

two essential elements of a market-based system of timber pricing that would assure the Department that the province was receiving adequate remuneration within the meaning of the law. First, Province A would have eliminated all or virtually all of the current constraints on companies operating in the province that currently prevent them from adjusting to changing market conditions. Second, Province A would have introduced and implemented a system of auctions that were sufficient to establish market prices that could be used to set stumpage on the administered portion of its harvest, ensuring that the province received adequate remuneration on all timber sales.

More specifically, by eliminating the minimum cut requirements, mill closure limitations and appurtenancy clauses, as well as making its tenures freely divisible and transferable, Province A has ensured not only that firms are not compelled to produce when markets would otherwise dictate against it, but also removed barriers to the increased flow of fiber from tenure holders onto competitive markets, whether in the form of transfers of tenure, sales of standing timber, or sales of logs. The ability to move timber through those various forms of competitive market will also have the effect of increasing the value of those markets as indications of stronger competition for fiber within the province. As a result of these and other changes, the typical manufacturer will participate in competitive timber and log markets for a sizeable portion of their fiber requirements on an ongoing basis under all market conditions.

In addition, by eliminating any minimum processing requirements within the province, and potentially between the province and other jurisdictions, Province A has increased the ability of markets within the province to transmit information about prices and sales opportunities that the minimum processing requirements previously foreclosed. A subsidiary benefit of eliminating the minimum processing requirements and permitting purchases of the province's logs by buyers from outside the province, Province A would expand the opportunities for arbitrage between markets in different jurisdictions and thereby preclude the ability of producers in Province A to benefit from changes in provincial policies without the competitive benefit of those changes in policy flowing to competitors in other jurisdictions.

With respect to pricing, Province A will have ensured that it has a reliable point of reference in a range of market transactions that is representative of the harvest within the province. By ensuring that there are only the minimum necessary requirements to be eligible to bid on the province's timber, Province A will have eliminated one of the main barriers created by the long-term tenure system—the barrier to new entrants into the market for Province A's timber. Similarly, by introducing tenure reforms that have the effect of ensuring that virtually all market participants have to participate in the auction system or competitive log markets for a sizeable portion of their fiber, Province A will ensure that firms within the province face competitive pressures akin to those

faced elsewhere in the North American market. To the extent that the tenure reforms, over time, also yield a reduction in the percentage of the harvest that is subject to long-term tenures relative to that portion of the harvest that is sold at auction or through open and competitive log markets, Province A will reinforce the competition for timber on private and Crown land as well.

By ensuring that the information on prices established at auction is broadly available to all market participants, Province A will have increased the quality of information available on alternative commercial opportunities. It will have ensured that the maximum amount of information about transactions in the market place is flowing back to market participants to inform their decision not only about future auctions, but about prices reflected in other competitive markets within the jurisdiction.

Province A will also have ensured, in the process, that the adjustments needed to translate the prices observed at auction into stumpage charged on the administered portion of the harvest accurately and solely reflect the different terms and conditions between auction sales and the administered portion of the harvest. In doing so, Province A will ensure that the stumpage charges on the administered portion of the harvest ultimately reflect the value of the fiber in an open, competitive market, which is necessary to demonstrate that the province is receiving adequate remuneration for its timber.

By reinforcing the operation of log markets within the province, even though they would not be used as a reference point for setting stumpage, Province A would have helped create an effective outlet for fiber that will become increasingly available on the market as a result of the elimination of the constraints currently imposed on tenure holders. In addition, by providing a means by which log market transactions are made publicly available to market participants, Province A has fostered a more competitive market within the province for fiber, which would tend to reinforce the utility of the auctions as a reference point for the pricing of stumpage on the administered portion of Province A's harvest. That result would flow directly from the ability of the log markets to improve the range of alternative commercial opportunities available to market participants. To the extent that Province A improves the ability of the log markets to function by shifting licenses or tenures toward new market participants in the future, it will have the effect of expanding the competitive forces at work in the market by easing the entry of new competitors.

B. Comparison With Prices Established in Markets in Other Jurisdictions

Another alternative mechanism a province might use to ensure that it received adequate remuneration within the meaning of the statute would be to use prices generated in a market outside its jurisdiction. While taking into account the need for adjustments in order to ensure a fair comparison between standing timber sold in the two jurisdictions, prices generated in auctions from public lands or private markets, for example, could serve as an adequate reference point for

setting stumpage on the administered portion of a province's harvest, if combined with adequate policy reforms in other areas of the province's timber sales program.

1. Example of Prices Established in Markets in Other Jurisdiction(s)

Province B eliminates any existing minimum cut, mill closure, appurtenancy, and minimum processing requirements. Province B also provides for the divisibility and free transfer of tenure. Province B manages its harvest, particularly its annual allowable cut, on the basis of sustainable forestry, rather than as a means of artificially expanding supply.

Province B relies on prices from the sale of standing timber in open, competitive markets in an adjacent jurisdiction, or jurisdictions, to establish the reference point for setting stumpage on the administered portion of its harvest. The independently functioning markets for standing timber in the other jurisdiction, or jurisdictions, have no barriers to entry or exit, provide for the publication of price information to all market participants, include appropriate safeguards against collusive bidding, and provide a representative range of prices for standing timber comparable to that sold in Province B.

In addition, Province B reinforces the operation of the private market for standing timber within the province through the changes in conditions applicable to tenures on provincial lands. Province B also develops a mechanism for gathering and publishing the information on pricing in that private market, which is currently characterized by a series of bilateral negotiations between buyers and sellers. Province B commits not to reduce the share of competitive sales and should increase the share of competitive sales progressively over time.

Province B ensures that it adopts a transparent means, with the appropriate adjustments, to translate the prices established by open, competitive, and independently functioning markets in the adjacent jurisdiction into stumpage charged on the administered portion of Province B's harvest.

2. Analysis

By eliminating those conditions that prevent companies from adjusting to changes in the market, in the form of minimum cut, mill closure limitations, appurtenancy clauses, and minimum processing requirements, Province B ensures that firms participating in its market can respond appropriately to market signals from downstream product markets. Firms would be free to adjust their production accordingly.

Similarly, by providing for the divisibility and transferability of tenure, Province B encourages competition for timber within the province. In effect, Province B has eliminated the principal barrier to entry or exit from the market for standing timber within the province. It also ensures that a greater volume of timber or logs will enter the private market for fiber within the province.

By linking its stumpage system to open and competitive markets in an adjacent jurisdiction that satisfies the criteria outlined in the example, Province B also ensures that