STRATEGIC PERSPECTIVES OF BULGARIAN PLYWOOD PRODUCTION AND TRADE

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ABSTRACT

Plywood manufacturing is one of the most important production lines and value adding alternatives in woodworking industry. Plywood production volumes have increased rapidly in the last few years all over the world and especially in Asian countries. In this new environment the European manufacturers face a great competition. In these market conditions the manufacturing companies can either do better, extracting the best they can and providing much greater quality, or go down to slow and painful market dropout. Bulgaria is on the crossroad- to improve its plywood production in terms of investments and quality, or let its manufacturers in stagnation, waiting until their doors get closed. All these facts define strategic analyses that can outline the future improvement of Bulgarian plywood production as a question of present interest for the woodworking industry.

Key words: plywood, Bulgaria, strategies, analyses, matrices.

INTRODUCTION

Strategic thinking and strategic-oriented management in every sector of the economy ensure sustainable development and profitability of the enterprises included. The Bulgarian woodworking industry has had its good and bad periods over the years. It proved that it is more sustainable and adaptive during the world financial crisis (Neykov,2011). Investments have been made in the particleboard production, engineered wood products, etc. At the same time, it is not clear enough which products shift the entire sector upwards and which do not imply the rise of the production and trade sector. Such an example is production of plywood. The Bulgarian woodworking industry has great traditions in this production. The biggest and maybe the oldest enterprise in the country has been operating since 1935. Over the years, the enterprise has never stopped working even in the hardest periods of the Bulgarian economy after the 1989. This enterprise gives wages to more than 690 people in the small Bulgarian town of Troyan and ensures the normal way of living of their families and related businesses like retail, transportation etc. All these specifics of plywood production in Bulgaria define the actuality of determining the place of plywood in the Bulgarian economy, perspectives for improvement, its contribution to the export, threats and strategic perspectives in order to make it a competitive business in the context of the rising Asian competition.

The main aims and objectives of the current research can be summarized as follows:

- To outline the tendencies in plywood production and trade in Bulgaria;
- To determine the share of plywood produced in Bulgaria in country export and its added value;
- To reveal the strategic positions of plywood in comparison with other wood-based products in the internal market and export;

- To suggest a set of strategies aimed at making the Bulgarian plywood production and its main manufacturing companies competitive in the future.

Recent researches on Bulgarian forestry based industries have revealed that wood processing is a sustainable sector, which is able to face successfully the economic challenges, deriving by the economic crisis and the competition (Neykov, 2013). Strategic management is the major instrument for improvement not only the enterprises but the entire wood working sector. Recent studies that analyze the Bulgarian forestry and industries linked to it, focus on the major structural problems most of all strategic ones. Innovations is the most common tool for competitive advantages (Kolev et. al., 2016, Popova, 2014, 2015), information systems and investments in them (Tsoklinova, 2014). It has not an easy task to pull the efficiency upward and gain sustainable growth. In order to solve this task, it is necessary to select the set of measures and techniques allowing to form the combination of human, material and financial resources, the efficiency of which at operational, tactical and strategic levels would exceed the efficiency level of strategic management of the enterprise when strategic changes were not implemented (Tamosiunas, 2010). In this variety of tools approaches and solutions the current study summarizes the strategic choice in just four strategy. I addition the SWOT gives the supplementary guidelines for future improvement.

MATERIALS AND METHODS

Statistical information, taken from the statistical databases of Eurostat, Faostat and Indufor, as well as from other scientific and business resources, has been used for the purpose of this study.

The methodology includes fundamental methodic like Ansoff Matrix (Pindelski, 2016, Hussain, 2013). The matrix is used to describe the strategic thinking and functioning of the entire sector before during and after the crisis. The sector is considered as an enterprise which produces different products and sales to different markets. Throughout the strategies of the matrix it is possible to distinguish the successful ways to answer the negative changes in the economic environment.

The main indices of production and revenue of the domestic and export market are presented on Fig. 1 (Hill, Charles W. L., Gareth R. Jones, Melissa A. 2015).

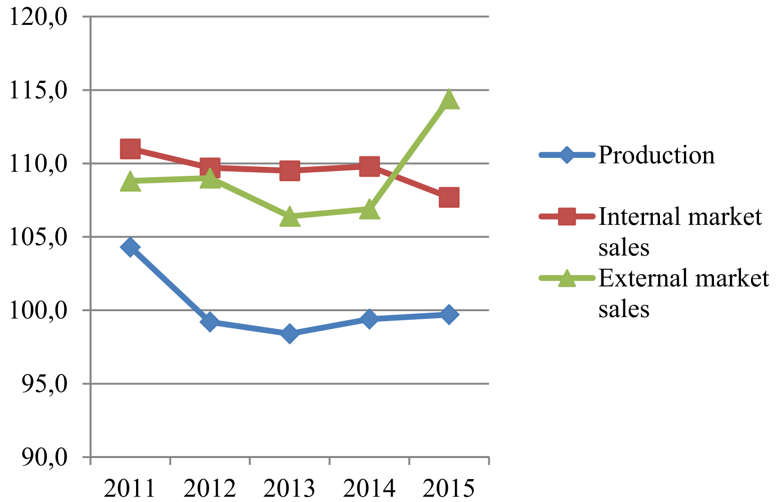

Figure 1: Main indices of production and revenues of the domestic and export market, 2010=100%.

The data in the presented graphic reveals the opportunities of the wood processing sector. The domestic market can be characterized by a recessive growth. The market has the most stable negative growth during the examined period, especially in 2015. The export market pulls the wood processing industry to a higher level of profitability, but here arises the question of the import competition. The big world manufacturers, more specifically from the Asian countries, proactively invade the Bulgarian as well as the world market. The low prices of their production are unattainable for many of the European manufacturers, including Bulgaria. The yearly import increment in the sector is circa 9% for the last two years of the research, while the production increment is barely 0.3%.

The plywood production stands as a counterbalance to the overall growth of the sector. On a worldwide scale the plywood production is shifting towards higher levels, as the same tendency applies also to Bulgaria. For the period 2004 – 2014 the relative share of Bulgarian production of plywood on the Balkan peninsula has decreased on average with 1.5% per year, i.e. 15% for the last 10 years. The trends after the economic crisis are quite promising. For the last 5 years the plywood production has increased with 88%. In comparison, the particleboard production has increased with 5.3% and the fiberboard production – with 3.2%. These trends determine the correct strategic development of the sector as a leading instrument in retaining and increasing the market positions of the country in the world plywood trade.

STRATEGIC ANALYSIS

The strategic analysis is a basic method for defining the future development of every business. No matter if it comes in question for a particular company, a sector of the state economy or a particular business in a company, the strategy provides the general milestones of improvement. A strategy is a set of related actions that managers take to increase their company's performance (Hill, 2015). According to Peter Dracker (Hill, 2015), the main stages of strategic management are the strategy formulation and strategy implementation. In this research we try to formulate some strategic perspectives, based on analysis of internal (products) and external factors (markets, economic conditions etc.), of the plywood processing industry.

After the economic crisis Bulgaria has found some leading partners for export. Considering their intensity, these markets can be treated as rediscovered. The main export markets of plywood before, during and after the economic crisis in 2008, are presented on Fig. 2.

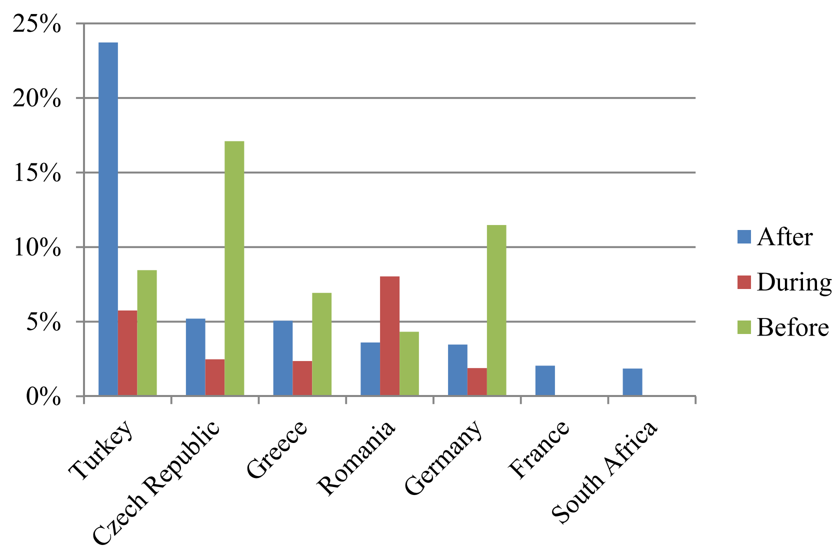

Figure 2: Export market share of plywood by leading trade partner countries

The graphic above can be interpreted with the Igor Ansoff's matrix, presented in Table 1. The reviewed changes directly reveal the strategic orientation of the plywood production in Bulgaria through the leading strategies, given in the table below. The analysis is completed with information given to the authors by the leading plywood producers (about the qualitative part of the processes – new products etc.)

Table 1. Igor Ansoff's matrix (product – market)

	Existing markets – before the crisis	**Market development**
Existing/approved products	Penetration	New markets
Product development	New products	Diversification

Before the crisis Bulgaria definitely counted on the focus strategy (named "Penetration). The approved kinds of construction plywood and insignificant quantities of other kinds have sold on traditional markets such as the Czech Republic and Germany. Bulgaria relied on the well-established trademarks and reputation. During the crisis the salvation was found in concentric and conglomerate diversification (markets with needs that had been neglected were rediscovered and appreciated). The distribution of small quantities of plywood to a multitude of markets provided stable revenues. After the crisis the chosen strategies were penetration- improvement of Turkish market, and concentric diversification (new markets) i.e. development of the French and South African market. New surface coatings are developed, which expanded the products for Turkish market. The last process is the result of the diversification, from the one hand, and of the relatively high rate of quality and price of the Bulgarian plywood, in comparison with the Asian products, on the other hand.

In addition to the matrix above and in order to define the possible future strategies, we have carried out a SWOT analysis, which points out the treats and the weaknesses (apart from the strengths and the opportunities, which are already clarified with the analysis so far).

Strengths: Long time production experience:

- The leading manufacturer in Bulgaria was established in 1935 and is still successfully working;

- Diversified supplier market;
- The Bulgarian manufacturers have built a stable import of plywood logs and veneer from the neighboring countries (Serbia and Romania);
- Bulgaria takes the 4th place in Europe in rate of increment/growth of plywood production, leaving behind countries with traditionally well-established wood processing industry, such as Finland, Sweden, Germany and Austria;
- Bulgaria takes the 7th place in Europe in rate of increment/growth of net export, leaving behind Germany, Poland and Russia;
- Firm positions of the Bulgarian plywood on the Turkey market, between 20% and 25% of the total export of plywood for the last 4 years;
- High quality. The Bulgarian plywood is of considerably higher quality compared with the import from Asia, including the Turkish market.

Weaknesses:

- Small investments in the leading plywood manufacturer. In Bulgaria, about 80% of the plywood production is carried out by a single manufacturer and the investments are considerably lower than the demands;
- The low labour productivity in plywood industry. The average labour productivity in Bulgaria is 11% lower than the labour productivity in Russia, 76% lower than the Estonian labour productivity and 234% lower than the Finnish one.

Opportunities:

- The opportunities should be concentrated on strengthening the investment activity;
- So far, the investments are focused on manufacturing operations with high added value;
- Investments should be targeted to the development of strategic policies and tangible measures, aimed at improving the labour productivity, such as investments in modern processing technologies and human resource development;
- Investments in the cultivation, management and use of own poplars stands;
- Establishment of strategic partnerships with the Bulgarian forestry enterprises.

Threats:

- Significantly reduced raw material base. The Bulgarian plywood manufacturers predominantly use raw material from Romania and Serbia;
- The increased production levels in both raw material supplying countries (Romania and Serbia) seriously increases the competition between them and Bulgaria;

CONCLUSIONS AND RECOMMENDATIONS

The current state of the wood processing industry in Bulgaria is the result of the long-time struggle with the world competition, the weak state policy in supporting the wood processing enterprises, the world economic crisis and the serious disturbance of the labour market conditions in the country, particularly in terms of decreased levels of employment. Despite the abovementioned difficulties the situation in the sector is improving in terms of positive growth of production and trade.

The State should take its responsibility by providing protection and assistance to the Bulgarian plywood manufacturers. This is the only possible way for the domestic plywood industry to resist the growing economic pressure by the Chinese industry.

The main recommendation we can propose are following:

- Enterprises in sector to implement proactive business and corporate strategies that cover 20% of the contractors which provide 80% of overall turnover. In this way the enterprises follow the Pareto efficiency as well as overall sector.
- Enterprises have to improve their information systems to provide accurate information for interactive strategies in the case of threats.

REFERENCES

HILL, CHARLES W. L., GARETH R. JONES, MELISSA A. 2015. Schilling Strategic Management: Theory, 11e, p. 3–13.

HUSSAIN, S., KHATTAK J., RIZWAN A., ADNAN LATIF H. 2013. ANSOFF Matrix, Environment, and Growth- An Interactive Triangle, Management and Administrative Sciences Review, Volume: 2, Issue: 2, Pages: 196–206.

KOLEV, K., TSOKLINOVA, M. 2016. Relationship between competition, innovation and productivity growth, Serbian Journal of Engineering Management, Vol. 1, № 1, Serbia, 2016, pp. 14–18.

NEYKOV, N., TRITCHKOVN., TODOROVV., PETKOV A. 2013. Manufacture and trade of wood products in Bulgaria in the in the context of stability, growth and government policy, INNO, pp. 45–50.

NEYKOV, N., DOBRICHOVAA., PETKOV. 2011. The international financial crisis influence on the production and sales in sectors "wood processing without furniture' and 'furniture production, Development trends in economic and management in wood processing and furniture manufacturing, International Scientific Conference, Kozina, Slovenia, pp. 133–137. http://www.free-management-ebooks.com/dldebk/dlst-ansoff.htm.

PINDELSKI, M. 2016. Competitive Strategies, Warsaw School of Business, p. 12

POPOVA R. 2014. Innovativeness of the Furniture enterprises in Bulgaria, ICIM 2014: International Conference on Innovation and Management of World academy of science, technology and engineering, Barcelona, Spain/International Science Journal Index 86, February 2014 Barcelona, p. 1354–1357.

POPOVA R. 2015. Guidelines for the study of innovation activities of the enterprises in the Forest Industry, Sixth International Scientific Conference "Innovations in Forest Industry and Engineering Design", Yundola, 14–16 November, INNO Science Journal, vol. IV, 2/2015, p. 74–79.

POPOVA, R. 2015. Competitiveness of the innovations of furniture enterprises in Bulgaria, ICIMT 2015: International Conference on Innovation, Management and Technology of World academy of science, technology and engineering, 2015, Copenhagen, Denmark, International science journal, p. 1862–1865.

TAMOSIUNAS, D. 2010. Managing Corporate Strategic Changes in the Context of Climate Change, Inzinerine Ekonomika-Engineering Economics, 2010, 21(1), p. 22.

TSOKLINOVA, M., Information and communication technologies – generator of economic growth for Bulgarian companies, "Application of information and communication technology and statistics in economy and education" (ICAICTSEE – 2013), Sofia, 2014, pp. 373–381.

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