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TIMBER AUCTION IN ROMANIA AND THE BEHAVIOUR OF THE PARTICIPATING ORGANISATIONS – THE NEED FOR CHANGE

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Abstract: *The paper focuses on a comparative analysis of the timber auction (divided by species and types) – including two dimensions: total timber mass resources from a specific area (coniferous and deciduous, age of the trees, diameters and height, health) and forest accessibility – carried out in various areas of Romania (especially in Maramures) and their effects on the final price of the timber.*

Key words: *timber auction, price, competition.*

1. Introduction

The global timber market is subjected to the same legislation as any other market, but with some specific traits influenced by:

a. *total timber mass resources* from a specific area (coniferous and deciduous, age of the trees, diameters and height, health);

b. *forest accessibility* (which is measured by the degree of availability of all types of roadways and railways and by the distance between the felling site and a permanent means of transportation – especially roads);

c. *nature and wood characteristics* – which influence the production costs and directly the auction selling prices; these characteristics are influenced by: the wood species determines the maximum duration of storage until the wood deteriorates; wood preservation (for obtaining the maximum price) can be very costly; the best types of processed wood (especially timber) are obtained from large logs – which incur transportation issues, especially for long distances (significant increase in costs); wood is mainly felled during the cold season (October through March for the Northern Hemisphere), therefore transportation and handling require increased costs and special preservation measures;

d. *nature and characteristics of the* primary *products*, finite and semi finite, or wood derived products or wood based products;

e. *the influence of seasonality and major events* (natural disasters) on the production and trading of wood and wooden products;

f. *the way in which the price of wood is calculated* in different areas (referring to the asking price or the direct price offer made by the owner or the administrator of the forest); this

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calculation method differs from area to area influenced by the type of ownership, state owned or private; this asking price is or is not accepted by the market; we have determined that the price is formed in the different manner that the price for an industrial product (where the exact production and marketing costs can be determined);

g. *the sales method* (auction or direct sale) and the asking and sale prices in auctions throughout time as well as the presence or absence of a wood stock exchange (as an institution) in the areas where the auctions take place and its influence on the market;

h. *the degree of production and trade concentration* for several domination companies, at a regional or national level;

i. *the effects of regional or international crisis* upon the general development level of the wood based industries (furniture, construction, cellulose and paper, wooden boards and flooring, biomass energy, etc.);

j. *the availability of machinery and vehicles of the fellers* (saws, forest tractors, cable transportation, other specific installations, rigging, etc.).

In the same manner, we should not ignore the fact that the different areas wood markets are *heavily influenced by political decisions* by passing restrictive laws or on the contrary by loosening the legal conditions concerning felling. Both can lead to raising or lowering prices which distort the wood market, with both short and long term effects.

The paper focuses on the most important characteristic of the Romanian wood market: ***the timber auctions***, focusing on the Northern area (Maramures). The paper is the first in a series which focuses on this issue. The paper is based upon the author's research (2001-2010).

The main topics approached in the paper:

1. if a methodology (in this case the specific one concerning timber auctions) *is* improperly formulated and verified, its effects can be contrary to the intended purpose (fairness, transparency, efficiency);

2. only a long term study of the phenomenon can correctly underline its effects on the involved sectors (forestry and the timber industry);

3. at this point we can not copy the methods and techniques from other countries (the current Romanian timber market is far from being fully functional and consequently adapting to the social-cultural environment is a must);

4. a starting price which is too low or poorly determined has long term negative effects along the entire production and distribution processes as well as for the consumer;

5. change in this field is paramount.

Research methods:

1. *comparative analysis* of the initial asking prices and final price in auctions for a period of three years, for the main species and wood types;

2. *case studies* and economic and financial performances analysis as well as the behaviour of the main participating companies in the researched area (Maramures). The research began in 2001 and has been intensified in 2007 (through a EUROPEAID / 122573 / D/SER.RO research contract) and will continue.

2. Timber mass auction

2.1. Criteria for auction

Timber mass auctions for wood felled in Romania is organised by the following criteria:

a. ***The type of timber mass on sale***

***** *shaped round wood* (wood harvested from forest areas, without branches, and cut to standard size for the following types: round wood for timber, round wood for aesthetic veneer, round wood for technical veneer, standardised round wood for timber, wood for mining and construction wood; harvested, cleaned, sectioned and split wood for: round and split wood for cellulose paper and fuel);

***** *standing wood* (trees from forests are sold as they are, before being felled); this method is suited for felling companies, which cut the trees, clean the branches (and the bark if it is required), section the wood into standardised lengths, collect the logs (bringing the logs to a roadway or final storage), transport and storage;

b. ***The auction asking price*** is established according to:

* *species* (the highest prices are set for very valuable wood – oak, sycamore, common yew, walnut, wild cherry; medium prices are the most common and refer to timber and construction wood – common beech, silver fir, pine, common spruce, and hardwoods which are not commonly used in industry but rather in construction and households – mountain elm, common ash, silver birch, white beech; the lowest prices are set for poplar, willow, even white beech, in general species which can not be processed for veneer or large pieces of timber and soft wood species which are rarely used in construction);

* v*olume* (the base dimensions are taken into account: diameter at the base end and at the top end, length – these are the first indicators of the future usage: timber, veneer, construction, cellulose, fire, etc.);

* *possible usage* (for obtaining timber, aesthetical and technical veneer, construction wood, cellulose and paper, fire wood; to be able to establish the price we must take into account the quality and state of the wood);

***** *forest certification* – if the wood has grown in regular forests or in certified forests;

***** *forest administrative costs* (the costs of developing the forest: seeding, planting; the costs of maintenance from sapling to mature, ready for felling tree; the costs for fighting pest, fires and other natural disasters; the costs of security; the costs of registering and marking trees; all these costs except marking and felling are usually calculated as an average of the costs which are involved at the moment in a similar forest area, for each particular type of cost);

* *the accessibility of the wood on sale* (if the wood is in a easily accessible warehouse on a national or local road; if the wood is at the edge of county road or a forest road accessible to normal freight vehicles; if the wood is at the edge of a forest road accessible only to specially equipped means of transportation);

* *the asking and sale prices of previous auctions* (there is a database for previous auctions which can be consulted to determine if the prices set for a current auction are viable or not);

* *the current wood price levels on national and international markets* (the selling prices on different markets are considered, both national and international, by species and usage; we can see that the price is usually higher if the quantity auctioned is smaller compared to the attempts to sell large and very large quantities).

c. ***National legislation regarding auctions*** (mainly OUG nr. 34/2006 regarding public auctions, modified through OUG nr. 72 from the 17th of June 2009).

2.2. Auctions in Maramures area

Following the auctions organised between 2005-2009 in the area of the “Maramures RA” Forestry Department form Baia Mare (the cases where data is available) we can observe these:

1. Regarding shaped wood, the number of auctions organised were 7 in 2005, 39 in 2006, 45 in 2007, 50 in 2008, 44 in 2009, and 51 in 2010.

2. The very high number of auctions is not evidence that large volumes of wood were traded, but that they (regardless of quantity) were not sold on the first auction and had to be rescheduled for a future one. For example: in 2007 beech round wood for timber, with an asking price of 160 lei/mc was not bought, neither at OS Sighet (11.2 mc) nor at Magherus (36.8 mc); in 2008 spruce round wood for timber was neither not sold at an asking price of 160 lei/mc (3.0 mc at OS Sighet) nor and at 220 lei/mc (48.0 mc at OS Baia Mare).

We must underline the fact that the number of auctions is very high. In Europe, the main markets have around 4 or 5 auctions a year and only under exceptional circumstances another one or two are held. This was also the case of Romania between 1998 and 2002 when there were only 6 or 7 auctions a year.

The high number of auctions in the researched geographical area (as is the case for all Romania) is first and foremost very expensive, and secondly shows a degree of unprofessionalism both in the case of the sellers and the buyers.

The situation of the auctions on the wood market are presented in the following table, divided by the main species which grow and sold in the Maramures area (beech and spruce) and for a species which is not as present but has a high ecological and economical value: sessile from the oak family.

The type of auctions is those for shaped wood sold in an area with road access.

For each situation we have the minimum and maximum asking and selling prices.

The data is taken from the our research (participations in auctions), study of auctions documents, from the database of the National Department of Forests – Romsilva, from the section Wood Market History and from the documents of the Baia Mare Forestry Department.

Several aspects concerning the current situation:

***** [*Common Beech*] in most cases the selling price is the same as the asking price. The exception is 2007 where for round wood for timber the price rose from 110 to 120 lei/mc (a rise of 9%);

- the fact that the selling price is the same as the asking price is not ideal, and does not increase the participants' trust in the auctioning system and improve the wood market; this situation proves that, in most cases, there is an unspoken convention between the participants (there are ‘dummy’ bidders, present only to ensure the minimum number of three participants; the same for ‘cross bidding’ and ‘you scratch my back and I’ll scratch yours’, to be able to buy at the asking price);
- fire wood sold in 2007 for 25 lei/mc, only to increase in two years to 60 lei/mc (an important rise of 140%); this increase is blamed both on the increase in demand and on the artificial lowering of the offer (aimed at increasing the prices);
- there are significant differences between the minimum and maximum asking prices for some products; leaving out the difference in quality between two batches and other objective traits (including an exceptional high demand for that particular type) in most cases we have an artificial increase in the asking price to obtain higher profits

by speculating particular market conditions, and in some cases blocking the sale to wait for a 'particular' client who could not attend; sometimes this situation is caused by the fact that large buyers can afford to pay more to have the best wood and so gain a significant advantage over the smaller companies who do not have the financial resources to compete with them.

* [*Common Spruce*] most of the conclusions drawn for beech are available for spruce as well; nevertheless there are some particular traits: there is a strong variation between the auction prices of fire wood, from a minimum of 25 lei/mc to a maximum of 90 lei/mc (at 91 it did not sell); for 25 lei/mc the wood contains branches, trunks and other damaged parts of the tree; for 90 lei we have the good quality wood, which is easy to split and has few defects; as was the case for beech, in 2008 and 2009, wood for construction was not auctioned, it was included in the wood for timber category.

* We can observe that the auctioning average (the difference between the asking and selling prices) in 2008 was about 25 for wood for timber, following the downwards trend set by the previous two years, when the auctioning average dropped from 10% to 3%. What is striking is that general prices (both starting and asking) grew from year to year with a rate higher than inflation.

The participants in Maramures county auctions Table 1

Participants	**Quota** [%]				
	2005	*2006*	*2007*	*2008*	*2009*
1. Baia Mare Forestry Dpt.	18,4	18,2	19,2	19,7	21,4
2. Holzindustrie Schweighofer	17,3	17,3	18,8	20,5	22,3
3. R.G. Holz	12,0	11,7	12,2	11,9	13,2
4. Foremar SA	10,8	10,3	10,6	11,9	12,7
5. Dencova Bistra	7,4	8,0	6,5	9,7	8,5
Total 1-5	*65,9*	*65,5*	*67,3*	*73,7*	*78,1*
Total 2-5	*47,5*	*47,3*	*48,1*	*54,0*	*56,7*
Other [0,1- 3%]	34,1	34,5	32,7	26,3	21,9

As the unsold goods at the end of every year (after several auctions) were relatively small we can say that the prices listed in the table above are close to the real price of coniferous wood on an undistorted market.

Nevertheless, we can not overlook the fact that the percentage of high quality wood has decreased in the last two years – wood types in the aesthetic veneers section. The same situation occurs on the beech round wood market where there were no important unsold batches at the end of the year.

For the studied area, we have several companies with a market share of over 5% of the total wood sold.

The participants in Maramures county auctions Table 2

Participants	**Quota** [%]				
	2005	*2006*	*2007*	*2008*	*2009*
1. Baia Mare Forestry Dpt.	18,4	18,2	19,2	19,7	21,4
2. Holzindustrie Schweighofer	17,3	17,3	18,8	20,5	22,3
3. R.G. Holz	12,0	11,7	12,2	11,9	13,2
4. Foremar SA	10,8	10,3	10,6	11,9	12,7
5. Dencova Bistra	7,4	8,0	6,5	9,7	8,5
Total 1-5	*65,9*	*65,5*	*67,3*	*73,7*	*78,1*
Total 2-5	*47,5*	*47,3*	*48,1*	*54,0*	*56,7*
Other [0,1- 3%]	34,1	34,5	32,7	26,3	21,9

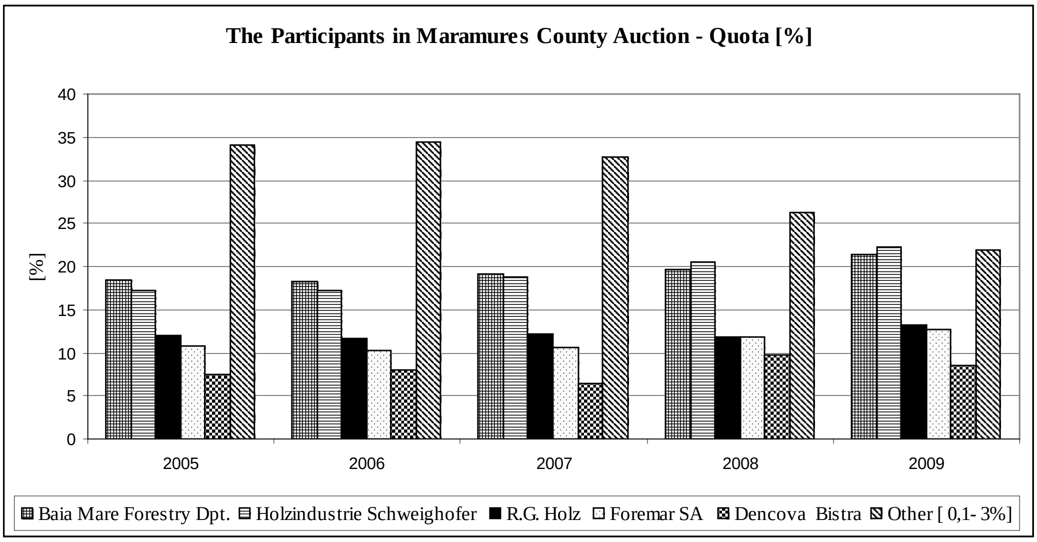

Fig. 1. *The Participants in Maramures County Auction – Quota [%]*

We can see that the four businesses increased their quota in the last years, the most important growth being the one of *Holzindustrie Schweighofer SRL (*an Austrian company, entered the Romanian market in 2002): 28% increase in 5 years.

3. Conclusions

* *We can not speak of a normal, balanced competition* in the Maramures area, but rather of a concentration of the demand on five large players
* The five main buyers with a combined quota of over 70% of the wood in fact determine the asking and selling prices in auctions.
* The participation of the Baia Mare Forestry Department, with a large percentage of the total wood sold, *both as buyer and seller, can not ensure a real, normal competition*; basically, the Baia Mare Forestry Department controls both the supply and demand and heavily influences prices (we must underline the fact that this situation is not abnormal according to Romanian law; the Baia Mare Forestry Department, as all units of this type in Romania, is not the

owner of the forest; the owner is the state which administers them through the forestry departments; consequently, a forestry department, which administers the forests of 1 to 4 counties, can develop its own felling sector and take part in auctions); such a situation is common only to Eastern European countries.

* On many occasions, *those who offer high prices in auctions and disturb the market are very small companies*; it may seem odd but the explanation is linked to their desire to remain on the market, hoping to be taken into account (especially by a more efficient felling method) and be granted a larger quota in the auctions (in some auctions a firm is accepted to bid for standing wood based on its previous work record of felling).

Besides those mentioned above, we can draw the following **conclusions**:

1. *Unlike in the rest of Europe, the shaped wood auctions are not the major player* (considerable volumes of standing wood is sold, which does not attract companies because the exact quality of the wood is not visible; even if the wood seems good when standing it could, after felling, have various hidden defects and this is why many potential buyers avoid these kinds of auctions).

2. *The fact that a state owned company takes part in the auction, which is, at the same time the administrator of the forests from which the wood is felled, causes a lack of correctness and transparency and drives serious companies away from the auction* (several allegations have been made that the best parcels of forests or the best batches of wood were withheld from auctioning until it was clear that only small and easy to influence companies would take part in the auction so that the Forestry Department would be the one which purchases the wood).

3. *In the last few years, in most cases, the selling prices were identical to the asking price, which is not normal*; it is not the case of supply and demand but rather a "controlled auctions".

4. *Although there is no excess of supply or demand*, and the wood auctioned covers the needed volume, both as species and products, for all industries involved and the population, *many auctions were needed to sell the entire volume of wood* – well above the European average.

5. Recently we can see that *there has been a decrease in the supply of expensive types of wood, especially aesthetic veneers* (according to the National Department of Forests); this proves that the companies involved do not focus as much on sorting and sectioning wood as to obtain the most valuable products; at the same time it could be a case of marking valuable products as inferior products so as to be able to sell to specific clients at a lower price.

Regarding *the price of wood at auctions* we can draw the following conclusions:

1. There is, in general, a normal gap between the minimum and maximum prices for the same type of wood.

2. Nevertheless there are situations where significant differences occur, which can not be explained by the quality of different batches; in many cases it is a forcing of the price level so as to take advantage of certain market situations (following the principle of 'one hit to break the market') or 'tailored prices', aimed at specific customers.

3. The prices of wood in the Maramures market are in accordance with those on the entire Romanian market, but smaller than the European ones.

But:

* for the most part, the timber auctions in the studied area fail to establish a fair price for the traded wood;
* the methodology applied can not eliminate "false auctions";
* the price of the timber after the auction does not constitute a stimulant for the growers and fellers;
* the behaviour of the involved companies does not ensure a "fair price".

The research is useful for: national regulatory bodies, specialist in the field of forestry involved in forest evaluation programmes and wood pricing operations, specialists from the academic field (teachers, researches, students), production specialists (in the fields of forestry, felling and wood processing).

The research will continue (including in other areas of Romania) for at least three more years, to confirm of infirm the current conclusions. The results of the research can be extrapolated (with inherent corrections) at a national level.

References

1. Antonoaie, N.: *Management strategic în sectorul forestier (Strategic Management in Forestry Sector).* Constanţa. Muntenia Publishing House, 2003.
2. Antonoaie, N.: *Management. Afaceri. Antreprenoriat (Management. Business. Entrepreneurship).* Braşov. Infomarket Publishing House, 2006.
3. Davis, L. S., Johnson, K. N.: *Forest Management.* Third Edition, New York. McGraw-Hill, Inc., 1987.
4. Dinicu, G.: *Piaţa lemnului în Maramureş (Wood Market in Maramures).* In: World Wide Fund – Danube-Carpathian Programme – „Responsible Forest Management for Sustainable Development", Bucureşti. 2008, pp. 18-35.
5. Drăgoi, M.: *Economie forestieră (Forest Economy).* Editura Economică Publishing House, Bucureşti. 2000.
6. Drăgoi, M.: *Decision Support System for Timber Bidding.* In: Lesnitctvi – Forestry 43(9), 1997, pp. 405-414.
7. Milescu, I. *Economie forestieră (Forest Economy).* Suceava. Crai Nou Publishing House, 2002.
8. *Forest Resources of Europe, CIS, North America, Australia, Japan and New Zealand (Industrialized temperate/boreal countries).* UN-ECE/FAO Contribution to the Global Forest Resources Assessment 2000. Main Report. Geneva, 2000, pp. 12-37.
9. http://www.rosilva.ro/bursa/licitatii/