The corrected volumes for the plots measured on poorly productive forest land are presented in Table 12, p. 48, and the local volume table for trees on poorly productive forest land is seen in Table 13, p. 49.

4. Suitable sample plot size in the forests of Inari

The variation of the sample-plot volumes is caused by the variation of stand structure and grouping of trees within the stands. The variation by stands tends to necessitate a great number of sample plot and the variation within the stands a comparatively large size of plots. Because the groups of trees often have a circular form, a rectangle plot may be more favorable than the circular one of the same size. The most suitable size is obviously an appropriate compromise of the conflicting claims mentioned above as well as of the reliability and expenses of the determination of the plots in the field.

The influence of the variable distances between the trees was studied in a model stock (Table 14, p. 54) which covered an area of 9 hectares. The mean volume of the model stock was estimated with 100 plots of different sizes (Fig. 15, p. 54). Results are presented in Table 15 and Fig. 16, p. 55.

If the trees are located in groups the small plots fall often either within the groups or in the gaps between the groups, and the variation of the plot volumes is high. Without any variation by stands the suitable plot size in Inari is 0.4—0.5 ha and with an average variation by stands not more than 0.4 ha. In South-Finland where the variation by stands is greater and the internal structure of the stands more homogenous the suitable plot size is obviously smaller.

5. Some viewpoints in planning new inventories

The total area should be broken down into suitable strata. At least the productive forest land under full stock, regeneration areas with few mother trees, seedling and sapling stands, open areas, poorly productive forest land, and waste land should be separated and their area estimated either from maps or aerial photographs or by the line method. The mean volume for each stratum is estimated with the plot method. An advance estimation of the approximate mean volume and the coefficient of variation of the strata are needed for calculating the optimum allocation of plots.

The mean volume in Inari is 70—80 m³/ha. If the plot size is 0.10 ha, the coefficient of variation is about 0.50. In small areas and homogenous growing stock the coefficient of variation 0.30—0.35 for statistical strata can be used. With decreasing plot size the variation increases.

The number of sample trees and the optimum allocation of the trees by diameter classes is based on the preliminary data of the stock table, total area of plots to be measured, and the coefficient of variation of the tree volumes by diameter classes. In the case of pine at Inari the coefficient of variation of each diameter class is about 0.18.

If the volume calculation is done with the diameter as variable the variation of the plot volumes is decreased. If the local volume table is used and the site and stock characterstics differ from the characteristics of the volume-table stock, a significant systematic error is possible. The error can be checked with a comparatively small number of sample trees or using data like that in Figures 9—13, s. 42.

Planning of efficient and economical forest inventories requires data concerning site and stock variation. It should be calculated and published systematically by geographical regions.
Preface

My interest in the roundwood market and in research connected with it arose soon after World War II. At the time I was a forest officer of a district forestry board and I had opportunities to follow closely the control of this market. New experiences were gained in 1952—54 when, as head of the office for research and statistics at the Central Forestry Association Tapio, I was entrusted with the task of surveying the development of the Finnish roundwood market. As Secretary to the Committee of Forestry Statistics I had the opportunity in 1954 to start the survey of private forestry, which provided one of the most important empirical sources for the present investigation.

In this study an effort is made to throw light upon the structural features and technical problems of the market. Such an approach may be justified by the fact that the roundwood market has been but little the object of systematic research. Later, I hope to pursue the problem of roundwood pricing and price formation.

It would have been impossible to collect the material for this investigation without the generous cooperation of many organizations and individuals. I would like to mention especially the Finnish State Board of Forestry, Central Forestry Associations Tapio and Skogskultur, District Forestry Boards, Forest Management Associations and their leagues, Central Association of the Finnish Woodworking Industries (including a number of its member companies) and the Forest Council of the Agricultural Producers, Dr. Jarl Lindfors, Dr. Antero Piha, Professor V. Pöntynen, Mr. Väinö Pöyhönen, a number of forest executives and district forest officers of private companies as well as many forest officers engaged in private forestry organizations have given me valuable information about their various special problems.

When collecting material in Norway in 1954 and 1959 I had especially valuable discussions with Professor Frits Jørgensen (the Norwegian Agricultural College), Mr. Eyvind Wisth, Mr. Erling Mykland and Mr. Harald Sellaæg (Ministry of Agriculture, Department of Forestry), Mr. Ivar Aavatsmark, Mr. Wilhelm Ersrud and Mr. Mathis Kleppen (The
Norwegian Forest Owners’ Association, Mr. WILHELM MATHESON and Mr. HELGE LOFTHUS (Organizations of Norwegian Forest Industries), and Mr. ARNE AASETH (Central Statistical Office).

My work in Sweden in 1954 and 1960 was made especially rewarding through the kind help of Mr. H. SÖRENSEN RINGI and Mr. B. RUDHOLM (The Board of Crown Lands and Forests), Mr. ERIC A. LINDB, Mr. SOLVE THULIN and Mr. ERIK KLEVENFELDT (Central Association of Swedish Forest Owners’ Associations), Mr. NILS SILVÉN (Royal Board of Private Forestry), and a number of officers in the organization of private forestry and forest industries.

The computation of the material was carried out mainly by Mr. OLAVI HEISKANEN, Mr. ILPO IMMONEN, Mr. PEKKA LANKINEN and Mr. ERIKKI MYLLYKANGAS. The translations into English were kindly undertaken by Mr. and Mrs. PENTTI KANERVA.

Professor HUUGO RANINEN has read the section of the manuscript which deals with trade customs and made several most helpful suggestions. The parts of the text dealing with Norway and Sweden have been checked by Mr. FINN ROALDSIEN, Mr. K. V. ALOVERE, Mr. SILVÉN and Mr. THULIN. I have also had the privilege of discussing with Professor A. J. ALTON (Oxford, Ohio, U.S.A.) some methodological problems of this investigation and owe my sincere thanks to him for his extremely valuable assistance.

I acknowledge the research grant awarded by the foundation KYÖSTI HAATAJAAN RAHASTO which decisively facilitated the completion of this investigation.

Helsinki, August 1960

Viljo Holopainen

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1. Introduction

11. General approach

Duddy and Revzan (1947, p. 4) define marketing as "the economic process by means of which goods and services are exchanged and their values determined in terms of money prices". By the term "process" they mean coordinated groups of functions intended to get the goods from the point of production to the point of ultimate use, not only in the physical sense but also in such a way that the highest possible satisfaction of consumer needs is secured. Maynard and Beckman (1952, p. 3) define marketing as covering all business activities necessary to bring about the exchange in ownership of goods and in their distribution. Converse and Huegy (1946, p. 4) stress the difference between marketing and production by defining: "Marketing or distribution will be used to mean the creation of time, place and possession utilities — the transportation and handling of goods and services from the point of production to the point of consumption" (italics mine).

Further definitions of marketing and distribution — used as synonyms by many experts — can be found in a comprehensive review by Kaski-Mies (1955, pp. 236—245).

In accordance with the aforementioned definitions the marketing of forest products is composed of the business functions aimed at getting standing timber to its ultimate use. On various grounds the process can be divided into different stages, for example, according to the form and degree of processing. One important stage in the process takes place when the roundwood obtained from the forest enters the industrial processing and continues its way towards ultimate use as processed wood either as a semi-product or as goods ready for ultimate consumption (e.g., sawn wood, cellulose, or paper). The division between the unprocessed wood market (or roundwood market)¹ and the processed wood market can be made on these

¹ The terms will be used interchangeably in the text.
grounds. However, all utilized wood does not undergo processing; some is used in unprocessed form as, for example, fuelwood and pitprops.

Any purposive investigation which has as its objectives the obtaining of knowledge of any business activity necessary to effect transfer in the ownership of goods or to provide for their physical distribution is marketing research.

The market can, however, be examined from various points of view. The majority seems to agree that it belongs in the realm of economics, as stated already in the definition. On the other hand, some differences of opinion have arisen as to whether it should be considered part of political economy or business economics. Schäfer (1953, p. 6) regards it as a borderline case. As far as the research object is concerned, market research should be considered a special field of political economy because the market is not a phenomenon of private economy but part of the entire economy (gesamtwirtschaftlich). When examined from the standpoint of its objectives the research can, according to him, be regarded as an instrument of the management of an enterprise. In that way he tends to treat market research as a part of business economics.

In his definition Schäfer emphasizes the business economical part of market research. It does not, however, prevent the studying of the market also as an aggregate within national economy. In that case the enterprises participating in the market are examined in the national market not only as competitors of each other but also as a partial factor in the entire marketing mechanism. In the international market the enterprises of each section of production can be considered as competing not only with each other but also collectively with the same type of enterprises of other countries. In the present investigation this "macro-economical" view is in the fore, even though in many connections the marketing will be considered also from the standpoint of private enterprises.

The study of the entire marketing system affords important bases for the marketing research of enterprise. It forms the foundation particularly for situation analysis, which in turn can be used as a basis for a more detailed study of the problems of sales promotion, etc. (cf. Brown 1949, p. 350—). Maynard and Beckman (1952, pp. 16—18) note that several approaches can be used in the study of marketing and thus distinguish, for example: commodity approach; institutional approach; functional approach; and historical approach.

The present investigation, which by its character deals with the marketing of a certain group of commodities, examines the market from several viewpoints, as is often the case. It is aimed at the institutions that participate in the market and at their functions with particular reference to the channels and methods of marketing. Trade customs constitute an important aspect in the institutional treatment of marketing and a considerable part of this study is devoted to them. At the same time the development of roundwood marketing, i.e. historical aspect, is considered but only for a comparatively short period (1936—58).

According to Schäfer (1953, pp. 11—15) the main objectives of the business economical market research are, from the standpoint of the enterprise selling a product, the demand for the product, competition on the side of supply, and channels of distribution. These can, however, be examined from different viewpoints. Schäfer distinguishes two approaches. One, which he terms market analysis, studies the points mentioned above, analysing at a given time. Its basic question is "what is?" The other, the observational method (Marktbeobachtung), studies the dynamics of the market ("den zeitlichen Ablauf des Marktgeschehens"). It seeks the answer for the question, "what will be?" Schäfer's grouping can be applied also in "macroeconomical" market research. His two methods can, however, best be termed static and dynamic research methods.

Maynard and Beckman (1952, p. 37) consider the marketing of goods as consisting of the following primary functions:

a. Functions of exchange:
1. Buying
2. Selling
b. Functions of physical supply:
3. Transportation
4. Storing
c. Facilitating functions:
5. Standardization and grading
6. Financing
7. Risk-bearing
8. Marketing information

This investigation will be concentrated mainly on the first stage in the marketing of roundwood, that is, on buying and selling. Certain risk bearing belongs organically within it. Likewise, financing will be dealt with, but only from the standpoint of the terms of payment between the buyer and seller. Transportation, storing, and grading will be considered in this study only to the extent necessary for the understanding of the marketing operations mentioned above. As measuring is an important facilitating function in the marketing of roundwood it will be discussed in this investigation. In addition, a number of facilitating functions connected with buying and selling will be dealt with.
12. The purpose and limits of this investigation

The present investigation is concerned primarily with the domestic roundwood trade. It is confined to the most important types of industrial wood including sawlogs, veneer logs and pulpwood. Specifically, the study was undertaken to answer the following:

1. What are the structures of supply and demand?
2. What are the channels and methods of marketing?
3. What are the trade customs?
4. What were the developments in marketing methods since the period 1936—38?
5. What are the similarities and differences in marketing of the private forest owners and the State?
6. What are the local features of the market?
7. What are the similarities and differences in the marketing of unprocessed wood between Finland and Scandinavian countries?*

The approach is, according to Schäfer's terminology (1953), closest to market analytical. The dynamic phenomena will be viewed only when they are directed toward the previously defined research aims. As to the dynamics of supply and demand only seasonal fluctuations will be treated.

Only primary marketing appears in this investigation. Import and export of roundwood and reselling by middlemen except forest owners' organizations thus do not belong in this study. Likewise, the local retail will not be considered in the examination of the methods of trade. The investigation, as concerns the buyers of unprocessed wood, will be limited primarily to two large buyer groups: forest industry and exporters of unprocessed wood.

The study will deal with only the two major groups of forest ownership, namely, the State forests under the State Board of Forestry and private forests. In this way two different ownership types and, at the same time, the main part of the volume sold in the roundwood market will be included. The third significant group of forest owners consists of the companies. From their forests the wood, however, does not generally enter the market but is used mostly in their own factories. The amount of wood sold from other forests is insignificant.

The product aspects of the market will be dealt with only to the extent required by the research topic.

The first part of the investigation period (1936—38) was characterized by a high level of economic activity in all countries concerned. In 1956—58

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1 Finland, Norway and Sweden together will be often named Northern Europe in this investigation.
2. Research method

21. Special features of the roundwood market especially with reference to its study

The roundwood market as far as it will be considered in this investigation belongs to the market of raw materials. Thus the demand for unprocessed wood is indirect. It gets its impulse from the consumption of end products but is not generally directly participated in by the consumer.

Furthermore, the marketing of roundwood requires harvesting from large forest areas and, in Finland and other Northern European countries, also from numerous owners. Duddy and Revzan (1947, pp. 12-13) call this type of market buying or centripetal market.

As are raw materials in general, roundwood is also a "bulky" commodity and in its marketing transportational aspects play an essential role. One unique and important form of wood transportation is floating, which is hardly used with any other goods.

Objects of special interest in marketing research often are the branded goods. It appears from what has been said that unprocessed wood does not belong with the branded but with mass goods. It is produced and marketed by numerous competing enterprises and the market is not characterized by the unique character of the products. When in addition the number of producers especially in Northern European countries is great, the competition among producers is much more perfect than in the market of brand goods.

Unprocessed wood differs, however, from typical mass goods, first, in that its product composition comprises numerous assortments. One could even say that the profitable marketing of only one product is often impossible since the same forest and even the same stem yields different products. This is explained by the special production conditions in forestry (joint production).

The buyers have to a certain extent adapted to this special character of supply in such a way that the same buying enterprise has several kinds of establishments using different kinds of roundwood, e.g. sawlogs, pulpwood, etc. (Halmekoski 1955, p. 30). Nevertheless, there are many buyers who use only one type of unprocessed wood. The need for the simultaneous marketing of different kinds of roundwood brings up specific problems (e.g., exchange among buyers).

Although the products of different forest owners do not differ from each other as much as various brands, their features are still unique enough to be priced individually. This is true especially in the pricing of heavy timber (sawlogs, veneer logs, poles). The quality differences are not so much the result of the measures taken by the producers since their influence on the quality of roundwood is relatively small, but the differences are caused mainly by natural conditions. As quality and price determination cannot be done on the basis of samples sent to the buyers, for instance, this characteristic noticeably complicates the marketing of certain types of unprocessed wood and requires a detailed description of the goods ("sale by description").

According to Maynard and Beckman (1952, pp. 382-383) the marketing of raw materials is characterized by the infrequent use of "demand creation". Their reasoning is that "demand is derived and arises without effort and beyond control of the suppliers". Thus a buyer — usually skilled — has a decisive position in marketing. The inactive part of the sellers is also caused by certain factors characteristic of the roundwood market.

First of all, the need and demand for unprocessed wood have been created mainly by the wood-processing enterprises which have had to take the initiative in securing it without any kind of marketing organization of the forest owners. An organization with this type of origin is easily perpetuated. The activity of the sellers in the roundwood market has, particularly in Northern European countries, suffered from the fact that the group of sellers is composed chiefly of owners of farm wood lots which consider the production and marketing of wood as some kind of subsidiary occupation. Furthermore, the non-continuous nature of the marketing of roundwood as compared with the marketing of milk, for example, has caused the sellers to pay less attention to the marketing of wood than to that of agricultural products. On the other hand, infrequent marketing is made possible by the easy storing of the product, which comes in the form of growth, on the growing stock for many years without the danger of spoiling, a feature unique to forestry.

Furthermore, the logging of roundwood is generally, and especially in Finland, done by loosely organized seasonal labor, in fact, largely by the same forest owners who sell the timber. The poorly organized labor conditions have a certain effect on the entire marketing system of unprocessed wood.
22. Earlier investigations. The method used in this investigation

The unprocessed wood market has received only little attention in the study and research of markets. For example, Maynard and Beckman (1952), Duddy and Revzan (1947), and Brown (1949) hardly mention it in their textbooks. Instead, the marketing of agricultural products, for instance, is discussed extensively. It can be observed that general market study deals primarily with the marketing of consumption goods and highly processed industrial goods. One important reason for this may be that the market of agricultural products and consumption commodities in general has developed over a long period of time and their marketing problems are important in almost every country. The unprocessed wood market in turn is much younger and it has considerable significance only in relatively few countries.

Likewise, in Northern Europe special literature dealing with the unprocessed wood market is comparatively scarce. The principal part is composed of textbook-like publications (in Finland, e.g., Jalava 1932, Pakkanen 1949, 1957, Reinius 1954, Hassi 1957, Laine 1957), the publications concerned with only the specific conditions in one country (e.g., Zivnuska 1959), and general comparative reviews (cf. Kleppen 1958).

The present investigation has not had the advantage of using already developed methods of earlier investigations. Because the sampling method is known to be in general use in marketing research (cf., for example, Brown 1949, pp. 446—457; Luck and Wales 1952, p. 173; Schäfer 1953, p. 193—), I have applied it in this investigation for private forests which in Finland include according to the 1950 agricultural survey approximately 266 000 wood lots (excl. forest holdings under five hectares). In connection with the sample survey of private forests conducted under my direction in 1956—58, information was gathered about the repetition of the selling of private forest holdings, seasonal fluctuations, the sizes of annual sales and individual sales, trade customs concerning delivery methods, and other information related to sales. For this part the present investigation will continue the presentation of the results of the sample survey.

The research method has been explained earlier (Holopainen 1959 a). Here it should be only reminded that the investigation was carried out by taking a sample of approximately 12 000 forest holdings from a population of forest holdings grouped according to size. The sample was allocated practically in accordance to the forest areas of the stratum. The data from the sample forest holdings was collected according to instructions given

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1 Abbreviated in the following: survey of private forests.
on printed questionnaires by District Forestry Board and Forest Management Association advisers. The areal units of the investigation were the District Forestry Boards even though the sample within the limits of each size class was allocated also among the communes.

The sample was mainly planned for the purpose of determining the commercial removal which as such provides a useful basis for the study of roundwood marketing. The comparison of the total removal calculated on these bases with the results of the Third Wood Utilization Survey indicated that a considerable bias had occurred. Its effect on the results now being presented will be discussed in connection with the presentation of results.

I have supplemented the sample survey results for marketing methods in private forestry by addressing a questionnaire to the District Forestry Board and Forest Management Association advisers in the beginning of 1959. The questions in this marketing questionnaire appear in the Appendix.

The advisers were to estimate the average extent to which the alternative methods in each series of questions were used in his commune’s area in 1956–58.

This type of method corresponds principally to that for which Brown (1949, p. 311) uses the term, "observational method". It can also be named indirect method as a contrast to direct method of which the aforementioned sample serves as an example.

This survey of marketing methods was required primarily for three reasons.

1. First of all, if the questions included in it had been a part of the sample survey the number of questions asked would have become too large, causing statistical fatigue for both the ones answering and the ones asking.

2. The calculation of the sample results in terms of the small unit areas, such as communes, as appeared necessary for certain questions of trade techniques, would have required a much larger sample than was needed for the other study objectives. The investigation costs would have been greatly increased in that case.

3. Most of the questions are such by their nature that the presentation of precise numerical facts for them is not even necessary, but the estimation based on the observations of an expert knowing the local marketing is sufficient to give quite a clear picture. Especially in the study of trade customs the problem in the first place is not statistical but the recognition of the different methods, their evaluation and order of importance could be considered sufficient (cf. Schäfer 1953, p. 192).

In analyzing the results, especially if done by areas, attention should be directed primarily to the most common alternative in each commune. The possibility that the other two alternatives have been rather common should also be considered. In presenting their occurrence, the frequencies have to be used in analysing the results. These have been obtained by giving three points to the most common of the three alternatives in each series of questions, the next two points, and to the least frequent one point. The alternatives that have not occurred at all receive no points. By adding the points from different communes the frequencies of the alternatives are obtained.

Forest advisers generally have excellent possibilities to make observations on the roundwood marketing because almost every day they have to deal with the selling of wood from private forests and likewise must be in close touch with the buyers. On the other hand, all advisers have not carried out their part with equal interest and therefore the results probably are somewhat inconsistent and must be interpreted with caution. A group of uncertain results was checked with the help of District Forestry Boards. In addition, marketing questionnaire II was circulated in 1960 to forest advisers in order to provide some additional information. The results of it refer to the end of 1959.

In planning the survey the attempt has been to avoid such questions for which possible economic-political interests or the tendency to emphasize one’s own work would tempt the advisers to give biased answers. The biases possibly caused by these factors will be discussed in connection with the results. In examining the results different methods have been employed, for instance, the interviewing of the buyers of unprocessed wood.

Many technical questions of the trade appear from contract forms. Therefore, I collected 12 trade contract forms used in 1936—38 and 1956—58 by the buyers of unprocessed wood in different parts of the country. On the basis of these it has been possible to draw conclusions about some central practices applied in trade. Alongside of these an important source of the trade methods in the 1956—58 period has been the records of the forms committee set up by the Central Association of Finnish Woodworking Industries and the Forest Council of the Central Union of Agricultural Producers.

Especially in the examination of the development of trade customs many sources have been used side by side. First, the contract forms used in 1936—38 have been compared with each other. Furthermore, the forest advisers who had been in their districts already in the 1936—38 period were asked in connection with the questionnaire to evaluate the customs during that period. Additional information has been obtained by personal interviews and from literature. Many of the questions in the questionnaire mentioned above were meant to supplement this examination.

The data concerning State forests has been obtained from the State Board of Forestry primarily from its Business Department. State-owned
forests other than those operated by the State Board of Forestry will be left aside because of their small relative significance. The basis for selling activity is formed by statutes on the matter but many details have been made more definite in the State Board’s circulation letters and other directions. In addition, sales announcements and sales contracts have been studied in the archives of the State Board of Forestry and the officials of the State forest administration interviewed. The answering of some specific questions such as the size of individual sales and seasonal fluctuation has required separate investigations based on primary material.

The material concerning the Scandinavian countries has been received from organizations representing the various sections of trade and from the State Boards of Forestry. The main sources for the study are as follows:

- Statistical Yearbooks of Forestry in Norway and Sweden
- Rules of the forest owners’ organizations
- Annual reports of the
  - State Boards of Forestry
  - Forest owners’ organizations
  - Log scaling associations
- Annual collective agreements on prices and other trading conditions between sellers and buyers
- Public regulations concerning the roundwood sales from State forests
- Contract forms used in the roundwood trade
- Rules of log scaling associations.

In addition a number of published sources (e.g. Kleppen 1958, ZivNuska 1959) not mentioned above have been used.

Finally interviews of experts in the roundwood trade have provided a valuable means for filling many serious gaps in the material and especially for assessing the importance of alternative practices.

It must be pointed out that material concerning the Scandinavian countries is rather scarce and the aim has only been to collect information to facilitate comparisons between these countries and Finland.

3. The structure of supply and demand

31. Different forest owner groups and the wood quantities they supply to the market

The distribution of forest resources within the present boundaries of Finland according to owner groups in the years 1936—38 and 1951—53 is seen in Table 1.

Table 1. Distribution of forest resources by ownership classes in Finland (within the present boundaries) in 1936—38 and 1951—53.

<table>
<thead>
<tr>
<th>Owner Omistaja</th>
<th>Forest area Metsäala</th>
<th>Growing stock Puusto</th>
<th>Annual growth Vuotuomäärä</th>
</tr>
</thead>
<tbody>
<tr>
<td>State — Valtio</td>
<td>35.1</td>
<td>30.8</td>
<td>31.2</td>
</tr>
<tr>
<td>Private — Yksityiset</td>
<td>54.5</td>
<td>60.3</td>
<td>55.6</td>
</tr>
<tr>
<td>Companies — Yhtiöt</td>
<td>7.9</td>
<td>7.0</td>
<td>9.8</td>
</tr>
<tr>
<td>Church, Communes etc. —</td>
<td>2.5</td>
<td>1.9</td>
<td>3.4</td>
</tr>
<tr>
<td>Kunnat, seurakunnat ym.</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total — Yhteensä</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

| a) per cent — % | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| c) mill. cu. m. — milj. m³ | 1.370 | 1.401 | 1.370 | 1.401 | 1.370 | 1.401 |

Source — Lähde: VRJÖ ILVÉSSALO 1956.

1 The State forests include, in addition to those under the State Board of Forestry, the relatively small amount of forests under other State offices. The comparatively small area represented by collective forests is listed under private forests.
2 incl. bark — kuorteen
3 excl. bark — kuorettta.
The figures for the private forests contain also the minor forest resources owned by co-operatives, foundations, organizations, and other such groups (cf. Ilvesalo 1956, pp. 40, 80, 128).

The distribution of forest resources indicates clearly that wood is produced primarily in private and State forests. They make up 91% of the total forest area (in 1951-53) and 89% of the growing stock and growth. — Since 1951-53 the share of private forest has increased to 63% (in 1957) whereas the percentage of State forests has been reduced to 28 (Mirkko Ilvesalo 1955).

Table 2 gives the average quantities of commercial removal of industrial wood (the total removals less the utilization by the farming population) in terms of owner groups in the felling years 1955/56 and 1956/57 as determined in calculations made by the author in connection with the survey of private forests. It shows that the private and State forests constitute approximately four-fifths of the total.

![Table 2: Commercial removal by ownership classes, averages for felling years 1955/56 and 1956/57 according to the results of the survey of private forests (Holopainen 1959 a).](table2.png)

The survey apparently yielded smaller results for private forests than what was actually the case, although the error with regard to industrial wood is smaller than average (cf. Holopainen 1959 a). Thus a still greater part of the total commercial removals obviously comes from private and State forests, perhaps about 90% or almost the same proportion as the distribution of forest land. Of the industrial wood that has actually been sold, private and State forests contribute an even higher share because that removed from company forests is used mainly by the industrial plants of the companies themselves. On the other hand, part of the wood sold from State and private forests enters local retail trade only. In Finland's Wood Utilization Survey the utilization of industrial wood by the non-farming rural population was probably listed entirely in this category. It was determined separately, being in 1955 approximately 0.35 million cu. meters.1

The relation existing between removals from State and private forests cannot be accurately estimated on the basis of the data in Table 2 due to the error in the sample survey. Apparently private forests make up an even greater part than is shown in the table, probably being more than triple the removals from State forests.

The share of State forests according to Table 1 is smaller in terms of commercial removal than in terms of forest area. The main reasons for this difference are the lower level of site fertility in State forests and their concentration mostly in the unfavorable growth and demand conditions of Northern Finland. On the other hand, commercial removals from private forests are reduced by the home use of the rural population (in 1955 approx. 1.6 million cu. meters of industrial wood) which is taken almost completely from the farms' own forests.

The figures for State and private forests vary greatly in different parts of the country. Private forests make up 94% of the forests in the area of the District Forestry Board of Southwest Finland (district 2 in Fig. 1), but only 27% of the forest land in the area of the District Forestry Board of Lapland (19). The corresponding percentages for State forests are 1 and 72 respectively. The proportions of marketed wood closely resemble these percentages of forest area. In the southern part of Finland private forests are dominant, although their share varies to a considerable degree, whereas in Northern Finland the State forests are more important.

The private forests of Finland are divided into a great number of small forest holdings. In the survey of private forests, the population was composed of some 257 000 forest holdings. Since this included only those forests which are considered in taxation as having an annual growth of at least 20 cu. meters, it is reasonable to assume that industrial wood is

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1 Cubic meter refers in the following to solid measure excluding bark unless otherwise stated.
removed from nearly every one of them. When, in addition, less frequent sales are made from smaller forest property also, it can be seen that unprocessed wood is supplied from a great number of sources, probably including at least 300,000 forest holdings.

32. Buyer groups of industrial wood

The distribution of all industrial roundwood among different utilizer groups is shown in the results of the National Wood Utilization Survey. The structure of the primary utilization of industrial roundwood in 1936–38 and 1956–58 can be seen in Table 3. The figures include both the industrial wood removed from the utilizers’ own forests and that purchased by the utilizer.

Table 3. Composition of the use of industrial wood in Finland 1936–38 and 1956–58. (Source: OSARA, PÖNTYVENEN, ERKKILÄ 1948; PÖNTYVENEN 1958 a, Forest Research Institute).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mill. cu. m.</td>
<td>mil. m³</td>
<td>percent</td>
<td></td>
</tr>
<tr>
<td>1. Export of roundwood — Raakapuun vienti</td>
<td>3.31</td>
<td>4.06</td>
<td>12.6</td>
<td>14.9</td>
</tr>
<tr>
<td>2. Forest industries — Metsäteollisuus</td>
<td>19.7</td>
<td>20.81</td>
<td>74.8</td>
<td>76.5</td>
</tr>
<tr>
<td>3. Farm population — Maatalousväestö</td>
<td>2.03²</td>
<td>1.58²</td>
<td>7.8</td>
<td>5.8</td>
</tr>
<tr>
<td>4. Miscellaneous — Maun käyttö</td>
<td>1.28²</td>
<td>0.76²</td>
<td>4.8</td>
<td>2.8</td>
</tr>
<tr>
<td>Total — Yhteensä</td>
<td>26.48</td>
<td>27.27</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

¹ The wood bought from commercial sawmills by the rural population is not included here. Estimated in 1938 on the basis of ERKKILÄ (1943, p. 307).

² Items 3 and 4 refer to years 1938 and 1955. — Ryhmät 3 ja 4 ovat vuosilta 1938 ja 1955.

Utilization by the forest industry and the export of unprocessed wood are seen to be the chief uses of industrial wood in Finland. Other utilization amounted only to about 13% in 1936–38 and to about 9% of the total in 1956–58, the major part having been used by the agricultural population from their own forests. On these grounds it is possible to conclude that sales of industrial wood directly to the ultimate consumer rarely take place. The primary marketing of industrial wood in MAJNÄRD’s and BECKMAN’s (1952, pp. 138–139; 283–285) terminology is therefore mainly wholesale.

Forest industry enterprises and exporters of unprocessed wood are also the chief buyers of industrial roundwood. The share of the forest industry, however, is slightly decreased, because some industrial wood comes from the companies’ own forests. In the felling years 1955/56 and 1956/57 this amounted to approximately 5 million cu. meters, on the average (HOLOPAINEN 1959 a, p. 35).

The different buyers of the industrial wood which comes from private forests and their relative importance can be illustrated by the results of the survey of private forests because records of the type of buyer were kept on the sample forest holdings. For the whole country the distribution was as follows (the results are averages for the felling years 1955/56 and 1956/57):

<table>
<thead>
<tr>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Forest industry .......................... 80</td>
</tr>
<tr>
<td>2. Exporters or middlemen for unprocessed wood 17</td>
</tr>
<tr>
<td>3. Other buyers (mainly individual consumers) ... 3</td>
</tr>
<tr>
<td>Total 100</td>
</tr>
</tbody>
</table>

Group 2 also includes the middlemen who have resold the wood to various utilizers, primarily to the forest industry and exporters of unprocessed wood. The total for groups 1 and 2 (97%) will not thereby be greatly altered. Even making allowance to the fact that the bias appearing in the survey apparently is greatest in group 3, the results of the survey of private forests indicate that more than 90% of the industrial roundwood from private forests is sold to the forest industry and exporters.

The exporters and forest industry have a greatly varying role in different areas of the country. This is illustrated in Table 4.
Table 4. Different buyer groups of industrial roundwood in private forests by districts (Fig. 1) 1955/56—1956/57 (survey of private forests).

<table>
<thead>
<tr>
<th>District</th>
<th>Industrial company (large-scale enterprises)</th>
<th>Private sawmill owner (small enterprises)</th>
<th>Exporter of unprocessed wood</th>
<th>Other buyers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Metsähallituslaitokset (State Forests)</td>
<td>Metsäosastot (Forest Offices)</td>
<td>Yksityinen viisaita ja väärinäisiä</td>
<td>Vain metsätietoista materialia</td>
<td>Yhteensä</td>
</tr>
<tr>
<td></td>
<td>per cent — %</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Helsinki</td>
<td>58.7</td>
<td>12.1</td>
<td>23.3</td>
<td>5.9</td>
</tr>
<tr>
<td></td>
<td>2. Lounais-Suomi</td>
<td>38.7</td>
<td>23.6</td>
<td>27.8</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td>3. Satakunta</td>
<td>62.8</td>
<td>18.8</td>
<td>13.6</td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td>4. Uusimaa-Häme</td>
<td>70.8</td>
<td>13.2</td>
<td>9.2</td>
<td>6.6</td>
</tr>
<tr>
<td></td>
<td>5. Pohjois-Häme</td>
<td>70.3</td>
<td>11.4</td>
<td>6.3</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>6. Itä-Häme</td>
<td>74.1</td>
<td>17.4</td>
<td>4.7</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>7. Etelä-Savo</td>
<td>80.5</td>
<td>4.8</td>
<td>12.4</td>
<td>2.3</td>
</tr>
<tr>
<td></td>
<td>8. Etelä-Karjala</td>
<td>72.8</td>
<td>3.5</td>
<td>21.5</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>9. Itä-Savo</td>
<td>80.6</td>
<td>5.2</td>
<td>12.8</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>10. Pohjois-Karjala</td>
<td>74.2</td>
<td>4.6</td>
<td>18.3</td>
<td>2.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>76.7</td>
<td>5.3</td>
<td>15.1</td>
<td>2.9</td>
</tr>
<tr>
<td></td>
<td>12. Keski-Suomi</td>
<td>84.1</td>
<td>4.3</td>
<td>9.5</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>13. Etelä-Pohjanma</td>
<td>43.6</td>
<td>18.4</td>
<td>35.7</td>
<td>2.3</td>
</tr>
<tr>
<td></td>
<td>14. Vaasa</td>
<td>52.3</td>
<td>6.4</td>
<td>30.8</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>15. Keski-Pohjanma</td>
<td>37.4</td>
<td>4.7</td>
<td>54.1</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>16. Pohjois-Pohjanma</td>
<td>74.8</td>
<td>3.3</td>
<td>18.3</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td>17. Kainuu</td>
<td>86.1</td>
<td>0.5</td>
<td>9.3</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>18. Kolli-Suomi</td>
<td>65.3</td>
<td>4.7</td>
<td>28.5</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>19. Lappi</td>
<td>63.9</td>
<td>0.2</td>
<td>28.2</td>
<td>7.7</td>
</tr>
<tr>
<td>Total — Koko maa</td>
<td>71.1</td>
<td>8.8</td>
<td>16.7</td>
<td>3.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Utilization of home-grown industrial wood by the various groups of consumers and the approximate product composition in forest industry and export is presented in Table 5.

Table 5. Approximate product composition of home-grown industrial wood in utilization by forest industries and export of roundwood for the periods 1936-38 and 1956-58.

<table>
<thead>
<tr>
<th>Item — Erä</th>
<th>1936—38</th>
<th>1956—58</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mill. cu. m.</td>
<td>Mij. m³</td>
<td>Per cent</td>
<td>Mill. cu. m.</td>
</tr>
<tr>
<td>1. Sawmill industry (sawlogs) — Sahtalestissä (sahatukit)</td>
<td>10.97</td>
<td>55.5</td>
<td>9.02</td>
<td>43.4</td>
</tr>
<tr>
<td>2. Plywood industry (veneer logs) — Värneralestissä (värentukit)</td>
<td>0.82</td>
<td>4.1</td>
<td>0.85</td>
<td>4.1</td>
</tr>
<tr>
<td>3. Pulp- and fibreboard industries (pulpwood) — Puumassaa- ja kaukatekniikka (paperi- ja kultapaat)</td>
<td>7.77</td>
<td>39.3</td>
<td>10.58</td>
<td>50.8</td>
</tr>
<tr>
<td>4. Miscellaneous — Muut</td>
<td>0.21</td>
<td>1.1</td>
<td>0.36</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Total for industry — Yhteensä estissä | 19.77 | 100.0 | 20.81 | 100.0 |

B. Export of roundwood — Raakapuun vienti

<table>
<thead>
<tr>
<th>Material — Esitysmateriaali</th>
<th>1936—38</th>
<th>1956—58</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mill. cu. m.</td>
<td>Mij. m³</td>
<td>Per cent</td>
<td>Mill. cu. m.</td>
</tr>
<tr>
<td>1. Plywood — Paperipuu</td>
<td>1.18</td>
<td>35.3</td>
<td>2.35</td>
<td>57.3</td>
</tr>
<tr>
<td>2. Pitprops — Kolvopuu</td>
<td>1.72</td>
<td>51.5</td>
<td>1.21</td>
<td>29.8</td>
</tr>
<tr>
<td>3. Miscellaneous — Muut</td>
<td>0.44</td>
<td>13.2</td>
<td>0.50</td>
<td>12.3</td>
</tr>
</tbody>
</table>

Total export of roundwood — Raakapuun vienti — Yhteensä | 3.34 | 100.0 | 4.06 | 100.0 |

The table indicates that the Finnish roundwood market is dominated by sawlogs and pulpwood: they made up 86 % in 1936-38 and 88 % in 1956-58 of the total use by forest industry and export of unprocessed wood. Pitprops and veneer logs (each with a share of about 5 % in 1956-58) are next in importance. The group "Miscellaneous" consists of a variety of items: sleepers, poles, square timber, aspen for matches, spool wood, etc.

On the basis of Finland’s third Wood Utilization Survey, the commercial use (i.e., total utilization minus domestic use by the farm population) of industrial wood was in 1955

<table>
<thead>
<tr>
<th>Material — Esitysmateriaali</th>
<th>Mill. cu. m.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>timber of sawmill size</td>
<td>13.45</td>
<td>48</td>
</tr>
<tr>
<td>industrial cordwood</td>
<td>14.36</td>
<td>52</td>
</tr>
</tbody>
</table>

1 Includes some softwood — Sisältää hiukan myös haravaputa.
The proportions are nearly the same for the total of forest industry and export.

It is to be remembered that the percentage of sales from the total utilization, the proportions of different forms of utilization and of different buyer groups, and the product composition of annual removals are subject to variation from year to year. For instance, the use of unprocessed wood (industrial roundwood) by forest industry has varied during the period 1953—58 between the extremes of 15.9 and 22.3 million cu.m., with an average of 20.0 million cu.m. The general trend in the Finnish roundwood market is the increasing role of forest industry, and in industrial utilization of wood the growing importance of the wood pulp industry.

Furthermore, the enterprises buying unprocessed wood are not distinctly divided according to forms of utilization since many of them both use and buy several assortments of unprocessed wood at the same time.

On the roundwood market the number of buyers is but a fraction of the number of sellers. This is especially true of the wood pulp industry which has large plants. Also, some firms own more than one industrial plant. Since the 59 mechanical-pulp mills and cellulose factories of Finland belong to 40 firms (cf. Finnish Timber and Paper Calendar 1958/59), the pulpwood used annually by each enterprise is, on the basis of the 1956—58 utilization statistics, approximately 260 000 cu. meters, on the average. Exporting licenses for pulpwood and pitprops were given to 144 individual firms or combinations of firms in 1958 (Lisensiviraston tiedotuslaia 1958), which means an export of about 24 700 cu. meters per exporter. The list of exporters included 24 enterprises engaged in the manufacturing of wood pulp and fibreboard.

The quantities bought directly from the forest owners are apparently somewhat smaller than the previously mentioned figures because many exporters buy pulpwood also from middlemen. It should further be noted that the effective buying activities of the exporters of pulpwood and pitprops are restricted to smaller areas (primarily near the seacoasts), whereas the country's own industry purchases from a wider area.

In the sawmill industry the number of enterprises is much greater than in the paper industry. It has not been possible to obtain the exact figures, but the two central associations of the sawmill industry include some 400 members (cf. Holopainen 1959) and, in addition, there is a great number of small sawmills that do not belong to these associations. The majority — approximately four-fifths — of the total market production of sawn wood, is formed by the relatively large member concerns of the Finnish Sawmill Owners' Association.

Plywood, fibreboard, and chipboard industries fall between the wood pulp industry and the sawmill industry in size: the enterprises are relatively few in number (20 plywood factories, 8 fibreboard factories, and 4 chipboard factories), but the average consumption of roundwood per enterprise is smaller than in the wood pulp industry.

The number of enterprises buying roundwood is smaller than it possibly could be since the biggest enterprises are combinations with several functions and thus buy several assortments of roundwood (cf. Halmeoski 1955, p. 30). In a calculation made by the author the 40 enterprises owning the pulpmills of Finland are also in possession of 27% of the capacity of Finland's plywood industry, 46% of that of the fibreboard industry, and 596 000 stds. or 47% of the capacity of the sawmill industry (according to the Finnish Timber and Paper Calendar 1958/59; the value given for the capacity of the sawmill industry does not include small sawmills).

33. Scandinavia

The ownership of forests in Norway and Sweden is distributed as shown below (Statistiska uppgifter . . . 1958)1:

<table>
<thead>
<tr>
<th></th>
<th>Norway</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>per cent</td>
<td>%</td>
</tr>
<tr>
<td>State forests</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Other public forests</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Company forests</td>
<td>7</td>
<td>25</td>
</tr>
<tr>
<td>Private forests</td>
<td>67</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total, %</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td>millions of ha.</td>
<td>7.9</td>
<td>22.3</td>
</tr>
</tbody>
</table>

The private forests in Norway constitute an even higher percentage than in Finland, State forests in turn composing a noticeably smaller portion.

The coniferous industrial wood — hardwoods comprised only 1.3% of the total for the period — entering the market or industrial processing in Norway was, in terms of buyer groups, in the felling years 1955/56—1957/58 on the average as follows (Norges Officielle Statistikk XI):

<table>
<thead>
<tr>
<th></th>
<th>mill. cu. m.</th>
<th>per cent</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>excl. bark</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private forests (includes company forests)</td>
<td>7.37</td>
<td>89.0</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>0.38</td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>0.53</td>
<td>6.4</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8.28</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

1 The figures Concerning Norway have been checked on the basis of most recent information.
The corresponding statistics for the years 1936—38 are not available, but the ratios probably differ only slightly from those given in the chart above. About nine-tenths of the marketed wood is seen to come from private forests.

The farm forests of Norway are made up of 132,000 forest holdings with an average area of 27.3 hectares (1 according to the Census of Agriculture, 1949. Skogstatistik 1953—1956, p. 15).

The removals of coniferous wood given in the preceding chart were divided among the types of industrial wood (the figures for the period 1936/37—1938/39 are taken from Skogdirektörens årsmelding):

<table>
<thead>
<tr>
<th></th>
<th>1936/37—1938/39</th>
<th>1955/56—1957/58 per cent — %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sawlogs</td>
<td>39.6</td>
<td>44.5</td>
</tr>
<tr>
<td>Pulpwood</td>
<td>58.9</td>
<td>50.9</td>
</tr>
<tr>
<td>Others</td>
<td>1.5</td>
<td>4.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Norway exports small quantities (average for 1956—58 0.3 mill. cu.m.) of unprocessed wood, mainly from the water-way areas bordering Sweden. This is compensated by about equal imports of roundwood, mainly pulpwood (average for 1956—58 0.3 mill. cu.m.).

In Sweden the share of both private forests and State forests of the total forest area is smaller than in Finland. The company forests, on the other hand, are more common (approximately one-fourth). In both Norway and Sweden the group "other public forests" (communes, parishes, and the so-called almönningar) is larger than in Finland.

In Sweden the total fellings, including fuelwood, have been estimated for 1956—58 by forest ownership classes to be as follows (Skogstatistik årsbok 1956—58): ²

<table>
<thead>
<tr>
<th></th>
<th>incl. bark</th>
<th>excl. bark</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>State forests</td>
<td>6.25</td>
<td>5.08</td>
<td>12.2</td>
</tr>
<tr>
<td>Company forests</td>
<td>12.86</td>
<td>10.44</td>
<td>25.2</td>
</tr>
<tr>
<td>Private forests</td>
<td>29.28</td>
<td>23.78</td>
<td>57.4</td>
</tr>
<tr>
<td>Other forests</td>
<td>2.63</td>
<td>2.14</td>
<td>5.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>51.02</td>
<td>41.44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

² Various methods with somewhat different results are employed in Sweden for the determination of the annual cut. Here the method used by the Skogstyrelsen has served as the basis (cf. Skogstatistik årsbok 1957, pp. 64—65). The cut of private forests is determined by deducting the sum of other ownership classes — whose fellings are reported annually — from the total amount of fellings.

The wood removed from company forests is used primarily in the industrial plants of the company itself. A certain part of the removals from private forests — mainly from farm woodlots — is consumed at the owner's farm. No reliable estimations for this item have been made. Even if they were supposed that the non-commercial disposals — according to FAO, (Yearbook of Forest Products Statistics 1955, p. 47) it was 3.9 million cu. meters in 1954 — were entirely taken from private forests, they would comprise approximately 16 % of the total removal of these forests.

The private forests of Sweden are made up of 240,000 forest holdings with an average size of 47 hectares (Skogstatistik årsbok 1957, p. 23).

It ought to be noted that the quantity of marketed wood estimated in this way includes all the fuelwood and that part of industrial wood which is exchanged in local retail trade. Their share apparently is relatively small, which is already suggested by the figures on the utilization of industrial roundwood. In the publication Skogstatistik årsbok utilization and its components (averages for 1956—58) are given as follows:

<table>
<thead>
<tr>
<th></th>
<th>mill. cu. m. excl. bark</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sawmill industry</td>
<td>15.0¹</td>
<td>44.1¹</td>
</tr>
<tr>
<td>2. Woodpulp industry</td>
<td>16.5</td>
<td>48.5</td>
</tr>
<tr>
<td>3. Other forest industry</td>
<td>0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>4. Export of unprocessed wood</td>
<td>1.5</td>
<td>4.4</td>
</tr>
<tr>
<td>5. Other items (poles, pilings, mining timber etc.)</td>
<td>0.3²</td>
<td>1.5²</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>34.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

¹ Figure includes also the smallest forest holdings and is not comparable with the Finnish figures mentioned earlier.

² Since Swedish industrial statistics exclude establishments employing less than five workers the utilization figures of sawmill industry are added by 13 % (Skogstatistik årsbok 1957, p. 73).

³ Average for felling years 1952/53—1956/57.
The 72 pulp mills and fibreboard factories of Norway belong to 58 firms; in Sweden the number of factories is 144 and that of firms 82 (Brusewitz Nordisk Papperskalender 1959). The number of sawmills and involved enterprises in both countries is high: the number of commercial sawmills equipped with gang and circular saws is estimated to be approximately 3,700 in Norway and 3,800 in Sweden (Skogsbruket i Norden 1958, p. 6).

The structure of the forest industry in all the North European countries is very similar. The clearest differences can be seen in the average size of pulp mills, which in Scandinavia are smaller than in Finland, and in the role of small circular saws, which in Norway are more common than in either Finland or Sweden.

Forest ownership has been comparatively stable in Norway and Sweden since the 1930's. The quantities of wood available for market from private forests have probably increased to some extent, however, mainly because of a decrease in consumption on the farms.

4. The size and composition of individual sales

It has been pointed out (see Section 32) that the primary marketing of industrial wood is mostly wholesale regardless of the size of individual sales. However, the size of individual sales can be expected to influence the marketing methods, and therefore some aspects of it will be considered in the following.

The average size of roundwood sales during a certain year can be defined in several slightly differing ways. First, it can be defined as the quotient:

\[
\frac{\text{total sales of a certain kind of good}}{\text{number of sales of this same good}}
\]

(a)

Since each sale often consists of more than one assortment of wood (see Table 7) sold under the same contract, it would be logical to define, the average size of sales as the quotient:

\[
\frac{\text{total quantity of industrial roundwood in the sales}}{\text{number of sales}}
\]

(b)

For private forests the data of the sample survey has been used in the calculations. Because the results require laborious computations, it seemed adequate to restrict the work to six district forestry boards representing different kinds of marketing conditions and to the felling year 1956/57. The results are given both for stumpage sales and delivery sales in Table 6 a. Local retail is also included in the material, but in the sales of industrial wood it is relatively unimportant.
Table 6a. Average size of individual sales in some districts in the felling year 1956/57 (according to the survey of private forests).

<table>
<thead>
<tr>
<th>District</th>
<th>Stumpage sales</th>
<th>Delivery sales</th>
<th>All sales</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pyyhikäuppat</td>
<td>Hankintakäuppat</td>
<td>Kakkile alueita pääkauppat</td>
</tr>
<tr>
<td></td>
<td>Average size of individual sales, cu. m., Myyntien keskisuunnus, m³</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Lounais-Suomi</td>
<td>95</td>
<td>39</td>
<td>45</td>
</tr>
<tr>
<td>8. Etelä-Karjala</td>
<td>190</td>
<td>39</td>
<td>72</td>
</tr>
<tr>
<td>10. Pohjois-Karjala</td>
<td>190</td>
<td>56</td>
<td>68</td>
</tr>
<tr>
<td>12. Keski-Suomi</td>
<td>271</td>
<td>60</td>
<td>113</td>
</tr>
<tr>
<td>18. Koli-Suomi</td>
<td>207</td>
<td>81</td>
<td>80</td>
</tr>
</tbody>
</table>

The parcels of industrial wood marketed from private forests are seen to be quite small on the average: the mean for the six districts is approximately 70 cu. meters solid measure. However, the variation among the districts is great (37—113 cu. meters). It seems that near the coast, where the exporters of unprocessed wood and the small local enterprises appear with the forest industry as buyers, the individual sales are, on the average, smaller than in the interior. The size of forest holdings also has an effect on the volume of sales. This can be seen in Table 6b which presents the average magnitude of sales from forest holdings of various sizes in the same districts as in Table 6a.

Table 6b. Average size of individual sales by sizes of forest holdings (averages for districts mentioned in Table 6a).

<table>
<thead>
<tr>
<th>Size of the forest holding, hectares</th>
<th>Stumpage sales</th>
<th>Delivery sales</th>
<th>All sales</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pyyhikäuppat</td>
<td>Hankintakäuppat</td>
<td>Kakkile kauppat</td>
</tr>
<tr>
<td>Average size of individual sales, cu. m., Myyntien keskisuunnus, m³</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. —</td>
<td>20</td>
<td>83</td>
<td>32</td>
</tr>
<tr>
<td>2. 20—50</td>
<td>142</td>
<td>43</td>
<td>51</td>
</tr>
<tr>
<td>3. 50—100</td>
<td>191</td>
<td>58</td>
<td>81</td>
</tr>
<tr>
<td>4. 100—200</td>
<td>300</td>
<td>91</td>
<td>146</td>
</tr>
<tr>
<td>5. 200—300</td>
<td>373</td>
<td>121</td>
<td>219</td>
</tr>
<tr>
<td>6. 300—500</td>
<td>503</td>
<td>147</td>
<td>303</td>
</tr>
<tr>
<td>7. 500—1000</td>
<td>1,031</td>
<td>338</td>
<td>722</td>
</tr>
<tr>
<td>8. 1,000—</td>
<td>887</td>
<td>745</td>
<td>803</td>
</tr>
</tbody>
</table>

1 District numbers refer to Fig. 1. — Alueiden numerot viitattavat karttaan 1.

Besides being affected by the areas of forest holdings as such, the figures are also influenced by the fact that delivery sales are relatively more common from small holdings than from large ones (Section 83).

The average annual commercial removal per forest holding engaged in sales activities in 1955/56—1956/57 was calculated from the material of the survey of private forests. The results indicate that the quantities of annual sales as well are, on the average, quite small: in western and southwestern coastal areas and most of Northern Finland under 100 cu. meters and only in one district (9) has it been over 200 cu. meters. The average for the whole country is 116.5 cu. meters. In the felling year 1955/56 it was 118 and in 1956/57 115 cu. meters. On the basis of the two years studied, the variation is comparatively slight.

Information on the volume of sales from private forests comparable to those now being considered are not available for the years 1936—38. KAILA (1949) in his investigation has calculated the average size of all roundwood sales and of sales of each kind of wood by dividing the quantities sold by the number of sales (method a) for the years 1929—38. He did not take into account the fact that the same sale might have contained a number of other kinds of wood as well.

To make the figures of this study comparable to those of Kaila, the annual average for the sales of coniferous sawlogs and of spruce pulpwod have been calculated for the whole country. The comparison is seen below:

<table>
<thead>
<tr>
<th>Size of the forest holding, hectares</th>
<th>Stumpage sales</th>
<th>Delivery sales</th>
<th>All sales</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pyyhikäuppat</td>
<td>Hankintakäuppat</td>
<td>Kakkile kauppat</td>
</tr>
<tr>
<td>Average size of individual sales, cu. m., Myyntien keskisuunnus, m³</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1929—38</th>
<th>1956/57</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coniferous sawlogs:</td>
<td>332.4</td>
</tr>
<tr>
<td>Spruce pulpwod:</td>
<td>69.4</td>
</tr>
</tbody>
</table>

These figures indicate that individual sales have become smaller during the twenty-year period from 1936/38 to 1956/58. A similar pattern is suggested by MATILAIREN' S (1958) observation on the development in the quantities of wood marked for cutting in 1945—57.

Table 7 shows the composition of individual sales. Often they consist of only one assortment of wood. Nearly 30% on the average, however, is composed of at least two categories of wood. This kind of sale is more common among stumpage sales than among delivery sales.
Table 7. Composition of individual sales in some districts (see Fig. 1) according to the survey of private forests.

Taulukko 7. Myyntien kompositiön eri alueiden metsänhoitotaukkojen alueella yksityismetsien ototutkimuksen mukaan.

<table>
<thead>
<tr>
<th>District Metänhöitolautakunta</th>
<th>Number of assortments of timber in the sale Kaupun sisältäminen tuotantoina luku</th>
<th>% of the number of sales — % myyntien tuotava</th>
<th>Total Värävä</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Loumais-Suomi</td>
<td>95.5</td>
<td>2.0</td>
<td>2.3</td>
</tr>
<tr>
<td>8. Etela-Karjala</td>
<td>34.1</td>
<td>55.1</td>
<td>10.0</td>
</tr>
<tr>
<td>10. Pohjois-Karjala</td>
<td>60.1</td>
<td>36.2</td>
<td>3.7</td>
</tr>
<tr>
<td>12. Keski-Suomi</td>
<td>46.4</td>
<td>30.7</td>
<td>22.9</td>
</tr>
<tr>
<td>14. Vaasa</td>
<td>49.1</td>
<td>32.2</td>
<td>18.7</td>
</tr>
<tr>
<td>18. Koillis-Suomi</td>
<td>69.0</td>
<td>23.2</td>
<td>7.8</td>
</tr>
<tr>
<td>Total — Värävä</td>
<td>55.4</td>
<td>32.2</td>
<td>12.4</td>
</tr>
</tbody>
</table>

Stumpage sales — Pystykauppat:

<table>
<thead>
<tr>
<th>District Metänhöitolautakunta</th>
<th>Stumpage sales — Pystykauppat:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Loumais-Suomi</td>
<td>81.6</td>
</tr>
<tr>
<td>8. Etela-Karjala</td>
<td>65.4</td>
</tr>
<tr>
<td>10. Pohjois-Karjala</td>
<td>62.3</td>
</tr>
<tr>
<td>12. Keski-Suomi</td>
<td>65.5</td>
</tr>
<tr>
<td>14. Vaasa</td>
<td>68.6</td>
</tr>
<tr>
<td>18. Koillis-Suomi</td>
<td>100.0</td>
</tr>
<tr>
<td>Total — Värävä</td>
<td>68.4</td>
</tr>
</tbody>
</table>

Delivery sales — Hankinta kauppat:

<table>
<thead>
<tr>
<th>District Metänhöitolautakunta</th>
<th>Delivery sales — Hankinta kauppat:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Loumais-Suomi</td>
<td>61</td>
</tr>
<tr>
<td>8. Etela-Karjala</td>
<td>58</td>
</tr>
<tr>
<td>10. Pohjois-Karjala</td>
<td>99</td>
</tr>
<tr>
<td>12. Keski-Suomi</td>
<td>74</td>
</tr>
</tbody>
</table>

Information regarding the average size of sales was requested also from a number of large firms in forest industry which do their buying of roundwood in different parts of the country. The results include purchases from private forests only and refer to the felling year 1956/57:

Firm A (Northern Finland)..............................61
Firm B (Western part of Southern Finland)........58
Firm C (Eastern part of Southern Finland).........99
Firm D (Almost all of Southern Finland)............74

The average size of industrial wood sales from State forests according to sales contracts in 1955/56—1957/58 is seen below. The values have been obtained by dividing the estimated volume of sales by the number of contracts. The information was obtained from the State Board of Forestry. Retail has not been included in the data.

<table>
<thead>
<tr>
<th>Year</th>
<th>Stumpage sales range</th>
<th>Average number of trees</th>
<th>Delivery sales range</th>
<th>Average cu. m.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1956/57</td>
<td>2 240—40 968</td>
<td>6 260</td>
<td>200—17 000</td>
<td>1 970</td>
</tr>
<tr>
<td>1957/58</td>
<td>96—9 305</td>
<td>1 060</td>
<td>50—8 500</td>
<td>950</td>
</tr>
</tbody>
</table>

It has not been possible to obtain the statistics for the size and composition of sales from private forests in the Scandinavian countries. Interviews with a number of experts and the size composition of forest holdings would suggest that there is a close resemblance to the sales in Finland. The quantities sold at each time can, however, be expected to be somewhat greater on the average. It is also common to sell several kinds of roundwood at each time both in Norway and Sweden.

The following figures (information of the Direktorat for Statens Skoger) describes the size of individual sales from the Norwegian State forests (the figures refer to tømmer only):

Felling year | Stumpage sales range | Average number of trees | Delivery sales range | Average cu. m. |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1937/38</td>
<td>2 240—40 968</td>
<td>6 260</td>
<td>200—17 000</td>
<td>1 970</td>
</tr>
<tr>
<td>1957/58</td>
<td>96—9 305</td>
<td>1 060</td>
<td>50—8 500</td>
<td>950</td>
</tr>
</tbody>
</table>

The average size of individual stumpage sales from Swedish State forests was 565 cu.m. in 1957 (information from the Domänsstyrelsen).

Figures indicate that the sold parcels apparently are on the average considerably larger than those sold from private forests. A distinct reduction has taken place in the average quantity of sales in Norway since 1937/38.
5. Seasonal Rhythm of the Sales

The seasonal pattern of the market is often reflected in marketing channels and methods of price formation, etc. In Scars' (1933) opinion, even such central part of market observation, the seasonal rhythm in the Finnish roundwood market has received attention in various connections (e.g., Saari, 1931, p. 6; Renvall, 1954, p. 179) and the concentration of sales in the autumn characteristic of this trade has been pointed out. The character of the rhythm has yet not been very clear, and the difficulties encountered in making such a study are well known. The difficulties encountered in making such a study are well known.

As to private forestry, the seasonal rhythm was first studied in the survey of private forests in 1934 by indicating the monthly average of the mean of 12 days for each month. The results were calculated for each month and converted to correspond to a 30-day month. Finally, each monthly average was converted to the mean of all months. It was then possible to see how the seasonal rhythm had developed since 1903.

The data on the sample survey was also used for checking parallel data obtained from another source, i.e., the statistics of the Central Forest District. The information was collected from the Central Forest District and other sources. The survey was conducted every year, and the data was used to determine the seasonal rhythm.

Fig. 2. Seasonal rhythm of sales in private forests. The data for the period 1934-1958.
fellings as are specified in the private forest law of 1928. Generally, the felling report is made soon after the sale has been closed. The date, however, is most often somewhat later than the actual date of the sale. Since the board makes the summaries according to the month when the report arrives, there is a slight lag between the actual seasonal rhythm and that drawn on the basis of felling reports. In order to make a more accurate determination of this lag, the monthly sales averages for the felling years 1955/56 and 1956/57 as obtained from the sample survey and from the felling-report data have been compared with each other (Fig. 4).

The statistics on felling reports and the results of the survey of private forests do not cover exactly the same population. First, the private forest law of 1928 leaves a number of fellings outside the reporting responsibility. For this reason and because of neglect in reporting, the statistics drawn up from the reports do not include all the commercial fellings made in private forests. Furthermore, the felling-report statistics refer only to the Finnish-speaking forestry boards. Delivery sales made by the forest owners are often left unreported. On the other hand, felling reports are made also for commune and company forests. These deficiencies, however, should not greatly alter the picture of seasonal rhythm. Nor is it probable that the negative bias in the sample survey would make the picture drawn of the rhythm essentially biased.

The various sources all indicate that the sales of industrial wood are made most commonly during the last months of the year and that they continue rather actively through the beginning of the next year. Figure 4 shows that the seasonal rhythm in the felling-report data has a lag of about one month. No distinct differences in different parts of the country could be observed.

In Finland the seasonal rhythm of sales is influenced by a number of factors: climatic factors, seasonal rhythm in the exporting of forest products, the supply of labor, logging techniques, waiting done by sellers and buyers, etc.

From the buyer's standpoint, the reason for trading in autumn is, first of all, that by then he generally can have some sort of idea of the export market and exporting prices for the coming year. In addition, the labor situation becomes more favorable after the harvesting of the summer's crop on farms has been finished. For technical reasons the felling of sawlogs must be done during the winter. The hardwoods that will be floated are felled for seasoning in August-September and therefore the sales usually are made in July and August. This appears, though not distinctly, in the curve picturing the seasonal pattern of the sales of heavy industrial wood.

The primary reason for the forest owners' preference of autumn sales is that only then, after harvesting, do they have enough time for the planning of sales (e.g., for marking trees) and for other operations required by the sales (in delivery sales). Most of the forest owners want to gain an idea of the development of roundwood prices on the basis of auction sales of the State Board of Forestry (held usually at the end of September).

Many forest owners do not make their final plans for sales before this. The so-called cash sales are made mainly in the spring when the extraction of wood is completed, but due to their relatively small volume they are not sufficient to prevent the dropping of the curve during the spring months. — Thus there are factors on both buying and selling sides which contribute to the concentration of the sales to autumn.

As could be expected on the basis of the reasons for seasonal rhythm, the seasonal curve of the sales of industrial cordwood is somewhat (approx. two months) ahead of the cycle in the sales of sawlogs (Fig. 2).

Some exceptional features especially in the development of export sales of forest products, notably sawnwood can, of course, result in certain — one to two months' — changes in the seasonal pattern of roundwood sales.

The data on the rhythm of the sales from State forests was collected from the State Board of Forestry for the years 1956—58. It consists of the same sales as the material used in determining the average size of individual sales. The results are presented in Figure 5.

The sales from State forests have two peaks: the sales of heavy industrial wood are made in the autumn in September-October; the industrial cordwood which is exchanged mainly through delivery sales is sold in the spring after extraction. The hardwood logs are sold mainly in July, but their relatively small quantity does not have any great influence on the rhythm. The concentration of sales in two relatively brief periods stands out conspicuously, even more so than the rhythm in private forests.

It is also interesting to observe the peak in September caused by the auctions.
No statistics showing the seasonal pattern of roundwood sales in Scandinavian countries are available. Since the underlying climatic, technical, labor, etc. factors are in general very similar to those of Finland it is to be expected that the sales follow much the same rhythm as in Finland.

It is important to note, however that the institutional basis for marketing is in the private forests of Norway and Sweden different than in Finland (see Chapter 6). Annual roundwood sales, especially delivery sales, are to a considerable part carried out after a collective price agreement is closed between the forest owners' and buyers' organizations. The date of agreement again is different in different years. For example in the felling years 1956/57—1958/59 following dates are recorded:

<table>
<thead>
<tr>
<th>Norway</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Region I</td>
</tr>
</tbody>
</table>

The progress or lack of progress made in the price negotiations in various years and the failure to reach an agreement cause considerable annual institutional changes in the seasonal rhythm of roundwood sales. This applies especially to Norway where the main part of roundwood is sold on delivery terms through a forest owners' association. In Sweden where stumpage sales and direct selling from the forest owner to the consumer firm is more common — and where the sales from the State's forest follow their own course — the influence of institutional factors is less pronounced. In addition, a considerable number of contracts between forest owners and their associations is closed at open price before the price agreement.

On the basis of recent institutional developments it is to be expected that the seasonal pattern of sales in Scandinavian countries has been less permanent in 1956—58 than before World War II.

The seasonal rhythm of sales from the Norwegian and Swedish State forests too is characterized by the concentration of the sales in autumn. The auction sales (including only stumpage sales) of the Swedish Domänstyrelsen took place in the felling years 1956/57—1958/59 as follows:

<table>
<thead>
<tr>
<th>Norrland</th>
<th>South Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td>1956/57</td>
<td>3—15. 10. 1956</td>
</tr>
<tr>
<td>1957/58</td>
<td>30. 9.—8. 10. 1957</td>
</tr>
<tr>
<td>1958/59</td>
<td>No auctions</td>
</tr>
</tbody>
</table>

Delivery sales are usually carried out during the season of September-December often simultaneously with the sales from private forests. Only some small parcels are sold in the spring.

No "spring peak" is thus discernible in the sales of the Swedish Domänstyrelsen. The same applies to the Norwegian State forests. In this respect there is a considerable difference between Finland and the Scandinavian countries.
6. Institutional aspects of marketing

61. General

Institutional factors of marketing are defined in different ways by different experts. Kaskimies (1955, pp. 209—224), for example, defines them as "organized economically relevant frames, which an entrepreneur has to take into account in this activity". He has listed them as follows:

a. general economic factors (finance policy, economic and social policy etc.)
b. organizations and other group associations
c. trade customs.

Maynard and Beckman (1952, p. 17) define the institutional approach as the 'anatomy' (and functional as 'physiology') of marketing, which involves a study and description of "each segment of the marketing mechanism".

In this chapter a study dealing with the marketing anatomy in line with Maynard and Beckman is carried out. On the basis of this the channels of marketing will be dealt with in Chapter 7. Another important institutional aspect of this particular marketing research, i.e. trade customs, will be studied in Chapter 8.

It was mentioned that the roundwood market is a buying market. In Finland mainly the consumer and exporter or the producer (forest owner) are responsible for the marketing functions considered in this study. Their part in taking care of the different duties varies to some degree. At first, there is some difference between each group of forest owners now under consideration. Furthermore, there are differences especially among the private forest owners stemming from the size of the property, local customs, and individual habits.

Two principal practices can be distinguished in sales: stumpage sales and delivery sales. In a stumpage sale the role of the forest owner is mainly limited to the marking of the trees to be sold, to the sale itself and confirming (measuring) the quantity sold and possibly grading the quality of extracted wood at the point of delivery at a long-distance transportation route.

Measuring in general is in a key position when thinking of the various aspects of marketing. Thenceforth the buyer is usually responsible for the timber. In some cases the buyer even has the long-distance transportation done with his own equipment (truck transportation, private floating). More common, however, is the practice by which he turns some stages of transportation over to the railroads or private truckers. Even in these cases he still must take care of the co-ordination of different phases of transportation, intermediate storage, and in railroad transportation also of loading and unloading.

The floating unions constitute a special group of transportation agents. They are formed through the co-operation of the buyers of roundwood, and on some floating routes the unions are required by law so that they are the only ones with rights to float on those water routes. The quantity of wood transported by the floating unions of Finland was in 1956—58, according to statistics compiled by Pöntynen (1957, 1958, 1959), 9.3 million cu.m on the average, which means that approximately 40% of the total quantity of industry’s roundwood and exported unprocessed wood was at some stage transported by the floating unions. Many firms have to float privately considerable amounts of unprocessed wood.

There are some exceptions to the aforementioned division of functions. In Northern Finland the forest owner often takes care of the private floating (the floating from the place of delivery to the common waterway where the floating union receives the wood) in delivery sales. The State Board of Forestry employs this practice also at places in the southern part of the country. There are also cases when it delivers the wood to the storage yards at the factory (see Section 73).

62. Organization of marketing within a single enterprise

621. Sellers

The producers' (forest owners') organization for marketing varies according to the type of ownership and to some degree according to the size of holding.

The sales from private forests are made by the owner himself. This is usually true for extensive forest holdings as well, even when the owner has hired a professional forester for the other parts of forest management.

This rule has some exceptions. First of all, there are some rather large private forest holdings where the management and also the sales negotia-
ations have been given permanently to some forest agency. Sometimes a
local district forestry board, forest management association, or a profes-
sional forester is authorized to make an individual sale. This is a rather
common practice among forest owners who live a distance from their
forests. A third group is made up of forest holdings which by law are
subjected to regulation and where officials control the selling of wood to
maintain sustained management and sound felling practices. The techni-
cal aspects of marketing are left for the forest owner. At the end of 1958
there were approximately 37 000 such holdings and the total forest area
was about 0.8 million hectares (information from Central Forestry Associa-
tion Tapio).

There is reason to underscore the fact that in almost every instance
the initiative for the sales — on the supply side — comes from the forest
owner. He decides when and also often what is sold.

The marketing from State forests is directed by the State Board of
Forestry, mainly by its Business Department. A special statute (As. 140/
1922 with certain revisions in 230/1931) outlines the sales procedure. The
sales are made by different levels of administration depending on the type
of sale. The auction sale is made, according to the Sales Statute of 1922
(§ 18) if not ordered otherwise, by the regional office aided by the local
district forest manager. The approval or rejection of the bids, however,
has been made by the State Board of Forestry on the basis of the auction
records. Until World War II the auctions were arranged by the regional
office, although they were planned and put into effect under the direction
of the State Board of Forestry. Since 1953 the auctions have been central-
ized under the State Board of Forestry which has authorized a special
college to decide on the approval of the bid immediately at the actual
auction.

Contracts are made through the State Board of Forestry except for
those of more than five years, which according to the statute on forest
administration (As. 167/1921) must be submitted to the Government. The
same statute also states that sales exceeding 100 000 Fmk., bids in auction
sales, contract sales of more than 3 years, and the principles in the setting
of prices must be discussed in the staff meetings of the Department of
State Forests. Otherwise the selling of wood belongs to the Business
Department.

The auction sales and contract sales have been during the period studied
the principal means of marketing from the State forests. Retail selling,
which is limited mainly to local marketing, does not belong within the
scope of this investigation.

Although marketing from State forests is taken care of by the various
levels of the State Board of Forestry, the operations are rather centraliz-
This is the case even for the reason that a decisive part of the sales is
made by the central office, the State Board itself. Even for the part that
some marketing tasks are delegated to lower levels of the organization,
the Board oversees their work as a supervisory organ.

622. Buyers

The purchases of roundwood by each enterprise in forest industry are
directed to a certain buying territory which is determined mainly by the
location of the industrial plants, their size (demand for roundwood), and
transportation routes to the plants. Since in Finland floating is the most
important form of transporting, the procurement areas depend especially
on the waterway systems. The forests that the company possibly owns also
have some influence on the area. Further, the formation of wood-procure-
ment territory is subject to competition by other wood-consuming indus-
tries: the purchases can be directed to areas less favorable in terms of
transportation if the additional transportation costs can be compensated
by lower stumpage (Einola 1957, pp. 32—36).

The areas from which the exporters of unprocessed wood make their
purchases are determined by the connections to harbors (or to border rail-
way stations), but also competition in the area has its influence.

The organization in buying varies to some extent on the basis of the
type and size of the enterprise. Some individual differences occur also be-
tween enterprises of the same type.

In large enterprises of forest industry the buying of roundwood is done
by a relatively independent forestry department which is under the direction
of a forest chief. The magnitude of annual purchase is decided by the
management of the firm on the basis of production plans. For the actual
buying and extraction the organization of the forestry department may
consist of:

1. supervisory or inspection districts (chief forest officer as foreman)
2. forest management districts (district forest officer)
3. district superintendent districts (district superintendent)
4. district forest manager districts (district forest manag)
5. foreman districts (foreman)

(Halmekoski 1955, pp. 86—91).

Chief forest officers are found only in a few of the largest forest enter-
prises. Also the district superintendent and the foreman steps are often
combined (cf. Reinis 1954, pp. 9—12).

The forestry department is in charge of the buying of roundwood with
all related tasks and also of its storage and transportation to the factory.
In some cases wood that has been purchased is resold to other forest companies or exported. Furthermore, the forestry department is responsible for the administration of the forests which the company might own (Halmekoski 1955, pp. 12—17).

The general practice is that the forestry department, after designing with the management of the firm the general plan for the procurement of roundwood for a certain logging year, sets the approximate quotas for each forest management district and these in turn pass it down to lower levels in the organization.

The purchases from private forests are usually made by a district foreman or a district superintendent and only seldom, principally in the case of a bigger purchase, by the district forester. In some enterprises the senior foremen also have the authority to make purchases. The buying by the personnel is based on position authorization. Only in rare instances are they authorized exclusively for buying.

Administrative measures related to logging are taken by the buying personnel during the buying period and especially following it which makes it possible, especially for large companies, to maintain a local marketing organization. This assigning of different kinds of jobs to the purchasing agent is characteristic of the roundwood market. Partly it is caused by seasonal rhythm in buying activities and partly it is the cause of it.

Buying from State forests is most commonly done by the forest chief, in some cases the district forester. The buying and exchanging of roundwood between companies are usually done on forest management levels (Halmekoski 1955, pp. 106—109). The matters of principle are usually settled by the forest chiefs and the practical measures are taken care of by district foresters.

The industrial plants and exporting organizations owned by forest owners have at times managed with less purchasing organization by taking advantage of the purchasing and delivery services of the district forestry boards and forest management associations.

The buying organization of small industrial enterprises is considerably smaller than the organization in large companies and much more variable. It can be made up of a forestry department under the direction of a forest officer or a forest technician who is called the district superintendent and who has a varying number of foremen under him. The smallest sawmills have no forestry department, but the director of the mill, who usually is also the owner, takes care of the purchasing of roundwood.

The exporters of unprocessed wood maintain greatly varying types of buying organizations. First, some exporting is done by industrial enterprises. In this instance the buying is done together with the purchases of roundwood for the industry's own utilization or else the wood is extracted from the company's own forests. Another important exporter is the State Board of Forestry which gets the wood from State forests. In this case the forest owner itself makes the sale either directly or through an agent to a foreign buyer. The third group, and also the one with the greatest volume of export, is made up of the actual exporting firms. The largest ones, although only few in number, have almost the same kind of organization as the middle-sized industrial companies. The numerous smaller exporting firms have their buying organized mainly on the same lines as the small sawmills. Often the firm has a special forest chief or something corresponding and several local purchasing agents. The very smallest firms have no special buying organization at all, but the entrepreneur himself is in charge of the purchases of unprocessed wood and transportation to the harbor (border stations).

63. Buyer and seller associations

63.1. General

The basic subjects of the roundwood market are the forest owners on one hand and forest industry and exporting enterprises on the other. In market research, attention is often given to the combinations and uniting among the sellers or buyers which alter the character of the "original" supply and demand. This kind of combination—regardless of its legal nature—may have different kinds of objectives. They may try to influence price formation, rationalize marketing, etc. They also may influence marketing channels and methods and technical aspects of marketing in general. In this investigation the combinations are considered primarily from this last point of view.

63.2. Sellers

Among the private forest owners the interests have been directed for a long time toward business co-operation. The first plan having these objectives was probably designed by Pellervo Society, a central association for Finnish agricultural co-operation, which in 1907 designed rules to serve as a model for forestry co-operatives and forestry associations. Their purpose was the centralization and control of sales so that the co-operatives could have exclusive rights for selling the wood of member forest owners. It was also intended to establish forest industry owned by the forest owners and thereby promote the demand for wood, control stumpage prices, and seek profit from the processing industry. However, the plans never led to any mentionable practical results (Holopainen 1957, pp. 134—138).
The Forest Center of Forest Owners Ltd. (Metsänomistajain Metsäkeskus Oy), a central business association of forest owners, was founded in 1921, which with its subsidiary companies had the original purpose of acting as a middleman in the delivery of wood for forest industry and of engaging in the processing of wood and the export of forest products. Its activities reached their peak in the latter half of the 1920's when the organization had 11 subsidiary companies. In the early 1930's the depression weakened the organization to such an extent that only five subsidiaries continued to function, but even they were rather loosely connected to the Forest Center. In 1957 the firm merged with the Co-operative Society Forest Union (Metsäliitto i.l.), founded in 1947. The former subsidiary companies have continued to function as local independent enterprises.

The third important stage in the sales co-operation of forest owners is marked by the founding of the Forest Union Ltd. (Metsäliitto Oy) in 1934, with its most important function as an agent and exporter of pitprops and pulpwood in the same manner as the Forest Center. In 1947 it was reorganized under a new name, the Co-operative Society Forest Union (Metsäliitto i.l.). This is a co-operative which can be joined by forest owners by purchasing a certain number of shares depending on the size of their forest property. In the Swedish-speaking coastal areas of Finland there have been three local organizations resembling the Forest Union which now have either discontinued their operations or have joined the Forest Union. Its membership amounted in 1958 to 54,000.

The Forest Union and Cellulose Co. Ltd. of Forest Union (Metsäliiton Selluloosa Oy), which was founded by the former in 1953, and their subsidiaries now form the core of the business and industrial co-operation of forest owners. From the standpoint of roundwood marketing they are most important function-wise in their acting as buyers. It can be assumed that since they belong to the forest owners, they are better adapted than other enterprises to those buying methods which for some reason are preferred by the forest owners. Through increasing the demand for roundwood and competition on the market, their policies can bring certain price benefits to the forest owners.

In Southern and Western Finland the first forest management associations were founded as early as 1907. The actual development of these associations took place in the 1930's and 1950's. In the 1930's they covered most of the country; in the 1950's their work became more effective mainly due to the law on forest management associations passed in 1950 (cf. Holopainen 1957, p. 146—).

The forest management associations exist through the combining of forest owners usually within a commune, and their purpose is to hire professional foresters to advance both forest management and the marketing of wood within the area affected by the association. The impact of the forest management associations on the marketing methods for roundwood from private forests has been greater than the influence of any other combination. Especially in the 1930's the associations were very interested in business, which was shown, for example, by setting up special sales committees for the purpose.

Since 1941 the associations have formed provincial Leagues of Forest Management Associations, and the organ for their co-operation, the Forestry Council of the Central Union of Agricultural Producers was founded in 1942. This together with the central forestry associations and forest management association leagues has co-ordinated the business activities of the forest management associations. Furthermore, the Forestry Council has been an initiating force in matters concerning the marketing of wood from private forests (see Section 84).

It has been observed that the State forests under the State Board of Forestry have the character of one big enterprise with centralized marketing of unprocessed wood.

633. Buyers

Uniting is traditionally a common phenomenon with the buyers of roundwood, especially within forest industry. First, there has taken place a merging of independent enterprises into several very large firms. The quantities of unprocessed wood bought by a firm have, in the long run, been increased also by the expanding capacity of factories, which is especially true for the wood pulp industry. The founding of new plants within an enterprise has had the same effect. One form of centralization in the buying becomes evident through the fact that the number of economically independent enterprises is smaller than the number of nominally (juridically) independent; in other words, some nominally independent enterprises have a common management and a common forestry department (Halmekoski 1955, p. 10).

Co-operation by enterprises also appears in many forms. The Central Association of Finnish Woodworking Industries and its several member organizations (especially the Finnish Sawmill Owners' Association, Koivukkeskus, etc.) represent a close public co-operation which also has some influence on the marketing of unprocessed wood (see, for instance, Section 84).

A less conspicuous form of co-operation within forest industry appears as so-called buyers' rings. They have been discussed for decades but very little information about their activities comes before the public because usually they are not public organizations nor have they been registered.
They operate within the main divisions of forest industry and within certain regional limits usually determined by the areas affected by waterway systems. These kinds of buyers’ rings appear at least within sawmills (log-buying unions), plywood, and woodpulp industries.

The buying of pulpwood is perhaps the farthest developed in this sense. It is organized by the Pulpwood Union (Teollisuuden Paperipuunhyödistys), founded in 1947, with its functions stated in the rules including such things as promoting and rationalizing the procurement of industrial cordwood for its members and functioning as a stabilizer on the cordwood market. For example, it collects and compiles statistics concerning the buying of pulpwood by the members. All enterprises in the woodpulp industry are members of this organization.

The major purpose of the buyers’ rings is perhaps the maintenance of uniform price policies and the distribution of purchasing areas (e.g., Reinius 1954, p. 15, indicates this). The interests are thus more in the field of buying and price policies than in the functional aspects of marketing. Consequently there is no special need to consider them in any detail in this investigation. The buying and marketing functions in general are taken care of by the enterprises. It should be pointed out, however, that the buyers’ rings can also have the rationalization of buying activities as one goal: by distributing the purchasing areas among the entrepreneurs a certain degree of centralization in the buying and procurements is possible.

Within the exporters of unprocessed wood the buyers’ rings probably do not exist.

64. Scandinavia

641. Norway

The private forest owners of Norway joined together at the beginning of this century to form associations, each of which extended its influence to the areas affected by a waterway system; the first of them, Glommens Skogerierforening, was established in 1903 and their central organ on a national scale, Norsk Skogerieforbund, in 1913. The primary goal of the associations until the late 1920’s was to pursue the economic interests of the forest owners. In 1929 reorganization took place: the associations of forest owners operating on the basis of the range of waterway systems were made into sales associations (salgsforening). Their central organ has borne the name the Norwegian Forest Owners’ Association (Norges Skogerieforbund) since 1932. Even before the sales associations were formed there had been a number of local societies with similar functions covering one commune

or a slightly larger area (Grambo 1953, p. 14). After the establishment of the sales associations, the societies (skogerielag) have continued their work as part of the organization. The organization thus includes four levels: forest owner — local forest owners’ society — district sales association — The Norwegian Forest Owners’ Association.

The information given below illustrates the growth of the organization in 1938—58 (Årsberetning 1938/39, 1958/59).

<table>
<thead>
<tr>
<th>Number of:</th>
<th>1938</th>
<th>1958</th>
</tr>
</thead>
<tbody>
<tr>
<td>district sales associations ..........</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>local forest owners’ societies ......</td>
<td>191</td>
<td>447</td>
</tr>
<tr>
<td>members (forest owners) .............</td>
<td>18,350</td>
<td>48,540</td>
</tr>
</tbody>
</table>

The rapid expansion of the organization which took place between 1938 and 1958 was mostly due to the new areas that came under the influence of the organization and to the forest owners in the old areas who became members.

In 1950 the owners of large private forests associated to form the Skogbruksforeningen av 1950 mainly to advance the members’ forestry in general. This association, with some 200 members at the end of 1958 and approximately one million hectares of forest land, does not directly take part in the actual marketing activities. The principal reasons for this derive from the fact that many owners of large forest areas have their own professional personnel and are engaged in their own forest industry. Some members of this association, however, also belong to the subdivisions of Norges Skogerieforbund.

Since 1929 the organization of Norwegian forest owners has mostly functioned in fields of marketing, more specifically in the following two aspects:

a. the making of agreements with the buyers concerning roundwood prices;

b. the carrying out of practical marketing functions.

Before World War II the agreements on the prices of wood were made with sales associations, although preliminary discussion on prices was done within the central association. After the war price negotiations gradually shifted to central associations representing the buyers and the sellers, although the opinion of the sales associations is brought up through representatives in the price negotiation committee appointed at the annual meeting of the central association.

The practical marketing functions are taken care of mostly by sales associations. The local skogerielags function mainly as an organ of communication between the district sales associations and the forest owners.
It also has the task of listing those forest owners who want to sell timber each year.

There is no special marketing organization for the State forest of Norway but the marketing is, for a great part, delegated to local administration (to district forest officers). The central organ, The Department of State Forests (Direktoratet for Statens Skoger), however, directs marketing in accordance with the prevailing regulations.

The marketing organization of the buyers in larger forest enterprises consists of a forestry department directed by a forest chief (tömmerechef). The department is to supply the unprocessed wood required by the industry. Its tasks, and accordingly its personnel, are relatively less numerous than in Finland and also in most of Sweden.

The buyers in Norway are highly organized. There can be distinguished two kinds of organizations as far as the purchasing activities are concerned. First, there are the central organizations on the national level representing the various kinds of forest industry—sawmill industry (central organization established in 1933), woodpulp, cellulose, and paper industry (1940), fibreboard industry (1942)—which usually have the majority of the enterprises of the branch as members. These central organizations of the three major forest industries collectively negotiate through their representatives on the prices of roundwood with the representatives of the forest owners.

The sellers' and buyers' negotiations on the national level on prices and other principal marketing questions is the unique feature of the Norwegian roundwood market. Zivnuska (1959, p. 32) has named the prevailing situation bilateral monopoly.

Secondly, there are the associations representing the different fields of production (Norges Sulfattömmerekopernes Forening, Cellulosatömmerekopernes Forening, and Skurtömmerekopernes Forening) with their regional branches functioning by waterway areas at least in some parts of the country. These are responsible for dividing unprocessed wood among the member enterprises (cf. Oversikt No. 2, 1957, pp. 96—112). They resemble the buyers' rings of Finland except that they co-operate with the local organizations of forest owners.

In 1955 the central buyer organizations and Norges Skogeforbund made an agreement on the procedures to be followed in procurement negotiations. The Skogbruksforeningen av 1950 was also present, representing the sellers despite the fact that it does not take part in the actual price negotiations. The agreement was renewed in 1959 for three more years (cf. Avtale om . . . 1955 and 1959).

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1 Established July 1, 1957. Prior to that date the Norwegian Crown forests were under the general Department of Forestry.
Buyers of unprocessed wood other than the forest industry have their organizations which also make bilateral price agreements with Norges Skogseierforbund. The central organization of pole buyers can be mentioned as an example. The price contracts on sleepers are made with the State railway sleeper office.

It ought to be emphasized that the actual marketing operations such as the making of purchases are done by the buying enterprises and not by the buyers' associations (see Chapter 7).

642. Sweden

In Sweden as in Norway large private forest properties with a salaried forester are relatively more common than in Finland. These professional men also take care of the marketing under the direction and supervision of the forest owner. Most of the private forests in Sweden, however, belong to farmers and the marketing functions are taken care of by the owners themselves.

Commercial associations of the forest owners were formed in Sweden in the 1920's and early 1930's as local forest owners' associations (skogsägareförning) operating most commonly on a provincial basis. From the first associations which were primarily concerned with promoting silviculture grew gradually a trading organization. Particularly the need to create demand for roundwood, especially for small-sized timber during the great depression in 1929-32, contributed to the re-constitution of the associations and to the establishment of new associations in the beginning of the 1930's. Prior to World War II the associations did not yet have any great importance in marketing, although by 1938 there were already 31 of them with approximately 12,000 members.

During World War II and afterwards the organization expanded rapidly. At the end of 1958 there were 24 forest owners' associations with about 126,000 members (including 4,400 non-forestowner members). The forest land in the possession of these members was approximately 6.5 million hectares, which represents some 29% of the productive forest land of Sweden and 57% of the total area under private ownership. The number of forest-owner members is thus about 51% of the total number of forest owners (according to Census of Agriculture, 1951). The percentage of members is higher in large than in small owner classes.

In 1932 a central organization for the associations, the National Federation of the Swedish Forest Owners' Associations (Sveriges Skogsägareförningars Riksförbund, SSR)1 was established.

According to the present rules, which were in effect in 1956-58, the goals of the commercial activities of this forest owners' organization are much like those in Norway:

a. the making of general agreements on prices with the buyer associations and some large individual buyers;
b. the handling of practical marketing functions;
c. the distributing of marketing information;
d. the bringing about of just measuring regulations and contract conditions.

In addition, the Union promotes the general economical interests of the forest owners and in the 1950's has extended its work to include professional aid for forest owners in the same way as done by the forest management associations in Finland. In some areas (particularly in southeastern Sweden and near Stockholm) the forest owners' associations have been especially engaged in forest industry. However, the industry is usually organized as limited companies of which forest owners' associations, SSR and — in some cases — also individual forest owners are stockholders. (Skogsbönder... 1957, pp. 111, 116).

The activities in points a—c are mostly carried out by the forest owners' associations or collectively by several associations. SSR aims toward co-ordination and support of the member associations especially by making general agreements on prices and terms of marketing with the buyers' organizations and by providing experts for more local price negotiations. The organization's export of unprocessed wood has been concentrated and the interests on forest policies mostly concentrated in the SSR. Likewise, the selling of sleepers to the State railways is carried out by SSR.

Prices of roundwood (pulpwood and sawlogs) are negotiated collectively between buyers and sellers within five price regions which are indicated in Figure 7.

The State (Crown) forests of Sweden are under the care of a special central board (Domänstyrelsen, The Royal Board of Crown Lands and Forests). Local administration consists of 11 regions and these again of 110 districts. For the marketing of roundwood Domänstyrelsen has a special sales department directed by a sales chief (försäljningschef). The district forest officers are responsible for the local retail sales.

Special public status and regulations [DRS, ändring nr 174 (1. 10. 1947), nr 178 (1. 1. 1948), nr 174 (1. 6. 1952), nr 245 (1. 1. 1958)] determine the procedure in roundwood marketing. According to these marketing is organized along much the same lines as in Finland: the Domänstyrelsen, mainly through its sales department, outlines the marketing policy and carries out certain marketing functions assisted by the local administra-
tion. The most marked difference compared with the Finnish procedure is the greater responsibility of local administration in marketing. Auction sales and certain other sales are mainly carried out by regional forest officers (överjägmästare) and even district forest officers (jägmästare). Local retail sales are wholly delegated to the district forest officers.

The similarity with Finland can even be seen in the lack of co-operation between the sales organizations of the Domänestyrelsen and those of private forest owners.

The buyers' organization in the roundwood market is largely similar to that in Finland and Norway. Each big and middle-sized firm has a special forestry department — headed by a forest chief — responsible for the administration of the company's forest and for the purchasing of timber from other forests. This organization is composed mainly of permanently salaried personnel but partly both in Sweden and Norway of purchasing agents working on a commission basis (see Chapter 7).

On the buyers' side there is no formal central organization which would correspond to SSR. The forest industries' committee for co-operation (Skogsindustriernas Samarbetsskott), in which the five central organizations of the Swedish forest industries (Swedish Cellulose Association, S. Woodpulp A., S. Pulpmill A., S. Timber Exporters' A. and S. Wallboard A.) are represented, is mainly concerned with general forest and industrial policies and does not directly take part in price negotiations or marketing.

In the price regions I, II and V (see Chapter 7) there is a local association of roundwood buyers named Virkesföreningen (Nordsvenska Virkesför- reningen, Hälsinglands V. and Sydsvenska V.) representing organized co-operation within the forest industry. They represent member firms especially in the price negotiations.

Small roundwood buyers do not as a rule belong to the buyers' association. In regions III and IV no formal association exists. Price negotiations concerning pulpwood are carried out, however, by "Dala-industries" and "Wärmland-industries" which indicate certain co-operation between industrial companies.

In regions I—II buyers' associations comprise both sawlog and pulpwood buyers and the general agreement on prices and marketing conditions closed between SSR and the corresponding Virkesföreningen covers both assortments. In regions III—V these two main groups of forest industries act more separately — and sawmills also more locally. The general agreement covers only pulpwood whereas sawlog prices are negotiated between the local forest owners' associations and either corresponding sawmill owners' association or individual sawmill owners.

The aforementioned buyers' associations and some other less public forms of co-operation, which resemble largely the regional branches of the
forest industries’ associations of Norway take no part in the actual marketing functions, that being in all Northern European countries a concern of the enterprises themselves.

The uniting of enterprises has been important also in Sweden. The Swedish Cellulose Co. (Svenska Cellulosa AB), which is made up of 16 merged enterprises, serves perhaps as the best example. Matchstick manufacture belongs entirely to one firm (Svenska Tändsticks AB.). The State railways are, practically speaking, the sole buyers of sleepers for the home market.

Enterprises in Norrland are, on the average, bigger than in the middle and south of Sweden.

Among the exporters of roundwood there are a number of small firms, which have organized their roundwood buying in much the same way as in Finland.

7. Channels of marketing and methods of sale

71. Terminology

Channel of marketing or trade channel, also called channel of distribution (particularly when speaking of the marketing of consumer goods), has been given various definitions in marketing literature. Many American experts agree with the definition used by Maynard and Beckman (1952, p. 40): “The course taken in the transfer of title to a commodity constitutes its channel of distribution.” It is rather common in American literature to find included in the definition a more exact mention of the direction and object of marketing, in the same way as done, for instance, by Nyström (1951, p. 219): “... the course of ownership taken in the transfer of title to it as it moves from manufacturer or producer to the final consumer.”

A crucial point in the definition of the trade channel is the question: what kind of middlemen should be included in it? Is the channel of marketing composed only of those middlemen (wholesalers and retailers) who take the title to the goods or should also other middlemen (agents, brokers, etc.) be included? Maynard and Beckman (1952, p. 11) call the former merchant middlemen and the latter functional middlemen.

Kaskimies (1955, p. 42) — like many other authors — includes only merchant middlemen in the channel of distribution whereas, for example, Maynard and Beckman (1952, p. 40) and Phillips (1950, pp. 134—135) count also functional middlemen as a part of the channel.

Numerous special features of the marketing of roundwood are better illustrated if the broader definition is applied. Therefore, channel of marketing in the present investigation is understood to include also functional middlemen. This does not, however, invalidate the basic difference between the two types of middlemen, particularly regarding risk bearing.

Consumer and consumer firm in this study refer not to the ultimate consumer of the product but to the industrial user and exporter of roundwood.¹

¹ In many cases processing firm would therefore be better expression.
The analysis of the channel of marketing can be concentrated on various aspects, for example, its structure and length. Both of these aspects will be considered in the present study.

Methods of marketing — for which "methods of sale" is often used — can, at least in principle, be distinguished from the term "channel of marketing". In this investigation as well as in many others they refer to the means of contact between different middlemen and the forms of transfer of ownership. The decisions of whether to sell the product by auction or negotiation, the use of written contracts, etc., belong with the methods of marketing.

The channels and methods of marketing in the roundwood market are closely interwoven. Therefore, it has seemed appropriate to consider them side by side. The close relation between the two is shown also by the fact that all researchers do not even make a distinction between them. For example, SEVVERT (1951, p. 438) considers the channels of distribution (Absatzweg) as including all activity (Vertriebsbeistandungen) in the transfer of goods from the seller to the buyer.

KASKIMIES (1955, p. 59) emphasizes the need to devote attention to the functions of trade when studying the channels of marketing. Earlier (Section 11) a brief mention was made of the primary functions which will be discussed in this investigation. The buying and selling functions, and more specifically the contact between the roundwood buyers and sellers, must be considered together with the channels and methods of marketing. CONVERSE and HUEY (1946, p. 56) divide these primary functions into the following marketing components:

1. Buying functions:
   a. Determining needs
   b. Seeking sellers (describing the source of supply)
   c. Negotiating prices and terms
   d. Transferring ownership
2. Selling functions:
   a. Creating demand
   b. Finding buyers
   c. Informing buyers
   d. Negotiating prices and terms
   e. Transferring ownership

Since a very great number of private forest owners participate in the marketing of roundwood in all Northern European countries, special problems are involved in establishing contact between the buyers and sellers. For example, selling by samples is not possible in the roundwood market. Nor is it a custom to collect the roundwood to be measured and priced in a relatively small number of distribution centers, a practice common in the marketing of milk, meat, and several other agricultural products. The exchange has, however, a very definite local character. One reason for this is the fact that each allotment is characterized by its own size and quality. Furthermore, rational transport to factories, export harbors, etc., requires in casu solutions. Accordingly, establishing contact between buyers and sellers is one of the essential problems in the marketing channels and methods of roundwood and therefore the question will be of special interest.

72. Private forests

721. Direct selling

The Definition Committee of AMA (American Marketing Association, 1948) defines the concepts "direct marketing", "direct selling", as "the process whereby the producer sells to the immediate consumer or retailer without intervening middlemen." SCHÄFER (1953, p. 87) as well as a number of other investigators uses "direct marketing" (direkt Absatz, direkter Verkauf) to mean the selling by a producer directly to a consumer. The definition should not, however, be understood in such a way that the whole marketing process is carried out by the producer (cf. KASKIMIES 1955, p. 49).

In this investigation direct selling is used according to Schäfer's definition.

The marketing of roundwood from the private forests of Finland has for a rather long time been characterized by the buyers seeking out the sellers, a method called collection trade, by Raninen (1954, p. 40). The buyer's representative, i.e. a salaried official of the firm's forest department, has got in touch with the forest owners in his district, appraised the forests, noted the possibilities for obtaining the required products, estimated the quality of roundwood being offered for sale, determined other basic factors for pricing, and made an offer. If the sale has been made, a contract has been written and the buyer has sent his man to mark the trees for cutting. Earlier there were even instances when the felling was started without marking in advance.

The seller's position was inactive. However, there have been cases when the forest owner has indicated his intentions for sale to the local representative of the buyer. When the buyer's representative has been in the same community for a longer period of time, a rather permanent relationship between him and the forest owners has sometimes developed.

The great number of forest holdings and the further increase in the number and the simultaneous decrease in the size of individual sales signi-
fy that completely random seller-seeking becomes laborious and expensive. In order to increase the efficiency of sales, the buyers should be as well informed as possible beforehand about the possibilities and sales plans of the forest owners.

A certain development in the buying procedures has been introduced by the advanced marking of timber through the seller’s initiative, which practice is becoming more common. The answers to marketing questionnaires (Question Series 2 in the Appendix) show that in most (93%) of the communes in Finland the marking of trees prior to sales negotiations is the dominating practice. The other alternative is common primarily in Northern Finland.

The increase in the presale marking of timber has in turn been largely the result of extension activity by district forestry boards and forest management associations. In this respect the increases of professional personnel — timber markers, for instance — in the 1930’s and afterwards have been of special importance. The survey of private forests showed that the experts of these organizations had marked in the whole country an average of 73.5% of the commercial industrial wood removals in 1955/56 and 1956/57. The percentage was lowest (59.9) in district 19 (Fig. 1) and highest (89.3) in district 14. There is no dependable record of what this proportion was before World War II, but according to assessments made by Tapio it has been estimated as about 30% for the whole country in 1929—1938 (Keskusmetäsaura Tapion toiminta v. 1938, p. 115).

The marking of trees is often considered mainly a silvicultural procedure. However, when preceding a sale, it is also a marketing operation. First of all, it indicates the intentions of the forest owner. The product composition of the marked timber is also estimated at that time.

It has indeed become a common practice for the buyers’ representatives to plan their actions on the basis of the local forest adviser’s list of markings already made or ordered to be made in order to avoid useless inquiries.

Generally the time of marking the timber is so late that the seeking out of potential sellers solely on the basis of the forest adviser’s list is inadequate. This appears from Figure 4 which pictures the seasonal rhythm of timber marking among Finnish-speaking forest management associations as monthly averages for the period 1954—57. The drafts have been made from data collected by the Central Forestry Association Tapio (cf. Mattilaenen 1958). The data also includes fuelwood and a small amount of wood for home consumption.

The marking is usually somewhat ahead of the sales, but the interval is too short to permit the already-executed timber markings to be the only grounds for trading. For that reason alone there is also nearly random inquiry of buying plans. Even then all the private forests in the buying territory of a certain enterprise will not be contacted by that enterprise. In areas where buyers’ rings are active, they distribute the forest properties or even greater forest areas among the members. Moreover, the buyer’s representative’s previous knowledge of the forests of his buying district can be a guide in deciding where to go to make offers.

The sellers, especially the owners of small forest properties, also take the initiative in informing the buyer’s representative about their sales plans. Advertising a sale in the newspapers is not common among private forest owners. Neither is it typical for the buyers to use newspaper advertisements. Advertising is used primarily by small-scale buyers of special products (e.g., poles for export).

These different means of contact formed one object of interest in the survey of marketing methods (Question Series 1 in the Appendix). The results are given in Table 8 and Figure 8.

In the majority of the communes in Finland (69%) the most common means of establishing contact between the buyer’s representative and the seller is that the buyer learns of the sales plans from the timber-marking lists of the forest management associations and district forestry boards. Aside from that, the two alternatives mentioned above have probably been almost equally common.

The answers to the marketing questionnaires support the assumption that in the roundwood market first contact is usually made by the buyers. The sellers seem to have the initiative in Northern Finland (Figure 8) and on the southern coast (in the area of the Helsinki District Forestry Board) where joint offers made through the private forest management districts have been the principal means of introducing wood into the market.

It can be observed that the increased timber marking activity of the district forestry boards and the forest management associations has created a more solid basis for contact between the buyer and seller and thereby probably has increased the efficiency in making the sales. Furthermore, the contracts can now be made on more definite terms because of the information about the quantity of wood, the distribution among tree species and types of roundwood, sizes of stems, etc. (see Section 87).

722. The business agency function and service by forest management associations

7221. Collective sales

An earlier part (Subsection 632) has considered the co-operation of forest owners for marketing purposes. These owners’ co-operatives have two distinct forms of co-operation: collective sales and commercial service.
Table 8. Means of contact between the seller and buyer in private forests, 1956—58.

<table>
<thead>
<tr>
<th>Means of contact</th>
<th>Communes:</th>
<th>Frequency</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Kuntien:</td>
<td>value</td>
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<tr>
<td></td>
<td>luku</td>
<td>%</td>
</tr>
<tr>
<td>number</td>
<td>luku</td>
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</tr>
</tbody>
</table>

1 a. The buyer finds out about sales plans and makes an offer at random going from house to house — Ostaja selvittää myyntialueet ja tekee tarjouksia umpimääräisesti talosta taloon kaikin.  

<p>| | | | |</p>
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<tr>
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<tbody>
<tr>
<td></td>
<td>65</td>
<td>14</td>
<td>774</td>
</tr>
</tbody>
</table>

1 b. The buyer makes an offer by using the marking records of the Forest Management Association and District Forestry Board advisors — Ostaja tekee tarjouksen käytännön hyväksennä nimellä ja mihin neuvotilaan teimikkoaesteita.  

<p>| | | | |</p>
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<tr>
<td></td>
<td>331</td>
<td>69</td>
<td>1222</td>
</tr>
</tbody>
</table>

1 c. The seller contacts the buyer — Myyjä ottaa ensinnä kosketuksen ostajaan (joka yksilöllisesti tai kollektiivisesti nimellä: n vähityksellä)  

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<tbody>
<tr>
<td></td>
<td>84</td>
<td>17</td>
<td>777</td>
</tr>
</tbody>
</table>

Total — Yhteensä  

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<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>480</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

The forest co-operatives and associations which were planned by the Pellervo Society were intended to promote collective sales among the forest owners. The Finnish Forestry Association also took an interest in the matter and designed in 1907 a special contract form to be used in collective sales (Holopainen 1957, pp. 136—138, 239).

In the execution statute of the Private Forest Law in 1928 (As. 366/1928), one of the functions of the central forestry associations was "to direct the work of the district forestry boards in such a way as to bring about collective sales." This is an indication of how the public forestry policy favored the advancement of collective sales.

It can be said, omitting special cases, that collective sales have been made only from private forest management districts and forest management associations, first independently and later with the support of their organizations. The common procedure is as follows:

The forest management association through its forestry adviser inquires as to which of the forest owners are willing to participate in a collective sale and prepares a list of those willing to sell including information about the quantities of the different kinds of roundwood offered for sale, locations
of the parcels, places of delivery, and prices, and also the information needed to plan transportation. There are three common methods for product exchange included in the sales catalog: auction sale, sale with sealed bids, or negotiation with buyers.

The buyers are notified of the auction sales by newspaper advertisement or through some other means of communication. In collective sales by auction, each forest owner's parcel is offered individually and the buyers who are present make bids. Usually there is no set minimum price but the sellers have retained the right to admit or reject the offers made. The buyer has informed of the decision either directly or after a prescribed period of deliberation.

In making collective sales with sealed bids the catalog of timber for sale has been sent to the potential buyers who are asked to submit written sealed offers by a certain date. All the bids are considered at the same time and it is then decided to whom the sales will be made or whether the offers will be rejected. In some cases the making of the offers has been followed by negotiations, for instance, in order to raise a price that is considered too low by the seller. In these cases the highest bidder — as in negotiations which might follow an auction sale — has often been reserved the first right for purchasing (cf. Hass 1957).

Collective offers have also been made in cases when a forest management association has been negotiating with the buyers in order to make the biggest possible sale to a single buyer.

A collective sale is therefore an occasion in which the owners of several forest holdings have joined for marketing purposes. In making the sales contract, the forest management association does not appear as the seller but each forest owner acts individually as a seller of his own goods. The forest management association has thus the duties of a functional middleman and usually receives a commission of from one to two per cent of the sale value. The remuneration of the forest management association can also be done on another basis, for example, in the form of a fee which is paid by the day.

According to current legislation (As. 558/1950), the forest management association cannot practice trade by buying and selling the rights for timber cutting or roundwood at its own expense. Therefore, risk bearing is not characteristic of the marketing function of the forest management associations.

Collective auction sales have much in common with the auction sales of the State Board of Forestry (Section 73). The most striking difference is, however, that they are more local in character, comprising only one commune or an even smaller area. Moreover, these auction sales promoted by the forest management associations have at least so far been irregular, whereas the auction sales of the State Board of Forestry are repeated annually.

There is reason to emphasize the fact that the initiative in making collective sales has most often come from the forest management associations and their leagues. The stand of the forest owners has usually been rather inactive.

The original goal of the collective sales was perhaps to concentrate the making of sales under the direction of professional men and thereby eliminate sales contracts unfavorable and unreasonable to the forest owner due to his lack of familiarity with selling procedures. Also, there were aspects of price policies involved: by offering much timber at the same time, by concentrating and organizing the supply in such a way as to invite competition among buyers, it was hoped to get higher prices for the wood offered than when marketing relatively small quantities at a time. These goals have continuously been kept in the foreground.

Insofar as the size of individual sales from private forests has been diminished, it has become more and more important to economize the marketing and harvesting by creating the conditions for collecting greater volumes of wood together in as early a stage of marketing as possible. If some marketing functions are shifted from the buyer to the seller as such, no increase in efficiency has taken place. In collective sales, however, there is the possibility for the more effective use of the professional personnel hired by the sellers (forest management associations). As a result of this the buyer's wood-procurement organization can be cut down without the need for corresponding additions on the side of the sellers (Holopainen 1957, p. 246).

The collective sales, and especially the auction sales, have probably been believed to have also some value in informing the forest owner of price developments.

7222. Commercial service

In a collective sale each participating forest owner authorizes the forest management association to make a sale for a certain charge. A single forest owner can also authorize the association to make a sale and then the forest management association acts as an agent of the forest owner. The compensation in this case is not usually paid as a commission but as a fee. This method is practiced by forest owners who live a great distance from their forest properties.

Sometimes, although rather seldom, the forest owner authorizes some person other than a representative of the forest management association or district forestry board to make the sale. Personal relations are the chief
reasons behind this. The sales made by independent forest agencies for their customers can be included among these.

An intermediate form between entirely independent sales activities of the forest owners and the middleman function of the forest management associations or other professional men is represented by the professional assistance in marketing provided by the forest management associations and the district forestry boards. This service is made up of various functions. First, there is the seeking of an appropriate buyer for the timber marked for cutting and the informing of the seller of marketing conditions and prices. There is also the possibility of the hiring of a professional man by the forest owner to assist him in negotiating a sale. The task of the expert is to see that a sales contract will be properly drawn up and that the seller’s interests are taken into account.

The delivery service in relation to materializing the sale will be treated in Section 83.

72.23. The importance of different methods

The marketing questionnaire included a series of questions (No. 3 in the Appendix) whose purpose was to determine the relative importance of the marketing methods described above. According to the most common practice in a commune, the communes were distributed among the different alternatives as shown in Table 9. The table also includes figures indicating the relative importance of the methods.

Table 9. Methods of sale in private forests, 1956—58.

<table>
<thead>
<tr>
<th>The forest owner makes the sale:</th>
<th>Communes</th>
<th>Frequency value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number</td>
<td>R auntu</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 a. independently — kokonaan omin neuvoin</td>
<td>333</td>
<td>70</td>
</tr>
<tr>
<td>3 b. with the assistance of F. M. A. or D. F. B. adviser or another professional forester — käyttämällä mhy:n tai mhy:n neuvon tai muun ammattimiehen apua</td>
<td>126</td>
<td>26</td>
</tr>
<tr>
<td>3 c. by authorizing an F. M. A. or D. F. B. adviser or other professional forester to close the sale — valtuuttamalla mhy:n tai mhy:n neuvon tai muun ammattimiehen päätämmän kaupan</td>
<td>21</td>
<td>4</td>
</tr>
<tr>
<td>Total — Yhteensä</td>
<td>480</td>
<td>100</td>
</tr>
</tbody>
</table>

Fig. 9. Methods of sale in private forests 1956—58 (the most common practice by communes). Key to symbols in Table 9.

According to the answers, in about two-thirds of the communes in Finland it was most common to make the sale without outside assistance in 1956–58. Also the frequency of using the professional services of the district forestry board and forest management association adviser is rather high, indicating that this practice is in many communes of great importance. It is possible, however, that the forestry advisers in supplying the answers have slightly exaggerated the importance of this practice in order to give a more favorable picture of their own work.

The commonest practice by communes is indicated in Figure 9. It shows that reliance on the professional services of forest management associations and districts forestry boards — and in some cases the agency function of these organizations — is common in the southwestern part of the country. Elsewhere, totally independent selling by forest owners is prevalent.

The matter can be illuminated also quantitatively for the years 1956–58. Tapio’s yearbook includes the statistics on the commercial activities of the forest management associations, and under the heading "sales assistance" are given the quantities which have been sold through forest management associations or with the assistance of other professional men. The professional assistance in this case, however, is not so broad in meaning as in the marketing questionnaire because only those cases are considered in which it has been necessary for the expert to travel. Consultation with the forest owners through telephone conversations or through the forest owner’s visit to the adviser (the quantities of sales made under this kind of guidance) are not recorded in the statistics. Similarly, figures for district forestry boards are also lacking, but their function in marketing activities is only small. In the figures there is included also the assistance to community forests and other similar properties. The values for the period are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>cu. m.</th>
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<tbody>
<tr>
<td>1956</td>
<td>754 000</td>
</tr>
<tr>
<td>1957</td>
<td>1 206 000</td>
</tr>
<tr>
<td>1958</td>
<td>1 088 000</td>
</tr>
<tr>
<td>Average for 1956–58</td>
<td>1 016 000</td>
</tr>
</tbody>
</table>

The figures point to the fact that the quantities of roundwood sold through forest management associations are of small relative importance (in 1956–58 probably a little over 10%) in the total commercial removals from private forests; the prevailing practice is the direct selling between the forest owner and the wood buyer. There are a number of reasons for this. First, there are psychological factors: the "proprietor attitude" com-

mon to the Finnish forest owner does not willingly allow the interference of others in his affairs. Another reason is the belittling of professional skills: an impression that no essential advantages in marketing are gained with professional assistance. The compensation to be paid to the experts also may have some bearing.

The farmers market a very great portion of their agricultural products through their own organizations, the Pellervo Co-operatives. According to Pernu (1959) their part in the marketing of agricultural products in 1956–58 was as follows: 80% of the milk marketed, 66% of the meat, 45% of the eggs and grain, and 31% of the potatoes. In the marketing of roundwood the corresponding portion can be estimated as 15–20% of all the wood marketed from private forests. This value is obtained by adding together the quantities handled by the forest management associations and the volume of direct purchases of timber by the commercial enterprises owned by the forest owners.

The irregularities in the roundwood market and the structure of the buying side, which is different in comparison to the buyers of agricultural products — the buyers of roundwood are usually organized whereas agricultural products are bought by the ultimate consumers —, are additional reasons for the lesser importance of co-operation in the marketing of roundwood than in that of agricultural products. Also, the historical background has a bearing on the present condition, for the marketing of roundwood at first was organized on the buyers’ side.

Nevertheless, it can be assumed that the agency function of the forest management associations has recently been growing in importance.

One of the questions in the marketing questionnaire was intended to gain information about the collective sales in 1956–58. The answers indicated that in the whole country during that period 493 such sales had been made, which means 164 per year. The greatest number (76 sales per year) was reported in district 1 (Fig. 1). In this area the co-operation of the forest owners is carried out through the private forest management districts directed by a forest officer. In district 13 the number of the collective sales was 15, in district 14 it was 12, and in district 8 it was 8. Elsewhere collective sales were rather uncommon. No replies were received from 31 communes.

The poor success of the collective sales can be explained partly by the same negative factors which hinder the agency work of the forest management associations in general. The conservative attitude of the buyers probably constitutes an additional reason of decisive importance. The buyers, in turn, might feel that the collective sales are an attempt to centralize the supply of roundwood, which naturally does not receive much support from them.
The negative experiences are especially true in the case of auction sales which have not been attended by large-scale buyers. Instead, the auctions may have been successful mainly in areas where there is a number of non-organized buyers of sawlogs. This is especially the case in the southwestern and western parts of Finland. In general, the tendency in joint sales is away from auction sales and toward the use of sealed bids.¹

72.3. Sales through merchant middlemen

The question of the amount of industrial wood sold from private forests through the channel "producer — merchant middleman — consumer (or exporter)" has not met precise determination in this investigation. In the survey of private forests the commercial wood sold to merchant middlemen was included under the heading "exporter of roundwood or middleman". This group comprised an average of 17% of the marketed quantities in the felling years 1955/56 and 1956/57. Most of this wood has been sold to the exporters, so that in any case the share of the merchant middlemen is quite small. In 1936—38 they probably were somewhat more important.

Those wood-using enterprises that have a permanent local purchasing and delivery organization have wanted to eliminate the merchant middlemen from the roundwood market because they offer practically no advantages to the companies. On the contrary, the marketing channel becomes longer, the costs of procuring roundwood are often increased, the "normal" order of the roundwood market disturbed, and in addition, their services are often uncertain (cf. Reinius 1954, p. 11). The work of the middlemen is primarily based on cooperation with such exporters of roundwood as do not have a buying organization of their own. As stressed, for instance, by Jalava (1932, p. 90), the merchant middlemen have often acted against good sales practices and therefore are not favored even by the forest owners.

The aforementioned figure excludes, however, the middleman role played by industrial companies and exporters in exchanging and reselling purchased roundwood. Need for such transactions may arise from many reasons as listed by Parkkainen (1957, p. 286). First, they are carried out to get rid of the assortments which are not used in the buyers' establishment. Secondly, they provide a means to avoid cross transports. Thirdly, exporters of roundwood are sometimes willing to exchange distant stocks against those which are near harbors in order to get quick delivery for shipment (cf. Reinius 1954, pp. 52—57).

Quantities exchanged in these transactions are not known but they may be even larger than those handled by professional middlemen.

73. State forests

The domestic marketing of industrial wood from State forests is mostly done in the form of direct sales from the forest owner to the buyer, mainly forest industry. The State Board of Forestry also practices the export of roundwood.

Lapland forms an exception since there small quantities are sold also to middlemen who resell mainly to forest industry. The middleman functions are carried out mostly by local farmers or other persons acquainted with logging. This agency function has come into being chiefly in order to create a demand for even low-quality stands, for instance, those in which the most valuable trees have been removed and from which the forestry companies otherwise do not want to buy because of high logging and delivery costs. Industrial companies aid these middlemen with advance payments and the State Board of Forestry encourages their work by making the logging quantities so small that a private middleman can handle the logging and delivery.

Each forest management district presents its marking plan to the State Board of Forestry before the start of the selling season. The forest management plan of the district serves as the basis for operations, but also the prevailing marketing conditions are taken into account. The regional administrative office gives its statement on the selling plan after which the matter is discussed and the final decision is made in the State Board of Forestry (see, e.g., the State Board of Forestry's circulars of Oct. 28, 1924; Jan. 18, 1934; and June 27, 1957). Various causes such as wind damage and forest fires, serious unemployment etc. can bring about changes in the original plan.

Every year catalogs listing the parcels to be sold are sent to the buyers. When wood is intended for export or delivered directly to the buyer's storage yards, it is not included in the list.

The sale itself can take several different forms:
1. auction sale by the State Board of Forestry;
2. sale with sealed bids by the State Board of Forestry;
3. sale by negotiation; and
4. retail sale with a license by the district forest manager.

Selling to a foreign buyer is done by the State Board according to ordinary export practices.

¹ Information received from the officials of many forest management association leagues.
The procedures to be followed in sales of timber from State forests have been outlined by the Government (As. 140/1922 revised in 1931, As. 230/1931). No mention of export sales is made in the statute.

The auction sales were first the only means of selling by the State Board of Forestry. In 1909 it was decided by the Government that in addition to the public auctions which included the most valuable wood, there were to be local auction sales where less valuable wood would be sold for the local population. The local auction sales, however, have been quite rare and in recent years none have been held.

According to the Sales Statute the auction is held by the regional office with the assistance of the district forest manager from whose area the wood is being sold, if not otherwise ordered. In 1936—38 auction sales held in three places (Oulu, Tampere, and Viipuri) followed this pattern. They were made with rising bids and each tract of marked trees was given to the highest bidder if the State Board of Forestry considered the offer adequate. The buyer learned of this only after the State Board had on the basis of the auction records considered the matter and informed him of its decision.

Between 1939 and 1948 no auction sales were held. Since 1953 the auction sales from State forests have been concentrated in one place. The State Board of Forestry representatives have been authorized to decide immediately after the highest bid is made whether it is accepted or rejected. In cases when the bid is not approved, the same tract of timber is offered another time in the same auction sale and also the State Board decision is given immediately. If the bid has been rejected, the highest bidder has not had the first buying rights to that offer when it is sold later by other means.

The practice adopted in 1953 has raised considerably the proportion of accepted bids from the prewar average.

Between 1936 and 1938 only sawlogs, both on stump and with delivery contracts, were offered in the public auctions. Early in the 1930's there were also sold in the "second-stage auction sales" small-sized sawlogs and cordwood on the stump in areas where the most valuable timber had already been marketed.

In 1956—58 a variety of types of roundwood have been offered in the auctions although the sawlogs have been the most important assortment. The sales have been made mostly, and since 1958 entirely, with delivery contracts.

A buyer who is planning to bid in the auction is obligated by the Sales Statute (§ 20) to leave an approved surety for the payment of logs during a set period and for the fulfillment of the terms of sale. Since 1953 the buyer has also been required to pay 20% of the sales price in advance before the end of the auction.

Until 1919 the auctions were the main form of sale from State forests. Then the State Board of Forestry introduced the use of sealed bids into its selling program. The buyers are notified either by mail or newspaper advertisement and are requested to submit within a certain period sealed bids on allotments of timber listed in the sales catalog. Each parcel is then sold with a written contract to the highest bidder if the offered price has been considered adequate. This practice differs from the auction sales in that the bidders do not know each other’s offers and may not compete openly with each other. In the northernmost parts of Finland this has been the dominant practice in 1956—58. Also hardwood logs and some special products have been sold in this way throughout the country.

The parcels left unsold at the auctions or in the sales with sealed bids have generally been sold by negotiation. Contact is usually initiated by the State Board of Forestry but sometimes also by the buyers. Prices and other terms of sale are stipulated in a written contract (Laine 1957). — The sales, or at least the basic prices proposed in the sealed bids or in negotiations, are approved at the meeting of the State Board of Forestry college.

It has been mentioned that with some wood-using enterprises long-term (3—5 years) delivery contracts have been made. The terms of these contracts are stipulated in bilateral negotiations between the State Board of Forestry and the buyers.

### 74. Forms of contracts

The contract for the sale of roundwood can be either written or oral. The marketing survey (see Section 84) showed that the written contract is prevalent in the marketing of industrial wood from private forests. A written contract is practically always made in the case of stumpage sale. In delivery sales there are two common practices. When the sale is made before logging the written contract is usual. When, instead, the object of sale is an allotment of wood already logged and ready for measurement (cash sale), there is no need for a special delivery contract and both sides will receive only a measurement certificate. It was brought out before that only small allotments from private forests are marketed in the latter way. On the grounds of the volume of industrial wood sold the importance of the written contract is therefore greater than on the basis of the number of individual sales. The written contract is also common in sales by auction.
The form of contract when purchasing wood from *State forests* varies with the type of sale. According to the sales statutes of 1922 (§ 18), when selling by auction a special purchase contract is not required. The buyer needs only to sign the auction sale records, which are considered binding for both sides. The terms of sale are stated in the printed announcement of auction sale. Since 1953 the practice has changed so that the highest bidder is given a receipt for the downpayment and — since 1954 — a certificate of sale.

When wood is sold through sealed bids or by written contracts, a separate agreement between the State Board of Forestry and the buyer is written for each individual parcel.

There are many reasons for the general use of written contracts in roundwood sales. One basic reason is the generally long contract period. The fact that the product is not ready to be seen when the contract is made has its effect, too. Therefore the contract includes rather detailed specifications concerning the purchase: the size and quality, quantity, period of logging and delivery, measuring, pricing, terms of payment, etc. Because these terms are written they provide both the buyer and seller with greater security than does an oral agreement. Dudd and Revzan (1947, p. 386) emphasize that the purpose of "future trading" in the long production process is "to provide the merchant and the manufacturer a means of protection against the risk of price change."

Legal factors are sometimes the reason for using a written contract as a security measure, because it can be mortgaged to secure against the changes in the ownership of the forest property.

### 75. Scandinavia

#### 751. Norway

In Norway the marketing of roundwood from private forests has usually taken either of two channels:

a. marketing through forest owners' (sales) associations;

b. direct selling.

The rules of the sales associations (cf. Normalvedetekter for ... 1955 § 4) usually obligate the member forest owners to exchange all commercial timber through this organization.

The marketing through the organization has two characteristic phases:

- Phase 1: forest owner — skogierlag — skogierforøring;
- Phase 2: skogierforøring — consumer of roundwood.

The sales each year are commenced after the agreement on prices has been reached between the forest owners and the buyers. According to the agreements made in 1955 and 1959 (Avtal om ... 1955, 1959) the price negotiations must be held in April, for pulpwood felled in the spring (barked in the period of sap flow) and for other roundwood in August and September. The negotiations have sometimes been rather prolonged, which has delayed the starting of sales (for instance, in 1958 the agreement was reached as late as October 23 on the basis of an arbitrator's award).

After the prices are established, the forest owners file with the local agent of the *skogierlag*, usually the chairman, a binding notice (innelling) of the types of roundwood and the amount they are planning to sell. Ordinarily the marking of timber has been done in advance. The *skogierlag* forwards the information to the sales associations.

Upon gaining an idea of the quantities of wood offered in the district on the basis of these notices, the sales association gets in touch with the buyers of roundwood in the district (the buyers' association). It is then seen if the supply of a certain product is greater than the demand. If such is the case, the forest owners' organization can, according to its rules, force the forest owners to reduce their offers. Special mention of this is also made in the forms on which the forest owners' notices are reported. If, on the other hand, the offered quantity is smaller than that which the buyers are willing to purchase, there will be negotiations between the buyer and seller organizations in order to fulfill the needs of the buyers with domestic wood. In 1955 and 1959 an agreement was made whereby the exchange of information about demand and supply between the buyers' and forest owners' organizations was to take place each year before December 15 and the procedure was to be repeated in the middle of the following January and February.

In the negotiations between the district sales associations and the buyers it is also decided how much each buyer will receive of a certain kind of roundwood from the district and the area from which each buyer will have his wood delivered. The aim is toward greater efficiency in transportation. After these preliminary discussions, the sales association and the buyer make a delivery contract.

Under this system the forest owner is not in direct contact with the buyer. He may, however, state his wishes concerning the choice of buyer to the sales association which in turn tries to honor established trade relations. The forest owners' organization has, however, been seeking to eliminate this practice, which somewhat complicates the work (Skogeieren 1957, p. 377).

The status of the *skogierlag* in the channel of marketing differs from that of the *skogierforøring* in that the former acts only as a functional
middleman. Skogeierforening is, in contrast, one kind of merchant middleman since it makes binding delivery contracts with the buying firms in its own name. Its position, especially in risk bearing, is rather unique because the prices have been set by negotiations before making the sales contracts and there are binding agreements (inmel ding) with the forest owners about the quantities to be delivered. The risk in this connection is, to some extent, comparable to that of the retailer selling goods at prices determined by the manufacturer (resale price maintenance) which practice has almost eliminated the price risk (Kaskimies 1955, p. 197). The skogeierforening receives a provision of 1.5 % from the buyers which, too, is typical of agency functions.

Since most of the private forests belong to the organization of forest owners (see Subsection 641) and since the members under the regulations are obligated to sell roundwood through the organization — exceptions are possible mainly in relatively unimportant stumpage sales (with the permission of the sales association) — the procedure described above is dominating in the market of roundwood from private forests in Norway. It is rather obvious that, practically speaking, all the roundwood exchanged from the members' forests in 1956—58, excluding local retail, passed through the forest owners' organizations. In these years the quantities of wood handled by the organizations were, on the average, 64 % of the commercial removals from private forests. Because the statistics on fellings in private forests include also the removals from the company forests and large forest holdings from private forests. Since the statistics on fellings in private forests include also the removals from the company forests and large forest holdings from private forests.

The sales statistics have also included some wood from the State forests, but in making the comparison this quantity can be disregarded.

The importance of co-operative marketing has not been reliably determined for the years 1936—38. Norges Skogeierforbund estimates it as 50 %. This estimate, plus the increase in membership as well as in the proportion of co-operative sales from all sales made from members' forests, suggests that co-operative marketing has gained considerably in importance since the 1930's. The chief exceptions are the owners of large forest properties who generally do not belong to these organizations and who sell their roundwood individually directly to the consumer. Some of them have, however, their own industrial plants which utilize much of the roundwood produced in these forests.

From the State forests of Norway the exchange is usually direct between the forest owner and the consuming enterprise. Sometimes the channel "forest owner — skogeierforening — consumer firm" is used also by the State forest administration. Other forms of middlemen are very rare.

According to the selling regulations (Instrukser m.v. 1919, pp. 59—61) each district forest officer has to deliver annually (by April 15) a proposal concerning the marking of timber for sale. When this is accepted by Direktoratet and the marking is carried out, sufficient information for sale is available. The parcels (markings) to be sold must be made known to buyers in press.

Three methods of sale are available according to the regulations (pp. 63—65) namely:

1. sales by auction (rising bids);
2. sales with sealed bids;
3. hand (cash) sales on local retail.

Of these the sale with sealed bids involving a separate contract with each individual buyer is by far the most important (according to information received from Direktoratet). Once the prices between the buyers and forest owners have been determined by negotiations, the district forest officers ask — often through newspaper notices — the buyers to submit sealed offers. Selling by auction is rarely practiced in Norway for the reason that collective bargaining determines roundwood prices.

Written contracts in selling roundwood are common both in private and State sales.

752. Sweden

In Sweden the marketing of roundwood from private forests takes usually one of the three channels:

1. marketing through the organization of forest owners (forest owners' associations);
2. direct selling: forest owner — consumer (industrial) firm;
3. forest owner — middleman — consumer firm.

The rules of Swedish forest owners' associations do not compel the members to sell the roundwood only through the organization as is the case in Norway. The rules of many associations, however, allow the administrative board of the association to make members responsible for the delivery of certain products during a certain period, for instance, one year, in order to fulfill the agreements made by the association. In accordance with this many associations especially in Central and Southern Sweden have recently maintained delivery obligation for pulpwod but only seldom for sawlogs. Delivery obligation does not, however, prevent the member from selling other kinds of timber through other channels as well.

Delivery obligation is required in those fairly common cases when the amount of timber to be delivered is stipulated in the contract between the association and consumer firm. The former does not always have the information on the amount of timber the members are willing to deliver,
The association is entitled to buy and sell also the timber of non-member forest owners.

The association’s middleman function is effected in two ways: the association can buy roundwood from the forest owners at a fixed price and resell it — mostly to forest industry — or it can function as an agent in seeking a buyer for parcels of roundwood supplied by a forest owner. In the first case the exchange is made in two steps: a) forest owner — association; b) association — consumer firm. In the latter case the actual sale is made only by the forest owner and the purchasing firm.

The two-phase exchange which is favored by the associations is the dominant form. In this case the association takes title to the goods (merchant middleman) and bears a risk, though it is more nominal than real since either the price to be received by the association is usually known (on the basis of price agreement) before making purchases from the forest owners or the contract will be closed at open price (if the price question is unsettled).

The forest owners’ associations deliver timber usually to the road side or river bank. Only in exceptional cases do they take the responsibility for transporting it to the buyer’s mill.

The purchase function of the association (functional middleman) is performed particularly in the auction sales of standing timber. Many associations, particularly in the southern part of Sweden organize annual auctions after the auction sales of Domänstyrelsen, e.g., in order to get information on the price development.

The distinct form of the middleman function of the forest owners’ associations is seen in the buying of roundwood from the forest owners and its resale to the industrial establishments controlled by the forest owners. These establishments — e.g., 72 sawmills (of which 19 frame sawmills) and 3 pulp mills — are usually independent companies whose shares as a rule are held by the forest owners’ associations and in some few cases also by the individual forest owners. In Sweden industrial activity run by the forest owners has usually four goals: controlling prices of roundwood, promoting demand especially in those parts of the country where it otherwise is poor, influencing roundwood prices and dividing the profits of the industrial activity.

Local contact associations corresponding to the Norwegian sogeierlag do not exist in Sweden. Their function is largely carried out in some regions by the local agents of the forest owners’ associations who collect information on the parcels of timber to be annually sold by forest owners. This function has been, however, recently done mainly by the salaried inspectors employed by associations.

The direct purchases of roundwood from the forest owners by the

utilizers, especially forest industry, form another common form of roundwood exchange. It is carried out mainly in two ways:

a. by the firms’ permanent employees;

b. by the firms’ purchasing agents on a commission basis.

Channel (a) — very similar to the direct marketing in Finland (see Subsection 721) — is extensively employed by the large and middle-sized companies in Norrland where companies own large forest areas and where it is rational to entrust the company’s forest administration with the additional task of buying timber from private forests.

Channel (b) on the other hand is fairly generally used as a subsidiary purchasing method especially in the south of Sweden, where firms are smaller, own less woodland and where road transport is dominating in the transport of roundwood. Agents are employed for the period of one buying season at a time. They are usually retired forest rangers, truck owners, farmers, etc. The quantity which they are entitled to buy, as well as prices, are stipulated in the contract made between the agent and firm. They make the purchase in the firm’s name.

By using such agents the firms are in a position to reduce the permanent buying staff and hold their fixed costs to the minimum. It also helps the firms to use effectively the short buying season and to fill quickly their roundwood requirements.

Information on the relative importance of the different channels has not been available. In some Norwegian investigations (Kleppe 1958; En oversikt ... 1957–1958, p. 13) the volume of roundwood handled by the forest owners’ associations has been estimated as 8—12 million cubic meters annually (an average of about 10 million cubic meters) for the most recent years. Direct exchange between the forest owners and woodconsuming enterprises is apparently of greater magnitude, the share of independent middleman being noticeably less than either of the others.

The marketing of roundwood from the State forests of Sweden is done directly to the wood-using firms or sometimes to exporters. Middlemen also buy a few lots especially in Southern Sweden. Forest owners’ associations can act also as middlemen by buying pulpwood especially from the State forests and by selling a part of it abroad and another part as pulpwood to pulp mills. Important buyers from State forests have been the woodusing industries owned by the State itself. In 1942 these industries were separated from the direct control of the Domänerverket and were formed into an independent corporation, AB Statens Skogsindustrier (ASSI). According to the statutes (68/1941, 117/1957) ASSI must pay market prices for roundwood regardless of whether it is bought from the State or from private forests. The firm buys on the average 20—30% of the wood
removed from the State forests mainly on delivery terms. These sales satisfy about 80% of its total need for roundwood (cf. En oversikt ... 1957–58, p. 8).

The Domänverket does not directly export roundwood, as does the State Board of Forestry in Finland. Its sales policy is outlined independently of those in the private forests. In the same way as in Finland, the allotments of roundwood to be offered for sale are marked and listed in the districts before the selling season and compiled in sales catalogs by regions or districts and by forms of sale.

The methods of sale are as follows:
1. Sales by auction. Domänverket holds annually auctions of wood being offered on the stump in various parts of the country, usually one in each of the regions (in Norrland) or districts (in Southern Sweden). Each allotment marked in the catalog is sold in turn with rising bids. The regional or district forest officer "officiates" at the auction and has the right to accept or reject the bids on the basis of price calculations made by the Domänstyrelsen and supplied to the local administration approximately a month before the auction.
2. Sales with sealed bids as in Finland. Potential buyers must be informed of the parcels to be sold by the regional or district forest officer. The offers are accepted or rejected at various stages of administration (Domänstyrelsen, regional or district forest officer) according to the value of the parcel in question (DRS, F3, § 4).
3. Sales by negotiations between the Domänverket and the wood-using industries:
   a. collectively with the associations of industries (virkesföreningen);
   b. with individual companies.
4. In the form of 10-year contract with ASSI.
5. Hand (cash) sales on local retail.

It has recently been the practice (also in 1956–58) that the Domänstyrelsen first negotiates with the buyers’ associations (virkesföreningen) or with individual companies in order to get a general agreement on prices for a certain region. Also the total sales quantity is frequently mentioned in the contract to be subsequently divided among the different companies by the virkesföreningen. Details will then be stipulated in the contract made by the regional or district forest officer and each company (Domänverket 1956 pp. 31–35; 1957 pp. 33–38).

A written contract is made in the sales from both the State and private forests in Sweden.

Of the sales of standing timber in 1956–58 63 per cent was sold, on the average, in the auctions and approx. 30 per cent with sealed bids (Domänverket 1956–58). There are no statistics on the subdivision of delivery sales between different methods of sale but the main forms are sales with sealed bids and by negotiations. Auction is not applied.

76. On the factors affecting the channel of marketing

We have seen that a number of channels in the marketing of roundwood can exist side by side within a country. The most outstanding difference among the North European countries is to be found in the channel adopted in marketing from private forests. Especially in Norway, but also in Sweden, the role of the associations of forest owners is much more important than in Finland. These findings naturally make one to ask: what are the reasons for the differences, in other words, which are the factors influencing the formation of the marketing channels?

Kaskimies (1955) has examined the structural factors in the marketing channels of consumer goods considering the maximizing of the enterprise’s profits to be the initial cause. Since in the marketing of roundwood independent distributing firms are very seldom encountered, the maximizing of their profits does not have the same meaning as in the distribution of consumer goods. Instead, the attempt to cut the marketing expenses to a minimum could be thought of as the governing principle in determining the channel, for this is a factor in maximizing the profits of both the forest owner and the buying firm. Nevertheless, the formation of the channel of distribution (of consumer goods) cannot in reality be explained simply by cost theories, as pointed out by Kaskimies in his aforementioned investigation (pp. 99–100). To understand the reason one needs only to think of the difficulty which often arises in determining the channel of least costs. Furthermore, the distribution frequently takes place under conditions far from representing perfect competition.

Kaskimies’s remarks apply also to the marketing of roundwood. There is also reason to emphasize that the channel used on this market usually affects the costs of the entire extraction process, especially transportation costs. The comparison of the total costs of the different types of marketing channels therefore requires simultaneous examination of all these costs.

In determining the channel of marketing, cost reduction loses much of its importance since distribution of income, that is, stumpage, is an integral part of the marketing of roundwood. For the utilizing this stands out as an expense, but for the producer (forest owner) it means income. As the stumpage in all the North European countries is often the highest expense item, the buyer is greatly interested in using a marketing channel that would secure a low stumpage price. The forest owners’ interests are just
the opposite. This factor of price formation or income distribution has indeed become very important in the formation of the marketing channels of roundwood.

In his closer analysis of the structural factors in the distribution channels of consumer goods, Kaskimies (1955, pp. 107—108) divides them into four groups:

1. market factors
2. product factors
3. enterprise factors
4. institutional factors

Kaskimies points out the difficulty in assigning factors to the various groups and especially in drawing the borderlines between the different groups. In the present investigation this division has not been followed even for the reason that the factors in the marketing of roundwood and of consumer goods are basically different. As an example, no brands exist on this market. Moreover, the list of factors influencing the marketing channel would be much shorter because this study is directed only to one commodity (unprocessed wood) which lacks many of the special features of consumer goods.

*Historical* influence on the channels of marketing has already met with some discussion. At first, the forest industry could not depend on the services of forest owners' associations in obtaining roundwood since these associations are 'relative latecomers. The firms had to set up their own organization for procurement of raw material. Since changes in the marketing channel take place at a slow pace (Kaskimies 1955), the system that first was created has especially in Finland and Sweden retained its dominating position. For the buyer this arrangement secures the sureness of deliveries and it also gives him a firm grip on the price formation in the market.

Likewise the distinct *seasonal rhythm* — a factor largely beyond the buyer's control — has been said to support the traditional trading pattern because after the sales have been made in the autumn the local labor is free for the extraction of roundwood.

The acquaintance with the formation of the forest owners' marketing organizations indicates that the chief aim has been to improve the *competitive position of forest owners in the price formation of roundwood* (e.g., Skogsbönder... 1957, pp. 7—10). The great number of forest owners representing supply and the relatively small number of buyers, which furthermore have often been highly organized, has in all North European countries given oligopolistic character to the roundwood market. Through their associations the forest owners have tried to alter this situation to represent their interests.
As we have seen, the Norwegian forest owners have been the most successful in their attempts and the Finnish ones the least. The explanation for this is difficult to find. One, perhaps an important, reason can be found in the average size of forest holdings which in Finland is slightly smaller than in the Scandinavian countries where also the ownership has been more stable. The interest in associating with the purpose of increasing the forest owners' share in the distribution of income has been greater among forest owners in Scandinavia than in Finland where there is a very great number of "marginal forest holdings", ones from which the employment is equally or more important for the forest owner than the stumpage. Also the differing knowledge and skill of the forest owners and the different attitude of the buyers toward the efforts of the forest owners in the three countries can provide some explanation. In Finland in particular the buyers have been rather consistent in discriminating against forest owners' commercial associations. This has decisively weakened the effectiveness of their functioning. On the other hand, it must be admitted that in Finland there has not even been such a determined effort towards organized marketing by forest owners as in the Scandinavian countries. — Živonas (1959, pp. 26—27) emphasizes the importance of geography and especially the transportational aspects in the organizing of the Norwegian forest owners.

More intensified public control of economic life can be listed as one possible factor favoring the associating of forest owners (cf. Kasmimies 1955, pp. 224—225).

With differences in backgrounds the North European countries now have systems in which the contribution of the forest owners and their organizations in the roundwood market is quite different.

The Scandinavian forest owners' associations which first seemed to have been founded mainly to influence price formation have later begun to be concerned also with certain actual marketing functions. These associations in Norway and Sweden form an intermediate step in the marketing channel. They collect the forest owners' offers and sell the wood in greater parcels to the utilizers, practicing also some delivery service. Thus they carry out the initial gathering of roundwood which was earlier done only by the buyers' agents or the buyers among themselves as exchange. This is closely linked to the obtaining of assortments and selections appropriate to the user. Since in the marketing of consumer goods both of these functions belong to the wholesalers (Kasmimies 1955, p. 76), the forest owners' associations represent the "wholesale phase" between the roundwood producers and utilizers, although in this trade, contrary to the exchange of consumer goods, the quantities increase in moving toward the utilizer. In Sweden the demand promotion for roundwood and especially for small-sized wood seems to have been important in the work of the forest owners' associations (Skogsbönder . . . 1957, p. 118).

It is difficult to evaluate whether this type of marketing saves costs or not. In Sweden the buyers must pay the forest owners for these services the same commission as for private agents. However, it is possible that the forest owners' associations in handling great quantities of wood are able to reduce the buyers' cost of transportation.

It is apparent that the marketing services of the forest owners' associations are most beneficial to the small forest owners for whom it would be difficult to offer adequate quantities for sale. In Norway and partly also in Sweden the owners of very large forest properties market their wood individually. Thus the size of the forest holding affects the selection of the marketing channel. The same is true for the buying enterprises. By availing themselves of the forest owners' association's services, the small enterprises do not need to set up their own organization for roundwood procurement, whereas large enterprises have to have such organization.

We ought to point out that the marketing organizations in the Scandinavian countries have arisen from the collective activities of the forest owners. Each private forest owner is restricted by institutional limitations in selecting the channel of marketing. This is especially true for Norway where association rules require the members to sell all roundwood through the organization. The forest owner can be freed from this obligation only by resigning from the association. In Sweden the members usually have a greater freedom of choice, although in some associations surrendering the wood intended for sale is compulsory.

In all the North European countries the marketing from State forests takes place as direct sales to the user, with only few exceptions. The magnitude of the "forest owner" in this case and the legal nature of the public ownership of the State forests are perhaps the chief reasons for the application of this marketing channel.
8. Trade customs

81. The concept and origin of trade customs

According to Raninen (1934, pp. 32, 279) trade customs or usages1 are "established, reasonable, appropriate and good customs well in accordance with existing positive law". Trade customs are used as means of interpreting, expressing and completing sound practices in trade, in determining the rights and responsibilities of the two parties involved in a contract. Since in Finland the commercial legislation is embodied in a number of laws passed at different times and since legislation is always inclined to contain loopholes, trade customs are a very important auxiliary to the written law (Kytä 1958, p. 10). Raninen (1934, p. 28; 1950, pp. 739—740) stresses their value in increasing effectiveness of trading, maintaining good business morale and protecting the rights of the weaker party.

As we can see from the definition, the establishment of certain practices in trading itself has to be considered the primary source of trade customs.Codifying and ratification can serve to promote the formation and establishment and especially to demonstrate the existence of trade customs. In some instances these customs can originate from the sanctioning of certain norms in advance, as has been the case with stock exchange regulations and with general contract terms in many fields of trade. Raninen (1934, p. 25) does point out that a practice can be either the cause or the result of trade norms.

The Central Chamber of Commerce is the official organ for the confirmation of trade customs in Finland. Among its responsibilities is the preparation of statements on "trade practices, trade customs, and trade terminology" for courts and for interested persons (As. 55/1917). The roundwood market has remained a relatively peripheral field in this phase of the Central Chamber of Commerce's work. Not a single resolution concerning the roundwood market can be found in its trade-customs register.

On the other hand, within the roundwood market, as well as in others, an interest can be aroused among the buyers and sellers in the study and development of trade customs (cf. Kytä 1958, p. 10; Gerig 1959, pp. 12—13). This will be discussed later.

Court decisions can also, in a sense, establish practices which outline the obligations of the buyer and seller in certain cases (cf. Kytä 1958, p. 10). When the Supreme Court as the highest level of appeal has passed down a decision on some question of trade, recourse is often made to that ruling in similar cases. This does not invalidate, however, that trade customs originate primarily within the trade itself. In fact, even the courts seek support from prevailing customs in settling cases for which no clear laws exist (cf. Raninen 1934, pp. 29, 40; Gerig 1959, p. 12).

Since the purpose of this investigation is also to examine the developments in marketing, the question of whether trade customs can change is raised. In the definition the term "established" means, according to Raninen (1934, pp. 32—37), that the practice has been continued over a sufficiently long period of time (cf. Gerig 1959, p. 12) and the longer a certain practice has been in use the more definite is its significance as a trade custom.

This need not mean, however, that trade customs cannot change (cf. Raninen 1934, p. 28). For this reason alone it has seemed justifiable to study the development of trade customs since the late 1930's. In this way it will also be shown whether the practices prevalent in 1956—58 were established before the Second World War and how stable they have been in different regions. In fact, the results will aid in evaluating the practices used in 1956—58 as trade customs.

Kaskimies (1955, p. 214) distinguishes between trade customs which are evident in competition, either horizontally within a branch or vertically between the different phases of a channel of marketing, and those customs in the technicalities of trade. Only the latter will be considered here.

82. The roundwood market from the standpoint of the formation and research of trade customs. Method of investigation

Raninen (1950, p. 734) considers the origin of a trade custom to be in a practice which has been introduced in continued trading between two merchants. From there the practice has spread to cover the business relationships among other merchants and between merchants and their customers. It seems that in reality most of the trade customs have first evolved amidst professional merchants.

The fact that the formation of trade customs is closely related to the

1 Also term "commercial custom" is used.
activities of professional merchants has given rise to the questions on the
application of the customs in the exchange of roundwood. Gerio (1959,
p. 15) is of the opinion that since forestry is not a trade, trade customs do
not concern forest owners nor the sales which they have made. Kytöä
(1958, p. 9) considers delivery sales but not stumpage sales, as being subject
to trade customs. In his opinion, the stumpage sales belong under civil
rather than commercial law. I have taken the stand that in the marketing
of roundwood certain practices have become established, which within this
particular trade may have the character of trade customs. The aim of the
investigation is to evaluate their position as established trade customs.

In the roundwood market the buyers' side has been composed of a
great variety of businessmen, the sellers' side being made up of often
unorganized forest owners with very little trade experience. The great
difference in the experience of the buyers and the sellers in business affairs
have all been obstacles to established practices. It is also possible that the
infrequent repetition of sales from the same forest holding common in the
past has had similar influence. The seller therefore has not been equally
interested in establishing trade as, for instance, in the market of agricultural
products where the selling is continuous. It has been possible for the
buyers to arrive at individual solutions with different sellers. The State
forests with the terms of sale under public regulation form a conspicuous
exception.

With the passing of time the organizing of also the private forest owners
has introduced a new era in the development of trade customs in the
roundwood market.

For the study of trade practices and customs in the roundwood market
the special character of this trade presents its own problems. The collec-
tion of material which would give an undeniable proof of the existence
of a trade custom is very difficult. This is all the more so because it is
obvious that at least part of the trade customs have only local scope.
However, the common use of written contracts greatly facilitates the study
of the trade customs in the exchange of roundwood.

The present investigation is not intended to be an exhaustive account
of all trade customs but will be concentrated on the following:

- terms of delivery
- contract period
- expression of the quantity of sale in the contract
- measurement of the timber
- financing (terms of payment).

First, it has been my intention to describe the most common practices
within each item listed above. My orientation for this has included personal
observations and interviews with people participating in marketing in

various parts of the country. The impressions gained thereby have been
supplemented and clarified by the study of contract forms used in 1936—
38 and 1956—58 by twelve buyers of roundwood in different parts of the
country, mostly enterprises engaged mainly in forest industry.

The buyers' sales contract forms have given indications of the scope
and regional variation of alternative methods. The study of actual regional
features, however, has been attempted through the marketing question-
naire introduced in Section 22 (see also the Appendix) and—for delivery
customs—through the survey of private forests.

The value of the answers in the marketing questionnaire depends first
of all on the selection of correct and adequate alternatives in designing the
questions. The results indicated that in this respect the questions were
rather well constructed. For two groups of questions, however, there
appeared a need to complete and clarify the questions. Naturally the sig-
nificance of the results also depends on the competence and interest of the
questioned forest advisers in their evaluating the various alternatives. This
matter will be considered later with the presentation of the results.

The forest advisers who had been in their present community already
in 1936—38 (at least part of this period) were also asked the relations
of methods then applied and, by comparing the answers with those given
by the same advisers for 1956—58 it has been possible to draw conclusions
about the development of methods. The dependability of these results is
hampered by the possibility of inaccurate recollection of the 1936—38
period. Still, the answers can be suggestive and by comparing them with
the picture gained from the contract forms for the same periods, it has
been possible to reconstruct the development pattern of trade practices
from two sources of data.

It ought to be pointed out that the results of the inquiry do not reveal
the quantitative relationships between the different trade practices. This
is due to the fact that the basis for the estimate given by the forest advisers
was, according to the directions, the number of sales and not the quantity
of wood sold. Furthermore, the results appear by communes, and both
the small and large communes have been given equal weight.

The valuable data (e.g., the approved contract forms) on trade customs
is provided by the records of the Committee on Forest Trade Contract Forms
set up by the Central Association of Finnish Woodworking Industries and
the Forest Council of the Union of Agricultural Producers. First of all,
the contract forms provide useful information on certain trade practices
applied in 1956—58 especially when combined with the knowledge of
their range (Question Series 4 in the Appendix). Second, the records can

1 This in the following will be called, briefly, the Farms Committee.
show the stand on earlier trade practices taken by this organ representing both sides of trade. Third, the opinions of the Forms Committee can suggest the direction of the development of trade customs because of the authority gained by the Committee.

Statistical proof can be found for only part of the conclusions arrived at in the following. For instance, the sales contract forms of the twelve buyers studied represent too small a sample for statistical analysis. This is obviously most often the case in studying trade customs. The problem, in fact, is not a statistical one in the first place; the illustrations for different alternatives and the pointing out of their importance can often be adequate.

The Sales Statute, sales notices, State Board of Forestry circulars, and sales contracts have been used as sources for the study of the trade practices in the sales from State forests.

It appears that contract forms have a key position in the present study of the trade customs. Strictly speaking the terms of the forms can be considered trade customs with the provisions only that they are in accordance with the laws and reasonable (Raninen 1934, p. 27; 1951, p. 99). Very little attention will be paid in this (marketing) study to the legal aspects of the trade customs. That is justified in view of the fact that almost all contract forms are inspected by lawyers before printing; for example, the Forms Committee includes at least one lawyer. Instead, a fair consideration will be given to the question of whether certain practice stipulated in the forms is "reasonable" in spite of the fact that the word contains some element of subjective nature.

The study of the trade customs of Scandinavian countries is complicated to some extent by the fact that the channel of marketing comprises in many cases two phases: a) forest owner — association; b) association — consumer firm. On the other hand the study is greatly helped by an early development of fairly uniform trade practices. As early as the 1920's some Norwegian buyers and sellers negotiated on the standardization of sales contracts and, for instance, in the Glommen River District buyers' activity lead in 1922 to an agreement on uniform sawlog and pulpwood contracts (cf. Grambo 1953, pp. 34—35). In the 1930's further progress toward uniform contracts was made (cf. NS, årsberetning 1936/37, p. 8; 1938/39, p. 10). By 1956—58 the sales contracts had mostly been established on a uniform basis. However, there still remained some minor differences according to location. In 1958 it was considered by the Skogeierforbund that the differences in conditions did not permit the establishment of uniform contract forms for the entire Eastern and Southern Norway after the Norges Treforedlingsråd had given its recommendation (NS, årsberetning 1958/59, p. 24).

In the development of trade customs in Norway the forest owner and buyer organizations have been in a key position. The practices which they have introduced have also spread among unorganized sellers and buyers, for they have employed the same contract forms. This applies partly also to the State forests. The main part of the state's trade customs are, however, issued independently by the Skogdirektoratet.

In Sweden the standardization of trade customs was started mainly during the period between the two World Wars. The initiative came from the log-scaling associations (see Section 88). Each member buyer had to use association-approved forms containing specifications for the quality of roundwood, measuring, etc. Especially the co-operation between the forest owners and buyers (Komiteammietintö 5/1936, p. 62), the Timber Measurement Act of 1947 — which resulted in the establishment of new measurement associations — had later given rise to fairly uniform trade customs in each locality. On the other hand, the marketing of roundwood from the private forests of Sweden is less concentrated than in Norway. This and local variations in marketing conditions have resulted in certain local characteristics of trade.

Roundwood sales (marketing) from the State forests has long been subject to uniform practices — with certain local differences — stipulated by the government and the State forest authorities (the Domänesstyrelsen).

The study of the Scandinavian trade customs is based mainly on the contract forms, sales regulations (State forests), and — regarding measurement — measurement acts and measurement regulations.

83. Delivery customs

831. Basic concepts

Terms of delivery refer in general to the buyer's and seller's agreement concerning the responsibilities for transportation charges, insurance, and other general expenses connected to transportation and specifies the transfer of responsibility for transportation.

In the general classification of delivery practices the exchange of roundwood is considered mainly under loco trade where goods are freely transferred in the community where the seller (forest owner) lives (Raninen 1954, p. 143). Some exceptions to this can, however, occur.

In the exchange of roundwood two distinct forms have traditionally been distinguished: sale of standing timber and sale with a contract for
The difference between the two lies in the distribution of responsibilities between the parties for the different marketing functions (including risk bearing). In the sales of standing timber, or stumpage sales, the forest owner sells the cutting right, that is, the right to remove a portion of the growing stock, which is more closely stated in the contract. The harvesting is left entirely to the buyer; sometimes the seller does nothing other than sign the sales contract. Often, however, he takes care of the marking of timber before the contract is drawn up and takes part in the measuring either in person or through a representative. The price to be paid is called the stumpage price. — Some buyers have called the stumpage sale contract a "rental contract".

In sales with a contract for delivery, or delivery sales, the seller is responsible for getting the wood stated in the contract to a given place of delivery. He usually does the logging but only in rare instances has he agreed to take care of the transportation all the way to the factory or export harbor. It is also possible to make a contract which stipulates that the buyer does the felling and the cutting into logs and the seller is responsible for the hauling of the logs in the forest.

In stumpage sales the seller has only a slight risk to bear. Because the transfer of title to wood can take place only after the felling is completed (Kyttä 1958, p. 27), the seller's main risk is the possible damage to the growing stock remaining after the making of the sales contract (for instance, snow, storm, or fire injuries). This, however, is not directly caused by the sale since the forest owner would have to face the same risk even if no sale were made. In delivery sales, in contrast, unfavorable weather conditions and a sudden rise in wages or other expenses, for instance, can represent a considerable risk.

Legally speaking, there are certain differences between delivery and stumpage sales (cf., for example, Kyttä 1958, p. 25 —). The buyer can secure the right for felling by mortgage with a written contract for a maximum of ten years. Mortgaging is rather uncommon, however.

A cash sale is often distinguished from stumpage and delivery sales. In terms of the division of marketing functions between the buyer and seller the cash sale ought to be considered as a special form of delivery sale: i.e., one with prompt terms (prompt sales or hands sales). It is an entirely differ-

1 The Finnish terminology for the two different types of sales is not very satisfactory. Hankinta, the word corresponding to delivery, can also mean the logging operations in the forest, which naturally has to be done also in the case of stumpage sales (though it is then carried out by the buyer). However, the terminology is already rather well established in Finland and no change has been felt necessary in the present work.

2 Information supported by a number of forest chiefs and district forest officers of various firms.

ent matter that a cash sale—partly because of its promptness—possesses features differing from traditional practices in the roundwood market. For instance, it is based only on an oral agreement and is carried out without advance financing by a buyer (cf. Pakkonen 1957, p. 285). More about cash sales can be found elsewhere (see Sections 74, 85, and 88). The differences exist primarily in the terms of payment and not in the type of delivery.

832. Private forests

In the questionnaire used in the survey of private forests the type of delivery was recorded for each parcel sold. The mean values for the felling years 1955/56 and 1956/57 are shown by districts in Table 10.

Table 10. Commercial removal of private forests by delivery customs, average for the felling years 1955/56 and 1956/57 (survey of private forests).

<table>
<thead>
<tr>
<th>District</th>
<th>Stumpage sale</th>
<th>Delivery sale</th>
<th>Total Yhteensä</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pystymysmyynti</td>
<td>Hankintamyynti</td>
<td></td>
</tr>
<tr>
<td>Helsinki</td>
<td>74</td>
<td>249</td>
<td>323</td>
</tr>
<tr>
<td>Lounais-Uusmi</td>
<td>105</td>
<td>315</td>
<td>420</td>
</tr>
<tr>
<td>Savakunta</td>
<td>334</td>
<td>490</td>
<td>824</td>
</tr>
<tr>
<td>Uusimaa-Häme</td>
<td>347</td>
<td>363</td>
<td>710</td>
</tr>
<tr>
<td>Pohjois-Häme</td>
<td>522</td>
<td>377</td>
<td>899</td>
</tr>
<tr>
<td>Itä-Häme</td>
<td>502</td>
<td>310</td>
<td>812</td>
</tr>
<tr>
<td>Etelä-Savo</td>
<td>405</td>
<td>534</td>
<td>939</td>
</tr>
<tr>
<td>Etelä-Karjala</td>
<td>384</td>
<td>529</td>
<td>913</td>
</tr>
<tr>
<td>Itä-Savo</td>
<td>319</td>
<td>250</td>
<td>569</td>
</tr>
<tr>
<td>Pohjois-Karjala</td>
<td>240</td>
<td>536</td>
<td>776</td>
</tr>
<tr>
<td>Pohjois-Savo</td>
<td>522</td>
<td>616</td>
<td>1 138</td>
</tr>
<tr>
<td>Keskia-Suomi</td>
<td>770</td>
<td>479</td>
<td>1 249</td>
</tr>
<tr>
<td>Etelä-Pohjamaa</td>
<td>102</td>
<td>426</td>
<td>528</td>
</tr>
<tr>
<td>Vaasa</td>
<td>61</td>
<td>230</td>
<td>291</td>
</tr>
<tr>
<td>Keski-Pohjamaa</td>
<td>73</td>
<td>200</td>
<td>273</td>
</tr>
<tr>
<td>Pohjois-Pohjamaa</td>
<td>56</td>
<td>306</td>
<td>362</td>
</tr>
<tr>
<td>Kainuu</td>
<td>82</td>
<td>239</td>
<td>321</td>
</tr>
<tr>
<td>Koillis-Suomi</td>
<td>13</td>
<td>235</td>
<td>248</td>
</tr>
<tr>
<td>Lappi</td>
<td>34</td>
<td>228</td>
<td>262</td>
</tr>
<tr>
<td>Total — Yhteensä</td>
<td>4 945</td>
<td>7 012</td>
<td>11 957</td>
</tr>
</tbody>
</table>

1 000 cu.m. — 1 000 k.m² fodder.
The share of stumpage sales was 41% and of delivery sales 59% of the total volume of industrial wood exchanged. Since the delivery sales are relatively more important (77%) for fuelwood, the percentage for the total quantity of wood sold with delivery contracts would be approximately 63%.

In reality the percentage of delivery sales should perhaps be slightly higher since the negative bias which has been noticed to occur in the survey is most likely the result of omissions of small delivered quantities.

When comparing the number of delivery sales with the total number of sales, the percentage is even higher than if the comparison were made on the basis of volume. This appears from Table 11 which shows the distribution of the number of sales in six areas representing different demand conditions in the felling year 1956/57. The data was collected in the survey of private forests.

Table 11. Division of roundwood sales according to the terms of delivery in some districts in the felling year 1956/57 (survey of private forests).

<table>
<thead>
<tr>
<th>District — Alue</th>
<th>Prompt (&quot;cash&quot;) sales</th>
<th>Other delivery sales</th>
<th>Sales of standing timber</th>
<th>Total Yhteenv.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Käsirahaankaupat</td>
<td>Kaukosankarankaupat</td>
<td>Pyysikankaupat</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Share of the number of sales, %</th>
<th>Kausi kaukoppeja korvatu, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Lounais-Suomi ...</td>
<td>42</td>
</tr>
<tr>
<td>8. Etelä-Karjala ...</td>
<td>19</td>
</tr>
<tr>
<td>10. Pohjois-Karjala ...</td>
<td>18</td>
</tr>
<tr>
<td>12. Keski-Suomi ...</td>
<td>23</td>
</tr>
<tr>
<td>14. Vaasa ...</td>
<td>42</td>
</tr>
<tr>
<td>18. Koli-Suomi ...</td>
<td>13</td>
</tr>
<tr>
<td>Average — Keskimäärin ...</td>
<td>20¹</td>
</tr>
</tbody>
</table>

In some districts (2 and 14) the cash sales can be seen to occupy a noteworthy portion of the total number of sales, although the volume represented is perhaps rather small.

In examining the regional differences the share of delivery sales is particularly high (74—94%) everywhere in Northern Finland and Ostrobotnia. A relatively low percentage (45—48%) is found in the areas of the district forestry boards of Central Finland and Northern and Eastern Häme.

¹ Unweighted mean of districts.

The regional features in the terms of delivery are a reflection of regional trade customs, but they are also influenced by the regional differences in the structure of private forestry and agriculture, by labor relations, the product composition of sales, etc.

Statistics have not been compiled for the years 1936—38. However, KAILA (1945) has made a study of the importance of delivery sales in the marketing of wood from "actual private forest holdings" in 1929—38.

The material has been collected from "book keeping" farms of the Second Wood Utilization Survey. There are some differences in the populations sampled by Kaila's investigation and by the survey of private forests since the material in the latter includes samples from co-operatives, foundations, State educational and training properties, and other similar forests, whereas Kaila's work covered only forests owned by actual persons. However, this does not greatly lessen the comparability of the results of the two investigations. The material on which Kaila bases his study includes a notable negative bias (KAILA 1945, p. 27). It is difficult to evaluate the effect of this bias on the investigation results on terms of delivery. It could be assumed that the omissions are most common among small delivered parcels, which tends to lower the percentage of delivery sales. On the other hand, a similar bias in the survey of private forests, though a smaller one, has probably had an influence in the same direction in the results concerning the terms of delivery. The changes in the boundaries of the country and the different sampling and calculating methods employed by KAILA (1945, p. 21) make the comparison somewhat less accurate.

The comparison of results is shown below:

<table>
<thead>
<tr>
<th></th>
<th>1929—38</th>
<th>1955/56—1956/57</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For the years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KAILA (1945)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of delivery sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy timber</td>
<td>14</td>
<td>50</td>
</tr>
<tr>
<td>Industrial cordwood</td>
<td>37</td>
<td>64</td>
</tr>
<tr>
<td>Industrial wood, average</td>
<td>24</td>
<td>59</td>
</tr>
<tr>
<td>Fuelwood</td>
<td>75</td>
<td>77</td>
</tr>
<tr>
<td>All roundwood</td>
<td>30</td>
<td>63</td>
</tr>
</tbody>
</table>

The comparison indicates a vigorous increase in the importance of delivery sales since the 1930's. Many factors have contributed to this development. There has been a structural change in the removal of industrial wood; the industrial cordwood has gained relatively more in importance and now has more weight than before in the total for industrial wood. A marked increase of delivery sales is, however, discernible in both of these roundwood categories.

One factor with a vital influence on this development is the structural change within private forestry, its becoming more dominated by small
forest holdings (Holopainen 1957, p. 20). The decreasing proportion of delivery sales with the increasing size of forest holdings up to 300 hectares can be used in evaluating it. In the survey of private forest this phenomenon in 1955/56 — 1956/57 (considering all timber categories sold) was demonstrated as follows:

<table>
<thead>
<tr>
<th>Size of holding, hectares</th>
<th>Delivery sales in per cent of all sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>under 20</td>
<td>84.6</td>
</tr>
<tr>
<td>20—50</td>
<td>77.3</td>
</tr>
<tr>
<td>50—100</td>
<td>62.5</td>
</tr>
<tr>
<td>100—200</td>
<td>51.3</td>
</tr>
<tr>
<td>200—300</td>
<td>39.6</td>
</tr>
<tr>
<td>300—500</td>
<td>36.7</td>
</tr>
<tr>
<td>over 500</td>
<td>39.1</td>
</tr>
</tbody>
</table>

The trend toward smaller forest holdings has been accompanied by a decrease in the size of individual sales (see Chapter 4). The delivery sale under these conditions is more rational because the overhead costs of logging on small and scattered felling sites would be markedly higher for a buyer than for the forest owners. Usually the small property owner himself carries out the logging of the products in a delivery sale and does not need to take administrative expenses into account (Holopainen 1959 b).

The decrease in the area of agricultural holdings and the mechanization of work on the farms has had the same sort of influence. As more things earlier made by the farmers as handwork (wagons and sledges, doors, windows, etc.) are now industrially produced, more labor can be spared from the farms to seek additional income from forestry, for instance. The development toward a monetary economy and the tendency to raise the standard of living has necessitated the procuring of additional income. Hence, within the agricultural population the desire to be employed and receive income is apparent, and this in turn has brought an increase in the popularity of delivery sales and in the frequency of sales of smaller parcels of timber. The regulations concerned with forests of settlement farms require the sales to be done in accordance with a sustained cutting plan which also contributes to annual delivery sales.

The importance of the views expressed in the preceding paragraphs and especially of the employment aspects is demonstrated by an observation made also in the survey of private forests (cf. Holopainen 1959 b) that a very great part of the harvesting in delivery sales—approximately 50 % of the felling and cutting into products and approximately 70 % of the hauling to a point of delivery—is done by owner families. The forest owner has better assurance of work and earnings when he makes a delivery sale than he would by selling on the stump and going to work in a forest owned by somebody else. In addition, psychological factors prevent many farmers from seeking employment under other forest owners. Also, in forestry extension work delivery sales have been recommended for a variety of reasons (Holopainen 1957, p. 248).

The preceding has been a review of the terms of delivery and the factors influencing their development primarily from the standpoint of the sellers (forest owners). For a buyer the stumpage sale might mean certain advantages in marketing policy. It gives him a firmer grip on the markets than does a delivery sale. Above all, it is possible for him to supervise the making of products and observe the quality better than in delivery sales.

As a counterweight to these advantages there is the increasing overhead costs of logging with the decreasing size of individual sales. Several other factors also have a bearing on the decision. Thus the more strict enforcement of the Forest Law has brought with it a greater risk for the buyer to be made responsible for the paying of regeneration costs and other expenses included under the law. In a stumpage sale the buyer should purchase all the timber marked for removal, thus receiving also products of no interest to him, for instance, pulpwod and fuelwood for the sawlog buyer (Einola 1957, p. 35). A relatively common practice in stumpage sales has recently been that the buyer has carried out the logging of undesirable products at the expense of the forest owner, but even in these cases it has meant additional responsibilities and often also investments for some length of time. In delivery sales the logging and marketing of these "unwanted" products are carried out by the forest owner.

The buyers of roundwood who still in the 1930's seemed to have preferred stumpage sales to delivery sales have in the course of development also adopted sales with delivery contracts. The forest owners have become more skilled, which, too, has favored this development. There should also be mentioned the increased delivery service by the forest management associations, which has made successful delivery sales possible even when a lack of professional knowledge, the distant location of the forest property, etc., would have been against such a sale. Proof of the increased professional skills of the forest owners was provided by the responses to the marketing questionnaire (II), for it was shown that the cutting into sawlogs by the forest owner himself was the most common practice in 76 % of the communes of Finland (the log lengths determined by the forest management association specialists was dominant in 6 % of the communes and by the buyer in 18 %). For birch veneer logs the corresponding percentages are 46, 50, and 4, respectively. In many instances the forest owner himself
does the work required for logging and perhaps is satisfied with a smaller compensation than what the buyer would be required to pay for hired workers. This is possible since the delivery compensation has often been nontaxable income for the forest owner.

833. State forests

From State forests the wood was sold at first only as standing timber. Throughout the period of Finland's independence the State Board of Forestry has encouraged delivery sales. For this purpose the State Board of Forestry established in 1918 a special delivery bureau and began to employ foresters specialized in delivery. According to Hertz (1934, p. 136), 8% of the wood marketed by the State Board of Forestry was sold with delivery contracts. For industrial wood the development is seen below:

\[
\begin{array}{lll}
1936-38 & \text{an average of} & 57.3\% \\
1956-58 & \text{of} & 64.1\%
\end{array}
\]

The development in the terms of delivery from State forests during the period studied has been much the same as in private forestry: the delivery sales have increased in importance although at a slower pace. Nevertheless, the quantity sold in 1956–58 with delivery contracts percentage-wise is higher for State forests than for private forests.

The State Board of Forestry in many cases extends its delivery farther than do the private forest owners. As a rule, the wood is delivered via the common floating routes if floating is chosen as the form of long-distance transportation. In this case the deliverer is in charge of floating on minor rivers or truck transportation when necessary.

At the end of the 1950's the State Board of Forestry adopted a new practice in the selling of roundwood: delivery at the storage yard of the buying enterprise. This type of delivery follows a long-term contract (usually 3–5 years), in which an approximate agreement on the annual deliveries of different products is made. The exact quantities and detailed delivery schedules are agreed upon each year and the prices checked twice a year. In 1958 the State Board of Forestry had contracts of this kind with six enterprises and the stacked volume of pulpwood delivered under the contracts was approximately 700 000 cubic meters.

This method of marketing is rather interesting for two reasons. First of all, it reflects the desire of the producer to secure demand by offering a delivery which could be considered a service. It can also be interpreted as a demand-promoting action which, in the market of roundwood, has unwittingly been used very little, but in the marketing of some other raw materials is commonly employed. Another feature of interest is the exceptionally long contract period with an open price which, too, is intended to secure constant demand and resembles in a sense the open-price contracts of cellulose. It lets the buyer know quite exactly the quantity of wood he will receive from State forests. The closer customer relationship between the producer and utilizing should also be noted.

The delivery sales of the State Board of Forestry have at times been criticized by both the buyers and the State auditors. The buyers, especially in the 1920's, considered the contract terms unfavorable; the State auditors have complained especially about the unsatisfactory economic results of the delivery sales (Komiteammiinti 6/1948, pp. 13–21).

The State Board of Forestry has based its arguments in behalf of delivery contracts primarily as a means to promote demand. It is also possible to market some products which otherwise would not be in demand, especially small-sized wood. By delivery sales the State Board can also gain those small-scale buyers as customers who would not purchase roundwood from State forests as standing timber. This and the possibility to sell products abroad increase demand and create competition among buyers which in turn raises the price. Although there are certain difficulties involved in the comparison of delivery expenses between the State Board of Forestry and private forest owners, the State Timber Sales Committee, for instance, has shown by its calculations that no significant differences could be observed between the two (cf. Komiteammiinti 6/1948, p. 47).

The State organs have not made any efforts to limit delivery sales. On the other hand, the Forest Administration Committee considers the business activities of the State Board of Forestry, including the administration of logging and delivery, to be characterized by a certain amount of rigidity and feels that better care of logging would be taken under an organization more flexible than a state office (Komiteammiinti 7/1959, p. 34).

834. Scandinavia

8341. Norway

No statistics have been compiled concerning the customs in the delivery of wood from the private forests of Norway. Among the members of the forest owners' associations belonging to the Norges Skogseierforbund, 6% of the roundwood was sold on the stump and 94% with delivery contracts in the felling year 1955/56. As was mentioned before (Chapter 7), about 64% of the private-forest roundwood felled for sale and industrial use is marketed through the forest owners' organization. Some of the forest
owners who are not members of the organization probably sell proportionately more on the stump than do the members. On the other hand, the majority of the large property owners either are themselves professional foresters or have employed professional men, and the sales are usually made with delivery contracts. It seems appropriate to assume that approximately nine-tenths of the commercial removals from the private forests of Norway are sold with delivery contract.

The importance of delivery sales has grown since the 1930's. True, there are no records for the 1930's but as late as in the felling year 1946/47 the stumpage sales comprised 22 % of all the sales made by the members of the forest owners' associations.

The popularity of delivery sales is partly the result of the same factors that contributed to their extensive use in Finland. Furthermore, the forest owners' organization has long since been working away from stumpage sales (see, e.g., Evju 1950; Skogeieren 1954, pp. 203—205). One reason behind this policy is the awareness of the fact that the marketing operations of the forest owners' associations are noticeably easier and can be carried out with the minimum of staff if the logging is the seller's responsibility (Holopainen 1947, p. 20). It is also held that the delivery sale demonstrates a larger contribution by the owner in the production than the sale of standing timber.

Earlier, stumpage sale provided the buyer with a possibility of obtaining "extra" roundwood in addition to the quantity stated in the contract between the buyers' and forest owners' association. The buyers had used this possibility even when purchasing standing timber from the members of the forest owners' organization. Recently it has been attempted to stop these "leaks". According to the association rules of 1955 the members are to make also the stumpage sales through the associations. In 1955 the buyer and seller organizations agreed that the direct sales of standing timber from the members of the forest owners' associations can take place only with the consent of the associations ("i förståelse med distrikets skogseierforening", Avtale om ... 1955). The agreement was renewed in 1959. Furthermore, the buyer organizations must report stumpage sale contracts made by their members. Information about the volume of stumpage sales is to be exchanged by December 15 at the latest by the organizations that signed the agreement. This wood is then taken into consideration in making the distribution plans for the felling year.

The selling of roundwood from the State forests of Norway, as well, is done primarily with delivery contracts, whose importance has considerably increased since the 1930's.

In Sweden the relationships between stumpage and delivery sales from private forests do not appear in any statistics nor is there any study which would cover the whole country. The Royal Board of Private Forestry (Kungl. Skogstyrkset) has carried out regional sample studies and has evaluated the measuring data on the basis of sample results. From the experiments the Skogstyrkset has estimated that in the northern part of the country (Sundsvall region and northward) one-third of the wood from farm woodlots in the felling years 1951/52 — 1955/56 was sold as standing timber and the remaining two-thirds with delivery contracts (Skogstatisistisk årsbok 1956, p. 64). The account for 1949 showed that in "Dalarna och Värmland" approximately one-half of the sawtimber trees were sold on the stump. In the trading of industrial cordwood the sale of standing timber probably holds a smaller share. In a committee report (SOU 8/1957, pp. 92—93) it is estimated — on the basis of a small sample (material was collected from 8 communes in different parts of the country) — that 40—50 per cent of the timber sold from the farm forests in the felling year 1951/52 was sold on the stump.

The Swedish forest owners' organizations have favored delivery sales largely for the same reasons as in Norway.

It can be estimated that in the felling years 1955/56 — 1956/57, for which comparable figures are found in Finland, in the country as a whole, approx. 60 % of the wood from private forests has been marketed on delivery terms. This is about the same figure as in Finland.

In the sales of roundwood from the State forests of Sweden the average proportion of delivery sales made up

<table>
<thead>
<tr>
<th>Period</th>
<th>% Delivery Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>1936—38</td>
<td>36%</td>
</tr>
<tr>
<td>1956—58</td>
<td>75%</td>
</tr>
</tbody>
</table>

(according to information obtained from the Domänstyrelsen).

The proportion of delivery sales has greatly increased in the Swedish State forests since the 1930's. This is largely due to the labor policy of the State forest authorities. In order to secure sufficient labor for silvicultural and other forest work after the war the Domänverket has employed permanent forest workers and provided them with houses (Domänverket 1955, p. 15). Delivery sales have been a simple solution to the employment problem of this labor in the winter season.

The forest owners' responsibility in delivery sales is commonly taken from the forest to roadside, railway station or river bank where it is taken over by the buyer (consumer firm or forest owners' association). In the cases in which the forest owners' associations act as middlemen
timber is mostly left to the consumer firm at the same places or — sometimes in the north of Sweden — "freely sorted" (fritt urskilt) at the river mouth after floating. In the State forests "freely sorted" is a common delivery custom in Norland.

In some cases roundwood may be delivered even to the consumer's timber yard by the associations or by the Swedish Domänverket.

84. Contract forms

841. Historical background

A written sales contract is usually made when exchanging roundwood (Section 74). It is most common to use a contract form which has a number of general terms printed and in which the specific conditions of each sale are written when making the contract.

In sales from private forests before World War II the specific terms of the sale were almost exclusively written on forms which the buyer had designed and brought along with him to the sale. There was a wide range of variation in the terms printed in the contract forms of different buyers (cf., for example, Jalava 1932).

Forest owners gradually gave attention to the unreasonable conditions set by the buyers (cf., for example, Tapio 1907, p. 142; 1908, p. 122), and the forest owners' organizations initiated measures to remedy them. Hence, in 1938 the Central Forestry Association Tapio appealed to the Central Association of Finnish Woodworking Industries for the establishment of "fair" contract terms. The efforts began to bear fruit during World War II. Through the initiative of the Forest Council of the Central Union of Agricultural Producers (July 10, 1944) the Ministry of Rationing and Relief set up a board representing the interests of both sellers and buyers to design approved forms. The work was completed during the same year and on December 14, 1944 (As. 946 and 947/1944) the Ministry ordered that these terms were to be followed in the sale of roundwood if either party so requested. There were six different types of contract forms: three for stumpage sales and three for delivery sales. In delivery sales the requirement to use the approved forms concerned only quantities exceeding a certain minimum. Forms to be used in the sales of fuelwood had been issued earlier by the Ministry.

The Government had by these actions given the initial push for the standardization of contract forms and for the examination of general terms applied in trade. The work probably originated from the efforts to protect the sellers' rights in the roundwood market, then under State control.

When State control of timber supply was discontinued in 1947, the forms initiated by the authorities lost their legal status. In 1949 (November 19) the Forest Council of the Central Union of Agricultural Producers proposed to the Central Association of Finnish Woodworking Industries that the work toward standardization of contract forms be continued and a committee representing both buyers and sellers be set up for the purpose. The following year the Central Forestry Association Tapio made a similar proposal. These proposals were an attempt to establish uniform trade customs in the roundwood market by making technical improvements in the contract forms used during the wartime period of State control.

The Central Association of Finnish Woodworking Industries agreed to the proposals. The committee1 began its work in 1950 and the first contract forms appeared in print in the same year. Again there were three forms for stumpage sales and three for delivery sales. Later the same year three forms were prepared to meet the needs of Northern Finland.

The forms were printed and circulated by private forestry organizations. In addition, the committee decided (June 8, 1950, § 11) to recognize forms2 printed by buyers if the terms were in agreement with the conditions of the aforementioned standard forms.

The Forms Committee has continued its work by designing new and reviewing old forms. In 1952 there appeared three contract forms to be used in the selling of birch logs for plywood. In 1956–58 the number of forms drawn up by the Committee was 12 and they were distributed by delivery terms and products according to the list below (in the forms the abbreviation "P-S" is derived from the Finnish name for Northern Finland):

<table>
<thead>
<tr>
<th></th>
<th>Southern Finland</th>
<th>Northern Finland</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contract of selling right (stumpage sale):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy timber and cordwood (No. 1, 1 P-S)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Heavy timber (No. 2)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Heavy coniferous and hardwood timber (No. 2 A)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Cordwood (No. 3)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Contract on delivery (delivery sale):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coniferous and hardwood sawlogs priced by the cubic foot (No. 4)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Heavy coniferous and hardwood timber priced by number of stems (No. 4 R)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Heavy timber (No. 4 P-S)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sawtimber and cordwood (No. 6)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Veneer logs priced by the cu. ft. (No. 7)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Cordwood (No. 5); No. 5 P-S</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

1 Abbreviated in the following: the Forms Committee.
2 Abbreviated in the following: recognized forms.
It is to be noted that the Forms Committee is not formally an independent organ with a right of decision but it must submit its recommendations for forms and their contents to the parent organizations for ratification. Usually the approval of the principles is obtained from the parent organizations before the decisions are recorded in the minutes of the Forms Committee. Because the matters, except for some minor details, have been approved just as recommended by the Committee, its actual powers have been quite extensive.

842. Use of different contract forms in private forests in 1956–58

The period 1944–50 stands out as a time of significant reform in contract forms of the roundwood market: until then the forms were entirely designed by the buyers, but at that time there appeared the ones first made by officials and later by a joint committee of the buyers and sellers. The parent organizations have agreed to use the jointly prepared forms upon a request by a buyer or seller. In practice these forms have become common in two ways. First of all, a rather large number of buyers use only the standard forms and many others have designed their own forms in such a way as to gain the recognition of the Forms Committee. The former have usually been small-scale buyers and the latter large-scale buyers. For other buyers the decision has been left to the seller: the standard forms, which the buyer keeps on hand, are used upon the seller’s request.

The difference between the forms printed by the buyers and recognized by the Forms Committee and the standard forms is largely a matter of form (the name of the buyer, the listing of products, etc., are printed). The Forms Committee has strictly abided by the principle that the general conditions of the contracts are not to be changed, although some of the forms printed by the buyers provide a possibility for the buyer and seller to agree on conditions not mentioned in the standard forms (cf., for example, Forms Committee minutes of Nov. 20, 1950; Jan. 22, 1951; Nov. 9, 1951; March 1, 1956).

It was of interest in the marketing questionnaire to discover how common the use of different contract forms was. The question alternatives are seen in the questionnaire (Appendix, Question Series 4). Results are illustrated in Table 12. The practice most common in each commune in 1956–58 is shown in Figure 11.

The standard forms drawn up by the Forms Committee have spread over the whole country and in 1956–58 they were the most commonly used forms nearly everywhere in Finland. District 17 and parts of districts 13 and 16 were the main exceptions. In these areas the forms designed by buyers were most commonly in use. In 78% of all the communes for which questionnaires were returned the forms designed by the Committee or made by the buyer in accordance with the standard terms were most common. In addition, in some communes the "non-recognized" buyers' forms were most common, but in others they held only a minor position. The practice of making no written contract was third in importance, or it was not known at all (districts 17 and 18).

Since the standard forms of the Forms Committee came into use only after the beginning of the 1950's, it is probably that they are still in the process of becoming more widely spread. In areas such as Northeastern Finland they have replaced, practically speaking, all other types of contract forms. In this way the terms of the standard forms are becoming more and more established as the norms in the sales of roundwood and are — through institutional agreements — gaining the status of trade customs as has been the goal.

The State (the State Board of Forestry) has not participated in the work of the Forms Committee. As pointed out before, the principles governing the sales from State forests have been established by law (As. 140/1922) and the regulations concern both the buyer and the seller (State Board of Forestry). The Statute leaves some details to the State Board’s discretion. Paragraph 26 of the Sales Statute grants the right to the State Board to make certain exceptions to the terms and according to § 27 the terms on local retail are left entirely to be decided by the State Board of Forestry.

The development of the trade customs of the two most important sellers, the private forest owners and the State, is basically quite different. As the private forest owners have remained passive until very recently, the development of the customs has mostly been dominated by the activities of the buyers. The State, in contrast, because of its legal status as a public functionary has one-sidedly regulated the practices.

A formal indication of the special character of trade customs in sales from State forests is that even in contract sales the detailed sales terms do not appear in the contract forms but only a reference is made to the terms printed in the auction notices distributed to the buyers. These in turn refer to the Sales Statute although additional clauses appear. Only the special conditions of each sale are included in the contract.

843. Scandinavia

As mentioned in Section 82 in Norway the tendency as early as in the 1920’s was toward uniform contract terms in the collective negotiations

\footnote{1 These cases have been explained by prompt sales ("hand sales") with no agreement made in advance.}
Table 12. Contract forms used in private forests, 1956–58.


<table>
<thead>
<tr>
<th>Using contract forms designed by:</th>
<th>Communes:</th>
<th>Frequency value:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kauppoissa käytetään:</td>
<td>Rannasko</td>
<td>Runkoon luku</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4 a. Buyers — Ostajai laatimia kaavakkeita</td>
<td>103</td>
<td>21</td>
</tr>
<tr>
<td>4 b. Forms Committee (or equivalent) — Yleiskaavakkeita (ksi. litte kysymys sarja 4)</td>
<td>374</td>
<td>78</td>
</tr>
<tr>
<td>4 c. Only oral agreement is made — Kauppa perustuu vaan vaaliiseen sopimukseen</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Total — Yhteensä</td>
<td>480</td>
<td>100</td>
</tr>
</tbody>
</table>

between the buyer and seller. During the period now being studied terms approved by both parties have generally been applied. The general terms (quality requirements, measurement practice, pricing, force majeure, etc.) of contract have been printed separately (*Kontraktbetingelser*). The contract forms — both the innelind forms used by the forest owner and the ones used between the sales association and consumer firm — list therefore only the special conditions for each sale; otherwise only a reference to the general terms is made. The general terms of the contracts have been designed by river districts but they are, except for pricing, rather uniform in the whole country. The contract forms include mention of the seller and buyer organizations which have approved the forms.

The general conditions and the actual contract forms provide the bases for trade customs in the marketing of roundwood from the private forests. In the main they are also applied to the delivery sales from the State forests. The conditions concerning the sales of standing timber from the State forests are stipulated in *Instrukser m.v.* (1919) and in the contract forms issued by the Direktorat for Sjäns Skogar.

As mentioned in Section 82 the collaboration of the Swedish forest owners’ and buyers’ organizations (including timber measurement associations) have resulted in a considerable uniformity of the contract forms in each marketing region. Contrary to the Norwegian practice most of the trading conditions are included in the contract forms. True, certain general principles are outlined in the collective price agreements but they are of less permanent nature than the Norwegian *Kontrakbtetingelser*.

It is important to note that the forms used in the contracts between
individual forest owners and forest owners' associations are also applied to the contracts between the associations and consumer firms. Furthermore, the stipulations of these forms are generally applied also to the direct sales from the forest owner to consumer firms, very often even in those cases when contract is closed between unorganized buyers and forest owners.

85. Contract period

851. Sales of standing timber

In the standard forms the term "extraction period" is used. It refers to the time within which the buyer must carry out the cutting of timber and hauling to a prescribed point of delivery.

On the front of the forms there is only a brief mention of the extraction period: "The logging and hauling must be completed by ______________ month

______________, 19 __________." This presupposes that in each case the seller and the buyer agree upon a certain date. Since in Finland the felling year usually is concluded at the end of May, the extraction period is often agreed to terminate on the last day of May or thereabouts. Some buyers state the extraction period as a certain length of time, for instance, two years, which commences with the date of making the contract. In these cases the contract period usually ends in autumn.

The general terms of the contract (on the reverse side of the form) include some important additions. At first it is stated that for products ready for hauling the period can be extended beyond the termination of the extraction period up to the last of May of the following calendar year, by which time the measuring must also be carried out. If this possibility is used, the seller has the right to receive an advance payment and the buyer must pay interest for the balance of the sales price over a period starting from the agreed end of the extraction period.

The need for an extension of time for hauling arises from the special character of the harvesting of forest products. For instance, an exceptional winter may force the buyer to deviate from his original logging plans. In general, this additional provision gives him more flexibility and possibility for adjustments without any considerable loss to the seller.

The only condition for the extension of hauling time is that the products be ready at the end of the extraction period. A product ready for hauling refers to wood which after felling has been cut into such a form that it can be hauled from the forest by ordinary means (Forms Committee May 2, 1952). The Supreme Court, KKO, (ruling 11 10/Jun. 27, 1954) after voting has given the concept ready product even broader interpretation by considering the buyer entitled to haul the wood during the coming winter even if the timber was only felled during the agreed extraction period but cut to dimensions afterwards.

The Forms Committee (Oct. 22, 1952) has also considered the possibility of treating the wood when left in the forest under the conditions stated above. It has taken the stand that the buyer can, after the actual extraction period, have the wood barked and carry out any other measures necessary to prevent damage. However, he must consult the forest owner on the matter.

The conditions of the standard forms appear also in the forms printed by the buyers and recognized by the Forms Committee. They are often found even in buyer-printed forms which have not been recognized by the Forms Committee. In these forms different terms of sale are also common. In one such form the clause on the extension of hauling time requires only the felling of timber (instead of products ready to be hauled) by the end of the original extraction period, and another clause states that the seller continues the extraction period for an agreed annual compensation if the buyer so desires.

The definition of the contract period in the forms used in 1936–38 have varied to a great extent. Common to all of them has been that the contract period was set to end at a certain date. Most of the forms have also included a mention of an extension of logging time. It, however, had not been restricted to products ready for hauling but the forms have held that the contract period is extended upon the buyer's request for a compensation described more precisely in the contract. Such forms are exceptions in which no mention of an extended contract period is made, or where an automatic extension of contract period until the end of the following winter is granted for products ready for hauling and the buyer has reserved the right to continue the contract for a compensation. The practice of admitting a year's extension for ready products (or for felled timber) accompanied by a provision in case of force majeure has also occurred.

As a general observation, the prewar forms of different buyers defined the contract period in a great variety of ways, although the materials for the principles adopted by the Forms Committee and widely accepted in 1956–58 were already in existence.

In State forests the extraction period in stumpage sales extends, according to the Sales Statutes (§ 12) and if not otherwise stated, until April 15 of the second spring after the bid in an auction is approved or a sales contract written. This principle governed the contract period in 1936–38. By 1956–58 the extraction period had been extended until April 30.
The sales regulations for State forests make no mention of an extension of hauling period for ready products. The State Board of Forestry, however, has the right to grant an extension of extraction period up to five years with terms to be especially arranged. An extraction period exceeding five years must be submitted under the decision of the Ministry of Agriculture. The possible extension of the extraction period has no effect on the length of time for making payments.

852. Delivery sales

In the standard forms the mention of contract period reads: "The logging period ends on ................. .............., 19......, by month day which date the products must be hauled to ................. storage area to a place approved by the buyer."

In the special forms for Northern Finland the clause on the actual logging period has two parts. The content of the first part is the same as in other standard forms. The second part is a direct continuation of the first: "...and from there immediately after the floating rivers are freed from ice, to the ................. floating district of ................. River Floating Union, where the responsibilities of the deliverer end."

The contract forms for delivery sales, except for the statement on floating in Northern Finland, presuppose that the parties agree on an exact date by which the wood must be at the point of delivery stipulated in the contract. A date somewhat before the end of the felling year (May 31) is usually chosen; such dates as March 15, April 1, April 15, and April 30 are quite common, depending on the buyer's transportation plans. One particular reason for an early date is that the buyer then has a possibility to arrange barkling and other preparatory work for transportation well in advance of floating.

The additional clause in Northern Finland has its origin in the common practice whereby a seller usually floats the products to the main river where the floating union in turn takes the responsibility for the wood (Forms Committee Jan. 16, 1950). It would not be possible to set an exact date in such a case, but what interests the buyer is that the wood arrives in time to be joined with the collective floating done by the floating union.

Forms intended for heavy timber include also a statement of felling time (for example: "Hardwoods are to be felled in the summer for seasoning/ in the winter and the conifers in the winter/ ................. ").
a route on which further transportation is possible only when the ground is frozen, the buyer and seller may agree on a different ending date.

The long-term contracts for delivery are not much different in this respect. The long term refers only to the period for which a certain schedule of annual deliveries is in effect.

853. The length of the contract period

The length of the contract period was also of interest in the marketing questionnaire. The three alternatives appear in the Appendix, Question Series 5. In stumpsage sales the first alternative (prompt sales) naturally could not be possible.

The distribution of the number of communes by the dominant practices in each of them is evident from Table 13.

Table 13. Length of the contract period in private forests, 1956–58.

The contract period for delivery sales usually consists of only one winter season covering seven to eight months, except the approximately ten-month period for veneer birch. As mentioned earlier, pulpwood is sold mainly on prompt terms in the spring.

An extension of removal period up to five years is given by the State Board of Forestry according to need. The condition is that the buyer apply for the extension before the end of the original contract period and pay the sale price. The State Board has the right to review the price level when the extension is granted.

The principles governing the stumpsage sale contract period in State forests and in private forests differ chiefly in that for private forests a two-phase contract period is so defined that an extension of extraction period by one year is granted only for products ready for hauling. Neither is there anything in private forestry corresponding to the long-term contract periods used by the State Board of Forestry.

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1 The forest chiefs and forest officers of a number of wood-using firms have confirmed this statement.
854. Scandinavia

8541. Norway

For stumpage sales a certain fixed date is set in the contract in which time the timber must be extracted. Ordinarily, the extraction is to end in the summer at the conclusion of the felling year so that the total contract period is less than a year. In addition, there is a clause whereby the buyer is to carry out the harvesting in the least time possible. There is no mention of an extension of the hauling period, except a general force majeure clause. The law (Lov om ... 1908) prohibits a longer contract period than three years (in exceptional cases, five years).

In delivery contract forms the contract period extends over the felling year, often stating a more definite date. The general conditions, however, include the clause: "The timber must be ready to be measured by the first of May. If the log-scaling associations considers it necessary from the standpoint of measuring and floating, it can in certain districts require the timber to be ready for measurement by an earlier date, but not before the first of April."

In Norway the contract period is commonly defined within the felling year. Most of the sales are made in the autumn and as a rule the contract lasts less than a year.

According to the regulations (Instrukser m.v... 1919, pp. 65—66) and contract forms concerning the stumpage sale of roundwood from Norwegian State forests the contract period ends at certain date to be stipulated in the contract. For smaller parcels, with favourable extraction conditions, the period should end not later than July 1, next year. For larger sales, or in cases when extraction conditions are unfavourable, the period can be two years and in exceptional cases three years. The chief of the Direktoratet or — concerning small parcels — the district forest officer may allow an extension of period stipulated in the contract. In these cases a price increase equal to the assessed "value of growth" during the period of extension is generally required. The timber which is not extracted by the end of the stipulated — or extended — period belongs to the State.

In delivery sales the practice of private forestry is generally followed. Consequently a contract period lasting from autumn to the end of the felling year is mainly applied.

8542. Sweden

In the sales of standing timber from private forests the contract period usually lasts 2—3 years, in Norrland even five years. A period shorter than two years is rather seldom applied. On the other hand, the law prohibits a longer contract period than five years. No mention is made of an extension of the hauling period (cf. Finland).

In the State forests the extraction period is usually stipulated to end on June 1 of the summer following the closing date. The district forester is entitled when required to allow a year's extension for felling trees still standing and for hauling trees made to products without payment. Further extension of hauling and extension for felling time may be allowed against payment stipulated by the Domänsstyrelsen. This payment covers the delay caused to the silvicultural operations after felling and administrative inconveniences (Bestämmelser gällande ... 1959). Extension may be decided only for the period of one year each time. If no extension is applied or admitted all the timber covered by the contract which is in the forest at the end of original contract period belongs to the Crown. Thus the regulations concerning the contract period are very similar to those applied in Norway. A basic difference can be seen, however, in the motivation of payment in case of extension.

In delivery contracts between private forest owners and buyers (including forest owners' associations) the contract period generally ends with the felling year as in Finland and Norway, thus lasting mostly less than a year's time. In the private forests of Southern Sweden (price region V) the extraction period of sawlogs usually ends on April 30 or May 31, whereas the period of pulpwood usually extends to October 1. In fact it seems to be quite typical of the Swedish practice to stipulate a different delivery time for different assortments.

The differences in contract periods depend mainly on transport considerations. When timber is floated it must be delivered before floating starts. In the case of truck transport more flexibility is allowed.

An interesting feature of region V is the stipulation that the seller is allowed to deliver 10% of the quantity after the ordinary contract period (but not later than December 1). In the contracts between the forest owners' associations and consumer firms the contract period is approximately of the same length but usually ends somewhat later than in contracts with individual forest owners (which contracts are the basis for the deliveries of the associations).

According to the regulations concerning the sales of roundwood from the State forests (DRS § 6) the delivery period should not cover a longer time than the next felling or floating season. Certain differences between various regions and timber assortments can be realized in the frame of this general principle, mainly depending on transport conditions. The stipulation of contract period depends also on the type of delivery (delivery to roadside,
river bank, freely sorted at river mouth, mill store). If, for example, roundwood is sold to be delivered sorted at river mouth, only the time by which the timber must be delivered to river bank may be stipulated in the contract. Further transport to the final delivery point is the responsibility of the floating association.

86. Force majeure

861. The meaning of force majeure

Contracts for future trading include generally the clause concerning force majeure. The content of the concept "force majeure" has been an object of some debate but it is generally agreed that it prevents the fulfillment of the contract and that the person involved in the contract had no means of taking it into consideration (Ranninen 1951, p. 189).

It is not the purpose of this investigation to make a more detailed analysis of the basis of the concept. This can be found, for instance, in a comprehensive study made by Godenhielm (1954). However, there are two questions of particular interest in the present investigation:

1. What is considered a force majeure in the marketing of roundwood?
2. Do the contracts used in the roundwood trade follow some general pattern in force majeure decisions in view of the obligations of the both parties concerned, especially in considering the length of contract period?

These questions will now be considered briefly.

In many contract forms applied in international trade, for instance, in "Uniform 1951" for sawn wood, two basically different force majeure cases are distinguished:

a. the objective impossibilities mentioned in commercial legislation, such as war and blockade, and import and export prohibition;

b. cases which are closely connected with the trade and especially to the enterprise of the seller and/or the buyer, such as [in Uniform 1951] floods, droughts, ice, damage to mill and/or timber yard or shipping yard, strike, lock-out; and a general clause: "any other cause beyond the seller's control."

Godenhielm (1954, pp. 145-162) mentions as a third group (c) such factors as cannot easily be fitted into "a" and "b", as "delay and/or loss of tonnage" in some contracts in international trade. He emphasizes the subjective character of these force majeure factors.

862. Force majeure clauses in Finnish contract forms

The standard forms for roundwood contain the following force majeure clause:

Sales of standing timber:
"If the removal of wood is hindered by lack of snow, a strike, the breaking out of war, or other irresistible force, the extraction period is extended for an additional compensation after the force has ceased until the end of the following felling season, however, no longer than four years from the date of signing the contract."

Sales with delivery contracts:
"If the logging is partly or entirely unfinished at the end of the agreed logging period because of a lack of snow, a strike, the breaking out of war, an official order, or other irresistible force, the delivery contract is void for the part not hauled to the point of delivery, and the deliverer must return payments not met by the delivery with interest from the date of receiving the advance payment to the date of returning the money."

The brief list in the standard forms includes actually all the different types of force majeure: war (group a), strike and (for delivery sales) official orders (group b), and lack of snow which Godenhielm (1954, p. 161) lists in group c, although I feel that it could as well be placed in group b.

Most typical of the roundwood trade in the Northern countries is the lack of snow, which can make the hauling of logs from the forest to the point of delivery impossible. Some change, however, has taken place as motor vehicles are being introduced and adopted.

Official interference refers primarily to cases when the administrators of the law on Private Forests prevent the materializing of felling plans if the felling would constitute a breach of the law. Similarly colonization authorities may have a right to prevent felling in certain cases.

Godenhielm (1954, pp. 166-178) divides the force majeure clauses into three groups according to their consequences:

a. clauses by which the contract period is extended within certain limits in case of an irresistible force; the right for extension usually belongs to the seller;

b. clauses stating that the contract in the case of force majeure is void either entirely or at least for the part not materialized by the time of force majeure; in this case the buyer and seller are in an equal position;

c. clauses which provide the possibility to alter the contract terms (e.g., means of delivery or/and price).

In the classification drawn up by Ranninen (1951, pp. 191-192) the groups "a" and "b" are very similar to those above. As a third group (c)
he mentions the contracts in which the seller by his option can either dissolve the contract or modify the terms so that the contract is extended beyond the period affected by the force majeure.

Often (e.g., Uniform 1951) the same contract implies different handling for different causes of delays.

The samples given above of the force majeure clauses in the standard forms suggest that two distinct practices are applied in the sales of roundwood: in stumpage sales the contract period continues after the hindrance ceases to exist until the end of the following felling year, but no longer than four years; in delivery sales the contract is discontinued for the wood which has not been supplied when the obstruction appears.

Thus, the solutions have appeared to be dictated by practical considerations. In sales of standing timber the advance payments to the forest owner at the beginning of the contract period are considerably high (see Section 89). The repaying of this money in many cases could create difficulties. This alone makes it reasonable to extend the contract period. In delivery sales an extension of the contract period would often require prolonged supervision of the seller's activities by the buyer, wherefore it is more simple to cancel the contract altogether. Ordinarily the advance payments in delivery sales are made as the logging progresses, so that the seller is usually not greatly in debt to the buyer when the contract is cancelled.

The force majeure clause of the contract forms has also been included in the buyers' forms recognized by the Forms Committee.

In 1936–38 the contract forms for stumpage sales commonly included a force majeure clause, the principle in which was the continuation of the contract period just as in the standard forms (cf. also Jalava 1932, p. 76). In delivery sale contract forms, in contrast, this clause was very exceptional (only one of the twelve forms investigated had it included). A literal interpretation of these contract terms made it possible for the buyer to require the deliverer to cancel the contract, to pay interest for that part of the sales price which the deliveries did not cover, and to pay fines if "for one reason or another" the delivery had not been made.

The sales terms of the State Board of Forestry do not include any specific mention of force majeure. It can, however, form the grounds for an extension of extraction period (stumpage sale) as has already been mentioned. The buyer is then required to make an intermediate payment, whereas in buying from private forests this was not necessary. The delivery contracts, in turn, have contained a reservation: "... unless prevented by very special reasons". We could interpret this as a force majeure clause.

Many investigators, for instance, Raninen (1951, p. 192) and Godenhelm (1954, pp. 162–165), stress the obligation of the seller to inform the buyer of an unavoidable cause as early as possible. However, this does not usually concern, according to Godenhelm (1954, p. 171), the causes listed in group "a". The standard forms do not especially point out the need to notify the buyer.

It is interesting to note that a force majeure in the contract forms of the roundwood trade has, especially in the 1930's, been given only brief mention. One reason for this is that only rarely is such a provision needed. However, when neglected, the courts tend to settle the case in favor of the buyer (Godenhelm 1954, p. 201). Godenhelm (pp. 202–204) stresses, however, that this "restrictive interpretation" should not be applied as a general rule. First, in the branches with standard forms (typprotokolle) each regulation should be interpreted by comparing it partly with earlier and partly with existing standard forms. Furthermore, force majeure clauses must not be read as an isolated item but in connection with other contract stipulations.

863. Scandinavia

In Norway the "General Terms for Contracts" (Kontraktbetingelser) covering the area of three forest owners' associations (2, 3, 5) defines force majeure as a case in which the fulfillment of the contract is prevented by:

(a) very exceptional nature conditions;
(b) labor dispute on an organizational level or
(c) other factors (begivenheter) beyond the control of the parties.

It can be seen that the Norwegian force majeure concept corresponds fairly closely to the Finnish one as expressed in the standard forms. Group (a) is somewhat broader than lack of snow (in Finnish forms); no special mention of war and official order is made in group (c).

The Norwegian force majeure clause postpones the fulfillment of the contract by the time the irresistible hindrance lasts.

Swedish force majeure clauses are not uniform in the contracts between private forest owners and their associations. The following force majeure cases are usually mentioned in the contracts: war, strike or other labor dispute, lock-out, fire, hindrance caused by nature, lack of labor, other factors beyond the control of parties concerned. These are listed in at least four out of the six forms studied (including State forests). In addition mobilization, blockade, lack of means of transport and orders of authorities are mentioned in some contract forms.

All type of force majeure cases mentioned by Godenhelm (1954, pp.

1 Information received from the forest chiefs of many firms.
87. Trade customs concerning the determination of the quantity

871. General

Until very recently the determination of the quantity of roundwood to be included in the sales from private forests was often quite indefinite. The practice is referred to as "bulk sales", which could include "all the wood that the buyer cares to remove" or all timber in a certain area exceeding a given diameter for an agreed total price (Jalava 1932, pp. 56, 162). In these cases the pricing was based on the same indefinite description of the quantity.

It is characteristic of the roundwood market that at the time of sale the goods are not ready, but the quantity has to be estimated usually on the stump. Because the margins for error in an estimation are rather wide, it has become a common practice in Finland to determine the quantity at two stages. There can be distinguished:

a. the estimation of the volume of timber before the sale and the defining of the sales quantity in the contract on the basis of the estimate;

b. the confirmation of the quantity for which payments are made at the conclusion of the contract (after extraction), that is, the measurement of products.\(^1\)

This section will be devoted to the customs in expressing what the sale is to include. The measuring of the products is treated in Section 88.

\(^1\) In the stumpage sales of heavy timber only the number of stems is often determined.
When the sale is made prior to the marking of the timber the estimate is usually less accurate and the margins of error wider. It is to be understood in the light of this why in the contract forms the quantity is based on the estimated volume of wood. The buyer and the seller may also make an agreement that the sale comprises all marked stems, but this must then be specified in the contract.

In the stumpage sales of heavy timber the quantity is commonly given as the number of stems regardless of the fact that the volume is also estimated upon marking. Unless it is specifically stated in the contract that the final price is determined according to the mean volume, the buyer is obligated to pay the agreed stem price even though the final measuring would reveal that the mean volume was incorrectly estimated (cf. KKO II 403/Nov. 1, 1950).

The defining of the quantity of a purchase as the amount of timber marked for removal has a definite legal significance. By its ruling (KKO II 105/Sept. 26, 1955) the Supreme Court required the buyer to pay also for those marked trees which he had not removed within the agreed period.

The marketing inquiry II sought also an answer to the means of expressing the quantity in the sales of sawlogs at the end of 1959. The results prove that the use of stem number and cubic foot content were almost equally common in stumpage sales, but in delivery sales the latter is prominent. As the basis for payment the cubic content dominates also the sales of standing timber. Especially in Northern Finland it is a general practice to use cubic feet volume — to be measured after extraction — as the basis of price determination even though sales quantity is determined as a number of trees.

Cordwood is practically always expressed in cubic meters.

It ought to be noted that the standard forms for stumpage sales presume the marking of trees in advance of the logging. The marking of the borders of a clear-cut area can be considered as filling this description. The importance of marking is emphasized by the provision in the standard forms that the buyer must pay double the price for unmarked stems which have been felled.

In those buyers' forms recognized by the Forms Committee that were studied for the present investigation, the clause on the description of the quantity of the sale was the same as in the standard forms. In other buyers' forms which were studied some differences could be found. At first there ought to be mentioned those in which the clause covered the same aspects as in the standard forms. Some included a technical addition which reserved the right to agree on a different percentage of allowable margin for quantities expressed in number of stems and in cubic meters, in other words, for heavy timber and for industrial cordwood. Some forms had the percentage (e.g., 10%) already printed in the form.

In addition to these rather uniform contract forms there were also ones in which the quantity was assumed to be expressed only as the timber marked, whether this marking had already been done or was to be carried out later on, with no reference made to volume. The following statement was also encountered: "trees which could be removed within the confines of sound silvicultural practices, as designed by the buyer" on the basis of marking carried out either by the buyer or the seller in the past or in the future. Here the determining of quantity is related to a rather indefinite clause on the quality.

The contract forms for stumpage sales employed in 1936—38 can first be divided into two groups according to the manner of defining the quantity:

a. The forms which defined only the area where the logging was to be carried out but had no printed clause concerning quantity, or at the most a statement: "the sale includes . . . . . . . . . . . . . . . . . . . . . . .". Then the quantity was defined mainly on the basis of information which the buyer's representative had gained in appraising the forest or which the seller was able to provide. In the latter part of the form there usually was a statement on marking and measurement.

b. The forms in which both the logging area and quantity were stated.

The former type was probably more commonly used. The difference in the content of the two was not very great since the forms in group "a" had probably the definition of quantity written out afterwards in much the same way as printed in "b"-type forms.

The actual practice in describing what the sale would include varied to some degree with the enterprise (and locality). It seems likely that usually the sale was defined to include the timber marking either in advance through the seller's initiative, or after signing the contract through the buyer's action. The estimate of the volume included in the contract was legally of secondary importance although it had significance, for instance, in the planning of payment schedule. The forms of type "b", in particular, often defined the purchase as including "all green and healthy wood which satisfies the buyer", making some restrictions on diameter, etc. The determination of the volume of these sales was rather indefinite.

A less common practice was to state the quantity of the sale either as the number of stems or cubic content (e.g., approximately 310 stems, 150—200 cu.m. stacked measure). One firm, however, had even retained a right "to select as many unmarked trees as was necessary to attain the stated number of stems." This emphasized the attempt to obtain the volume set as the goal.
The Sales Statute defines no conditions for the expression of the quantity in the sales from State forests. The Statute does state the minimum dimensions and quality which the buyer must consider regardless of whether the sale is done on a stem basis or volume basis. Furthermore, § 9 of the Statute implies that the payment ought to be made for the quantity (or number of stems) which the buyer either on the basis of the sales regulations and/or contract is responsible to accept regardless of whether he has removed all of the trees or not. This is supplemented by a statement in the third paragraph of the Statute which makes the buyer, if not ordered otherwise, responsible to pay for every tree marked for the sale if the purchase is made in terms of number of stems. For instance, storm, forest fire, or some other calamity which occurs after the contract is closed does not relieve him of this responsibility.

These regulations emphasize the importance of marking as the basis of quantity (see also State Board of Forestry Circular, Jan. 18, 1934). In the course of logging it is possible for the sellers’ and buyers’ representatives to check the decisions made upon marking and to agree, for example, on the making of pulpwood from stems marked for sawlogs but inadequate by dimensions or quality. The felling of an unmarked tree is penalized by requiring the buyer to pay at least double the value of the tree according to the assessment of the district forest manager (As. 140/1922 § 9).

In the State Board notices for sales of heavy timber on the stump in 1936—38 the number of stems by tree species and the mean volume of all marked stems were reported for each marked stock. In 1956—58 they were informed separately for each species. It was particularly pointed out in the sales notice that the information on the mean volume was not considered binding for the seller.

The size of each sale was expressed as the number of stems. The offers in 1956—58 have usually been requested to be made per cubic foot for conifers and per stem or cubic foot for heavy hardwood timber. Even in these instances the size of the sale in the contract is defined in number of stems, but the price for conifers has been paid according to the cubic foot content determined in the final measurement. The sales notices have also included specifications for cutting stems into products. It has been possible to sell coniferous sawlogs also on the basis of an agreed stem price.

In 1956—58 the deviation from the agreed quantity has been considered in the following statement: "The number of stems counted in the measurement may vary within a ± 3 % of the number stated in the contract. In counting this the delivered logs and the defective stems either left in the forests or made into cindwood are to be taken into consideration." The deviation has been based on the stem number also in cases when the paying is done by the volume found in the final measurement of logs.

In 1936—38 the allowable deviation was ± 5 % according to the Sales Statute (§ 8).

In the sales of cordwood on the stump the size of the sale has been based on the stacked volume estimated upon marking. The billing is done on the basis of ready products measured after extraction and adding the marked stems left unremoved. For cordwood a ± 20 % deviation from the stated volume has been allowed over the entire period studied (§ 8).

873. Delivery Sales

According to the standard forms the quantity of the delivery from private forests is expressed for heavy timber as the number of stems ("delivery by stems"), number of logs, or in cubic feet and for cordwood in cubic meters of stacked wood. A mention is generally made of the location of the timber and the person or organization responsible for the marking, whether done before or after the contract. In the forms for veneer logs of birch (the purchase defined in cubic feet), it is assumed that an agreement is made on the allowable percentage of lowest grade and/or diameter class.

The standard forms require that the parties agree in the contract how much the quantities confirmed in the final measurement may differ from the contracted quantities for each product. The deviation can be stated either as per cent of the quantity written into the contract or by giving the upper and lower limits for each product. The per cent of deviation is determined separately for each product (e.g., for veneer birch, pitprops, etc.). Furthermore, the Forms Committee has decided (Oct. 28, 1954) that heavy timber of different species (for instance, pine and spruce sawlogs) is considered as different products. So it is not possible to compensate the deficiency of one product with a surplus of another if no special agreement has been made.

It is interesting to observe that also in the delivery sales the wood comprising the purchase is presumed to be removed from a specified area of a certain property. Two factors stand out as possible reasons: legal aspects and quality. The inclusion of the property in the contract facilitates the checking that the seller has the rights and possibilities to fulfill the contract. It also provides the buyer with the opportunity to gain at least an approximate idea of the quality.

The buyers' forms for delivery sales in 1956—58 have defined that purchase in much the same way as it is described in the standard forms. In some instances, the quantity of heavy industrial wood is expected to be expressed within broader limits than in standard forms by referring only to the wood marked in a specified area without any mention of the volume.
This does not prevent the making of an estimate for the wood that will accumulate.

Perhaps the most significant difference between the standard forms and those printed by buyers is that the per cent of allowable variation in many of the buyers' forms is already printed, which means no negotiation on this point. The Forms Committee has not given its approval (Oct. 16—17, 1950) for the printing of this percentage in the contract forms unless it has been 5%. This percentage can therefore be regarded as recommendation by the Forms Committee.

In the forms used in 1936—38 the most common ways of defining the size of a sale have been:

a. The lower and upper limits have been stated (200—400 cu.m. of stacked spruce pulpwood or at least 200 and at the most 400 cu.m. of stacked spruce pulpwood).

b. The lower limit only has been stated (e.g., at least 25 cu.m. of stacked pine pulpwood).

c. The quantity has been expressed as an exact number of cubic meters or cubic feet, (e.g., 800 cu.m. of stacked spruce pulpwood).

d. The quantity has been expressed as one figure with an "approximately" reservation (e.g., approximately 50 cu.m. of stacked pine pulpwood).

The study of the forms then in use reveals that forms of type "a" were common.

In the delivery sales from State Forests (State Board of Forestry) the quantity in 1956—58 has been described for heavy timber in cubic feet and for cordwood in stacked cubic meters. In the final measurement the observed quantity has had to be within ±10% of the original contract (cf. Sales Notice, delivery sales 1955/56—1957/58). In 1936—38 the allowable deviation was ±20%. In practice the variation for cordwood has been smaller than the stated percentage would permit because the sales are mostly made in the spring, in other words, at the time when the products are delivered and the quantity is accordingly known.

In the recent long-term delivery contracts for pulpwood the annual delivery must be within ±10% of the agreed quantity. In some cases it has been decided in the buyer's option.

874. The relative importance of the alternative practices in 1956—58.

The right to set the quantity

One question series (6 in the Appendix) of the marketing questionnaire was intended to discover the frequency of use of the different alternatives in describing the size of the sale. On the basis of the study of the standard forms and the forms of different firms and by field observations, it was found that the three alternatives presented in the questionnaire were the ones most likely to be encountered. Neither did there appear a need for additional questions when the inquiries were made. On the other hand, it ought to be remembered that there is some variation within each alternative. Thus alternative "6 a" includes both the markings of timber in existence at the time of sale and those marked afterwards. Likewise, "6 b" includes both a precise statement of quantity — generally with upper and lower percentage limits defined — and one with "approximately" added.

In the 1950's the latter practice has been replaced largely by the former as recommended by the Forms Committee.

On the basis of which practice investigated was dominant, the distribution of communes was made.

Table 14. Means of expressing quantity to be sold in private forests, 1956—58.

<table>
<thead>
<tr>
<th>There will be sold:</th>
<th>Sales of standing timber</th>
<th>Delivery sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communes: Kuntien:</td>
<td>Frequency value</td>
<td>Communes: Kuntien:</td>
</tr>
<tr>
<td>number luku</td>
<td>%</td>
<td>number luku</td>
</tr>
<tr>
<td>1</td>
<td>2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

6 a. Certain marked trees or area — Tielet leimikko (tai alue)

<table>
<thead>
<tr>
<th></th>
<th>266</th>
<th>58</th>
<th>1091</th>
<th>25</th>
<th>5</th>
<th>516</th>
</tr>
</thead>
</table>

b. Certain volume of wood — Tielet paumäärä (estim. mini 200 m³)

<table>
<thead>
<tr>
<th></th>
<th>184</th>
<th>40</th>
<th>986</th>
<th>451</th>
<th>94</th>
<th>1408</th>
</tr>
</thead>
</table>

c. The upper and lower limits of the quantity are stated (e.g., 200—300 cu. m.) — Mahtiaenn määän ylä- ja alaraja (estim. 200—300 m³)

<table>
<thead>
<tr>
<th></th>
<th>11</th>
<th>2</th>
<th>419</th>
<th>3</th>
<th>1</th>
<th>593</th>
</tr>
</thead>
</table>

Total — Yhteensä

|                | 461 | 100 | —    | 479| 100| —   |

Two of the alternatives (6 a and 6 b) are seen to be almost equally represented in stumpage sales, although "6 a" has probably been slightly more common. In delivery sales it has been the custom throughout
the country to express the quantity as a certain volume of wood. If the contract forms include a mention of allowable percentage of deviation as in the standard forms, the difference between "6 b" and "6 c" is only a matter of form. It has already been pointed out that in 1956—58 a number of contract forms printed by the buyers had this provision included.

The answers to the marketing inquiry prove the success of the Forms Committee in striving toward a precise expression of the quantity sale. Since in delivery sales the size has always been expressed more accurately than in stumpage sales, the increasing proportion of delivery sales has also contributed to the precise definition of the quantity. Also the fact that the marking of timber prior to sales is now more common than in the 1930's (see Chapter 7) has facilitated the obtaining of more dependable information about the quantity of wood for sale.

Allowable deviations from the stated quantity in the forms of type "6 b" are illustrated by the figures below which are compiled from the answers to the questionnaire:

<table>
<thead>
<tr>
<th>The percentage of allowable deviation estimated to be most common</th>
<th>Communes number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>68</td>
<td>15.4</td>
</tr>
<tr>
<td>5—10</td>
<td>45</td>
<td>10.2</td>
</tr>
<tr>
<td>10</td>
<td>326</td>
<td>73.9</td>
</tr>
<tr>
<td>15</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Total</td>
<td>441</td>
<td>100.0</td>
</tr>
</tbody>
</table>

For 38 communes no reply was received.

The popularity of the 10 % margin probably can be traced to a number of factors. First of all, it is rather commonly in use in other commercial fields (cf. RANINEN 1943, pp. 194—201). It is also possible that Raninen's recommendation to the Ministry of Rationing and Relief in 1945 to use this percentage when interpreting the meaning of "approximately" in roundwood contracts,

The principle of the Forms Committee in granting recognition only when the printed deviation is ± 5 % can be interpreted as an indirect recommendation by the Committee (cf. also KYTTÅ 1958, p. 36). Both the study of prevailing practices and Raninen's recommendation, however, suggest that the 10 % margin should be considered a rather established trade custom.1

1 The Forms Committee has based its recommendation on two decisions made by the Supreme Court (KKO 11 478/Oct. 8, 1923 and 11 219/Aug. 23, 1940). These do not refer, however, to the sales made by the forest owner but by the middlemen.

An essential question in determining the size of the sale is who may determine the quantity within the confines of the contract. Usually the Finnish contract forms contain no clause on this matter. RANINEN (1951, pp. 158—167) stresses that this right should belong to the party which is responsible for the transportation of the goods. Thus in the export trade the quantity within the allowed limits is decided by those who do the freighting; in other words, when selling c.i.f. conditions it is the seller, but under f.o.b. conditions it is the buyer. This idea can be found in several contract forms (e.g. Uniform) which include a statement that the allowance is granted "for convenience of chartering" and that the percentage is lower (usually 5 %) when the delivery makes up only part of the shipment.

In the primary marketing of roundwood the margin cannot be traced from transportation aspects except in the very rare instances when, for example, a railway carload or a truckload of wood is sold. The basis for the variation is probably primarily in the difficulty in the volume estimation of standing timber. Since in delivery sales this estimation is made on the seller's responsibility, then also the final quantity is left, within the limits, to be decided by the seller unless a special mention is made in the form. In stumpage sales, however, the quantity in practice is determined by the party carrying out the marking of trees. An exception is made only in the rare instances when the final size of the stumpage sale is based on the stated volume (which might be only estimated) and not on the marking. Then the buyer may exceed or go below the volume stated in the contract by the agreed percentage of margin.

The seller's right to set the quantity means in practice that when prices tend to fall after the closing of the contract he generally delivers the maximum quantity and vice versa. This is naturally harmful to the buyers, who have made efforts in recent years to reduce the margin to five per cent (cf. REINJUS 1954, p. 36).

875. Scandinavia

8751. Norway

In Norway the estimate made when marking the timber has generally formed the basis of payment for stumpage sales. The Ministry of Agriculture has ruled (Nov. 6, 1954, and June 18, 1958) that when this is the practice, the marking of trees must be done by a forest overseer (skogoppsyn) or under his supervision. There are also strict regulations on measuring and volume determination made in connection with the marking. In the contract form the quantity of wood is expressed both in terms of number of stems and volume as appears in the marking records.
The statute given in 1955 (Sept. 27) states that conifers sold on the stump can also be measured as finished products in areas where log-scaling associations operate. In this case the paying is based on the measurement after extraction, and when the marking of trees is being carried out the quantity is estimated only roughly (Heje 1960, p. 85). The buyers' and forest owners' organizations agreed in 1955 (cf. Avtale om kjøp ... 1955) that one of the two methods described above must be used in the sale of standing timber.

In delivery sales the quantity is expressed in volume units (mainly on top-measured, middle-measured or stacked cubic meters) with the margins of ±10 %. This margin is applied in principle both in the sales between the forest owner and sales association (or other buyer) and between the association and consumer firm. In practice a greater variation is allowed in the innemelding contract between the forest owner and the sales association since with a great number of sales the inaccuracies compensate each other. In addition, the innemelding form contains a condition which guarantees the sales association a right to reduce the purchases from forest owners if market conditions so require.

The aforesaid customs concerning the determination of the quantity are followed also in the Norwegian State forestry. Marking of timber is, however, the responsibility of state foresters. It is stipulated in the stump-age contracts that the State forest administration guarantees the correctness of the number — but not the volume or quality — of trees marked. Consequently the buyer has the right to check and rectify the number of trees after extraction.

8752. Sweden

In the sales of standing timber Swedish private forestry follows the Norwegian practice in the determination of quantity. From the two alternatives applied in Norway the custom of defining the quantity only on the basis of assessment in connection of marking (without subsequent measurement) is dominating. Marking is mostly carried out by the foresters employed by the district forestry boards.

In the State forests quantity — and payment — is determined on the basis of marking records (without subsequent measurement). According to the sales regulations (Bestämmelser ... 1959) every parcel is sold in the condition in which it is in the time of marking without responsibility for any change caused by wind, etc. and without guarantee of quality and volume of stems. No mention is made in this connection of the number

of trees marked (cf. Norway) but it is understood that the buyer has the right to check it after extraction for rectifying apparent mistakes.

In delivery contracts quantity is defined in volume units (the units applied are explained in Section 88) with one number with circa reservation or with margins stipulated (printed) in the contract. The following margins are applied.

a. In the contracts between forest owners and forest owners’ association and other buyers: ±10 % and (seldom) ±5 %. In some forms a margin of ±10 % is used for individual assortments and ±5 % for the total sales quantity.

b. In the contracts between forest owners’ associations and consumer firms: ±10 %.

c. In the general agreements between buyers’ and forest owners’ associations (if preliminary quantities are collectively agreed): ±20 %. In this agreement the margin to be used in the contracts mentioned in point b. is usually defined.

d. According to the sales regulations (DRS § 6) of the State forests the margin should be “as a rule” ±10 %. Sometimes a margin of ±20 % is applied in practice.

In case of circa reservation circa is usually defined to mean ±5 (sometimes ±10 %) margin.

It is generally mentioned in the contract forms that the seller determines the quantity within the defined margins.

In the sales between forest owners and forest owners’ associations margins are in general fairly liberally interpreted.

88. Trade customs concerning measurement

881. General. Development of measurement in Finland

One of the peculiarities of the roundwood trade is the difficulty in the precise determination of the quantity with practical methods. Since the object of trade is a bulky raw material with considerable variation in quality, weighing, which would yield exact results without technical handicap, has not been used for the determining of quantity. Most commonly the quantity has been based on the volume or on the number of logs derived from the volume (cf. Jalava 1932).

The exact determination of the cubic content is very tedious. The harvesting and consumption aspects often require the marketing of roundwood to be carried out as logs of differing length and different degree of primary processing. Hence, a number of principles have been employed
in the measurement of volume, such as the solid cubic content, technical volume, stacked volume, etc. All this and the use of different units (meter, foot, inch, etc.) complicate the measuring and create a demand for performers with more professional skill than is necessary in many other fields of marketing.

The measuring of roundwood in the sales from private forests of Finland has traditionally been carried out in accordance with the agreement made by the parties. The sales contracts have often included a statement concerning the measuring. Because the contract forms until quite recently have been designed by the buyers, the measurement norms have naturally been such as to consider first their interests. An individual seller usually has not understood the importance of the measurement clauses, and even if he has paid attention to them, it has hardly been possible for him to have his interests taken into account.

The forest owners’ organizations often gave attention to the unreasonable terms in the measuring procedures and to the diversity of practices among the buyers (cf. Holopainen 1957, pp. 248–249). The Central Forestry Association Tappi, among others, made in the 1930’s recommendations — because of suggestions by forest owners — first to the Central Association of Finnish Woodworking Industries and later to the Ministry of Agriculture that standards for measuring practices ought to be established. These and the proposals made in Parliament began to show signs of success when the Government set up in 1934 a special committee to plan the development of roundwood measurement. In 1938 the Timber Measurement Act was passed (As. 337/1938) on the basis of the committee report presented in 1936. Among other things, this law:

1. ordered certain forest officials, primarily the State Board of Forestry and district forestry boards, to oversee the measuring of roundwood;
2. assigned officials to carry out measuring when necessary;
3. ruled that there was to be drawn up a statute, a regulation for measurement, which defines the standards for all measurement of roundwood. The measurement regulations were published the same year (As. 395/1938).

The Act and related regulations do not, for the part of the officials mentioned under (2), govern the measurement of wood sold from State forests (State Board of Forestry and the Forest Research Institute).

Thus the measuring of roundwood to determine the sales price has been done since the beginning of 1939 according to minimum requirements set by the Government and, in a sense, under official control.

1 Komsi (1939, pp. 166–221) has made a detailed account of the circumstances under which this law came into being.

882. Measurement regulations

In order to understand the practice of the 1956–58 period there is need for a short review of the technical principles involved in the measurement regulations (As. 395/1938).

It has been customary in Finland to measure the technical cubic content of sawlogs. The volume when so measured is smaller than the real volume for the following reasons:

1. The volume is calculated on the basis of top diameter of logs.
2. The diameter is rounded off to the nearest lower full unit, the difference between the technical and actual content being greater the larger the units used in measuring the diameter.
3. The logs are to include a trimming allowance which is not recorded with the volume.

In addition, the measurement result has often been reduced even further if the shortest diameter of irregular cross-sections has been measured systematically.

The measurement regulation retained the use of technical cubic content but made restrictions for the measuring. Some of the regulations are compulsory for the parties of the sale, in other words, limit the freedom for agreements, and others are as general norms in case nothing else has been agreed by the parties. Some compulsory minimum requirements in the measuring of softwood logs are:

1. The length of the log is measured as the shortest distance between the crosscuts.
2. The buyer may require a maximum of four inches in trimming allowance which is not considered with the length.
3. If a log exceeds 23 feet in length and is measured in one piece, the diameter must be taken from 23 feet from the base of the log at the most.
4. The dimensions are rounded off downwards, the length being measured with the precision of at least one foot and the diameter of at least a half inch. The parties may agree upon more precise measuring.
5. The provision in § 22 of the Timber Measurement Act and § 10 of the measurement regulations ought still to be mentioned. It states that no deductions other than those stated in the measurement regulations are allowed for roundwood which meets the terms of the contract. A buyer’s requirement of an inclusion of extra measure is not in accordance with the law. This applies also to deductions claimed as compensation for rot or other defects in sawlogs.

The following are the most important of the supplementary general norms:

1. The thickness of a log is measured as a horizontal diameter.
2. The trimming allowance is taken from the top of the log.
3. The diameter of a coniferous log is measured under bark.
4. The volume of a sawlog of 23 feet at the most is determined on the basis of top diameter.

These aspects can also be modified by agreement. Thus it is possible to decide to take the shortest diameter as the thickness of the log or determine it as the mean of the horizontal and vertical diameters. The trimming allowance can also be taken from the base.

For hardwood logs (including veneer logs) the measuring is different. The diameter is taken, if not agreed otherwise, over the bark from the middle of the log if the logs are unbarred, as usually is the case.

The following are examples of compulsory requirements in the measurement of cordwood (pulpwood, pitprops, fuelwood, etc.) in stacks for sale:
1. The length of the stack is measured from the middle parallel to the bottom of the pile.

2. The height of the pile is measured at right angles to the length from the upper edge of a bottom log to the upper edge of the corresponding log at the top. Heights from both sides of the pile are taken at regular intervals of less than three meters and the mean of the measured heights is used.

3. In measuring the length, the last complete half or full decimeter is considered and in measuring the height the precision is one centimeter. The parties may agree on more exact measurement.

Later (in 1952) regulations have brought the measuring of the solid volume of pulpwood under legislation (As. 145/1952).

The parties can decide on the deductions to be made, for instance, for careless stacking. If no agreement is reached, the measurement regulations provide the buyer with the right to re-stack the wood once. The regulations also state how the costs of re-stacking are distributed. The volume recorded after re-stacking is taken as the basis for payment.

It often happens that the degree of preliminary processing, especially of bark- ing, of the products when brought to the place of measurement is different than assumed in the contract. For example, wood that has to be priced in half-barked form has been delivered un-barked and has to be measured as such. In these cases the measured volume is changed to correspond to products in the contract by conversion coefficients agreed upon by the parties.

Even the standards limiting the freedom of agreement do not entirely rule out measuring practices that are not in accordance with the measuring regulations. The Timber Measurement Act (§ 5) permits even such a procedure that the buyer or the seller measures the wood or estimates it according to his own judgment if the other party approves the result. The regulations are to be understood so that each party has a right to require the fulfillment of the minimum standards regardless of agreements. For supplementary norms, in contrast, the agreements between the parties are more binding than the norms.

With the trade customs related to measurement the objects of interest are whether the adopted measurement practices are more exact than what is necessary under the law and what is the relation of practice applications to the general supplementary norms.

The standard forms have the following supplementary statements for measurement:

In the standard form for stumpage sales ("Heavy Timber and Cordwood":)

"The final quantity of wood is confirmed... and for heavy timber it is based on the counting of butt logs / measurement in accordance with the law done jointly by the parties involved in the sale."

In the general terms on the reverse side of the form ("Contract Terms", § 7: Measurement) it is stated:

"The birch veneer logs are measured over bark. Unless agreed otherwise and if the buyer so desires, the diameter of an irregular cross-section in a sale made on the cubic-foot basis is determined from two diameters at right angles to each other if the difference of the shortest and longest diameter is at least one-half inch in sawlogs under nine inches in diameter and at least three-fourths inch in thicker sawlogs, the shortest diameter being taken from veneer logs."

It ought to be pointed out that the counting of the number of butt logs, which is a common practice in the stumpage sales of heavy timber and the only one in stem delivery sales, cannot be considered an act of measurement since the determining of the volume has been made when the trees were standing, most commonly in connection with the marking. Neither do the measurement regulations in Kosmi's (1939, p. 71) interpretation consider this counting or the estimation of standing timber as measurement.

The standard forms have adopted the basic principle of the measurement regulations. This means that both the compulsory minimum requirements — these do not even need to be repeated in the forms — and the supplementary general terms of the regulations are followed. The supplementary terms, however, are made more complete and given as three additional rules.

The first states that the diameter measurement of birch veneer logs is made over bark. This could, in fact, be made on the basis of § 9 of the Timber Measurement Act. The Forms Committee by including this stipulation has especially wanted to establish this practice in the measuring of birch veneer logs.

The second rule also concerns the diameter measurement of veneer birch. In the supplementary statements of the measurement regulations the horizontal diameter of the logs is assumed to be measured, whereas the standard form takes the shortest diameter as the thickness of the log if not agreed to proceed otherwise. Here the tendency to establish a practice other than that adopted in the measuring regulations is obvious. Still the requirements state that the buyer must particularly want to follow this procedure. This method of measuring veneer logs is recommended on the basis of technical aspects of production.

The third rule concerns the diameter measurement of elliptical sawlogs. Deviating from the supplementary rule in the measurement regulations, the diameter of these kinds of logs is to be taken, upon the buyer's request, as the mean of two perpendicular diameters. The parties may still agree to proceed otherwise, for example, as suggested in the measurement regulations. The goal of the Forms Committee has been to increase the accuracy of measurement.

It is easy to see that the supplementary clauses all concern only heavy timber. The measurement of stacked wood is in the measurement regulations. However, the standard form for delivery sales of cordwood contains a clause:
"If there is ice or snow packed on the wood the buyer can, if no measurement deduction has been agreed upon, postpone the measuring and accepting of the wood until the snow and ice have melted."

This does not contradict the statement on extra measure in the Timber Measurement Act since the clause facilitates the measuring in perfect accordance with the measuring regulations after the snow and ice have melted. A corresponding statement has not been included in the contract forms for stumpage sales.

In 1956–58 the buyers' forms which had been recognized by the Forms Committee had the same clauses unchanged. In other buyers' forms studied the most common basis of measurement has been the Timber Measurement Act as such. The following statements are examples of supplementary regulations found in the buyers' forms.

1. A number of the forms had a clause which required the shortest diameter of an irregular cross-section to be taken as the thickness of the log.
2. In some cases the diameter of heavy timber is measured horizontally or, on the buyer's request, as the mean of two perpendicular diameters.
3. A supplementary clause on the measurement of heavy timber implied the same things as in the standard forms (in one of the forms studied).

In the forms of one firm no mention of measurement was made. This corresponds to the case of measuring according to the measurement regulations.

In 1936–38 the most distinct difference in comparison to the practice prevailing in 1956–58 was the requirement on extra measure. It was then the practice that a prescribed portion of the roundwood was delivered without compensation to the seller.

In the sales of heavy timber the excess was usually taken in the form of a trimming allowance which ordinarily was from four to six inches. Furthermore, in the contract forms of some enterprises the allowance was supposed to be taken from the base of the log. The extra measure was applied mostly in delivery sales since the stumpage sales were usually based on the stem number. Apparently the buyer assumed the same measuring practice in making his price calculations for the wood bought on the stump.

In the sales of cordwood the excess was required as additional height of the piles, in rare instances also as extra length of the logs. The clause concerning this extra measure could be found in almost every contract form used in 1936–38. The extra quantity was, however, different depending on the locality and the enterprises. Usually it varied within 5—10% of the stated quantity (cf. Komiteenmietintö 5/1936, p. 43).

The extra measure was argued mainly as an allowance for shrinkage and settling of the piles, and the purpose was to prevent measurement losses when delivering the wood either in the factory or, for instance, to a foreign buyer. Accordingly, the percentage of extra measure for green (unseasoned) cordwood (commonly 7.5% or 10%) was usually higher than for dry wood (5% being most common). The extra length, although very rarely required, could not be defended on these grounds since the shrinkage of wood in the direction of the axis is negligible.

Another difference, in the actual measuring techniques, was that the shortest diameters of irregular cross-sections of heavy timber were always required to be measured. A comparable practice in the sales of cordwood is apparent from the clause which required the height of the pile to be measured from the lower edge of the bottom logs to the centers of the top logs and the length of the pile to be measured from heart to heart of the extreme columns of logs (cf. Komiteenmietintö 5/1936, p. 41). Sometimes it was stated that the height of the pile was to be measured from the lower side.

The regulations concerning the accuracy of measurements were in 1936–38 somewhat different than the ones in the Timber Measurement Act. For heavy timber the use of half-inch precision was even then most common. In many of the forms, however, logs of 11 inches (in some of them 10 inches) or more in diameter were to be measured with a one-inch precision. The regulations on the precision of measurement of stacked wood concerned only the length of the piles. One-decimeter accuracy was assumed and the rounding off was done to the next lower decimeter. It is likely that the height of piles was taken with one-centimeter accuracy as is also stipulated in the measurement regulations.

Although the contract forms in 1936–38 did have a number of clauses on measurement, much was left open since the only regulations which appeared in practically every form were the ones concerning the taking of the smallest diameter for heavy timber and the extra measure for cordwood. The Timber Measurement Act and the related legislation have resulted in more uniform and complete practices in the measurement of roundwood.

The grading of roundwood was left beyond the scope of the Timber Measurement Act and the statutes, even though the committee had recommended that the standards for quality and the grading of sawlogs be included in the statute on measuring. The quality standards and the grading of products were left for the parties of the sale to decide. The measuring officials, according to the Statute (As. 374/1938, § 23), were only to confirm the quantities agreed on or disagreed as meeting the requirements of the contract. Contrary to the stand represented by KOMSI (1939, pp. 74—84) and RAININEN (1943, p. 83), practical foresters, MECKLIN (1959),
for example, have on these grounds considered the duties of the measuring officials entirely technical and not evaluative.

The Forms Committee (Jan. 27, 1960) has filled in some of the gaps left in the legislation by designing minimum quality requirements for coniferous sawlogs, industrial cordwood, and fuelwood (for sales of standing timber). In 1959 (June 25) the central organization of the buyers of veneer birch (Kevätuksetus) and the Forest Council of the Central Union of Agricultural Producers representing the forest owners, made an agreement on the quality and measuring requirements for veneer birch. The Forms Committee (Dec. 15, 1959 and Jan. 25, 1960) has reviewed its contract forms in the light of this agreement.

Until 1939 the measurement in the sales from State forests was based on the Sales Statute which has been supplemented by the State Board of Forestry circulars and instructions. In the Statute (§ 4) the regulations for measuring heavy timber implied, for example, that the diameter was to be taken from the top of the log and, unless otherwise agreed, the longest diameter was to be measured with a precision of one centimeter, rounding downward. Logs of over six meters were to be measured in sections of six meters or less. An accuracy of one decimeter was to be used for length and the rounding was done downwards.

In practice, the determining of the solid volume of felled stems was common in delivery sales; in stumpage sales the price was based on the number of stems.

No details for the measurement of cordwood were included in the Statute. Instead, it was especially stated (§ 5) that extra measure had to be considered in calculating the volume.

The auction notices had supplementary measuring norms some of which even differed from the Sales Statute. Thus the length of sawlogs was to be measured in English feet with a one-foot precision, rounding downwards. The maximum trimming allowance which could be required was four inches. The diameter of hardwood logs was to be taken over bark with a one-inch precision. Extra measure was allowed for cordwood:

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Extra Measure %</th>
</tr>
</thead>
<tbody>
<tr>
<td>two-meter half-barked pulpwod</td>
<td>5%</td>
</tr>
</tbody>
</table>
| four-meter » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » » } 51

883. Measuring

Before the passing of the Timber Measurement Act the decision on the measuring personnel in the sales from private forests was left entirely to be made by the parties to the sale. No clear statements could be found in the contract forms. One statement often encountered implied that the wood is measured and turned over to the buyer on the dates decided by the buyer and seller (in some cases the dates were determined by the buyer alone). Sometimes the contracts included a date by which the measurement had to be carried out. A clause requiring the buyer's representative to measure the wood together with the seller was very rare. In some instances the measurement was assumed to be combined with the determination of the volumes for paying wages to the hauler and the seller had to be present if he wanted to protect his interests.

The findings of the marketing questionnaire indicated that the dominant and probably the only practice in 1936—38 was for the buyer's representative and the forest owner to carry out the measuring together. The buyer was represented either by the local district foreman, or a special measuring team in the case of a large enterprise. The forest owner was usually present in person. It was only very seldom that he had hired someone to represent him, mainly for the reason that he wanted to avoid extra expenses and to protect his interests personally. Since the "measuring" due to the great popularity of stumpage sales included mainly the counting of butt logs of heavy timber, he felt competent to do it himself; neither did he feel a need for professional assistance in the relatively simple measuring of stacked roundwood. Also the small number of professional men employed by forestry extension organizations could be listed as a reason.
Obviously this widely accepted practice reduced the need for more exact statements on measuring personnel in the contract forms.

According to the Timber Measurement Act (§ 5), "The measuring of timber is done together by the seller and buyer or by their representatives or a third person appointed jointly by the parties." In a sense the act gives first place to the practice prevailing in the 1930's. On the other hand, it also provides special measuring officials: the official measurers and timber-scaling boards. The official measurer — mostly forest technicians who are appointed to carry out measuring as an auxiliary job — can be present either from the beginning or called in afterwards if either party does not approve the other's measuring. The timber-scaling board is the final stage of appeal if the official measurer's work is not considered satisfactory.

In eight of the eleven contract forms designed by the Forms Committee it is particularly pointed out that the determination of quantity is done by the buyer and seller together by measuring / counting the number of butt logs. Three of the forms make no such mention. In these it is only stated "the products are measured according to the measurement regulations at the time agreed upon by the deliverer and the buyer." Even then it is intended for the buyer and seller to do the measuring jointly.¹

In considering the practices in 1956—58 it is first interesting to note how common the agreements between the buyer and seller have been and how often official measurers have been employed. A statistical account of the latter practice will be presented later.

Also the possibilities in measuring by the buyer and seller together are of some interest. Evidence from various sources indicates that the measuring has been done:

a. by the buyer (or his representative) alone;
b. by the buyer and seller together;
c. by the buyer together with a professional man (forest adviser) hired by the seller.

In alternative c. the forest owner himself is often also present. In a legal sense alternatives b. and c. are equal, but in evaluating them as trade customs a distinction ought to be made.

One question series in the marketing questionnaire (No. 9 in the Appendix) stated the alternatives and the results are presented in Tables 15a and 15b. Measuring done by the buyer (or his representative) and the seller together appears to be dominant in most communes in Finland. Next come the communes in which the measuring has been most commonly carried out by the buyer and the forester (forest adviser) representing the forest owner. From the answers it appears to be somewhat more common in the

¹ Information given by Dr. Jarl Lindfors, the chairman of the Forms Committee.

case of heavy timber than of cordwood sales. This is easy to understand since the measuring of heavy timber and especially the calculating of the cubic content requires certain professional skills, and also the financial interests of the forest owner in these sales are great due to the high unit value of timber.

It is rather surprising to note that no significant difference between delivery and stumpage sales was recorded although one would expect that in delivery sales of heavy timber the forest owners would need professional assistance in the measurement. This perhaps could be explained by the fact that stumpage sales are primarily made by owners of large forest properties who are more willing to pay a professional for measuring than are the small forest owners.

As seen in Figures 12a and 12b there are certain local characteristics in the applied measurement practices: in the southwestern and southern parts of the country where the forest management associations have been longer established than elsewhere, it is also more common to use their professional services.

In Lapland and Northeastern Finland often the buyer alone makes the delivery measurement. There the forest owner himself usually prepares the timber and hauls it to the point of delivery keeping a record of the volume. This has been given as the reason for his not attending the actual delivery measuring. In this way he already has a control for the measuring.

The official-measuring was not included in the alternatives of the questionnaire since the information can be obtained from existing statistics. By the decision of the Ministry of Agriculture (As. 47/1939) the district forestry boards are required to report annually on the measuring activity in their districts. This source has served as the basis for information concerning the official measurements in 1939 and 1956—58. Because the annual report of every district forestry board did not mention the measuring activity, a special question on the number of official measurements in each commune was included in the marketing questionnaire (see the Appendix, point 9). It also served as a check on the information in the annual reports.

The number of official measurements of industrial wood¹ according to the annual reports of the Finnish-speaking district forestry boards:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1939</td>
<td>14</td>
</tr>
<tr>
<td>1956</td>
<td>22</td>
</tr>
<tr>
<td>1957</td>
<td>23</td>
</tr>
<tr>
<td>1958</td>
<td>16</td>
</tr>
</tbody>
</table>

| Average for 1956—58 | 20 |

¹ It was not possible to distinguish between the measuring of industrial wood and fuelwood in every case.
Table 15a. Measurers of heavy timber in private forests, 1956—58.

<table>
<thead>
<tr>
<th>Measuring is done in the sales of heavy timber by:</th>
<th>Sales of standing timber</th>
<th>Delivery sales</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mittoauksen suurittajat, järeä puu kaupassa:</td>
<td>Pystykaupat</td>
<td>Honkimokkaupat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communes: Kuntien:</td>
<td>Communes: Kuntien:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>frequency value</td>
<td>frequency value</td>
<td></td>
</tr>
<tr>
<td></td>
<td>number luku (%)</td>
<td>number luku (%)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9A a. The buyer alone —</td>
<td>8 2 144 12 2 154</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ostaja yksin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. The buyer and seller together —</td>
<td>304 66 1168 344 72 1296</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ostaja ja myyjä yhdessä</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. The buyer together with a professional forester</td>
<td>151 32 949 124 20 954</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(forest adviser) hired by the seller —</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ostaja ja myyjän palikkaa ammattimies (metsänomistaja) yhdessä</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total — Valtio</td>
<td>463 100 —</td>
<td>480 100 —</td>
<td></td>
</tr>
</tbody>
</table>

According to the answers to the marketing questionnaire there were 34 official measurings of industrial wood as an annual average for 1956—58 in the country as a whole.

The results from the two different sources are not exactly alike. Both of them still confirm that the official measuring is used very seldom. It is used mainly in the disputed cases which cannot be settled by negotiation between the seller and buyer.

It seems that when the Timber Measurement Act was being prepared, it was assumed that the official measuring would be widely used because a permanent measurement bureau was planned to be established in the area of each district forestry board (Köms 1939, pp. 204—205). In the light of experiences gained this was an over-estimation.

According to the Sales Statute (§ 8) the delivery measurement of wood from State forests is done by the district forest manager in the presence of the buyer or his representative. The district forest manager or a forester nominated by him keeps a record of the delivery, including the quantities. The buyer or his representative has to sign the delivery record which, according to the Statute, is conclusive evidence also without the buyer’s signature even when the buyer is not at all present at the actual measure-

Fig. 12a. Measurers of heavy timber in private forests (the most common practice by communes). 1956—58. Key to symbols in Table 15a.

Table 15b. Measures of industrial cordwood in private forests, 1956—58.

Tableau 15b. Mittausen suorittajat, pinottavara 1956—58.

<table>
<thead>
<tr>
<th>Measuring is done in the sales of cordwood by:</th>
<th>Sales of standing timber</th>
<th></th>
<th>Delivery sales</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number</td>
<td>%</td>
<td>number</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9Ba. The buyer alone —</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ostaja yksin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>145</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>9Bb. The buyer and seller together —</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ostaja ja myyjä yhdessä</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>353</td>
<td>77</td>
<td>1229</td>
<td>396</td>
<td>83</td>
</tr>
<tr>
<td>9Bc. The buyer together with a professional forester (forest adviser) hired by the seller —</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ostaja ja myyjän palkausammin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ammattimies (metsäomistaja) yhdessä</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>101</td>
<td>22</td>
<td>898</td>
<td>74</td>
<td>15</td>
</tr>
<tr>
<td>Total —</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yhteensä</td>
<td>456</td>
<td>100</td>
<td></td>
<td>479</td>
</tr>
</tbody>
</table>

On the other hand, the buyer can write his remarks on the records. The forest manager must report the complaint to the regional office which, after investigating the matter, may appoint another State Board official to make the measurement. The statute recognizes no other channels of appeal.

In the Timber Measurement Act the measurement of wood from State forests is in a special position since the activities of the official measurers and timber-scaling boards (§ 21) do not cover these sales. The measurers in 1956—58 have been the same as before.

**884. Scandinavia**

**8841. Norway**

In Norway the measuring of roundwood first received serious consideration at the end of the last century when in some areas different unit prices were being applied for sawlogs of different sizes. The buyers wanted to make measurement operations uniform and especially to eliminate unsound practices in measuring by installing a system of inspectors and by
establishing, in the beginning of this century, log-scaling associations in the river districts (cf. GRAMBO 1953, pp. 40—41; ELSTER 1959, pp. 37—53). The first and most widely known is the Glommen log-scaling association established in 1909. The forest owners’ demands caused the association to reorganize in 1911 so that also the forest owners had representation in the administration. In several other river districts similar organizing took place.

Because there continued to be great variation in measuring practices in most of the country, the Norges Skogeierforbund and the foresters’ organizations, among others, started a movement to establish a uniform measuring system which would satisfy both sides of the market (Komiteten for forst- og skogvævelstabilitet 5/1936, pp. 52—53). These plans lead to the Timber Measurement Act of 1928 (June 22) which with some later modifications (June 21, 1946, and June 18, 1948) has formed a background for timber measuring in Norway since the first of July, 1948.

The law concerns the roundwood which is used as raw material by industry or is resold in unprocessed form. The Ministry of Agriculture can make exceptions in the case of several special products and of purchases by small local sawmills or other similar small-scale operators. Standardized pulpwod (kubb), wood extracted from the owner’s own forests and processed in the owner’s establishment, and the sales of roundwood on stump are under the Timber Measurement Act to an extent prescribed by the Ministry. Fuelwood is not included in the act.

The law provides that the measuring of products considered in the act must be done in accordance with the regulations ratified by the King, in metric units. The regulations were adopted in the Glommen area as early as 1912 (cf. Forslag . . . 1937, p. 3). The King, by law, is empowered to give orders regarding volume tables, relationships of product prices, and tables of price relationships. Also, the designing of scaling regulations was to a great extent left in the hands of the Ministry of Agriculture. In 1929 (June 11) public scaling regulations were given in which was stated, among other things, the manner in which the diameter and length of logs were to be measured. Later the same year more regulations were passed on the grading of roundwood, on the products not covered by the legislation, and on the consideration of defects in the measuring of wood.

In general, the administration of the act has been based on measurement practices evolved through trade (cf. ELSTER 1959, p. 178; ZIVNUŠKA 1959, p. 27).

It has been typical of the roundwood market of Norway over a long period of time that the product of supreme importance — comprising approximately 90 % of the commercial removals in the felling years 1956—1957/58 — is coniferous timber (bærtiømmen), each log of which is measured separately. The diameter is measured either at the top of the log or in the middle and there are, accordingly, the top-measured (topp-målt) and middle-measured (midtmålt) logs, the closest Finnish correspondents being coniferous sawlogs and pulpwod respectively, although in Norway the former is, to some extent, also used for pulp and vice versa. Each type has set standards for size and quality, although they are not exactly alike in every district. Each year the price relationship between the two is confirmed and the one which gives better prices for the seller will decide the manner of cutting and measurement. The price scale for top-measured logs rises with the diameter, varies to some degree according to the length of log, and is different for spruce and pine. With middle-measured logs the unit price for different diameters is the same but not for different tree species (pine and spruce). In 1937—47 there were three, and in 1947—52 two, price categories based on the volume of logs. In 1952 the use of the classification was discontinued (cf. JØRGENSEN 1953, pp. 164—166).

The length of both top- and middle-measured logs is taken along a straight line with a half-meter accuracy and rounding off to the nearest lower half meter. The Ministry of Agriculture can grant permission for the use of shorter units of length. When the recognized measurer observes that the lengths marked at the ends of the logs are correct, he can use them instead of measuring every log.

The diameter is to be measured perpendicular to the axis of the stem and under bark (the log must be thoroughly barked at the place where the measurement is taken) using the smallest diameter of the cross-section with the precision of one-half centimeter — in some areas a one-centimeter accuracy is in use — rounding downward. If the log is not cut at a half-meter or meter mark, the diameter is measured from the point where the last full number of half-meters falls.

The Timber Measurement Act also contains specifications for the measuring of irregular logs.

An important product in areas where land transportation (truck and rail) is used is pulpwod (kubb), which is cut into standard lengths (1.0 m, 1.25 m, 1.5 m, 2.0 m, 2.5 m, or 3.0 m) and measured in piles. According to the regulations passed in 1955 (September 24), the length and height of each pile must be measured with an accuracy of one centimeter rounding downward and the volume of the pile is calculated in cubic meters with two decimals. Deductions must be made for defective products.

The norms for the measurement of other less important types of roundwood will not be considered here (cf. HEJE 1960, pp. 61—84).

The measurement regulations in Norway are usually very strict leaving only a narrow margin for agreements between the buyer and seller. Further-
more, by later legislation several kinds of roundwood first not covered by
the act, such as pine poles (Dec. 1, 1955, and Feb. 4, 1956) and deciduous
industrial cordwood (Aug. 2, 1957) were brought under the law.

As pointed out before, this kind of measuring is not necessary in the
sales of standing timber if the marking has been done either by a forest
overseer or under his supervision.

There are 14 measuring districts authorized by the King. The law
provides him with the power to require each of them to establish a log-
scaling association. This is a joint organization of roundwood buyers and
sellers and it is to strive toward impartial measuring which fairly considers
the interests of both sides. The board of directors of the association is
made up of an equal number of buyers' and sellers' representatives. The
rules are ratified by the Ministry of Agriculture. Of the rules of the
logscaling associations which were in existence before the act, especially
the Glommen association rules have served as a standard (Elsten 1959,
p. 177).

The measuring of products regulated by the act is done by a professional
measurer in the service of a log-scaling association. The costs are divided
evenly between the buyer and seller. The measurers also grade the quality
and make deductions for defects. Quality classification is primarily applied
to special products (for instance, for veneer logs, up to 1952 also to midt-
midl tømmer).

The log-scaling associations play a dominant role in the measuring of
roundwood in Norway because the most important product of the round-
wood market (barktømmer) is measured mainly by the association of-
icals, and the quantities of less important products not required to be
officially measured are insignificant. Moreover, the participants of a sale
can agree to have an association official measure wood which is not re-
quired to be so measured. The associations measure also the roundwood
sold from State forests.

According to Mykland (1958) the log-scaling associations measured
in 1950/51—1955/56 an average of 77% of the marketed timber. The
remaining 23% was measured by the buyers and sellers or, if the wood
was utilized in the forest owner's own manufacturing plants, the forest
owner alone.

The rules of each log-scaling association contain regulations regarding
procedures in case of dispute. It is a common practice that the dispute
is first submitted to the district chief (distriktschef) of the scaling associa-
tion. His decision can be appealed to the director of the log-scaling asso-
ciation. If the need arises, the director can call the chairman and vice-
chairman to settle the dispute. According to association rules, these two
men always represent the different sides of trade. The buyer and the

seller or their representatives have the right to be present when the measur-
ing is done and to make control measurements. — The disputes according
to the reports of experts are very rare.

8842. Sweden

In Sweden it was first the practice that the buyer and seller together
measured the wood, although the details of the actual measuring in differ-
ent parts of the country varied greatly. The large-scale buyers realized
early the disadvantages caused by the lack of uniform measuring practices
and began to establish regional scaling associations (tumningsföreningar)
which operated mostly by river districts. The first association of the Än-
german River was founded in 1892 and by the end of 1928 there were
seven such associations. In 1939 they numbered 12.

Until the 1930's the scaling associations were totally governed by the
buyers, so the forest owners began to demand representation in the as-
sociations. The system did not secure equal representation of the two sides
and the measuring practices were still in the 1930's unsatisfactory in many
parts of the country: there were areas without any scaling associations,
and in areas where the associations had extended their influence all buyers
were not members. This condition brought about an act in 1935 on the
measurement of roundwood (Komiteamnleteintö 5/1936, p. 61) initiated
largely by forest labor organizations and forest owners. The Act of 1935
did not cover Southern Sweden and neither did it include the measurement
of hardwood.

During World War II certain price control measures were introduced
which resulted in the need for measurement regulations covering the whole
country. The Royal Board of Private Forestry (Skogstyrelsen) established
in 1941 was entrusted the task of issuing such regulations.

In 1947 (June 20) a new law on timber measurement was passed and
together with later amendments it has served as the basis for measuring.

The Timber Measurement Act and related statutes also in Sweden con-
tain regulations on measurement standards and measuring personnel. In
both respects it approaches more nearly the Norwegian than the Finnish
principles. First, there are specifications of the quality of different products
and the allowable defects in each type of roundwood issued by the Skogs-
styrelsen. The minimum dimensions are also included for some products,
such as veneer logs. The minimum and maximum dimensions of several
important types (sawlogs, pulpwood, logs for sleepers) are left to be settled
by the parties involved in the sale. Quality classification of industrial wood
is common in Sweden and in connection with the measurements, the product
gradating and deductions for defects are made. The estimation of the de-
Pulpwood can be measured either piece by piece (solid volume) or in piles. When measured by the log, the length is measured just as in the case of sawlogs but without the trimming allowance. Standard lengths are also used. The measuring of the diameter is otherwise the same as with coniferous sawlogs but the top and base diameters are measured one inch from the ends of the logs (instead of one-half the trimming allowance as in sawlogs). The crossmeasuring of elliptical cross-sections is required. The volume is based on diameter excluding bark (cf. Circulär nr 2 B) and is expressed in different units. Solid measure is applied more commonly in Northern and piled measure in Southern Sweden.

When measured in a pile the pulpwood must be stacked at least one meter high and the top of the pile must be level. The height, rounded off to the next lower full centimeter, is measured by sections from both sides of the pile. The sections are to be equal in length, usually 1.5 or 2 meters. The height of the pile is the mean height of the sections.

The width of the pile, in other words, the standard length of the logs, is checked.

The length of the pile is the mean of the lengths measured from both sides of the pile with an accuracy of a half decimeter rounded downward (Tillägg 1 till Circulär nr 3). The volume is expressed in cubic meters of piled measure.

Deductions are made if the stacking of logs or trimming has been careless and if there is ice or snow in the piles.

Pulpwood measured in a pile is divided into two classes (prima and secunda) according to quality and thickness (cf. Circulär nr 3 B).

Veneer logs of pine are, in the Swedish plywood industry, more important than birch. The measurement of log length is done with one-half-foot accuracy (one decimeter) rounding downward. The trimming allowance is at least three inches (7.5 cm.). The diameter is measured from the middle of the log just as in the case of birch veneer logs. When "floating volume" is used, the diameter is measured as described in the rules of the floating district. Two quality classes are distinguished for the veneer logs of pine: prima and secunda (cf. Circulär nr 5).

Veneer logs of birch are measured and the volume is determined for each log individually. The diameter is measured under bark and determined with an accuracy of one centimeter or one-half inch (if the parties involved have not made an agreement for one-fourth-inch accuracy). However, the logs are not barked for diameter measurement, but the barkless diameter is obtained by subtracting the double bark from the over-bark diameter. There are no quality classes for birch veneer logs.
The timber measurement acts of both Sweden and Norway restrict the work of measurers much more than the corresponding legislation of Finland. The Measurement Act of 1947 in Sweden recognizes voluntary and official measuring.

Voluntary measuring can be carried out by a private person, an enterprise, or by a timber-scaling association. In Sweden as in Norway the timber scaling associations are impartial and the board of directors is composed of an equal number of representatives of both buyers and sellers. In Sweden the rules of the scaling associations have to meet certain requirements stipulated in the law (270/1947). The measurer must in every case, even if he is a private person or an official in an enterprise, meet certain qualifications of competence and give an official promise of impartiality. The timber-scaling association controls through spot checks and by other means also the voluntary measuring.

Official measuring can only be done by specially appointed officials in the service of the timber-scaling associations or appointed by them.

Voluntary measuring is much more popular than official measuring. The official personnel are called in mainly in disputed cases or when either party of the sale wants for some reason to be sure of faultless measuring and the qualifications of the measurer, accuracy of the measuring equipment, the recording of measurements, etc. (cf. Circular nr 23 B).

The official measuring serves, in a sense, as the first stage for clearing complaints. If voluntary measuring results in a disagreement which is not settled by the parties involved, the measuring is discontinued and an official measurer can be called. There is the possibility for filing a complaint against an official measuring to the board of controls of the scaling association, but the board's decision is final (Circular nr 23 B).

Since in Sweden even voluntary measurement in most cases is done by a scaling association expert, the associations are quite important in the measuring of timber. In 1956–58 the associations measured an average of 21.5 million cubic meters annually or 54 % of the total removals; for pulpwood the corresponding values are 15.4 million cubic meters and 82 %. Of marketed quantities the percentages are even higher than those mentioned above.

The requirements concerning measuring also apply to the roundwood marketed from the State forests of Sweden.

89. Terms of payment

891. General

RANINEN (1954, p. 149) makes a division into sales with advance payments, cash sales, and credit sales.

In the sales of roundwood (except cash sales) it has been customary to pay gradually as the logging operations have advanced, i.e., the seller has received payments before the delivery of products has taken place. The pattern of payment has depended on the kind of seller, buyer, and delivery practice and also some changes can be expected in the terms of payment with time.

In connection with payment some special problems require an answer, e.g.:
1. What is the relation between advance and cash payments?
2. What is the payment procedure?
3. How is the security problem solved?

Especially these problems will gain attention in the study.

892. Private forests

In the standard forms under "Payment period" it is stated:

"The advance payment is ------------------------- Fmk. The balance will be paid by -------------------------"

In the forms for Northern Finland the wording differs slightly:

In sales of standing timber:

"When the contract is signed ------------------------- Fmk and ------------------------- Fmk are paid in advance. The balance will be paid by -------------------------"

In sales with a delivery contract:

"When the contract is signed ------------------------- Fmk and ------------------------- Fmk are paid in advance. Payment at measurement / final payment is made when the deliverer has hauled the wood to the collection point. In the payment at measurement ------------------------- Fmk per cubic foot (in forms for cordwood: Fmk per stacked cubic meter) are withheld until the final payment."

The wording of the clause on payments indicates that the Forms Committee has assumed the sales price to be paid partly in advance and partly after the delivery measurement, i.e., when the definite quantity of wood is known.

The time of making the advance payment is left for the buyer and seller to decide. The forms for Northern Finland make it definite that the first payment is to be made immediately after signing the contract. This is obviously the practice also in other parts of the country although the standard forms do not indicate it clearly. Other advance payments are made as agreed upon in the contract.

The final accounting can be done only after the final measurement when the quantity of wood and total price are accurately known. Different ways of expressing the time of the final accounting and the paying of the
Table 16. Terms of payment, 1956—58 in private forests.

<table>
<thead>
<tr>
<th>Time of payment</th>
<th>Sales of standing timber</th>
<th>Delivery sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maksuusaika</td>
<td>Pystykauppat</td>
<td>Hunkitakauppat</td>
</tr>
<tr>
<td></td>
<td>Communes: Kuntien:</td>
<td>Communes: Kuntien:</td>
</tr>
<tr>
<td></td>
<td>number taka</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

10 A. Immediately after closing the sale (or within 14 days) there will be paid of the sale price — Heti kau-
panteen päättyttyä (tai väh-
meistään 14 vvk:n kulua-
sa) maksetaan kauppa-
hinnasta:

a. None at all — Ei lain-
kaan

b. —30 %

c. Over — Yli 30 %

Total — Yhteensä

|                  | 463 | 100 | 480 | 100 |

10 B. Before the contract peri-
od ends there will be paid of the sale price — Ennen sepin
sumajan umpen ka-
lumista rahaotettavan:

a. None at all — Ei lain-
kaan

b. —50 %

c. Over — Yli 50 %

Total — Yhteensä

|                  | 455 | 100 | 480 | 100 |

1 Number of communes is smaller than in the column 5 since stumpage sales are not practiced in a number of communes. — Kuntien luku tässä pienempi kuin sarak-
keessa 5, koska eräissä kuntissa pystykauppoja ei tehå juuri lainkaan.

balance are possible in the contract forms. For instance, the date can be stated by which the payments must be completed or it can be agreed that the final payment is made within a certain time from the measurement.

The marketing questionnaire included two series of questions concerned with the payment period (No. 10 in the Appendix). The first was to discover what portion of the price in 1956—58 was paid right after (within 14

Fig. 13a. Terms of payment by communes corresponding to alternatives 10 Aa—10 Ac in Table 16.

Kuva 13a. Taulukon 16 valitettuja 10 Aa—10 Ac vastaavat tulokset kunnittain.
days) making the contract, the second to find out how big a share of the sales price was paid before the end of the contract period. For both series of questions the forest advisers were to estimate separately the customs used in stumpage and delivery sales.

According to the most common alternative, the communes were divided as seen in Table 16. The regional characteristics in payment practices are demonstrated in Figures 13a and 13b.

From the results we can conclude that, first of all, the making of advance payments is the rule in the sales of roundwood. Furthermore, it is obvious that the downpayment usually makes up 0—30 %, but rather often also over 30 % of the total price. Before the termination of the contract period over 50 % of the price has usually been received, in some parts of the country it has been less, raising the final payment to over half of the total.

No mentionable differences can be observed between delivery and stumpage sales nor clear regional characteristics in the making of advance payments.

The financing of the sales of roundwood — as well as any form of trade — is mostly influenced by two factors: first, the seller’s need for money and the buyer’s ability to pay; second, security considerations both for the buyer and the seller.

Most sellers are interested in receiving as much as possible in early payments. For the buyer the fulfilling of this desire stands out as an increased financial effort, increased costs in the form of interest, and also some risk. When the monetary situation is tight, the buyer is usually forced to be conservative in making advance payments. The monetary situation in turn is influenced by several factors: trade cycles, advance payments by foreign buyers to the exporters, and monetary policies. In 1956—58 the tight monetary policy of the Bank of Finland and the limited advance payments from foreign buyers have notably reduced the possibilities for advance financing.

In the case of profitable business and when the monetary situation is more favorable, advance payments are very willingly granted. The purchasing of roundwood and the financing of these purchases provides the firms a possibility to arrange the annual balance according to taxation considerations.

Security (avoidance of risk) from the seller’s standpoint induces him to be interested in receiving the payments before the title to the goods and the right of transportation is transferred to the buyer. This is made possible both by advance payments and also by agreement that the goods are transferred only after the total sales price has been paid.

In the standard forms the transfer of title upon payment has been sug-
ggested as one alternative. KYTTÄ (1958, pp. 30—31) considers this withholding of the title to the goods an exceptional arrangement. In his opinion it is usually transferred in delivery sales upon the delivery measurement which in the standard forms has been stated as the other alternative. In sales of standing timber the transfer is considered to have taken place when the trees have been felled (cf. KKO II 520/Nov. 4, 1937; II 60/Feb. 24, 1947), if it had not been decided otherwise. The marketing questionnaire II revealed that the title to the wood in delivery sales has most commonly been transferred at the measurement (Table 17).

If the buyer does not meet the payments as they fall due, the standard forms authorize the seller to withhold, with lien, from the contract a quantity of wood corresponding to the unmet payments if he is not given some other approved guarantee. On the other hand, a delay in making an advance payment does not mean, according to the Supreme Court (KKO II 32/Jan. 18, 1929), that the seller may neglect the logging.

Also the buyer has a need for security. In stumpage sales he can mortgage his right of felling to assure returns for his advance payments. Otherwise, the advance payments can be lost, e.g., if the seller becomes bankrupt (cf. KKO I 47/Oct. 13, 1931). This security measure is taken, however, very seldom.

In delivery sales the buyer’s risk is greater than in stumpage sales. It is possible that the delivered timber does not cover the payments made in advance. For such a case and for force majeure the standard forms have a group of rules protecting the buyer. If the buyer has grounds for doubt that the delivery will be partly or entirely neglected, he may ensure the returns for advance payments by marking out the products as the logging progresses to cover the value of the advance payments. After that he has the lien as a protection against losing the advance payments. If the delivery contract because of force majeure is made void for the part of undelivered wood or if none or only a part is fulfilled during the prescribed period due to a cause beyond the buyer’s control, the deliverer must return the payments which have not been covered by deliveries, with interest from the day of receiving to the day of return. If the contract is not fulfilled for reasons other than force majeure the buyer may use another alternative after negotiating with the deliverer: before or during the first coming felling year the buyer has the marking of timber done by an impartial forester and takes a reasonable charge for direct marking and logging costs from the deliverer.

In practice the seller often agrees to have the transfer of the titles take place in the delivery measurement and permits the transportation before the total sales price is paid (Table 17). This is explained by the fact that the buying firms are generally known to be in sound economical condition.

| The transfer of title is agreed to take place: | Communes: | Kuomin: | Frequency value | Runsaus: | Luku |
|-----------------------------------------------|-----------|--------|---------------|---------|
| a. in measurement — luovutusmittauslauessa | 360       | 78     | 1 251         |
| b. after the sales price has been totally paid — kauppahinnan tulluus kokonaismaksetaksi | 82        | 17     | 836           |
| c. after a certain time from measurement — määräajan kulussa loppumittauksesta | 23        | 5      | 186           |
| Total — Yhteensä                            | 474       | 100    |               |

Nothing corresponding to bank guarantees or letters of credit applied in export trade is known in the marketing of roundwood from private forests.

The recent developments in the means of payment has resulted in the wide use of checks and money orders. In the opinion of the Forms Committee (June 16, 1954), a payment has been carried out according to the agreement when the money has been deposited at the bank or the money order made or the cash sent to the seller by the date stipulated in the contract. May it be pointed out that the Supreme Court in its ruling (KKO II 31/Feb. 10, 1926) considered that the buyer had not broken the contract which stated that the payment was to be made at the delivery of the logs when the buying firm immediately following delivery had sent the money to the seller through a bank.

In the buyers’ forms with the recognition of the Forms Committee used in 1956—58, the terms of payment were in accordance with the standard forms. On the front page there can be seen slight changes and additions made, for instance, for the paying procedures. Other buyers’ forms are somewhat more variable. Common to all is that the paying is assumed to be done in at least two stages: advance payment and final payment. Many firms have their forms designed for paying in three stages: the down payment made upon signing the contract, the advance financing (in one or more installments according to an agreed schedule) and the final settling of the account after the measurement and delivery. Even when the contract form includes only the advance financing and final payment, as in the
standard forms, the making of down payments has apparently been rather common.

The schedule for advance payments is agreed upon individually in each case. In delivery sales it is rather common to find these payments made according to the buyer’s judgment as the delivery progresses. With this clause the buyer has wanted to reduce the risk which is related to too high advance payments.

The final payment according to the forms is usually made within a certain period from the measurement and delivery. Most often this period is printed in the form and it varies from a week to a month, the one-month payment period being most common.

The clauses on the guarantees of payment have been almost the same as in the standard forms. However, the seller’s lien has been excluded. The interest for unmet payments is higher than in the standard forms, 8–10 %. In some cases it has been tied to the discount interest of the Bank of Finland but defined, for instance, as 1 % higher than the current interest per cent.

In the contract forms of 1936–38 it was common to find a three-stage payment:
1. down payment upon the signing of the contract;
2. other advance payments before the end of harvesting;
3. final payment after the final measurement.

A variety of regulations has governed the payments in group "2" which also may have included several individual installments. In stumpage sales, especially in the forms used in Northern Finland, this payments was assumed to be made immediately after the marking of timber (in 1936 the marking was commonly carried out by the buyer after the signing of the contract). In the country as a whole, however, it has been more common to design a schedule for the payments with times agreed with at least one-month precision.

In the advance payments for delivery sales it has been quite common to use the wording: "according to the buyer’s judgment as the logging progresses." In some cases it has been stated that a certain part (e.g., 3/4) of each individual delivery is paid (in these cases all the measuring is not done at the same time). As an interesting detail, the contract form of one firm has required the seller to pay interest to the buyer for advance payments over the period from receiving to date of delivery.

The making of the final payment was usually done in connection with the delivery measurement. In Northern Finland, when the floating on minor rivers after the delivery measurement was also carried out by the seller, the final payment was to be made when the wood was delivered to the floating union.

The Sales Statute of 1922 and the amendment to it made in 1931 (As. 230/1931) regulates the paying for stumpage sales — usually done with a two-year extraction period — so that the buyer pays half the total price by January 31 of the first contract year. The balance for the wood delivered during the first year must be paid by August 31. The date serves also as a deadline for the payments for those undelivered products which the buyer would have been responsible to remove, according to the Sales Statute, during the previous winter. This refers primarily to the cases in which a buyer has been granted an extension of removal period as provided by the Sales Statute (§ 12).

This was the prevalent practice in making payments in 1936–38. In delivery sales where a one-year contract period was commonly applied, half of the sales price was to be paid in January at the latest and the rest by August 31 during the same year that the products were delivered. Hence, the date for final payment is later than in private forests.

Both in stumpage and delivery sales the buyer had to give a guarantee approved by the State Board of Forestry within four weeks of the approving of the offer. In auction sales there was a bidding fee to be paid according to a set scale before the beginning of the auction.

In 1956–58 the payments were made according to the pattern below:

a. the buyer has paid 20 % of the sales price in the auction or, in the case of sales with written contract, within two weeks of the dating of the contract;

b. by January 31 of the first contract year the payments altogether have made up 60 % of the total sales price;

c. the rest has been paid by August 31.

The quantity of wood which the buyer is required by the Sales Statute to accept whether he has taken all or not has served as the basis for final charging.

According to the Sales Statute the buyer must, within four weeks of getting the notice of an approved offer, submit a guarantee approved by the State Board of Forestry for paying the price and fulfilling other conditions of the sale. The State Board has reduced this time to two weeks. The guarantee must be so designed that it is valid also if extension of removal and payment period is granted.

In case of delayed payments an interest of 10 % must be paid over the period of delay. The Ministry of Agriculture, however, has the right to change the interest rate.

In the contracts with the State the buyer has no security problems.
In Norway the terms of payment have to be considered separately for the trade between the forest owners and the sales associations and between the sales associations and wood-using firms.

When making a delivery sale the forest owner after filling the *innelling* has been entitled to a non-interest *advance payment* from the sales association. Ordinarily the maximum has been 40% of the estimated sales value, in rare instances even higher. For the advance payment exceeding the maximum, the forest owner has had to pay bank interest. If the forest owner has not taken the advance payment, his contract price has been raised by 1.5%.

The practice has been somewhat variable at different times. Quite recently each forest owner has been given a 1.5% increase in the contract price but all advance payments have been under the burden of 3–5% interest.

The balance of the sales price has been paid to the forest owner soon after the sales association has received payment from the wood-consuming firm.

In the case of standing timber sales from the forests of the members of forest owners’ organization payments are made through the forest owners’ association although the contract is made directly between the forest owner and the consumer firm. The payment schedule is defined in the contract. Non-members naturally receive their payment directly.

The contracts between the sales associations and wood-using enterprises have recently been made to define the amount which the seller can receive as a non-interest advance payment (cf. Avtale om tømmerprisene... 1959/60). The sales associations have wanted to discard this practice which originates from the earlier usage between the private middlemen and wood-using firms. They have been able to include in the contracts a proviso stating that the buying firm pays a bonus of 1.5% (for pulpwood barked during sap flow and delivered by the end of the same year that the sale is made, it is 1%) of the gross price if the forest owners’ association does not take an advance payment.

According to the contract the sales price must be paid in full by June 25—July 15. The buyer gains title to the wood immediately after the delivery measurement has been made.

It can be seen that terms of payment in both steps of the trade are very similar.

Although the possibility of receiving a 1.5% increase if no advance pay-
date by which it must be covered with deliveries. If this is not done it is
— from this date on — subject to interest (in 1956/57 6 %).

There are certain regional variations in payment procedure.

Part of the advance payments made by the forest owners' associations
are financed by association funds which have accumulated from the pay-
ment of shares. Each member upon joining the association must redeem
a certain number of shares usually depending on the area of his forest
holding. The provisions are stated more precisely in the association's rules.
The payments on shares are retained by the association as a loan from the
forest owners. Each member's part gathers interest and is annually in-
creased by adding the profits on shares and by withholding part (1—2 %)
of the payments the member receives for his timber.

The forest owners' associations also take bank loans for the advance
payments and for financing current expenses. In addition they are entitled
to advance payments from processing firms as mentioned above.

Payment procedure in the direct selling between forest owners and
industrial users follows largely the same pattern as in the trade between
forest owners and their associations. Particularly in the stumpage sales
the terms of payment are often very flexible. In many cases payment is
made "when required" (på anfordran).

In the roundwood sales from the Swedish state forests payment must
be made, according to the sales regulations (DRS, m. 245 § 6):
a) in stumpage sales within 6—8 months after the closing of the con-
tract. The date must be fixed in the contract;
b) in delivery sales not later than 3—4 months after the completion
of the delivery. In case of delivery involving transport of timber
the time is only 30 days. A certain payment date — or payment time
in days reckoned from the date of the invoice — must be fixed in the
contract.

There are very elaborate regulations concerning the guarantee required.

It can be seen that the terms of payment in Finland and Scandinavian
countries have many similar characteristics. The main difference is prob-
bly the more extensive use of — interest free — advance payments in
Finland.

9. Summary of the main results

Although forestry of Finland and the Scandinavian countries has much
in common (export of forest products, rather similar structure of forest
ownership and roundwood buyers, the seasonal rhythm of the sales), great
differences do occur in the roundwood market. The greatest of these is to
be found in the channels of marketing from private forests: in Norway the
wood is primarily marketed through the forest owners' associations, in
Finland direct individual selling is applied, while Sweden represents a
"compromise" in the sense that both channels are quite common.

The institutional contribution and thereby the producers' contribution
to the market thus is much more important in the Scandinavian countries
than in Finland. This study has briefly considered the underlying causes
concluding that the forest owners' marketing organizations in Norway and
Sweden were probably formed in the first place, but not solely, to protect
the forest owners' interests in price formation, to counterbalance the as-
associating of buyers. In both of these countries the prices for roundwood
are determined on the organizational level. In Norway it can be spoken
of as bilateral monopoly, whereas in Finland the price formation mechanism
has retained its "original" competitive nature although the marketing
pattern itself deviates greatly from perfect competition.

We should, however, point out that especially in Sweden the creation
of demand for roundwood, especially of small-sized wood has been a great
factor in the formation of forest owners' associations. Later, this effort has
appeared in the work of the association as a strong interest in establishing
new forest industry particularly in areas of low demand.

The present investigation cannot provide the final explanation of the
causes for the basic differences between the three countries. It has only
been possible to present a group of probable factors where differences are
obvious, such as the structure of private forestry, geographical conditions,
historical and cultural background, State control, and the structure and
attitude of the buyers.

It is important to note that the strong institutional influence in the
marketing by Norwegian and Swedish forest owners appears also in the
the technical phase of marketing; the trade customs. The most conspicuous is the difference in the measuring of roundwood which in Scandinavia is done according to detailed public regulations and mostly is carried out by the officials of special measuring boards. The greater activities of the forest owners especially in Norway appears also in the almost exclusive use of delivery sales.

The other trade customs as well are more uniform in the Scandinavian countries than in Finland. It ought to be emphasized that the uniformity in those countries has appeared earlier through the work of the institutions — and therefore it has proceeded further — than in Finland where a real tendency toward uniform practices first appeared during the Second World War and shortly thereafter.

The Forms Committee, which began its work in 1950, has in about a decade brought about significant unification in the trade customs in Finland and this development can be expected to continue.

The marketing from State forests in all three countries is based on legislation on public ownership and it has differed from the practices used for private forests. The contrast in the origin of trade customs between State and private forestry has been most conspicuous in Finland where the customs in the marketing from private forests have mostly been dictated by the buyers while those for State forests by the forest owner (State). The three countries still have much in common in the channels of marketing and sales methods, as we have now seen. This especially holds true for Finland and Sweden.

Without going into the details, there is reason to review the two directions of development which have become evident in this investigation.

First, we have seen that the producer's role in marketing has essentially increased since the 1930's. This is shown in increased marketing activity through forest owners' associations in Norway and Sweden. In Finland, too, the work of forest management associations directed to the advancement of marketing (the marking of timber, commercial service, etc.) has grown considerably. Also, the relative importance of sales with contract for delivery has generally been growing, in addition to which the delivery sales are becoming more active, including additional marketing functions, as seen in the long-term contracts from State forests.

The forest owners' participation in forest industry and in the export of roundwood can also be interpreted as an expression of the roundwood producers' growing interest in marketing. This activity has significant scope in Sweden and Finland.

A second line of development appears in the giving of more detailed norms in trade customs. As an example, there has been a change in the expression of the quantity of sale from the indefinite "at least" or "app-roximately" to more precise upper and lower limits. In addition, the tendency seems to be toward the lowering of this percentage from the former twenty or ten per cent to five per cent. The contract period, too, is becoming shorter. The growing popularity of the delivery type of sale has an indirect influence of the same sort on both the percentage and contract period. The norms on the measuring of roundwood as well have become more exact. And one more thing which can be mentioned here is the appearance of entirely new clauses. For instance, the force majeure was but rarely found in the forms used in the 1930's in Finland.

One matter of principle connected to trade customs still needs to be pointed out.

As the marketing from State forests is based on legislation regulating public ownership and since the development of trade practices in private forestry has been greatly influenced by institutions, i.e., interest groups, it seems fitting to ask whether these any longer are trade customs in the "original" sense of the word. Especially for the State this comment is justified since in that case the "trade customs" have been formed in a rather straightforward manner, dictated by public officials. And they have indeed in many cases more the nature of a law than of a trade custom. But similar reservations have been made for the customs codified by interest groups, as pointed out by Raninen (1934, pp. 26—27). In the latter case there are, however, two factors which favor the application of the term "trade custom". First of all, the trade customs in the roundwood market were earlier characterized by a great diversity and they were almost entirely dictated by one party, the buyers. Second, the Forms Committee in Finland and frequently the organizations in the Scandinavian countries have used earlier contract forms as a source in designing new clauses. On these grounds it can be expected that one of the principles which Raninen uses to characterize trade customs, "good and reasonable", is being considered more now than in the past.
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SELOSTE:

RAAkapuun markkinointi suomessa ja skandinavian maissa

Erityisesti markkinointiteiden ja kauppatapojen kannalta

Tutkimustehtävä ja -aineisto


Primäärlaineistoa olen koonnut pääasiassa Suomesta johdollani suoritetun, hakkuvuuesiin 1955/56 ja 1956/57 kohdistuneen yksityismetsien otantatutkimuksen yhteydessä. Aineistoa olen täydentänyt yksityismetsien osalta metsähoidolautakuntien ja metsähuoltotoimistojen neuvojen väliyksellä v. 1959—60 suoritetun ns. markkinointitiedustelun avulla. Valtion metsiä koskeva aineisto on koottu metsähallituksesta, pääasiassa sen liikeosastolta, minkä lisäksi raakapuun markkinointia koskevat julkis-suhteelliset säännökset ovat olleet tutkimuksen pohjana. Ns. kaavakotoimikunnan pöytäkirjat liitteineen ja 12 eri yritykseltä saadut kauppa-

1 Olen käyttänyt termiä markkinointitie (channel of marketing) esim. KASKIMIESEN käyttämän jakelutien (channel of distribution) asemasta, koska myös termi sisältää on tässä jonkin verran toinen vastaten lännöllä amerikkalaisen marketing-termin alaa (ks. KASKIMIES 1955, s. 39).
kirjakaavakkeet ovat em. lähteenä ohella muodostaneet tärkeän perustan kauppatajoja käsittelevälle tutkimuksen osalle. Aineistoa olen täydentänyt haastattelemalla asiantuntijoita ja eräistä muista lähteistä, jotka on mainittu tekstissä.


Vertailua yhteenveto tuloksista

Yhteenvetona voidaan todeta, että vaikka Suomen ja Skandinavian maiden metsä- ja puutaloella on tiettyjä yhteisiä piirteitä (kaikki metsäöntuotteet vientiin, melko samanlainen metsäömistö ja ostajakunnan rakennus, kauppakaupan markkinoiden kauppatalous) näiden markkinoinnissa on suuria eroavuksia. Suurin eroavuus on yksityisvesien markkinointi:

Virtailevat yhteenvetotuloksista:

Kun kuitenkin syytä alleviivata, että erityisesti Ruotsin metsäömistajayhdistysten syntymiseen on keskeisesti vaikuttanut myös raakaaperäinen, taitava ja kiinnostava yksityiskohtainen tutkimus. Myöhemmin tämä on ollut yhtenäinen osuus kaikista markkinointimunneloista, joilla on ollut monia vaikutteita metsäöiltä ja metsäötiloista.

Markkinointitöiden onnistuminen on perustunut monesti se, että niillä on ollut tarpeeksi aikaa ja resursseja kehittää ne. Tämä on ollut tärkeää myös kaupan ja yritysten markkinointikeskuksissa, joissa markkinointifirmat ovat tehneet monia suosittuja tuotteita ja palveluita. Euroopan unionin sisämarkkinoiden avulla on ollut mahdollista parantaa myös markkinointia kaupungeilla ja kaupungeissa.

Markkinointitutkimus on ollut tärkeä osa kaupan ja yritysten markkinointia sekä tulevat markkinointijärjestelyt ovat ollut tärkeä osa markkinointia. Tästä voidaan tehdä päätöslauselmia, että markkinointi on tärkeä osa kaupan ja yritysten toimintaa. Markkinointi on tärkeä osa kaupan ja yritysten toimintaa ja sen on tärkeää pitää huolen.

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tymisestä pitää myös raakapuun tuottajain teollisen toiminnan viriämistä, mikä toiminta etenkin Ruotsissa ja Suomessa on jo saavuttanut merkittävän laajuuden.


Nimenomaan kauppatapojen osalta on vielä syytä viitata eräaseen periaatteeksi.

### Questionnaire on the Marketing Methods of Industrial Wood Sold from Private Forests

**Yksityismetsistä myytävän ainespuun markkinointimenetelmä koskeva tiedustelu**

**For the years 1956—58**

(för dissta vuosiin 1956—58)

<table>
<thead>
<tr>
<th>District Forestry Board:</th>
<th>Information about</th>
<th>commune</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metsähallintolaitokunta:</td>
<td>Tiedot koskevat</td>
<td>n.kuntia</td>
</tr>
</tbody>
</table>

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#### 1. Mean of contact between the seller and buyer

*Kuinka ostaja ja myjä saavat kosketuksen lainsäisa*

**a.** The buyer finds out about sales plans and makes an offer at random going from house to house

Ostaja selvitää myyntiaukkeet ja tekee tarjouksen umpimääriä kautta tuleen kaiken.

**b.** The buyer makes an offer by using the marking records of the Forest Management Association and District Forestry Board advisors

Ostaja tekee tarjouksen käyttäen hyväksennä mhy:n ja mhl:n neuvojen leimikkolaatetta.

**c.** The seller contacts the buyer

Myyjä ottaa ensinnä kosketuksen ostajaan.

#### 2. The trees are marked

*Leimaus suoritetaan*

**a.** before making the sale

ennen kaupanötä

**b.** after making the sale

kaupanötön jälkeen
3. The forest owner makes the sale
Metäomistaja suorittaa kaupanteen
a. independently
kokoontaa omiin neuvoin
b. with the assistance of an F.M.A. or D.F.B. adviser or another professional forester
läyttämällä mänt:n tai mänt:n neuvoin tai muiden ammattimiehen apua

c. by authorizing an F.M.A. or D.F.B. adviser or other professional
forester to close the sale
valtuuttamalla mänt:n tai mänt:n neuvoin tai muita ammattimiehiin päätettävä
kaupan

In the period 1956—58 there have been to my knowledge
joint sales in the area of this commune (joint sales offers from
several forest holdings)
Vv. 1956—58 liiteosi en taltat kaupan alueella yhteisymmärrys
(aseuman metäällä yhteisä myyntikapusta)

4. The sales are made
Kaupissa käytetään

a. using contract forms designed by the buyer
ostajan laatimia kaavaileita

b. using the forms approved by the Central Association of Finnish
Woodworking Industries and the Forest Council of the Central
Union of Agricultural Producers (the forms printed by the buyer
but by content corresponding to the approved forms of the
associations mentioned above are included)¹
Suomen Puupiljustyöolliosuunen Keskkäliiton ja Maataloustuot-
tajain Keskiyliiton metäväaltavuorien vahvistamia kaavaileita
(tahán siitävät myös ostajan punnutamat, mutta asiastustööllään
em. järjestöjen sopimia vastaavat kaavaileet)¹

c. Only on the basis of oral agreement
kauppa perustuu vain suulliseen sopimukseen

5. Contract period

Sopimusaika

Sales of
Standing Timber
Pystykauppa
Hankintakauppa

Delivery
Sales

a. cash sales
käiskauppa

b. up to one year (including contracts with ex-
tended hauling)
enintään 1 vuosi (tähän luetaan myös sellaiset seumpimukset, joissa myönnetään pidennetty ajo-
aika)

c. over one year
pitkemp kuin b-kohdassa mainittu

6. Means of expressing quantity to be sold.
There will be sold:
Myyttävän määrän ilmaisutapa. Myyään:

a. trees marked in a certain stand (or area)
tietty leimikko (tai alue)

b. a certain amount of wood (e.g., approx. 200
cum.)
tietty puumäärä (esim. nein 200 m³)

c. the upper and lower limits of the amount are stated
(e.g., 200—300 cum.)
mainitosta määrän ylä- ja alaraja (esim. 200—
300 m³)

When alternative 6b is applied the amount must
be within % (e.g., 10 %) of the stated
Milloin valintajohto 6b sovelletaan, määrä saa ylit-
tää tai alittaa sopimukseen mainitun määrän

7. Consideration (recognition) of log size in the
price determination of sawlogs.

Logs are priced:
Järeiden huomioon ottaminen saa-
tukkien hinnoittelussa.

Hinnoittelussa sovelletaan:

a. on price scale based on mean volume of stems
rungon keskiylioton perustusta hinta-asteikkoa

b. on price scale based on mean volume of the logs
pölyn keskiylioton perustusta hinta-asteikkoa

c. on price scale based on the top diameter of the
logs
pölyn laatuoptimumaan perustuvaa hinta-asteik-
koa

d. the size is not actually considered but is taken into
account on the basis of assessment in forest
pölyn laatuoptimumaan perustuvaa hinta-asteik-
koa, vaan ostaja arvioi liitumääräisen jär-
estyshyökkäen joka metässä tai leimautetun
perusteella

8. — — —

9. The measuring is done by
Mittauskseen suorittaa

A. In the sales of heavy (sawlog-
size) timber:
Järeän puun kaupissa:

a. the buyer alone
ostaja yksin

b. the buyer and seller together
ostaja ja myyjä yhdessä

¹ The approval is indicated in the upper corner of the form.
¹ Tästä on merkintä kauppakirjakaavakseen ylälukemassa.
72.4 Marketing of Roundwood in Finland and the Scandinavian Countries

DIRECTIONS FOR COMPLETING THIS FORM

1. The questionnaire concerns only the following kinds of industrial wood:
   - coniferous sawlogs
   - birch veneer logs
   - pulpwood
   - pitprops

   The answers should refer to industrial wood as a whole unless otherwise specified in the individual question. This questionnaire does not concern fuelwood.

2. The questionnaire covers the period 1956–58.

3. The area unit for the questionnaire is the commune. A separate form must be filled for each commune.

4. The questionnaire is answered by a forestry adviser appointed by the District Forestry Board or the Forest Management Association on the basis of his knowledge of local marketing conditions. When several advisers are working in the same commune, it is recommended that they discuss the questions together.

5. The questions are answered on this form. The most common alternative for each question is indicated by the figure 1, the next by 2, and the least common by 3. 0 is used to indicate that the practice suggested by the alternative has not been used at all. If, for example, the first question is answered:

   a. The buyer finds out about sales plans and makes an offer at random going from house to house.

   b. The buyer makes an offer by using the marking records of the Forest Management Association and District Forestry Board advisers.

   c. The seller contacts with the buyer.

6. The answers are made on the basis of the number of sales.

KAAVAKKEEN TÄYTTÄMISOHJEET

1. Tiedustelua koskee vain seuraavia ainespuun tavaralajeja:
   - havusatukit
   - vanerikoivut
   - paperipuu
   - kalvospuu

   Acting in the area of the commune since 19... lähtien
Milloin ne on kaavakkeessa otikoita erikseen jonkin kysymyksen kohdalla, myös vastaukset annetaan erikseen kahvikoko määrällä tai -ryhmänä kohdistavasta. Muodoin vastaukset tarkoittavat näillä tavarastojen yhteisesti.

Pöytäpuu jää tiedustelun ulkopuolelle.

2. Tiedustelu kohdistus vuosijaksoon 1956—58.


4. Tiedustelunaan vastaa paikallisen markkinoittajien tunteamuisen puhdistamalla metsänhoitotakuuman tai metsänhoitolyhydykseten sijainnin nimeämä metsänvaltaus tai metsänhoitonaikaja. Milloin saman kunnan alueella teillä useampia naapurijaa, elissä sovaita, että he yhteisesti pohtisivat tiedusteluun liittyvien kysymyksien.

5. Vastauskset annetaan tälle kaavakkeelle. Kunkin kysymysryhmän yleisimmän vaikutukset kohdalla merkitään kaavakseen oikeaan laitteen a, riveille ja a, kohtaan a, seuraavaksi yleisimmän luku 2 jne. Jos vaikutukset ilmentävät käytäntöä ei esiinny lainkaan, ao. kohtaan merkitään 0. Jos esim. ensimmäinen kysymyssarjaan vastataan:

1. Kuinka ostaja ja myyjä saavat kosketuksen toisiinsa
   a. Ostaja selvittää myyntiaikaa ja tekee tarjouksen umpimääräisesti talona kultien,
   b. Ostaja tekee tarjouksen käytävän hyväksikseen metsänhoitotakuuman
   c. Myyjä ottaa ensimmä kosketuksen ostajaan

   Vastaan on tulkittava seuraavasti: Keskettä vastaan ja myyjän kesken syntyy yleisimmän nimen, ennen että ostajat tekevät tarjouksensa käytävän hyväksikseen metsänhoitotion laitteen ulottavalla kosketuksella myyjällä (luku 1 kohdassa b). Sen ohessa he selvittevät myyntiaikaa ja tekevät tarjouksia myös umpimääräisesti talona kultien (luku 2 kohdassa a). Sen silloin kauppoja ei tehdä lainkaan siten, että myyjät ennen ottaisi kosketuksen ostajaan (luku 0 kohdassa c). Jos c kohdassa olisi luku 3, se merkitsisi, että käytäntöä esiintyy jokin vähemmän kaupan b ja a kohdissa mainittua.

6. Vastaukset annetaan sitämmin pitäen kauppojen laukumäärän jakaumusten erilaisten tapausten kesken.

PINOTAVARALEIMIKON TAKSATORISET TUNNUKSET JA NIIHEN VAikutUS LEIMIKKOARVIÖINNIN TARKKKUUTEEN

KULLERVO KUUSELA

SUMMARY:
MENSURATIONAL CHARACTERISTICS OF CORDWOOD STOCK MARKED FOR FELLING AND THEIR EFFECT ON THE PRECISION OF THE STOCK ESTIMATION

HELSINKI 1960