving inadequate. The industry had expanded markedly and in the process had exhausted a significant

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¹ Contemporaneously Bill 12, the Ministry of Forests Act, was passed. This legislation established and defined the functions of a new, separate Ministry of Forests, provided for some reorganization of the Forest Service and required regular reporting on the status of forest resources. These administrative measures should facilitate implementation of the Forest Act.

proportion of the original allocations. Moreover, the size of manufacturing installations had grown considerably and required larger, more secure supplies of the raw material. Concomitantly, interest had been aroused in European forest management systems based upon the principle of sustained yield.

These dual concerns of an inadequate, insecure timber supply and of deficient resource management were addressed by the second Royal Commission, headed by G. Sloan, which reported in 1945. The Sloan Commission recommended the creation of two types of management units, the Private Working Circle and the Public Working Circle. By means of the Private Working Circle individual enterprises would be granted long-term harvesting rights over extensive forest areas in return for a commitment by these enterprises to practise sustained yield management on their holdings. Smaller operators who were unwilling or unable to assume management responsibilities would have access to the Public Working Circles wherein public agencies would perform the management duties.

These recommendations were acted upon and the resulting legislation had far-reaching impacts on the industry. Within a short period of time the bulk of the provincial forest was brought under sustained yield management, performed by either the public or private sector. By 1975 nearly 80 percent of the annual harvest originated from sustained yield units. These Private Working Circles went far in assuaging the demands of the larger industrial enterprises for security of raw material supply.

Sloan wisely advised that these policy innovations be reviewed after a decade to determine their efficacy. This was done by a third Royal Commission, again chaired by Sloan, which reported in 1956. This Commission, with some minor exceptions, approved of the manner in which the allocation policy had developed.

Now, some twenty years later, the fourth Royal Commission has reported and its influence on forest policy is emerging. The purpose of this paper is to analyze the Pearse Report, note its effects on legislation, and, in so doing, determine whether it is to be classed with the first two Royal Commissions, which resulted in significant alterations of forest policy, or with the second Sloan Commission, which essentially endorsed existing policy.

Pearse was given two broad charges. The first was to examine the current state of timber allocation in the province and in so doing to determine:

1. The extent to which the forest resources of the Province are committed

- to use and to users under all tenure arrangements, including Crown grants;
2. The procedures for allocating rights under these various arrangements;
 3. The provisions for conservation, management, utilization, protection and development of the forest resources allocated;
 4. The taxes, royalties, rentals and other charges levied upon forest land, timber and primary forest products, excepting the general form of the stumpage appraisal system;
 5. The implications of these tenure arrangements for the structure of the forest industry, having regard to its pattern of integration, concentration, ownership and control; and for the structures of markets for forest products produced in the Province.²

The Commission's second broad charge was to formulate policy recommendations which would ensure that:

1. The full contribution of the forest resources to the economic and social welfare of British Columbians is realized in terms of the diverse commercial and environmental benefits they potentially may generate;
2. The various public levies on, and the charges associated with the acquisition and retention of, Crown timber reflect the full value of the resources made available for harvesting, after fair and reasonable allowance for the costs, harvesting, forest development and profits; and that the various forms of public revenues derived from Crown granted and Crown forest resources are systematic, equitable and consistent with general taxation policy in the Province;
3. The marketing arrangements for timber products permit their full value to be realized and are consistent with an efficient economic structure;
4. The regulation of exports of forest products serves the best economic interest of the Province;
5. The efficiency and vigor of the forest industry is maintained and that domestic participation in its ownership and control is adequate;
6. Proper provisions are made for the efficient management, protection and enhancement of the forest resources and for the regulation of harvesting and utilization practices.³

The first set of charges, while formidable, was straightforward. The Commission was directed to construct a comprehensive description of the

² Peter H. Pearse, *Timber Rights and Forests Policy in British Columbia: Report of the Royal Commission on Forest Resources* (Victoria: Queen's Printer, 1976), pp. xi-xii.

³ *Ibid.*, p. xii.

provincial system of timber allocation, which was to include such basic information as: who has the harvesting rights, how they got them, what resource management and financial responsibilities are attached to each, and what effects these allocation arrangements have had on the industrial organization of the forestry sector.

However, the second set of instructions which call for policy recommendations is replete with concepts which have no precise meaning. Notions such as "full contribution . . . to economic and social welfare," "commercial and Environmental benefits," "systematic, equitable and consistent" tax policies, "full value," "best economic interest of the Province" and "efficiency and vigor of the forest industry" are difficult to define and difficult or impossible to measure. Little wonder then that the Commission's Report comprehends both a systematic view of the entire resource allocation system and also ranges over subjects from the Accelerated Reforestation Fund to zone foresters.

In fact, so extensive was the Report that the Commissioner eschewed summarizing his findings, justifying his omission with the argument that presented out of context they would hardly be comprehensible. While this is true for many of the specific, complex issues, some general statements can be made. With respect to resource management the commitment to sustained yield management was reaffirmed, although fundamental changes to the system of inventorying, determination of harvesting rates and public administration were recommended. Most importantly, the Commission found that a large proportion of both harvesting rights and manufacturing capacity had come to be controlled by a small number of enterprises. Despite this control the dominant firms, indeed the entire sector, were earning subnormal returns.

Concentration of control had become an extremely contentious issue. Many observers and industry participants viewed the trend with alarm and hoped that the Commission would recommend policies to reverse or arrest the evolution of the industrial structure into fewer and larger corporations. On the other hand there were those who argued that this evolution was normal and desirable and that in any case the financial state of the sector was so weak that any tampering with the structure would prove disastrous. These two issues, high concentration and poor financial performance, strongly influenced the Commission's recommendations and therefore deserve elaboration. Unfortunately this will require a rather lengthy discussion of the provincial timber allocation system.

CONCENTRATION AND THE STATE OF THE SECTOR

Concentration of Harvesting Rights

The single most impressive accomplishment of the Pearse Commission (and the Task Force on Crown Timber Disposal which preceded it) was the cataloguing of the multiple forms of timber harvesting rights (commonly called the tenure system) and the determination of the holdings of these rights by individual forest product firms. The tenure system is extremely complex, having multiple types of forest tenure with significant variations in the contractual arrangements of individual tenures of the same general type. While harvesting rights could conceivably be grouped by a number of principal characteristics (including physical location, taxes, stumpage and royalties), the most important distinction is between the regulated and unregulated harvesting rights, where "regulated" means committed to sustained yield management. The unregulated harvest originates primarily on Crown granted lands and Old Temporary Tenures (OTTs), while the most important regulated tenures are the Tree Farm Licences and rights within the Public Sustained Yield Units (PSYUs).⁴

Forest products firms regard wood harvested under these different tenure arrangements as being strongly differentiated even though the timber itself may be physically identical. This is because the tenure arrangements differ in terms of security, harvesting regulations, and the public charges the timber will bear. It is therefore more meaningful to discuss concentration of the holding of each tenure type rather than to simply review aggregate harvesting rights.

Crown Granted Lands

Up to the end of the nineteenth century the principal method of allocating timber was through the granting of the fee simple interest in land. These Crown grants were made to induce settlement and to stimulate economic development, particularly construction of railroads. While the policy of alienating timber lands was short-lived, it is responsible for putting some of the finest timber stands into private hands.

As of 1973, nearly five million acres of Crown granted land remained outside of sustained yield units. In terms of acreage, this represents a little less than 4 percent of the provincial forest although, as indicated in Table 1, these lands were the source of 9.4 percent of the 1974 harvest.

⁴ The system is in reality much more complex because some Crown granted lands and OTTs have been included in TFLs and Taxation Tree Farms, both of which are "regulated."

TABLE 1
*Area, Harvest and Concentration of Harvesting
 Rights by Tenure Categories*

<i>Tenure Type</i>	<i>% of Provincial Forest (acrage)</i>	<i>% of Provincial Harvest (1973)</i>	<i>% of this tenure form controlled by largest 4 firms⁴</i>	<i>% of this tenure form controlled by largest 10 firms</i>
Crown Grant ¹	3.7	9.4	67.4 ²	81.5 ²
OTT ¹	0.6	9.0	62.8 ²	85.2 ²
TFL	7.8	26.3	70.9 ³	96.5 ³
PSYU	59.4	50.2	26.9 ³	38.8 ³
Other	28.5	5.1		
Total	100.0	100.0	33.5 ⁵	53.3 ⁵

¹unregulated

²in terms of acreage

³in terms of allowable annual cut

⁴1975

⁵in terms of actual harvest, 1975

SOURCE: Task Force on Crown Timber Disposal (1974), *Crown Charges for Early Timber Rights* (Victoria: B.C. Forest Service) and P. Pearse (1976), *Timber Rights and Forest Policy in British Columbia* (Victoria: Queen's Printer)

Clearly they are some of the most productive and most easily exploited timber lands in the province. Rights to harvest on private lands are obviously secure — as long as the institution of private property exists owners will enjoy exclusive use of these forests.

It is difficult to calculate total public levies on these lands with precision because royalties, if imposed at all, vary according to date of alienation, and property taxes vary according to locale. Even though forest products firms have argued that in specific instances taxes and royalties on Crown granted lands exceed stumpage charges for timber cut in public forests, it is generally believed that, in aggregate, wood taken from private lands bears a relatively moderate fiscal burden. More importantly, firms operating on private lands need not comply with costly Forest Service management regulations.

While the holding of Crown granted land is an extremely desirable method by which to acquire access to wood fibre, few firms enjoy signifi-

cant holding of such lands. As of 1975, four firms controlled two-thirds, and ten firms accounted for 82 percent of the unregulated Crown granted lands (see table 1). This finding was unsurprising as a high concentration of ownership has existed for several decades.⁵

Old Temporary Tenures (OTT)

The OTTs were created as an alternative to Crown grants when the government moved to a policy of alienating only harvesting rights and not forest lands. The OTTs refer to five tenure forms: Timber Leases, Pulp Leases, Timber Licences, Pulp Licences and Timber Berths.

As with Crown granted lands, the government encouraged firms to commit their OTTs to sustained yield programs. By 1973 only 833,000 acres or 0.6 percent of the provincial forest remained in unregulated OTTs. However, the area measure belies the current importance of these productive stands for in 1973 they accounted for 9 percent of the provincial harvest (see table 1).

The OTTs are similar to the Crown grants in terms of desirability. Although subject to expiry dates, all are renewable and heretofore renewal has been nearly automatic. Moreover, some bear extremely long terms going well into the next century. Public levies on timber taken from OTTs vary as with the Crown grants and they also enjoy immunity from costly Forest Service management regulations. A major distinction between the OTTs and the Crown grants is that they revert to the Crown once the harvest is complete and therefore their importance is gradually diminished.

Again, few firms enjoy the advantages of unregulated OTTs. As of 1975 four firms held 63 percent and ten firms held 85 percent of the forest land in these types of tenure (see table 1).

Tree Farm Licences (TFL)

Following the Sloan Commission Report of 1945 the government adopted a policy of sustained yield forest management. This was implemented through the creation of Private Working Circles (first Forest Management Licences and subsequently TFLs) and Public Working Circles (subsequently PSYUs). The purpose of the Private Working Circles was to bring already allocated areas under sustained yield management and to place upon private industry a part of the management

⁵ Pearse, p. B 10.

burden. Firms were encouraged to combine their holdings of Crown granted lands and OTTs with hitherto unencumbered Crown lands into rational management units over which they would have both exclusive cutting rights and extensive management responsibilities. Crown grants and OTTs committed to TFLs are known as Schedule "A" lands and bear their original royalty and stumpage rates. Timber cut from the Crown's contributions to these units, known as Schedule "B" lands, bears a stumpage charge as appraised by the Forest Service. Both Schedule "A" and "B" lands must be managed and harvested in accordance with principles of sustained yield. The TFL bears the most onerous management responsibilities of all tenure forms.

As of 1973, the TFLs covered 10.4 million acres (7.8 percent of all forest land) and accounted for 26.3 percent of that year's harvest. They are high quality lands.

Historically, the TFLs were also desirable in terms of security. At the outset some were granted in perpetuity although in 1958 all new licences were given a set term of twenty-one years. At the time of the Commission's hearings there was considerable debate as to whether the 1958 amendment applied retroactively to the sixteen remaining perpetual licences. The security of the TFLs was one of the most critical issues addressed by the Pearse Commission.

Control of the TFLs is even more highly concentrated than was the case for private lands or OTTs. In 1975, four firms accounted for 71 percent of the allowable yearly harvest from these licences while 10 firms held 97 percent (see table 1).

Public Sustained Yield Units (PSYUs)

As originally conceived, the PSYUs were to differ from the TFLs in two primary dimensions. First, the Forest Service was to be directly responsible for planning, reforestation and protection on these lands. Secondly, cutting rights in these units were to be allocated by competitive bidding. Evidently it was envisaged that the TFLs would serve to assuage the industry's demands for long-term supply security while the PSYUs would remain a source of timber for all who could pay the market price. This, as the Pearse Commission determined, has not come to pass.

As of 1973 the PSYUs accounted for nearly 60 percent of the provincial forest and were the source of half the harvest in that year. Cutting rights in these units take three principal forms: the "ordinary" Timber

Sale Licence (TSL), which accounted for 5 percent of the 1974 cut from the PSYUs; the Timber Sale Harvesting Licences (TSHL), which accounted for 59 percent of the cut; and the "third band" Timber Sale Licence, which accounted for 36 percent of the cut.⁶

The "ordinary" TSLs refer to the traditional form of sales, the oldest of which granted cutting rights to a certain tract, carried negligible management responsibilities, and typically had a term of five years or less. This form of tenure is now of minor importance.

The TSHL, introduced in 1967, confers the right to cut a volume (not area) of timber, usually runs for ten years and, importantly, carries extensive management responsibilities. This tenure form is of increasing importance.

The "third band" TSLs were introduced to allocate additions to allowable cut resulting from the adoption of close utilization standards. The allowable cut is that which the forest can support in perpetuity (i.e., sustained yield) and is a proportion of an original inventory of merchantable timber. The amount of "merchantable" timber expanded as technology was developed which could use smaller and defective trees, and thus the inventory and the annual allowable cut expanded commensurately. Firms which adopted the new technology and moved to close utilization were rewarded with additional cutting rights in the form of "third band" TSLs. This tenure form has a term of up to five years (with some exceptions), may be revoked more easily than either the TSL or TSHL, and requires little management on the part of the holder.

Relative to other forms of harvesting rights, control in the PSYUs is less concentrated. In 1975, four firms held 27 percent of the allowable cut in the PSYUs while eight firms held 39 percent (see table 1).

Overall "control" of harvesting rights is somewhat difficult to determine because in some instances control is exercised over forest area (Crown grants and OTTs) while in others it takes the form of rights to harvest a given volume of timber (TFLs and PSYUs). Nonetheless some estimate can be made based upon actual timber harvested. In 1974 ten enterprise groups were responsible for 55 percent of the total provincial harvest, while in 1954 the top ten accounted for only 37 percent. This is especially significant considering that the total harvest increased over the two decades by 125 percent.⁷

⁶ *Ibid.*, p. 74.

⁷ *Ibid.*, p. 43.

Concentration in Manufacturing

The trend toward increased concentration in the holding of harvesting rights has been accompanied by similar tendencies in the wood products manufacturing industries. If one adhered to a narrow definition of an "industry" an extensive list of wood products industries could be constructed. However, we will limit our discussion to five — lumber, plywood, market pulp, newsprint and linerboard.

Of the five, lumber production is the least concentrated. As of 1975, four firms controlled 22 percent, eight firms controlled one-third, and eighteen firms controlled one-half of the provincial sawmilling capacity.⁸ Actually a distinction should be made between coast and interior lumber industries as the two regions produce a different product mix and ship to different geographic markets. The coast industry is far more concentrated than that of the interior; in the former, six companies accounted for one-half of sawmill capacity, while in the latter the top six held only one-quarter.⁹

In terms of 1974 production, the plywood industry is highly concentrated with five firms accounting for nearly three-quarters of that year's output. This control has increased only marginally over the last decade although two firms, MacMillan Bloedel and Weldwood, have consistently held about 40 percent of provincial capacity.¹⁰

Concentration of market pulp (essentially kraft pulp not committed to internal use by the manufacturer) production capacity is also high. In 1975 four firms accounted for 52 percent and eight firms for 84 percent of provincial capacity.¹¹

Newsprint is the most important paper product. In 1975 it represented two-thirds of all provincial paper production in terms of weight. Additionally, it represents roughly 10 percent of the total value of shipments of the forest products sector. Concentration of newsprint production capacity is extremely high in the province with one firm, MacMillan Bloedel, accounting for 62 percent of provincial capacity and the top four firms holding 94 percent.¹²

⁸ *Ibid.*, p. 44.

⁹ *Ibid.*, p. B 11.

¹⁰ R. Schwindt, *The Existence and Exercise of Corporate Power — A Case Study of MacMillan Bloedel Ltd.* (Ottawa: Supply and Services Canada, 1977), pp. 69-76.

¹¹ *Ibid.*, p. 87.

¹² *Ibid.*, p. 105.

Production capacity in linerboard, the second most important paper product, is even more highly concentrated. In 1975 two firms, Eurocan and MacMillan Bloedel, accounted for 89 percent of provincial capacity.¹³

Concentration is thus seen to be high within individual manufacturing industries. Moreover, because the major forest products firms are vertically integrated from harvesting through wholesaling (and in one instance retailing), it is generally the same group of corporations which dominates each state of production. For example, in the mid-1970s five firms (MacMillan Bloedel, British Columbia Forest Products, Canadian Forest Products, Weldwood and Crown Zellerbach) accounted for one-third of all timber harvested, one-quarter of total sawmill capacity, three-quarters of plywood production, 40 percent of market pulp capacity, 94 percent of newsprint capacity and one-third of linerboard capacity.¹⁴ In short, control at both the industry and the sector level is concentrated.

Financial Performance

Pearse committed only a small portion of the Commission's Report to a discussion of the sector's financial performance. He noted that data on rates of return were abundant, were available elsewhere and generally substantiated industry's claims that returns had been poor. Evidently poor returns were endemic to the sector across Canada, and were characteristic of each of the component industries. The Commissioner concluded that the principal negative effect of these inadequate returns would be the consequent inability of the industry to attract capital needed for both expansion and maintenance. This issue, the inability of the sector to attract needed capital, was raised repeatedly during the Commission's hearings by both forest products enterprises and by financial analysts. Their argument essentially was that returns were so low that investors were already avoiding the sector and that if the risk factor were increased by any reduction in the security of harvesting rights, the sector would have difficulty attracting enough capital to simply maintain the existing asset base. The need to ensure adequate investment influenced the Commissioner's statement of priorities for tenure policy, his recommendations, and subsequently forest policy.

¹³ *Ibid.*, p. 124.

¹⁴ *Ibid.*, pp. 37-127, and Pearse, pp. 35-51.

THE LINKS BETWEEN FOREST POLICY, CONCENTRATION AND THE STATE OF THE SECTOR

Having documented the characteristics and distribution of the various harvesting rights it remained to determine the "implications of these tenure arrangements for the structure of the forest industry, having regard to its pattern of integration, concentration, ownership and control. . . ."¹⁵

Concentration

In order to explain the role of forest policy in the trend toward concentration in the sector one must first identify the major forces influencing the relative growth of enterprises, and then attempt to quantify, or at least to rank, each. To this end it is useful to turn to the literature of industrial organization economics which emphasizes three concentration increasing forces. These are the pursuit of technical efficiency, the pursuit of monopoly power and the existence of barriers to entry.¹⁶

The pursuit of technical efficiency refers to the growth of the enterprise to take advantage of scale economics. The Commissioner recognized that enterprise growth was explained in part by the existence of scale economics, but his estimate of the importance of this factor is unclear. He writes:

The rapid consolidation of the industry in recent years has been driven, in large part, by technological and economic changes that have expanded economies of scale in manufacturing. But economies of scale in manufacturing is a limited explanation; many mills of large corporations, both sawmill and pulp mills, are well beyond the size that most experts consider to be necessary to achieve production efficiencies.¹⁷

On the one hand, technological and economic changes explain "in large part" the consolidation, and yet economies of scale have only "limited" explanatory force. Moreover there is no systematic presentation of what "experts" consider to be optimal scale.

Research indicates that the exploitation of scale economics has a very limited usefulness in explaining current levels of concentration. A comparison of estimates of minimum efficient scale with actual production shows that the sector could support, at a minimum, over 200 logging operations, nearly 250 sawmills, 22 plywood mills, 25 kraft pulp mills

¹⁵ Pearse, pp. xi-xii.

¹⁶ Joe S. Bain, Jr., *Industrial Organization* (New York: J. Wiley & Sons, 1968), pp. 211-12.

¹⁷ Pearse, p. 61.

and 10 newsprint mills, all of efficient size. Hypothetically, each of these plants could be operated by an independent enterprise, in which case concentration would be much lower than prevailing levels.¹⁸

Conceivably, cost savings available only to the large, vertically integrated, multi-plant/multi-product enterprise might exist and might therefore explain current enterprise size. Technological complementarity between pulping and papermaking results in real cost savings when these processes are vertically integrated. Evidently there are also some economies based upon the co-ordination of product flows between processes when carried on by the same enterprise. Economies of multi-product operation result from efficiency in residual use and perhaps from flexibility in the allocation of the wood fibre to its highest value end use. Little evidence of economies accruing to the multi-plant firm was found. In sum, while there is some fragmentary evidence of scale economies available to the large integrated firm, these advantages do not explain current levels of concentration.¹⁹

The pursuit of market power also provides a partial explanation of current levels of concentration. The Commissioner found that provincial forest products firms did not enjoy market power. He states that

the markets for the final products of the B.C. forest industry—lumber, pulp, paper products, plywood, and minor products—... are generally highly competitive, and the disciplining influence of competition among sellers precludes most forms of market behaviour that are contrary to the public interest... lumber is undoubtedly one of the most vigorously competitive markets of any major commodity in world trade... producers in this province are not regarded as the price leaders in major pulp and paper markets...²⁰

This is only partially true. Evidence indicates that the lumber markets which B.C. producers supply are indeed highly competitive. But the Canadian plywood market, which absorbs 80 percent of provincial production, is in fact dominated by four B.C. enterprises. One of these, Weldwood, is considered the price leader.²¹ Provincial producers are clearly regarded as price leaders in several newsprint markets. The most important of these, the western United States, is the destination for nearly two-thirds of provincial production. B.C. forest products firms hold

¹⁸ Schwindt.

¹⁹ *Ibid.*, p. 154.

²⁰ Pearse, pp. 291-93.

²¹ Schwindt, pp. 69-78, and Pearse, p. 294.

slightly more than 40 percent; one firm, MacMillan Bloedel, holds more than one-quarter of this market, and, since its merger with the Powell River Co. in 1960, has exercised price leadership. Additionally, provincial newsprint manufacturers supply nearly all of this product used in western Canada.²²

In both fine paper and linerboard/packaging, provincial manufacturers enjoy significant regional market power. MacMillan Bloedel alone accounts for 60 percent of provincial consumption of fine papers, an industry which in the past has been characterized by anti-competitive behaviour.²³ Finally, a number of regional markets for corrugated containers in Western Canada are characterized by monopoly or duopoly.²⁴ Contrary to the Commissioner's findings, provincial forest products firms do enjoy market power in a number of markets, and concentration can in part be explained by their pursuit of that power.

The third factor explaining concentration is the existence of barriers to entry to the industry. In the B.C. forest sector the principal barrier to entry is the restricted access to the raw material. And forest policy, because it defines the terms upon which access is granted, is, in large part, responsible for the creation of this barrier.

Over the years forest policy has had two basic goals. These are the use of the forest resource to foster economic development and the implementation of sustained yield management. The way in which each of these goals has been sought has led to the concentration of timber harvesting rights and the concomitant concentration of manufacturing capacity.

From the outset, forest policy attempted to tie the allocation of timber to industrial development. The railroads were early beneficiaries as they were granted extensive tracts of timber land to facilitate construction. Legislation was passed at the turn of the century requiring all timber harvested on Crown lands to be manufactured within the province. And a number of the Old Temporary Tenures had as conditions the construction of processing facilities.

There is little doubt that making the allocation of timber contingent upon mill construction did induce investment. In fact there is evidence that mills were built without secure markets for their output. For example, MacMillan Bloedel constructed a kraft paper and containerboard mill at Port Alberni in the mid-1950s with neither captive packaging capacity

²² Schwindt, pp. 91-108.

²³ *Ibid.*, pp. 109-15.

²⁴ *Ibid.*, pp. 117-26.

nor a long-term supply contract with any independent container manufacturer. The rationale for this move was explained thus:

Mr. R. M. Shaw (formerly president of MacMillan and Bloedel) testified that the Kraft machine at Port Alberni was installed in order to fulfill an expansion commitment of the company. A provincial forest management licence (subsequently a TFL) obtained by the company required it to expand its facilities to consume the waste products of its sawmills and plywood mills.²⁵

Currently, "third band" TSLs are being granted to firms which can prove "need." Need is defined as the excess of manufacturing capacity over allocated timber rights. Through interviews we have determined that on occasion operators have foreseen the availability of "third band" timber, have expanded their manufacturing capacity, and subsequently have been able to secure additional cutting rights based upon proven need.

The point is that timber allocation has favoured those firms which have the wherewithal to invest in manufacturing facilities. As the capital requirements of such facilities have increased the number of firms capable of making such investments has dwindled. The large, established firms clearly are advantaged in this regard.

Sustained yield policy has also induced concentration of harvesting rights through its stimulation of backward integration by manufacturing firms into the holding of timber rights. Essentially a manufacturing firm can acquire its raw material needs either from independent logging firms or from stands under its own control. As long as the timber market is characterized by a large number of independent sellers, the manufacturing firm can be reasonably sure of securing its input needs at a competitive price as long as it can pay that price. However, if the input market is supplied by a small number of operators, especially if some of these operators are vertically integrated, the firm without a captive source of timber will be in a precarious position. In order to avoid dependence upon its competitors, the non-integrated firm will be motivated to obtain control over its own timber.

Up to the 1940s there were a large number of independent loggers and the major manufacturing firms still relied upon arm's length transactions for a significant proportion of their input needs. However, as discussed previously, the government of the day created the private working circle or TFL. This policy triggered a surge of backward integration as each

²⁵ Restrictive Trade Practices Commission, *Report Concerning the Manufacture, Distribution, and Sale of Paperboard Shipping Containers and Related Products* (Ottawa: Queen's Printer, 1962), p. 630.

manufacturing firm hastened to secure a guaranteed source of timber. Moreover, the management responsibilities which had to be assumed by the TFL holder entailed financial burdens which only the larger firms could bear.

Had management of the PSYUs evolved as was originally intended, access to timber might have remained reasonably open. This, however, has not occurred for two reasons. First, harvesting rights within the PSYUs have come to be extended well beyond their initial terms as a result of the Forest Service's unofficial recognition of licensee quotas. The effect of this has been to entrench the position of established operators. Under this system a firm is said to have a "quota position" within a given PSYU equivalent to the volume of timber it is entitled to harvest by virtue of its Timber Sale Licences or Timber Sale Harvesting Licences. Upon expiry of either of these licences the operator is afforded preferential treatment in subsequent timber sales in order that he may maintain his quota position. The preferential treatment takes the following forms. When the PSYU is fully allocated the Forest Service will only accept applications for further sales from operators with a quota position. Once the sale is allowed the applicant may request that it be made by sealed tender. While any operator can tender a bid the applicant has the option of matching any higher than his own. In addition, all bidders except the applicant must pay a non-refundable bidding fee which often entails a considerable sum of money.

Secondly, access to the PSYUs has been further restricted by the Forest Service's policy of shifting management responsibilities onto the licensees. It will be recalled that the PSYUs were created to provide timber for those firms unwilling or unable to assume management duties. However, the Timber Sale Harvesting Licences, introduced in 1967 and now accounting for 59 percent of the harvest from the PSYUs, place significant management burdens on the licensee, which is clearly to the disadvantage of the small, financially weak operator.

Concentration, then, is seen to result from the pursuit of technical efficiency, the pursuit of market power, and the existence of barriers to entry. The primary barrier to entry is restricted access to the raw material, and this restriction is in large part the result of past forest policy.

The State of the Sector

While recognizing the poor financial performance of the industry the Commission did not rigorously explore the reasons, including forest

policy responsibility, for that poor performance. Three central questions should be answered. Why are returns low? From the public's point of view what constitutes an adequate return? How does, and how can, forest policy influence the level of returns? The answers to these questions are clearly relevant to the Commission's work because financial performance is one manifestation of the "vigour of the forest industry," and because poor performance was used as an argument against particular alterations of tenure policy.

In the Report the Commissioner dismissed the argument that low profitability was due to excessive Crown charges for timber as an oversimplification and instead emphasized excess capacity, especially in pulp and paper, which had resulted from "over optimism on the part of investors, followed by some prosperous years in the late 1950's; unexpected expansion in competing countries; and in this province, government policies that required mill construction as a condition of timber rights. . . ." ²⁶ As commonly used, "excess capacity" means that actual output is below the level required to fully employ an industry's physical capital. By this definition, excess capacity has not been a particular problem for the sector. Data on capacity utilization indicate that the wood industries and paper and allied products industries compare favourably with all Canadian manufacturing. From table 2 and figure 1 it is seen that utilization in the forest products industries fell significantly below that for all manufacturing only in 1975, the year of the Commission's hearings.

The problem is not one of idle capacity, but of an inability to restrict capacity and production relative to demand in order to raise prices and thereby profits. An explanation of this behaviour is to be found in the literature dealing with the strategy and structure of industrial enterprises. R. Rumelt characterizes American forest products companies as having assumed the low-performance strategy of "dominant vertical integration." ²⁷ The "dominant vertical" designation is applied to enterprises deriving the bulk of their revenues from the sale of intermediate or end products of a vertically integrated sequence of processes. Such enterprises are generally found in mature, slow-growth industries using capital intensive processes to produce non-differentiated intermediate products. Finally, and most importantly, these firms have remained committed to a strategy of "efficient operation of complex capital-intensive processes in a time

²⁶ Pearse, p. 50.

²⁷ Richard P. Rumelt, *Strategy, Structure and Economic Performance* (Cambridge, Mass.: Harvard University Press, 1974), pp. 128-45.

TABLE 2
Capacity Utilization — Canada*

<i>Year</i>	<i>Wood Industries</i>	<i>Paper & Allied Industries</i>	<i>All Manufacturing</i>
1961	88.0	91.7	75.9
1962	91.1	92.1	80.4
1963	94.0	93.9	83.0
1964	97.9	98.6	87.4
1965	95.7	96.8	90.2
1966	92.4	95.8	90.7
1967	90.5	87.1	87.2
1968	90.8	85.8	87.4
1969	89.3	91.9	89.5
1970	78.7	88.0	84.3
1971	81.1	83.8	85.0
1972	81.6	87.5	87.5
1973	85.1	90.3	91.8
1974	73.6	93.5	90.7
1975	64.3	72.7	82.1
1976	74.3	80.7	83.5
1977	78.7	83.4	83.9
1978 ¹	77.6	89.7	85.4

¹First two quarters.

*Based on capital-output ratio. See source for methodology.

SOURCE: Statistics Canada, *Capacity Utilization Rates in Canadian Manufacturing*, Cat. 31-003, Second Quarter 1978, (Ottawa, Sept. 1978, Statistics Canada).

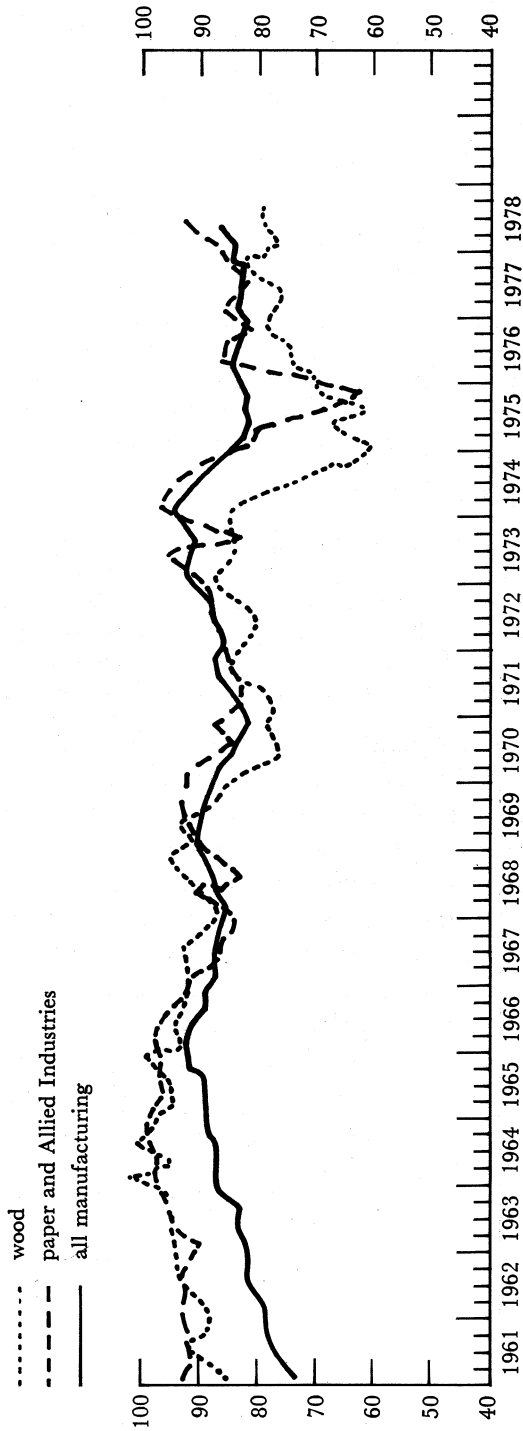
when consumer marketing, product innovation, engineering of special products and science-based research were becoming the types of skills most highly rewarded by the marketplace.²⁸

Rumelt explains the failure of these firms to readjust their strategies thus:

Escape from these industries, however, is particularly difficult for the large vertically integrated firm. Its technologies tend to be based on process rather

²⁸ *Ibid.*, p. 130.

FIGURE 1
Capacity Utilization Rates — Canada



source: See table 2.

than science or product function and are not readily transferable. Large size implies that the scale of investment in new businesses must also be large if noticeable changes in corporate performance are to be achieved, but low price-earnings ratios and high pay-out policies make such investments financially quite difficult. Finally, the integrated businesses train few generalists, and their attitudes and the organization structure they preside over tend to inhibit strategic change. Thus, unlike nonintegrated firms, the Dominant-Vertical companies have not, in general, significantly diversified in response to low performance.²⁹

With respect to the question of what constitutes an adequate return the Commissioner makes the following comment and poses a paradox.

At the beginning of this discussion I suggested that governments should be concerned that the profitability of the industry is sufficient to attract the desired amounts of new capital. In this light, the behaviour of the industry appears as something of a paradox, insofar as it has continued to expand and make massive capital investments in the face of low rates of return.³⁰

Rumelt explains the paradox thus:

... the oligopolistic nature of competition in the integrated industries makes constant infusions of cash necessary just to maintain position. In a business where expansive raw material sites and costly plants are the key competitive weapons, it is difficult to disinvest — like the poker player who has so far matched the bets of others, the integrated business keeps reinvesting because although winning is improbable, loss is certain if it does not.³¹

Concerning “adequate rates of return,” Rumelt makes the following observation: “Of course, what is a problem for a firm’s management is not necessarily a problem for society. Given a low level of technological change, there is no reason for the integrated extractive industries to earn more than a minimal return.”³² Evidently from the public’s viewpoint, forest products firms need earn only minimal returns to induce continued investment. To this point in time those levels have been achieved.

The above discussion also yields some insight into appropriate public policy bearing upon financial performance. Clearly Crown charges and regulations should not be so onerous as to compromise the survival of the forest products firms. More detailed financial reporting on the part of private enterprises and, perhaps, the use of state-owned forest products firms as yardsticks would help in this regard. Forest policy could also be

²⁹ *Ibid.*, p. 139.

³⁰ Pearse, p. 50.

³¹ Rumelt, p. 139.

³² *Ibid.*, p. 131.

used to induce a more rational investment strategy. Policy makers might take into account global supply and demand conditions for specific products when encouraging investment through the allocation of harvesting rights. Finally, forest policy, insofar as possible, should encourage those skills which Rumelt identifies as most highly valued by the marketplace — marketing, product (not process) innovation, engineering of special products and science-based R&D.

Parenthetically it should be added that from the vantage point of late 1978 it is difficult to be as sensitive to the industry's poor financial performance as was the Commissioner in 1975. Quite simply, the situation has been reversed. Devaluation of the Canadian dollar, an upsurge of U.S. housing starts, and strong markets for pulp and newsprint have combined to improve the profitability of the province's forest products firms (see table 3). Their response, as Rumelt would predict, is another round of investment in modernization and expansion of capacity.

TABLE 3

After Tax Return on Capital Employed of Largest
Four Public B.C. Forest Products Firms*

	1973	1974	1975	1976	1977
MacMillan Bloedel	10.1	7.9	loss	3.6	6.5
Crown Zellerbach	12.7	9.1	5.6	9.0	9.7
British Columbia Forest Products	9.4	7.9	6.1	9.3	8.3
Weldwood	9.5	7.2	4.1	6.6	7.8
Average	10.4	8.0	4.0	7.1	8.1

*Capital employed = Total assets — current liabilities + current part of long term debt — notes payable.

SOURCE: Various Annual Reports.

POLICY REFORM

At the outset of his statement of priorities for tenure policy the Commissioner set out two constraints which guided his subsequent policy recom-

mendations. First, reform must recognize established property rights. Any cavalier abrogation of these rights would result in an environment inimicable to further private investment in the sector. Second, reform must acknowledge the existing industrial structure of the sector. While it is not made explicit, "acknowledgement" seems to mean that radical, publicly mandated restructuring (e.g., deconcentration) is not feasible. These two constraints are of considerable moment because they severely narrow the scope for policy reform and effectively legitimize and entrench the extant industrial structure which has been shown to be highly concentrated. Further the Commissioner states that "whether the Crown should continue to retain title to forest resources is undoubtedly the most fundamental question in tenure policy. . . ." ³³ Some would argue that the most fundamental question in tenure policy is whether the Crown has allocated too much, to too few, to the detriment of the many.

Given these self-imposed constraints, the Commissioner addressed a number of tenure issues each of which touched upon the general forest policy goals of resource management, economic development, technical efficiency and allocative efficiency. The central issue was whether the existing tenure system, through the industrial organization it had fostered, was best suited to attain these goals. The Commissioner's answer was a qualified yes.

Resource Management

The two critical questions in the area of resource management are what type of management is sought, and which sector — public or private — is to implement the agreed upon management programme. As we have seen, the answer to the second question has important consequences for the industrial organization of the forest products industries.

The Commissioner reaffirmed the commitment to sustained yield management but found several shortcomings in the manner in which it is currently practised. As discussed above, sustained yield management requires accurate estimation of the current timber inventory in order to ascertain annual registration which, in turn, determines the annual allowable harvest. The Commissioner found that there were serious inaccuracies in inventorying, and that the problem was most severe in the PSYUs. The explanation for these inaccuracies is fairly technical and need not detain us here. Suffice it to say that the Report contains several suggestions for their correction.

³³ Pearse, p. 56.

It was also found that operators were accorded little flexibility in actually harvesting their annual allowable cut. Essentially if the harvest did not approximate the allowed cut on a five-year basis the operator could be penalized. The problem is analogous to the demand that an individual balance his budget every half decade even though there are periods in a lifetime when income exceeds desired expenditure and vice-versa. Pearse recommends that the rate of harvest be made responsive to economic and technological realities. For example, if market conditions are such that there is an inordinate demand for a certain species, harvesting in given stands could be accelerated to meet that demand. The suggestion seems eminently reasonable.

Problems were also encountered in planning at both the regional and management unit levels. The main problem in regional planning has been conflict over resource use. The Commissioner suggested involving public agencies besides the Forest Service in the creation of regional plans in order to resolve potential conflicts before harvesting begins. It was also noted that in the PSYUs planning for individual management units was deficient and that such localized planning should be brought up to the standard of practice in the TFLs.

Finally, it was found that utilization standards were being enforced without due regard to environmental, silvicultural and economic factors. For example, close utilization has required the harvesting of timber of such low quality that losses incurred by the operator have clearly overwhelmed any benefit to the forest environment. The Commissioner rightly recommended more flexibility in the application of these utilization standards.

With respect to the lodging of responsibility for resource management the Commissioner opted for a modified maintenance of the status quo. His investigations confirmed the widely held view that management was generally of higher quality in the TFLs than in any other management units and thus found little reason to tamper with the allocation of responsibilities within this type of tenure.

More important to subsequent evolution of the sector's industrial structure is the allocation of management responsibilities within the PSYUs. Pearse recognized that

over the years, in the face of its own inadequate financial resources, the Forest Service has tended to rely increasingly on licensees to carry out functions ranging from access development to cruising, planning, and reforestation. . . .³⁴

³⁴ *Ibid.*, p. 128.

and that

... the larger corporate licensees with longterm tenures are in a much better position than are smaller firms to accept responsibilities for functions that require extensive professional expertise, financing, and administration. A general reliance on licensees to perform these functions therefore constitutes bias towards larger enterprises.³⁵

Nevertheless the Commissioner suggested the creation of a new form of harvesting right for the PSYUs, termed a Forest Licence, which would replace current quota positions, run for ten and in some cases fifteen years, and perpetuate, and in some instances expand, the licensee's management responsibilities. Moreover, these Forest Licences will afford to their holders the same advantages at renewal as are now enjoyed by quota holders with one exception. The Commissioner has recommended the abolition of the non-refundable bidding fee. In essence the Forest Licence will legitimize quota positions, a right which hithertofore has been granted at the discretion of the Forest Service.

However, the Commissioner recommends the retention of the TSLs and incorporation into them of rights now held under "third band" sales. The terms of the TSLs are to be altered thus:

The obligations imposed by Timber Sale Licences should be more flexible, and generally not as onerous as in the case of Forest Licences. *To a greater degree* than at present the Forest Service should shoulder responsibility for resource management on Timber Sale Licences. . . . [emphasis added]³⁶

Roughly 55 percent of the annual allowable cut in the PSYUs is now held under quota, and therefore if all quota positions were put under Forest Licences, an equivalent proportion of the PSYUs would be subject to the same or a greater level of management responsibilities than currently exists. The remainder would be subject to diminished responsibilities. Thus, the effect of these recommendations would be to arrest, but not reverse, the trend toward greater management responsibilities for licensees in the PSYUs.

Economic Development

In the dimension of economic development the Commissioner perceived the central issue to be the continued viability of the provincial forest products sector, with emphasis upon the sector's ability to attract

³⁵ *Ibid.*, p. 129.

³⁶ *Ibid.*, p. 81.

capital to maintain and hopefully expand industrial activity. Industry spokesmen argued that capital shortages were probable because of the poor financial performance of the sector and because of increased riskiness attributable to insecure access to the raw material. The Commissioner made recommendations intended both to improve financial performance and to reduce the risk associated with raw material supply.

Profits are the difference between revenues and costs, and forest policy most strongly impinges upon costs because it influences Crown charges for timber, and because its harvesting regulations have important effects on logging costs. Because the Commissioner was directed by his terms of reference to ignore royalties attached to the OTTs and the general form of the stumpage appraisal system, he had little latitude to suggest alterations in the Crown's charges for timber. With respect to operating costs he did, however, make recommendations.

It appears to me that two areas of policy have imposed particularly excessive costs: the regulation of recovery standards, and controls on logging which aggravate the need for road construction. I have examined these issues at some length, and it is my impression that both policies substantially increase the aggregate cost of timber recovery without providing compensating benefits . . . [I] recommend changes which are designed to permit recovery standards to be determined discriminately in light of economic factors and the special needs of each site . . . much more emphasis should be put on economizing on road construction within the limits of proper silviculture and the environmental needs of each site.³⁷

However, it is in the area of security of raw material supply that the Royal Commission on Forest Resources made some of its most important recommendations. At the time of its hearings the political climate was such that many feared a unilateral alteration of existing tenure rights was imminent. A particularly contentious issue was the legal status of the TFLs. It will be recalled that some were granted in perpetuity, some for twenty-one years, and some had their terms changed from perpetuity to twenty-one years. The fact that, of the existing thirty-four TFLs, more than half were due to expire in 1979 added significantly to the anxiety over their security.

Pearse recommended that upon expiry TFLs be renewed for fifteen years and then at the end of each five years the licence could be renewed for an additional five-year period. Clearly he assumed that, in general, management terms would be acceptable to the licensee, would be discharged to the satisfaction of the Forest Service, and therefore the licence

³⁷ *Ibid.*, p. 321.

would be continually renewed. It was further recommended that the perpetual TFLs be immediately converted to twenty-one-year terms at the end of which the licensee could opt for the fifteen-year "evergreen" contract.

In the absence of capricious government action, which in any case would render all harvesting rights insecure, the recommended revisions to the TFL system do not impugn the security these licences have traditionally afforded their holders. It could be argued that holders of the perpetual licences would lose as a result of these policies. However, the legality of these licences was already being seriously questioned and thus the explicit granting of a thirty-six-year renewable term should be seen as an improvement in their security.

As already discussed, the Commissioner recommended the creation of Forest Licences which would effectively legitimize quota positions within the PSYUs. Because the quota positions resulted from Forest Service practices and not from contractual arrangements, the Forest Licence would render existing harvesting rights within the PSYUs more secure.

These recommendations would have the effect of maintaining the security of the TFLs and would increase the security of present quota positions in PSYUs. They are thus to the benefit of those holding these rights and would act to entrench the existing industrial structure.

Technical and Allocative Efficiency

It is best to begin this section with definitions. By technical efficiency is meant production at the lowest possible average costs. It involves the use of appropriate technology and the exploitation of scale economies at both the level of the plant and the level of the enterprise. Allocative efficiency refers to the use of resources in the production of these goods most valued by society.

To the economist trained in neo-classical price theory, the appropriate policy to ensure technical and allocative efficiency is the maintenance of highly competitive markets. Competition will foster technical efficiency by destroying any firm which fails to produce at minimum costs. The price system will allocate resources to those industries which can best use them. If it is clear that a competitive market is incompatible with adequate levels of economic performance then an alternate method of allocation must be sought. But in the absence of strong evidence of such incompatibility, competitive market allocation is to be preferred.

The Commissioner evidently shares these views. He writes:

The issue is not, as I have emphasized, that the size of these large firms is, in itself, disadvantageous, but rather that their progressive control over the timber supply and manufacturing capacity threatens to eliminate opportunities for the survival and development of small, specialized firms and new enterprises. If it were clear that this would lead to a more efficient industry, more capable of serving the public interest in generating the maximum value from timber, there would be less cause for concern. But there is scant evidence to suggest that the best industrial structure for this province is one composed of only a few, large, integrated corporations. On the contrary, the variety of forest conditions, manufacturing processes, and potential market opportunities, in addition to the self-regulating features of a diverse and dynamic industrial structure, suggest that superior performance can be expected from an industry that provides opportunities for a broad range of sizes and forms of enterprises.³⁸

This single paragraph touches upon several core issues which deserve elaboration. Most important is the Commissioner's statement that it is the *trend* toward concentration and not the present *level* which is problematic. It is the "progressive control," not the present control, by the large firms over both harvesting rights and forest products manufacturing capacity which is at issue. The emphasis upon trend and not current level is understandable given both the constraints which he set for policy reform and his recommendations in the areas of resource management and security of timber supply. Recall that the constraints involved honouring property rights and acknowledging the extant industrial structure, and that he recommended maintaining licensee resource management obligations and solidifying existing cutting rights. Had he found the existing levels of concentration incompatible with an "efficient industry . . . capable of serving the public interest in generating the maximum value from timber," the appropriate policy would have conflicted with both the constraints and the recommendations. Undesirably high concentration is remedied by deconcentration which would entail reallocation of harvesting rights, rejection of the existing industrial structure, the probable assumption by the province of greater management responsibilities, and a diminution of the security of timber rights.

Unfortunately, the costs and benefits of a concentrated forestry sector are neither systematically identified nor quantified. For example, it has been argued that large enterprises are better able to cope with cyclical demand conditions and thus provide greater employment stability. Is this because their size confers the ability to spread production over the cycle, or do they pass on the instability to their subcontractors? The Commis-

³⁸ *Ibid.*, p. 324.

sioner found that management in the TFLs was superior to that in the PSYUs. But how much better? And if the large corporations have a longer time horizon than public agencies is it possible that they should be given even stronger rights, perhaps even outright ownership, to encourage the intensive management practised in some of the private forests of the United States?

If, on the other hand, it is true that "superior performance can be expected from an industry that provides opportunities for a broad range of sizes and forms of enterprises," can it be shown that the performance of the dominant firms in the dimensions of technical and allocative efficiency has been inferior?

While the major firms are considerably larger than necessary to exploit the economies of scale at the level of the production unit, are there economies available only to the large multi-plant firm which justify their size? And if such economies are based, as Bentley suggests, on financial, marketing and political advantages,³⁹ should they be encouraged? Or do these firms suffer from diseconomies of large scale which could help explain their poor financial performance? Are there examples of "x-inefficiency," in which case the firm "operates completely off the production function surface to which profit-maximizing enterprises adhere. Production and office staffs may become bloated and obsolete equipment may be retained in use long beyond the proper time for modernization."?⁴⁰

Vertical integration brings its own efficiency problems. While vertical integration can result in substantial cost savings when based upon technological interdependency (i.e., technically connected stages of production), it involves the substitution of internal decision making for market exchange which can be both advantageous and disadvantageous—advantageous because the integrated firm avoids the transactions costs associated with market exchange (e.g., enforcing contracts, collecting information, negotiation), but disadvantageous because the discipline of the market is lost. The integrated firm must rely upon internally determined valuations, not market determined prices, for the allocation of resources to their highest value end-use. If internal valuation is faulty, misallocation results. Finally, in those markets in which the large firms

³⁹ William R. Bentley, "Supply Security, Sales Uncertainty, and the Value of Public Forestry Investments," in William McKillop and Walter J. Mead, eds., *Timber Policy Issues in British Columbia* (Vancouver: University of British Columbia Press, 1976), p. 139.

⁴⁰ F. M. Scherer, *Industrial Market Structure and Economic Performance* (Chicago: Rand McNally, 1970), p. 405.

enjoy market power there is always the potential for restricting supply and extracting monopoly rents.

These questions dealing with the relationship between size and efficiency were not confronted and thus the question of what industrial structure is most appropriate for the forest sector was not answered by the Commissioner. Rather, he concluded that a more concentrated structure was inappropriate, and that competitive forces should be encouraged whenever this encouragement would not seriously disrupt the existing structure. To this end he recommended policy reform bearing on the log, chip and export markets.

The Task Force which preceded the Royal Commission found that the coastal log market had severe deficiencies. Only a small proportion of logs cut on the coast entered the market, and transactions generally involved reciprocity — the integrated firms offered timber only to those enterprises capable of providing the seller with logs at a future date. Moreover, because prices in the coastal log market are used to determine Crown charges for timber, the Task Force found that “there are strong grounds for suspecting that the prices generally underestimate the value of timber transacted.”⁴¹ The Commissioner sought to invigorate this market by mandating an increased supply of unencumbered timber and by increasing available information regarding volumes, types and prices of logs sold. There are a number of problems with compulsory log trading which the Commissioner does not address,⁴² but the basic idea is feasible.

Lack of competition in the interior chip market is more easily corrected. For some years the government has enforced both a chip direction policy and a chip pricing policy which have resulted in distortions. The Commissioner has recommended the abandonment of both these policies.

With respect to export markets the Commissioner suggests relaxation, but not abolition, of provincial and federal restraints on the export of both logs and chips. He also encourages the federal government to lower tariffs on industrial machinery and to negotiate lower foreign tariffs on forest products. This call for freer trade is laudable, but, in our opinion, should go further. Two markets, plywood and fine paper, which have high levels of seller concentration and have been characterized by anti-competitive behaviour should be opened to foreign competitors through

⁴¹ Task Force on Crown Timber Disposal, *Timber Appraisal* (Victoria: British Columbia Forest Service, 1974), p. 185.

⁴² See Anthony Scott, “The Cost of Compulsory Log Trading,” in William McKillop and Walter J. Mead, eds., *Timber Policy Issues in British Columbia* (Vancouver: University of British Columbia Press, 1976).

the lowering of Canadian tariffs. Moreover, if a reciprocal reduction of the tariff on plywood could be obtained from the United States, this might well redound to the benefit of provincial producers. While the Commissioner's assertion that "the [plywood] industry would suffer seriously from any reduction in the tariff"⁴³ was probably correct in 1975, it is not true today. Devaluation of the Canadian dollar, a strong U.S. housing market and increased efficiency of the interior plywood producers have put provincial manufacturers in a strong position. The reciprocal lowering of tariffs would grant them access to the American market and would curtail abuse of domestic market power.

This concludes our review of the major findings and recommendations of the Royal Commission on Forest Resources. Due to the length (over 500 pages) of the Report and its appendices, and the diversity of issues raised, we have had to ignore or treat superficially many of the findings and recommendations. In particular we have avoided discussing many of the specific proposals for reform of both the content and administration of forest resource management policy.

We turn now to the legislation which drew upon the Commission's Report.

THE FOREST ACT OF 1978

The Forest Act of 1978 in large measure parallels the Royal Commission's recommendations. Where it does deviate is mainly in attaching additional security to established rights and in allowing perpetuation of rights in those areas intended by the Commissioner to remain open to competitive allocation.

With respect to the TFLs, the legislation reduces the term of all existing licences to a maximum of eight years, which contrasts with Pearse's recommendation that the perpetual licences expire after twenty-one years. However, the Act sets the terms of the new TFLs at twenty-five years, as opposed to the Commission's recommendation of fifteen years, and states that on the tenth anniversary of a licence the holder may be granted a replacement (not a renewal) licence covering the same area for another quarter of a century. Pearse recommended a similar "evergreen" contract except that on the fifth anniversary only an additional five-year period could be added. Succinctly, the Act and the Commissioner's recommendations differ in that under the former the Tree Farm licensee never has less than fifteen years nor more than twenty-five years remaining until

⁴³ Pearse, p. 294.

expiry, while under the latter the minimum is ten and the maximum is fifteen years.

In addition, Pearse recommended that new TFLs be granted only when two conditions were met. First, the licensee must contribute a matching amount (in terms of annual allowable cut) of private lands and OTTs. Second, the creation of a new TFL was not to increase concentration of harvesting rights. Neither of these conditions is found in the Act.

As recommended by Pearse, the Act creates a new tenure form in the PSYUs known as Forest Licences. However, as set out in the Act the terms of these licences differ radically from those proposed by the Commissioner. He determined that the public interest would best be served by allocating both initial and renewal Forest Licences through a process of competitive bidding. While the Act does require candidates for a new Forest Licence to file an application with the chief forester, including a bid for the timber, the chief forester is not directed to allocate the licence to the highest bidder. Instead he is instructed explicitly to judge each application in terms of its effects on existing and potential employment, its provisions for forest management, its compatibility with developmental objectives, its environmental impacts, and, lastly, its contribution to Crown revenues. Clearly, the chief forester retains considerable discretion in the distribution of these rights.

Pearse recognized the need to provide the Forest Licence holder with security of supply and therefore he provided for replacement privileges. The licensee was to have the contractual right to initiate a new Forest Licence, with a matching bid privilege authorizing a cut of at least 80 percent of that authorized by the expiring licence. Under the Act, the licensee must, in general, be offered a replacement licence providing an allowable cut equal to the expiring licence, and there is to be no competition, in any form, for the replacement licence.

Furthermore, the Forest Licences will have a normal term of fifteen years, not the proposed ten, and will not be subject to the 50,000 cunit maximum cut recommended by the Commissioner. As specified in the Act, the Forest Licence is far more secure than was intended by the Commissioner.

It will be recalled that Pearse recommended the creation of a new Timber Sale Licence which would provide the vehicle by which the small, unintegrated operator would gain access to timber. The licence was to be short-term, conveying rights to a very limited allowable harvest, and was to carry no contractual renewal privileges in order to avoid the emergence

of another "quota" system. The Act specifies no maximum allowable cut, sets a maximum term of ten years, and, importantly, provides for renewals. Moreover, the operator seeking renewal is offered protection in the form of bid-matching privileges, although the "bidding fee" has been abandoned.

The Commissioner intended that the Forest Licences would replace "quota positions" (which now account for 55 percent of the allowable cut in the PSYUs) and that the new, competitively allocated TSLs would be used to convey rights to the timber currently outside the "quota system," principally "third-band" sales. Or, more simply, the Forest Licences would cover a little more, and the TSLs a little less than one-half of the PSYUs allowable cut. However, under the Act, operators will be allowed to convert "non-quota" rights into Forest Licences. The interesting question is how much timber will actually be available for the Timber Sale Licensees. The more productive, more accessible PSYUs are, for the most part, already fully committed. That leaves uncommitted allowable cut in the more remote PSYUs, and timber in the planned PSYUs, which at present cannot be economically harvested. This does not augur well for the enterprise dependent upon TSLs for its input needs.

The Act is silent with respect to the coastal log market and the interior chip market. Its sections dealing with the export of intermediate products retain the very restrictions which the Commissioner wanted eradicated.

CONCLUSION

The Report of the Royal Commission on Forest Resources and the subsequent Forest Act do not call for a redirection of provincial forest policy. Rather they act to legitimize and thereby to entrench the concentration of harvesting rights (and, therefore, concentration throughout the sector) in large part induced by previous policy.

Had the Commissioner's recommendations been made law there may have been a cessation, but not a reversal, of the trend towards higher levels of concentration. The Forest Act of 1978 contains diluted versions of these recommendations and will result in a deceleration, but not a cessation, of the trend.

Nearly a quarter of a century ago H. R. MacMillan, founder of MacMillan Bloedel, the province's largest forest products firm, stated that it will be a sorry day for the Eastern Division or elsewhere in British Columbia when forest industry here consists chiefly of a very few big companies, holding most of the good timber — or pretty nearly all of it — and

good growing sites to the disadvantage and early extermination of the most hard working, virile, versatile, and ingenious element of our population, the independent market logger and the small mill man. . . .⁴⁴

That day is nigh. Whether, and in what sense, it will be "sorry" for British Columbians has not, but most certainly should be, answered.

⁴⁴ Commission of Inquiry into Forest Resources, *Proceedings*, Books 74-76 (Victoria, 1975), pp. 8806-07.