FOREST LAND FUND AND THE QUALITY OF THE TRADE OF WOOD PRODUCTS

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Abstract

Maintenance and extension of forest area represent a major objective of the general strategy of environmental protection. In the same time, a rational exploitation of wood production is an essential component of the economic development of any country. In this context, the paper analyzes the evolution of forest areas in Romania and in other representative European countries. The economic contribution of wood products is comparatively analyzed in terms of the quality of the trade of such products, thus analyzing the ratio between the value of one imported tone and one exported tone wood product for several countries.

Key words: forest area, wood products, value of one tone of exported wood product, value of one tone of imported wood product.

The increase of forest areas and wood mass production represents major goal of the development strategy of the economy of all countries worldwide. Hence, it is unanimous accepted the primary role of forested areas as strategies for preserving the environmental equilibrium. In the same time, the wood mass production represents an essential component of the economic development.

The manner of valuing wood production on the market depends in a great measure on the labor associated with the process of obtaining wood products, which represent the object of the transaction. Thus, an important barometer that measures the degree of economic capitalization of the wood mass is represented by the ratio between the value of one exported tone and the value of one imported tone for several countries.

MATERIAL AND METHOD

Bibliographic and webographic sources of data collection regarding the forest areas and trade of such products are mainly extracted from FAOSTAT and EUROSTAT. Primary data collected are presented in Tables 1, representing the evolution of forested areas in Romania over time. The research was conducted for several countries. Table 2 and 3 indicate the volume of wood products imported for Austria, as well as the value of imports. In the case of Austria, the volume of wood products exported and the value of imports are shown in *table 4* and *5*.

The same webographic sources were consulted to collect data necessary for comparative analyses between Romania, Finland, Sweden, Poland and Hungary.

Evolution of forested areas in Romania for two specific periods of time

Table 1

| Year | 1938 | 1950 | 1965 | 1975 | 1980 | 1985 | 1986 | 1987 | 1988 | 1989 |
|-------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Forested area - thousand ha - | 6476.4 | 6446.3 | 6378.4 | 6315.8 | 6337.0 | 6339.1 | 6342.0 | 6353.0 | 6361.0 | 6372.0 |
| Year | 1990 | 1992 | 1994 | 1996 | 1998 | 2000 | 2002 | 2004 | 2006 | 2007 |
| Forested area - thousand ha - | 6371.0 | 6368.0 | 6369.0 | 6366.0 | 6367.0 | 6366.0 | 6388.0 | 6382.0 | 6427.0 | 6584.0 |

Source: Statistic Yearbook for Romania

Austria - import of wood products (tones)

| Table | 2 |
|-------|---|
|-------|---|

| Year | 1961 | 1965 | 1970 | 1975 | 1980 | 1985 | 1989 |
|-----------------|-----------|---------|----------|----------|----------|----------|----------|
| Imported volume | 521400 | 860280 | 2084920 | 2551200 | 4442680 | 5682160 | 6201500 |
| Year | 1990 | 1995 | 1997 | 2000 | 2002 | 2005 | 2007 |
| Imported volume | 5867718.2 | 8763960 | 10401807 | 14619175 | 17025342 | 21060310 | 23416596 |

Source: FAOSTAT | © FAO Statistics Division 2009 | 10 December 2009

Austria – value of imports (thousand \$)

Table 3

| Year | 1961 | 1965 | 1970 | 1975 | 1980 | 1985 | 1989 |
|-------|---------|---------|---------|---------|---------|---------|---------|
| Value | 16778 | 28222 | 101622 | 283746 | 730565 | 667670 | 1351813 |
| Year | 1990 | 1995 | 1997 | 2000 | 2002 | 2005 | 2007 |
| Value | 1415634 | 2086198 | 2016214 | 2608680 | 2231703 | 3135428 | 4240500 |

Source: FAOSTAT | © FAO Statistics Division 2009 | 10 December 2009

Austria - export of wood products (tones)

Table 4

| Year | 1961 | 1965 | 1970 | 1975 | 1980 | 1985 | 1989 |
|-----------------|---------|----------|-----------|-----------|----------|----------|----------|
| Exported volume | 3079060 | 2880940 | 3994021.6 | 3996449,6 | 6050700 | 5915680 | 8048860 |
| Year | 1990 | 1995 | 1997 | 2000 | 2002 | 2005 | 2007 |
| Exported volume | 8172792 | 10260700 | 9577300 | 12310400 | 12839200 | 14269400 | 16007271 |

Source: FAOSTAT | © FAO Statistics Division 2009 | 10 December 2009

Austria – value of exports (thousand \$)

Table 5

| Year | 1961 | 1965 | 1970 | 1975 | 1980 | 1985 | 1989 |
|-------|---------|---------|---------|---------|---------|---------|---------|
| Value | 182420 | 182831 | 342962 | 680408 | 1882685 | 1322523 | 2877976 |
| Year | 1990 | 1995 | 1997 | 2000 | 2002 | 2005 | 2007 |
| Value | 3125433 | 4156605 | 3834619 | 4298193 | 4622568 | 6018569 | 8383536 |

Source: FAOSTAT | © FAO Statistics Division 2009 | 10 December 2009

RESULTS AND DISCUSSIONS

The evolution of forested areas in Romania, for the two analyzed periods of time, is suggestively represented in *fig. 1*.

The period 1961-1989 is characterized by a decrease of forested areas in the 7th decade, followed by stability with a relative increase until 1989. After 1990, it can be observed a relative constant trend of forested areas with a significant increase after 2002.

A fundamental side of researches regarding the forest land fund of a country is represented by the quality of wood products export. Particularly, the quantity of wood mass exported for one tone of wood mass imported (I/E). Data summarized for this indicator are presented in *table 6* as comparison for the six analyzed countries.

Numerically, the volume of wood mass exported at one tone of wood product imported shows a significant advantage for the developed countries. This fact is noteworthy in the case of Sweden and Finland, which are well known for their rich forest patrimony. The situation is relatively similar for the two analyzed periods of time. That is, there are no significant differences between the period 1961-1989 and the period 1990-2007.

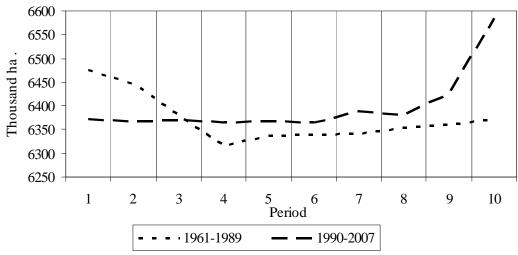


Figure 1 Evolution of forested areas in Romania

Table 6
Comparative situation of the ratio between the value of one tone of wood product exported and the value of one tone of wood product imported (1961-1989)

| Country | | Import | | | Ratio | | |
|---------|----------|-------------|--------|----------|-------------|--------|--------|
| | Tone | Thousand \$ | \$/t | Tone | Thousand \$ | \$/t | (I/E) |
| Romania | 1569742 | 383524 | 244.3 | 12983669 | 1652823 | 127.3 | 1/1.92 |
| Poland | 5490380 | 1046238 | 190.6 | 10721770 | 982072 | 91.6 | 1/2.08 |
| Hungary | 17417220 | 1839805 | 105.6 | 5268080 | 433299 | 82.2 | 1/1.28 |
| Austria | 22344140 | 3180416 | 142.34 | 33965711 | 7471805 | 219.98 | 1/0.65 |
| Finland | 24090948 | 1423253 | 59.1 | 80180860 | 23470878 | 292.7 | 1/0.20 |
| Sweden | 23625720 | 3035971 | 128.5 | 92550367 | 25702500 | 277.7 | 1/0.46 |

Table 7
Comparative situation of the ratio between the value of one tone of wood product exported and the value of one tone of wood product imported (1990-2007)

| Country | | Import | | | Ratio | | |
|---------|-----------|-------------|--------|-----------|-------------|--------|--------|
| | Tone | Thousand \$ | \$/t | Tone | Thousand \$ | \$/t | (I/E) |
| Romania | 4717446 | 2417256 | 512.4 | 13344993 | 3896707 | 292.0 | 1/1.75 |
| Poland | 23944217 | 11946680 | 498.9 | 22625508 | 9103762 | 402.4 | 1/1.24 |
| Hungary | 14177062 | 5197294 | 366.6 | 11666443 | 3038738 | 260.5 | 1/1.41 |
| Austria | 101154908 | 17734357 | 175.32 | 83437063 | 34439523 | 412.76 | 1/0.42 |
| Finland | 73129448 | 8440785 | 115.4 | 140481180 | 81262219 | 578.5 | 1/0.20 |
| Sweden | 71249290 | 13024999 | 182.8 | 158795347 | 80794518 | 508.8 | 1/0.36 |

The difference between developed and emergent countries, as regard to the market of wood products, is clear and it is maintained during the whole analyzed period of time. It is eloquent, thus, the fact that Romania should export

approximately two tones of wood mass for each tone of wood product exported. In the same time, Finland numerically compensates one tone of wood mass imported with only 0.2 tones of wood products exported. This is certainly due to the

different degree of processing raw materials and implicitly the major differences in the value-added process of such goods that are the object of the trade.

CONCLUSIONS

Forest areas and wood products are of major interest due to the environmental protection, but to the economic dimension of wood mass exploitation and capitalization as well.

The analysis of the evolution of forest areas in Romania emphasizes a concern to maintain and extend forested areas in the last period of time. As regard to the capitalization of wood mass, data analysis for the two periods of time emphasizes significant differences between the developed and

the emerged countries. Differences are generated by diverse processing capacities of raw wood material and by the value-added process for obtaining one tone of goods, which is the object of the export. In other words, the developed countries (Austria, Sweden, Finland) export mainly wood products of a high degree of processing while the emergent countries (Romania, Poland, Hungary) ordinarily export raw materials.

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