Reflections on Timber Price and Market Reporting 1/

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Timber price and marketing reporting is a tough idea to advance. It's like losing weight—the long run benefits are clearly desirable and attractive but the initial and early efforts are difficult and demanding and easy to put off. (I tried to put off our program chairman on this invitation, and you can see the results. So, let's take another look.)

Three basic justifications are generally given for timber (stumpage) price and market (volume sold) reporting:

- assurance of equity to buyers and sellers in the current market.
- efficiency in short-term supply responses to cyclical changes in demand.
- encouragement of investment in long-term supplies through assurance of equitable markets.

The justifications appear to be valid. They can be supported both in theory and in practice. Theory advises that accurate, reliable and timely price and quantity information are essential for fully equitable returns from markets and long-term investments and for efficient market operations. The timber market structure—many small suppliers and relatively few buyers, especially in the East—seems to emphasize that need.

From our practical experience there is nothing more disquieting than those unending stories about small landowners who received less than fair market value for the timber they sold. In recent years, repeated sharp rises and falls in

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stumpage prices in response to cyclic changes in timber demands have emphasized concerns about sluggish supply responses. Both the industry and the public sector view the reluctance of small landowners to invest in timber growing as a major source of uncertainty about long-term supplies.

Timber price and market reporting is not a solution to the foregoing practical issues, but a step toward their amelioration — probably more beneficial for enhancing market equity and short-term market responses and perhaps less so for long-term investments.

What are the Objections?

It is argued that stumpage prices cannot be reported reliably and accurately because of wide differences in tree quality and operating costs between stands, and lack of a common scale of measurement. However, these are the differences and shortcomings that a proper reporting system should try to document or otherwise remedy. Foresters have developed log and tree grades as well as a capability for classifying logging chances. Stumpage price reporting will tend to establish uniform log grades throughout the State as well as uniform basis for measuring volume. So long as there is no requirement for standardization there is no incentive for standardization in the unbalanced market place of many sellers and few buyers. That may explain why timber buying and selling from small ownerships remains one of the more anachronistic businesses in modern times. The objections about tree quality, logging chance and measurement scale largely argue that timber price reporting will be costly in the beginning and progress slowly towards achievement of desirable standards. However, some industry sources have indicated that the greatest source of stumpage price variance is transportation cost from the logging chance to the mill. If that is the case, the problem of variance may be easier to deal with than we think.
It is also argued that timber sellers can obtain price information from mill operators or timber buyers and assure equitable prices through solicitation of bids from multiple sources. But the buyers' estimates of quality, volume, and logging chances are also subject to wide variances and error. Because of risk aversion and business incentives, their estimates tend to be on the low side for quality and volume and perhaps on the high side for costs. Thus, transaction evidence from competitive sales appears to be the preferred data base for price reporting. The experts in agricultural price reporting insist on it. But it is more costly and difficult to do than quoting list prices from various mills.

Buyers cannot be expected to advise the seller whether the market is strong or weak, whether it is better to sell now or later. The seller needs independent information on whether prices are rising or falling, and their general level. But, price and market reports are usually several months or longer after the fact. Nevertheless, they do indicate past trends and they can be used as basic data for short-term local forecasts. Alternatively, the collection of transaction data could be made a continuous process that would permit real time reporting of spot prices in weekly or daily news media. Farmers, I understand, regard the news media as their primary sources of market information.

It is also said that reliable stumpage price reports alone are insufficient to assure informed marketing for the landowner. He also needs to know about tree quality and how to measure tree and stand volumes. The answer appears to be the employment of a consultant or public service forester. This simply advises that price reports should make clear to sellers that the
prices should be applied to measured volumes and quality of timber to be
sold and advise where such measurement services are available.
This seems to indicate a role for public service agencies. But it would
not be an inappropriate role for price reports published by
consultant firms or associations. Sellers ordinarily are ill-advised
to use buyer estimates of volume and quality.

To sum up, many of the objections can be turned around into reasons for
better price information on timber products.

What are the Benefits?

There are no quantitative estimates of benefits from timber price reporting.
So, we are left entirely to professional judgement. In my view, the main
initial response to reliable, accurate and timely timber price reporting
will be a greater readiness among landowners to sell timber. In any given
market period and place we can expect more timber to be offered for sale.
This indicates a lower average price for landowners. Corrections of
price inequities that do occur will work in the opposite direction.

There may also be some cost-savings to sellers due to lower market "search"
costs. But selling costs associated with more professional assistance
will increase. The net effect of price and cost impacts are impossible
to determine. My inclination leans toward somewhat lower average prices
for sellers, but perhaps larger returns through more accurate measurement
of volume and quality. This would also be a benefit to the timber industry.
I doubt that overall stumpage prices would be higher with price reporting and in this way lead to reduced supplies and higher consumer prices for timber products.

With adequate timber price reporting, stumpage price fluctuations will be less. Consumers, producers and landowners will benefit in short term. Long-term timber supply should be affected favorably. Properly designed geographic price reporting could also contribute to more efficient forest industry locations and stumpage market structures in the case of small and medium mills.

Longer term outcomes on price might not be much different than current projections. Somewhat faster harvest of the inventory will likely be offset by a little better management and investment.

Industry should benefit from a better supply situation and maintain a stronger share of its markets. However, rising relative prices, with or without price reporting will tend to reduce market shares.

Government and taxpayer costs would increase, assuming public participation in price reporting. It is not clear whether tax revenues would increase or decrease. There would probably be more employment in forestry and wood industries with price reporting.
This obviously is an optimistic but not uncritical viewpoint. It sounds like a Pareto optimum -- everybody gains. What else would one expect from a basic improvement in the way suppliers can do business with buyers?

**What is the Outlook for Timber Price and Marketing Reporting**

I believe the market opportunities for the private small landowner sector of the timber supply business will expand for both hardwoods and softwoods. Timber demand cycles will continue to occur. Sellers will stand to gain or lose more on future sales because of the rising general price level. This should help create a more favorable environment and stronger demand for better price information.

Industry appears less sensitive about timber price reporting than it was 20 years ago, especially at the State level. Where price reports are available, I understand they are the reports to check their competitiveness in buying timber. They are aware that price reports do not reflect the current market.

Timber price reporting as a Federally supported program was tested in Congress in the late 1950's and in the late 1960's within the Administration and failed to survive both times. However, we do have a few States -- 18 the last I had checked -- providing timber price reporting services of various types and qualities. Wisconsin has the strongest system in terms of quality and distribution. It is run by the State Extension Service and has been reporting for about 40 years. The public leadership for
price reporting belongs with the States, but there is a Federal role to encourage State leadership and provide coordination and guidance for uniform standards among the States. There is a general axiom that information with widespread social utility leads to the highest social benefits when distributed through public services. Private distribution ordinarily requires higher changes for such information and therefore leads to more limited distribution and lower social benefits.

I am encouraged by the emergence of "Timber Mart-South" in 1976 as a private forest products price reporting service. "Timber Mart-South" is a copyrighted report issued monthly. It provides both stumpage and delivered log prices for 11 Southern States by subregion within each State. I understand it is widely subscribed to by consultants, forest industry, banks and insurance companies, Federal and State forestry agencies, some larger landowners and the Internal Revenue Service. Price reporting in this case clearly has a significant market value and appears to be a profitable business service for forest industry and finance, the public service and some larger landowners. I'm glad to see such wide agreement. The emergence of "Timber Mart-South" seems to imply that if you wait long enough the private sector will provide needed useful services (i.e., when it becomes profitable).

Timber price reporting has been and remains with us. However, weak or inadequate it may be, I do believe it is here to stay. The real issues have to do with its quality and who should improve it. Properly designed and developed in concert with complementary services and information needed to optimize its potential benefits, timber price and market reporting deserves encouragement and support. It will help bring the forestry business
Synopsis:

FTP Evaluation

A. Evaluation Objective

1. Estimate the timber yield increase and associated financial return from the 1974 FTP investments, and

2. Identify predominant high and low performance program components for future program improvement.

B. Procedural Format

1. A marginal analysis format was used in the study, comparing the expected schedule of treatments and yields following the initial FTP practice to those likely from the typical nonindustrial private landowner.

2. The best available data on management regimes, timber yields, stumpage prices, and treatment costs was gleaned from published, unpublished, and informed judgment sources. The sensitivity of the financial return answers to changes in this basic data was tested.

C. Highlights of Results

1. The aggregate results for the Eastern FTP investments are quite high; an average internal rate of return (IROR) of 10.33% and an average benefit/cost (B/C) ratio of 5.73 at a 6.4% discount rate, and an estimated timber yield increase of 1036 million cubic feet by the end of the first rotation, (more than 50 percent of the yield increase would be achieved by year 2015). Seventy-six percent of the cases can earn a 6.4% discount rate.

<table>
<thead>
<tr>
<th>Species and Practice, for Eastern U.S.</th>
<th>Average IROR</th>
<th>Percent of Cases Earning 6.4%</th>
<th>Average MAI* Increase</th>
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</thead>
<tbody>
<tr>
<td>1. Southern Pine Plantings</td>
<td>11.3</td>
<td>91</td>
<td>108</td>
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<tr>
<td>2. Southern Pine and OakPine T.S.I.</td>
<td>9.3</td>
<td>73</td>
<td>45</td>
</tr>
<tr>
<td>3. Northern Conifer Plantings</td>
<td>6.9</td>
<td>63</td>
<td>122</td>
</tr>
<tr>
<td>5. Hardwood Plantings</td>
<td>10.2</td>
<td>70</td>
<td>44</td>
</tr>
<tr>
<td>6. Oak Hickory T.S.I.</td>
<td>4.7</td>
<td>42</td>
<td>9</td>
</tr>
<tr>
<td>7. Black Walnut and Cove Hardwoods TSI</td>
<td>21.4</td>
<td>80</td>
<td>16</td>
</tr>
<tr>
<td>8. Northern hardwoods TSI</td>
<td>15.0</td>
<td>80</td>
<td>10</td>
</tr>
<tr>
<td>Weighted Average East</td>
<td>10.3</td>
<td>76</td>
<td>75</td>
</tr>
</tbody>
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*Cubic feet, per acre, per year
These 8 species and practices account for 96 percent of the 1974 program acres.
2. The results in the Pacific Coast are almost as high as the East; an average IROR 9.43 percent and an average B/C ratio of 7.16 at 6.4 percent discount, and an estimated yield increase of 7 million cubic feet. Sixty-one percent of the cases can earn the 6.4 percent discount rate. Pacific coast practices accounted for 1.6 percent of the 1974 program acres.

3. The Rocky Mountain investments have generally lower returns; an average IROR of 2.93 percent and 12 percent of the cases can earn 6.4 percent. Cases in the Rocky Mountain Area accounted for 1.2 percent of the 1974 program acres.

D. Program Component Performance

1. Plantations of slash pine, longleaf pine, and loblolly pine had high average returns and generally high success rates as did timber stand improvements in black walnut, cove hardwoods, and Northern hardwoods.


E. Recommendations for raising financial returns and yield increases

1. Develop more detailed silvicultural guidelines that the service forester can use to screen out low priority practices.

2. Develop maximum treatment cost guidelines by practice, species site class, and region

3. Allocate cost-shares in a manner more sensitive to the actual cost of practices case-by-case

4. Avoid practices that require immediate follow-up attention if they can be installed in an alternative manner

5. Make sure that follow-up assistance is an integral part of the program delivery structure

F. Comparison of 1974 FIP with current FIP

In 1974 the average case size was 16.2 acres and Federal costs including administration and technical assistance was $43.00 per acre for reforestation and TSI practices. In 1977 the average case size was 25.9 acres and Federal costs now average $47.00 per acre for all practices. The current cost-shares paid to the landowner average $46.00 per acre for tree planting. Per acre costs have increased about 10 percent from 1974 to 1977.

EDITOR'S NOTE

More information can be found in—