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**DEVELOPMENT OF WOOD PROCESSING AND FURNITURE MANUFACTURING  
SECTOR IN ALBANIA AND THE WESTERN BALKANS**

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**ABSTRACT**

This article contains the results of research conducted on the current situation in wood processing and furniture industries in Albania, compared with other western Balkan countries. Wood processing industry in Albania faces several problems, and depends on various factors, which influence the technological and economic indicators of these companies in different ways. Albanian wood processing industry consists of three dozens of large companies and hundreds of small and medium enterprises spread throughout the country, that deal every day with several technical and organizational problems. Development of this industry in Albania has increasingly sped up in recent years. Domestic producers use various domestic and imported inputs in the production process. Manufacturing of furniture is based mainly on usage of wood panels and MDF; an indicator that shows that the furniture structure has changed a lot in recent decades. Development of these sectors requires further political and economic systems that are transparent and market driven, as well as investments in production technology and employee training. Since there is an obvious lack of general information, this study aims to ascertain the financial situation and progress of wood processing and manufacturing companies by considering several problematic issues in order to recommend possible improvements. A review of secondary literature and government statistics was conducted for seven countries: Albania, Bosnia and Herzegovina, Croatia, Kosovo, Montenegro, Macedonia and Serbia. The main factors we examined were the current status of these sectors, their economic role and significance, and the business climate. These factors are important not only to the countries themselves but also to potential foreign investors, customers, and raw material suppliers. Information sources include the WB, UNECE, FAO, USAID, and the EC. In addition, official government data were collected from institutions and organizations in the selected countries (ministries, agencies, and statistical offices), as were research results from scientific organizations (universities and institutes).

Results of this research are useful to a wide range of policymakers and academics.

**Key words:** Albania, Western Balkan, SMEs, wood processing, furniture manufacturing, industry, market, company

**1. INTRODUCTION**

Wood processing and furniture production are important sectors in many Western Balkan countries (Fig. 1). After abandoning a socialist business system, Western Balkan countries have developed free-market economies, including changes in ownership structure, recapitalization and modernization, adapting to meet EU standards and developing strategic linkages with supply-chain counterparts in developed countries (Glavonjić et al., 2009). Many of the technologies that are increasingly being adopted have been developed in industrial countries. Some of them, such as MDF production technologies had been in use, tested and refined for more than 25 years before they featured in the Region. Machinery is imported mainly from Europe.

After the fall of the communist regime, wood products and furniture manufacturing industries in Western Balkans survived despite a set of unfavorable conditions such as rising costs, changing buyer

habits, and the economic challenges. Having suffered a total destruction of the state-run sector, Albanian private companies began to operate, develop and strengthen their activity in the wood-processing industry. Especially in the last 15 years, Albanian wood industry has been under a complete transformation process, not only in terms of the structure and organization of the enterprises, but also in the type of raw materials used to produce wood objects with a greater range of choice. Usage of good management systems allowed companies to be more successful, and achieve their profitability and productivity despite operating in a challenging environment. (Çaushi et al., 2015).

Nowadays, wood processing industry meets a considerable part of the Albanian domestic market needs with wooden products. Since exports are profoundly important for the country, and only 15% of such products are being exported (Çaushi, 2013) [the value of exports is much smaller than that of imports], the problems to be addressed are not only related to quantity and capacity but also to production quality and cost. However, the imported furniture products are mainly mid-high class furniture and special furniture whose price is triple or even higher compared with that of domestic furniture.



Figure 1. Western Balkan countries

## 2. METHODOLOGY

This is an empirical research on wood processing and furniture manufacturing industries in Albania as compared to Western Balkan countries. While aiming to find out the present status of this sector, the article considers their previous background and developments chronologically, presents several arguments on their growth and/ or expansion, analyzes the implementation of new technologies in companies/ businesses that operate within the sector etc. For completion of this research, a set of qualitative research methods, principles and different approaches were implemented. In this context, historical, dialectic as well as comparative methods have been used for a contrastive analysis of the Albanian wood processing and furniture manufacturing industries, as opposed to other Western Balkan countries. An extensive review of secondary literature was conducted. Official government data were collected from institutions and organizations in the selected countries (ministries, agencies, and statistical offices), as well as research results from scientific organizations (universities and institutes).

### Scope of the research

- To analyze business practices adopted by wood processing and furniture manufacturing establishments in Albania;
- To understand challenges faced by wood processing and furniture manufacturing SMEs in Albania;
- To assess current performance of wood processing and furniture manufacturing industries in the Western Balkans;

- To compare Albanian wood processing and furniture manufacturing industries with those of other Western Balkan countries.

### 3. DISCUSSIONS

Globalization process is characterized by stronger competition and ever-stricter marketing conditions. Therefore, quality management and quality assurance have become a necessity in the struggle for a market and buyers, resulting in continuous work in this field (Lackovi et al. 2009). Globalization and a region's participation in the global marketplace, is the major driver of reforms being implemented in order to restructure, strengthen, and strategically connect industries with partners from developed countries. All countries in the region have undertaken reforms towards free-market economies. They have either recently become members of the EU (Croatia) or are planning to become members (Albania, B&H, Kosovo, Macedonia, Montenegro and Serbia), since EU membership creates market opportunities as well as challenges to provide quality wood products that meet required standards for sustainability at cost/price levels that are competitive (Glavonjić et al., 2009).

In general, the EU is the Western Balkans' largest trading partner, accounting for over 75% of the region's total trade. Since 2000, the EU granted autonomous trade preferences to all the Western Balkans, which allow nearly all exports to enter the EU without customs duties or limits on quantities. This preferential regime has contributed to an increase in the Western Balkans' exports to the EU. In 2013, the EU was the region's largest trading partner for both imports (73%) and exports (80.1%). As a whole, the region's share of overall EU trade was 1.1% in 2014. However, individual countries' shares were very low - Serbia (0.5%), Bosnia and Herzegovina (0.2%), Macedonia (0.2%), Albania (0.1%), Montenegro (0.0%) and Kosovo (0.0%) [Croatia became member of the European Union in 2013] (EC 2015).

Regarding forest resources in the Western Balkans, the largest areas of hardwood forests are in Croatia, B&H, and Serbia. Beech and oak are the most common wood species in the region. The largest areas of beech forests are in Serbia with 992,000 ha, whereas Croatia is the leading country regarding oak forested area with 850,000 ha. The quality of oak varies between countries, with the highest quality found in Croatia and northwestern Serbia. Overall, wood products production meets the domestic needs of most western Balkan countries, with the exception of Macedonia and Serbia regarding softwood. The region is net exporter of round-wood, exporting 1.68 million [m.sup.3] and importing was 602,600 [m.sup.3] in 2007 (UNECE 2008b). Montenegro has the smallest forest area in the western Balkans, with 621,000 ha, whereas Albania has the smallest volume of growing stock (78 million [m.sup.3]) (Glavonjic and Vlosky 2008).

Population growth rates in the western Balkan region are different, and for some countries they are projected to be negative over the period from 2007 to 2020 (United Nations Population Division 2008). For example, on one end of the spectrum, the average population growth rate in Albania is projected to be 0.45 percent over this period, followed by 0.34 percent for Bosnia and Herzegovina. Conversely, Serbia is projected to have the most negative population growth rate (-0.99%), followed by Croatia (-0.21%). Given that Croatia and Serbia are the largest countries in the region, with the highest forest potentials and capacities for wood processing, it can be surmised that the western Balkan region will remain an exporter of wood products in the future (Glavonjic 2008).

Economic growth and industrialization have created employment and income generating opportunities in non-land-based activities. The technological developments that have taken place over the last decades are shaping the future of the wood processing industries as a response to declining raw material supplies. The MDF production process involves in the first steps debarking and chipping. Cleaned chips are cooked in a digester and refined into wood fibers which are then mixed with resin and wax. The mixture of wet fiber, resin and wax is dried and transported to the mat former before it is pressed to produce a continuous mat. In the final processing stage it is trimmed, sanded and cut to specified dimensions. Depending on customer requirements board thickness varies between 2.5 and 32 mm.

Wood-panel products with their advantages, in terms of cost and technical property, have developed from plywood to particleboard and MDF, through an evolution from using basically solid wood to using fibers of a variety of products. This development has not only produced more

homogenous products, but has also reconstituted panel production. Additionally, it has much higher recovery rates than sawn-timber or plywood. The expected growth in ready-to-assemble furniture will increase the awareness of the special characteristics and advantages of wood-based panels, particularly MDF and OSB.

MDF has emerged as a price competitive alternative to the more traditional products such as plywood, particleboard and hardboard. With similar characteristics to plywood products, their greatest advantage is that low quality and low value raw materials (including non-wood fibers) can be turned into high value and high quality wood-panels. This clarifies why their production costs are by about 50 percent lower (Adhar, 1996). In addition, it is marketed as an environmentally friendly product which relies on sustainable resources such as rubber wood and non-wood fibers.

Western Balkans' wood processing and furniture manufacturing industries are doing their best not to be in the situation of their US counterparts. The exodus of the U.S. furniture manufacturing business, made their suppliers suffer, too. Thus, challenges in one part of the industry sector were extended to other parts of the wood products and furniture manufacturing value chain (Buehlmann and Schuler, 2009; Luppold and Bumgardner, 2008). As a result, employment in the U.S. wood products and furniture manufacturing industries between 2002 and 2009 saw a 9 percent decrease (U.S. Census Bureau 2013), and a large number of companies experienced bankruptcy, closed down operations, or relocated to offshore countries. Given this challenging situation, discussions need to center on how to make the region's wood processing and furniture manufacturing industries more competitive, since companies that focus solely on cost reductions tend to miss the opportunity to improve their performance by fundamentally changing their way of making business decisions that create true competitive advantages (Pirraglia et al., 2009).

Regardless of the considered industry, construction, economy, services, technical and economic system typology is very diverse, with both internal and external ramifications analyzed domain. Design and preparation of classification aims to highlight common elements of different types of systems, depending on certain criteria. Categories identification is of interest for theoretical work, but also practical in situations where an entrepreneur builds and defines the own technical-economic system. It must be outlined perfectly still at the design stage, something that requires accurate knowledge of all existing features and capabilities so that future developments do not significantly affect the initial construction (Draghici et al., 2010).

Roussouw and Van Vuuren (2010:201) state that "...the nineteenth century was the century of the entrepreneur. The 20th century became the century of management ... the 21st century promises to be the century of governance." Following the concerns existing on national and international level, industrial companies have been forced to develop and implement efficient management methods specific for production systems, in order to become lean organizations. In any organization, these methods are the basic elements used for efficient management of production systems, optimal allocation of resources, optimization of production costs, waste elimination and reduction of the time between receipt of customer orders and final product delivery (Filip, 2012).

Current developments in the wood processing sector are a response to a mixture of emerging constraints and opportunities that have existed for a much longer time. Advanced machinery and technologies for more efficient wood use have existed in industrial countries for decades. However, their adoption was neglected in the region. Looking at the processing capacity of wood processing mills, the main concern that has arisen is the future availability of logs. This concern has stimulated an entry into the reconstituted wood-panel industry as well as the use of formerly under-utilized or discarded raw materials. The forecast predicting migration of the production centers from Western and Central Europe to the Eastern part of the continent has not been accepted for a long time; but today the ultra-conservative investors have to face it as an obvious and painful reality (Siempelkamp, 2005).

In the periods of financial crisis, the main efforts must go in direction of raising regional competitiveness of specific country by investing in development. While it is important to introduce structural changes so as to adapt the international system to prevent future crises, this cannot be achieved without significant immediate measures to promote recovery from the current crisis. It is essential that governments undertake reforms that address the underlying factors that contributed to the current economic crisis if the world is to emerge from the crisis into sustainable, balanced growth (Stiglitz, 2010).

Successful management of a wood processing company is strongly related to a professional technical management, diversified manufacturing, high level of technological machineries used, etc. In general, wood processing industry is currently undergoing major structural changes. Small and medium enterprises are the backbone of economic development in European countries, with a significant impact on national production and income and a relatively high effect on employment. The SME sector is the backbone of economic development of market economy in many European countries. In terms of globalization of the world economy, the SMEs sector's internationalization requires duly preparation. Only competition-capable enterprises that include the application of modern knowledge and new technologies can become part of the world market of goods and services through business cooperation, partnership and direct negotiations (Shumanska 2014).

Business success today depends not only on the ability to meet market's demanded quality and quantity, but also on a long-term business strategy. There is a high rate of challenges faced by SMEs that operate in the wood products and furniture manufacturing industries, including recruitment and selection of personnel. Another threat lies in frequent changes in business conditions and financial, taxes and fees regulations, as well as changes in the terms of trade and export. According to Kaldor and Hume (2004) a tax is a compulsory payment made by an individual and/or firm to the government. Previous studies including Bondonio and Greenbaum (2007) and Lent (2004) focused on the use of investment subsidies and application of tax incentives on productivity and employment mostly with the use of non-fiscal variables. In developed economies; credit financing is mainly carried on a commercial basis through commercial banks. Economic analysts have indicated that SMEs that operate in the wood products and furniture manufacturing industries are feeling the impact of the current liquidity crisis and are operating on low capital bases, being impacted on their activities by banks procedures lending to small-to-medium enterprises in general, since loan recovery from SMEs was a great challenge in their operations.

The size of an enterprise is assessed according to the average number of employees. In accordance with EUROSTAT criteria, the following intervals are used: micro-enterprises, 0 to 9 employees; small enterprises, 10 to 49 employees; medium enterprises, 50 to 249 employees; and large enterprises, 250 or more employees. SMEs are officially defined by the EC as entities not exceeding 250 employees, independent in their operations from larger entities, with an annual turnover less than 50 million Euros or an annual account less than 43 million Euros. Such a definition is a key in order to determine which companies can benefit from EU programs to support SMEs (EC, 2015). Development of marketing theory in SMEs has been limited for a long time, and it is mostly treated on basis of classical applications of marketing models for small enterprises. Development theories to explain the behavior of small and medium enterprises against the marketing has been in general descriptive and qualitative and few of them are tested in practice (Grepcka et al., 2010).

The majority of SMEs that operate in the wood products and furniture manufacturing industries are being run improperly. In any organization worldwide the role played by management is crucial and indispensable as far as decision making and controlling of the proceedings is concerned. Management involves a set of four inter-related and inter-twined activities of planning, leading, controlling and organizing. These functions cannot be separated from each other if the organization is to achieve its desired goals. If this issue on skills or management aptitudes is not looked into carefully, we are likely to face more closures of SMEs that operate in the wood products and furniture manufacturing industries, as they would not last for long under bad management. Given the current situation, more SMEs that operate in the wood products and furniture manufacturing industries are likely to close down if managers do not change their attitudes towards operational efficiency and effectiveness (Stoner, 1982).

Transfer of technology is very important for development of enterprises and a major challenge for entrepreneurs. Technological developments allow for an increment in production as a key to increasing funding possibilities of their own sources. For these reasons it should be number one priority in any business enterprise (Shumanska 2014).

As the most problematic factors for doing business in WB, the Global Competitiveness Report identifies the following ones: low efficiency of public administration, corruption, instability of policies, tax rates, restrictive labor legislation, access to financial resources, tax policy, and poor work ethic of the national workforce. According to the results of the Global Competitiveness Report for

2014-2015, WB countries rank as following: Croatia (83<sup>rd</sup>), Macedonia (89<sup>th</sup>), Montenegro (97<sup>th</sup>), Albania (104<sup>th</sup>) and Serbia (132<sup>nd</sup> place).

## Country Profiles

### Albania

Wood processing has a long tradition in Albania. The new technologies of furniture production have induced in the market a large number of privately owned SMEs. The domestic wood processing and furniture manufacturing industry meets a considerable part of the consumers' needs. Although exports are profoundly important for Albania as a small country economy, out of 400 furniture manufacturing SMEs, most of them are micro-enterprises unable to compete in international markets because of the outdated technology and low-to-mid qualification level of their workers. With regard to the furniture sector, only 20 percent of production is sold within the country, targeting mainly low-cost products for low-income customers. The main products produced in-country are semi ready elements for chairs, tables, and other articles for export; chairs; bedroom furniture; tables; doors; windows; and flooring. Export demand for Albanian furniture has increased significantly (Glavonjić et al., 2009).

The following reasons account for the contemporary developments in the categories that have experienced changes and those that have remained largely stagnant in terms of modernization:

- decreasing raw material supply;
- reduced availability of large-sized timber; and
- increasing responsiveness to environmental pressures.

As a result of the economic circumstances in Albania, low capacity for private initiatives and low level of education and management sense, SMEs in the wood industry do not normally use or do not have access to credit or bank loans. To SMEs the interest rates are still very high.

The problems to be addressed in Albanian wood manufacturing industry are not only related to quantity and capacity but also to production quality and cost. The development of the free market economy enhances the necessity to manufacture wood products that are more qualitative in order to face an increasingly tougher competition. Furniture market is a matured market that offers limited potentials for development strategies and new possibilities, putting under pressure SMEs for finding new markets especially in the Balkans, but considering the small size of the major part of these companies as well as their capacities, this is not a possibility. In the last decades, the increasing consumers' needs, property market booming and promising tourist industry have driven the demand for both residential and hotel furniture as well as other higher-end products (Çaushi et al., 2015).

With regard to the furniture sector, only 29 percent of production is sold within the country, targeting mainly low-cost products for low-income customers. More than 80 percent of raw materials, primarily wood-based panels for domestic furniture industry, are imported. Albania also imports significant volumes of ready-made furniture, including office, kitchen, and other furniture. Office and kitchen furniture are imported primarily from Italy. The main products produced in-country are semi-ready elements for chairs, tables, and other articles for export; chairs; bedroom furniture; tables; doors; windows; and flooring. Export demand for Albanian furniture has increased significantly, from \$17.8 million in 2007 to \$49.1 million in 2013. In 2013, the export of bedroom furniture, the largest export sector, accounted for 35 percent of total exports, followed by wooden-framed chairs at 19 percent and furniture parts at 18 percent (ACIT 2014).

According to Çaushi et al. (2013), a key issue of wood processing and furniture manufacturing companies is their legal form, mostly as an ltd. Manufacturing companies are mostly of small and medium size, operating with a small number of employees. Despite that there is a large quantity of furniture imported; manufacturing of wood products by domestic SMEs covers a significant percentage. The main problems that stand out are the low level of qualification of the general staff and the technical conditions of the machinery used. Only 58% of the total number of employees is qualified to carry out their tasks. The competition, the low level of product processing as well as the insufficiently trained sales and marketing personnel without the proper motivation, does not permit this industry to further improve and expand. Unfair competition is perceived as another negative factor. The domestic market is not free and does not operate as such yet. On the other hand, the imported goods offer to the end client well-developed modern products, but at a higher cost.

## **Bosnia and Herzegovina**

In 1990, Bosnia and Herzegovina had more than 200 manufacturers in the wood products sector, accounting for 10 percent of total national industrial production, or \$450 million. Because of inefficiencies in the national company registration system, combined with the fact that many small companies do business without work permits, only estimates for the number of wood processing and furniture producers are available. One widely used estimate is 2,000 firms. Most of the companies in furniture production sector produce furniture from panels and chairs. Furniture and other secondary wood product companies (firms that use sawn-wood/lumber from the primary producers) from Bosnia are known throughout Europe for high quality. Many solid wood-based furniture manufacturers have integrated furniture production with sawmilling to guarantee a consistent supply of high-quality raw materials (USAID 2006).

Domestic demand for wood products is small; therefore, most of the producers are export oriented. In 2014, wood processing industry and furniture production was one of the leading export industries, making up almost 19.1 percent of total exports. The trade balance for furniture (including furniture parts) for Bosnia and Herzegovina is positive. The country manufactures and exports finished furniture, accounting for 54 percent of its total value-added exports (Foreign Trade Chamber of Bosnia and Herzegovina 2014).

Plywood is the only domestic wood-based product. As a result, all domestic consumption of fiberboard and particleboard is met through imports. Plywood and veneer production sectors are small, and compete with local sawmills for raw materials. As a result of recent increases in production of upholstered furniture, imports of plywood have increased, dominated by poplar (UNECE 2014).

## **Croatia**

The wood processing industry in Croatia is composed of many small firms and a relatively small number of large companies. For example, in 2004, there were 346 furniture enterprises (Zovak 2005). The Croatian wood processing industry is export oriented. The government of Croatia has made considerable investments in developing the wood processing and furniture production sectors.

Sawnwood and veneer dominated exports in 2012, accounting for more than half of the total export value. Production and exports of wood-based panels increased from 2006 through 2012. Croatia also imports significant volumes of particleboard to meet domestic consumption. Demand for MDF boards is increasing steadily in Croatia. The furniture industry is the largest consumer of MDF in Croatia, accounting for 40 percent of the overall demand. Production of joinery and interior furnishings account for 30 percent, and 10 percent is used to manufacture laminated flooring. Demand for oriented strandboard (OSB) is increasing as well as a result of significant civil engineering infrastructure projects as well as increasing production of prefabricated houses. Because Croatia does not have domestic OSB production, the country fully depends on imports, primarily from the Czech Republic and Germany. Similarly, plywood consumption is almost entirely met from imports (EPF 2013).

Despite increased production and exports, the Croatian trade balance of furniture is negative. Office furniture and furniture parts had the lowest import values. Furniture for sitting is imported primarily from Italy, followed by Bosnia and Herzegovina, Slovenia, and Poland. Import of furniture for sitting from China has been increasing in recent years. Regarding exports, the most significant furniture category is furniture for sitting, which holds 60 percent of the total export. Germany, Slovenia, and Italy are the most significant export markets for this furniture category, with more than 66 percent of total exports going to these three countries. Currently, the most sought after Croatian products are parquet, windows and doors, and solid wooden furniture (Yearbook Croatia 2013).

## **Kosovo**

According to the Tax Administration and Kosovo Customs (2012), 565 registered businesses operate in the wood sector. Wood processing is predominantly dominated by micro and small businesses. Around 92% of companies in the wood sector are micro, 7.8% are small and only 0.5% are medium sized companies. The main activity of wood sector businesses is manufacturing of kitchens

and furniture. On average 75% of total companies' costs are incurred from purchase of raw material and intermediate goods, whereas wages account for about 16% of total costs on average. Around one-third of the companies in the wood sector use their own raw materials and intermediate goods, and 68% of the companies obtain supplies from the domestic markets. With regard to the origin of imports, around one fifth of the companies import from Turkey; 18% from Montenegro; and 13% of the companies import from Germany.

Firms' reported production value is higher than €25,000 for nearly 50% of businesses. The annual production value of businesses manufacturing kitchens and furniture is €2.5-5 million. On average, the production value in 2012 was estimated to €107,000 on average per firm. A survey shows that 95% of the companies manufacture final products, 18% intermediate products and 10% raw material. Average sales were €41,000 for micro businesses, €150,000 for small ones and €1.5 million for medium-sized businesses. Wood sector companies sell mainly to the domestic market, with less than 15% of companies selling abroad. Although few companies are active in international markets, they reported that one-fifth of their sales come from exporting.

The majority of firms' assets are owned by the businesses, while only a small share being rented: 93% of businesses own machinery and equipment; 80% of businesses own land and buildings. The average capital intensity ratio (machinery and equipment/turnover) is 2.6. Capital intensity is lower among medium-size businesses (1.73) than for micro (2.7) and small businesses (2.2). More than 20% of the companies in the wood sector have invested in a new product. Nearly 10% of the companies have implemented innovative marketing strategies, largely related to new product designs. Only 4% of the companies have introduced innovative organizational changes.

From 2010 to 2011, export volume of wood products has increased by 11% and from 2011 to 2012 by 19%. 13.3% of wood processing businesses export their products. Main exported products are windows and doors, kitchens and furniture. From the survey it is found that main destination countries wood sector products are Albania, Montenegro and Switzerland. Destinations for future exports are believed to include mainly European countries, such as Germany, Austria, and Switzerland. The wood sector accounted for 1% of Kosovar employees. The average number of employees per firm was 15 in 2012, a substantial increase from 7 workers per firm in 2011. For approximately 70% of employees, secondary education is their highest level of educational attainment. Wood processing is a men-dominated sector. Only one-fourth of companies employ women.

The level of taxes in Kosovo is 'average'--i.e. not high and not low. Around 80% of the companies have stated that TAK operates at an 'average' level of efficiency, that it is 'efficient' or 'very efficient.' Around 70% of them share the same perception with regard to efficiency of Kosovo Customs. Access to financing is difficult and interest rates are high (*Sector Profile Kosovo, 2014*).

## **Macedonia**

Similarly to Albania, woodworking industry in Macedonia faces a number of restrictive factors, conditioned by the available technical-technological capacity, labor quality, organizational platform and a number of other factors. As a result of the proprietary and manufacturing restructuring in the wood working industry during the transition period, there was a decline in some of the large enterprises which led to formation of a large portion of small business entities. Employment in manufacture of wood and wood products and furniture production follows the trend. The average number of employees per year in total (manufacture of wood and wood products and furniture production) shows a decreasing tendency with an average annual rate (AAR) of -3,5%. Human resources are one of the most important factors for its development (Shumanska 2012).

Wood processing and furniture production in Macedonia are not as developed as in the other countries of the region. Meloska (2006) found that in 2006, Macedonia had 100 furniture/value-added producers. With regard to wood-based panels, Macedonia has a relatively small consuming market. Particleboard is the most commonly used panel type, while consumption of MDF and OSB is still relatively low. Because Macedonia does not have any wood-based panel producers, all consumption is from imports. As in other countries in the region, wood-based panels are used mostly in furniture and interior furnishings production.

Beech chairs comprise the greatest share of furniture production in Macedonia and are a key value-added export product. For furniture exports as a whole, the most important markets are



neighboring countries (Serbia, Greece, and Bulgaria), mainly because of low cost of transportation and lower market requirements, such as quality and certification, relative to the EU (Statistical Yearbook of Macedonia 2014).

Wood industry in Macedonia is characterized by low growth rates, a small amount of investments, lack of technological progress and outdated technologies. Macedonia is falling behind in conquering and application of modern technologies and at the same time shows a significant technological dependence from abroad. Businesses in the wood industry as part of Macedonian economy are facing the same situations and challenges. Technological dependence of Macedonian economy is manifested by: conditionality, in most cases because of importing/purchasing outdated equipment and spare parts under adverse credit conditions; conditionality for purchase of imported raw materials; insufficient technological guaranteed performance for purchased licenses and foreign technologies; inability to fully use the installed capacities of the acquired technology; limited opportunities to export finished products from foreign technology; inability to consistently use the domestic staff's potential, especially in the development of their own "know - how", "software" and the like (Shumanska 2014).

## **Montenegro**

Given the country's size relative to other Balkan countries, Montenegro has a comparatively large wood processing industry, with about 500 companies in 2014. Montenegro meets domestic market needs in sawn-wood and has relatively significant exports considering the size of the country. The most significant countries for softwood sawn-wood exports are Serbia, with more than two-thirds, and Albania. Beech accounts for the remaining 8 percent of sawn-wood exports, again primarily to Serbia (Yearbook Montenegro 2014).

The most important countries from which particleboard is imported are Austria, Hungary, and Croatia. The situation is similar with plywood. Plywood is produced in only one factory, with a currently installed capacity of 3,000 [m.sup.3] annually. Only beech plywood is produced in this facility, and one-third of its production is exported into Italy. Most imports of plywood, primarily beech and poplar, come from Serbia. Production of other wood-based panels (OSB and MDF) does not exist. Slovenia is the most important country from which these panels are imported (Glavonjic 2008).

Furniture production exists, but with obsolete technology and low production efficiency. As a result, the predominantly SMEs are oriented toward local markets and, to a lesser extent, the markets of the surrounding countries, Albania, Serbia and Kosovo (Agency for SMEs of Montenegro 2014).

In 2014, of the total value of exports from Montenegro, primary wood processing contributed by 4.2 percent, and furniture production contributed by 0.3 percent. With regard to imports, the situation is reversed. Furniture accounts for 3.9 percent of total country imports, while primary wood processing accounts for 1.8 percent. Because of increasing housing demand and construction and consumer demand for finished wood products, local producers are not able to meet demands, resulting in an increase in imports, with imports of furniture having the biggest influence. In 2013, Serbia accounted for 45 percent of furniture imports with products such as chairs/couches, dining room furniture, bedroom furniture, and other wooden furniture. Other important import countries are Slovenia, Italy, Bosnia and Herzegovina and Croatia. In 2014, furniture imports from India and China increased significantly, and these are expected to grow in the future (Yearbook Montenegro 2014).

## **Serbia**

Serbia has more than 7,000 wood product companies, of which around 70 percent were primary processors. Government is assisting foreign investment and industry expansion. One of the largest factories for multilayer parquet production in southeastern Europe began to operate last decade. Serbia imports a significant volume of softwood sawn-wood, 88 percent of which is imported from Bosnia and Herzegovina. Approximately one-third of hardwood sawn-wood production is exported, primarily to Italy (30%), Slovenia, Greece and Israel. Particleboard is the dominant wood-based panel used in Serbia, primarily in furniture production (EPF 2013).

The market situation for MDF is similar to that for particleboard. Consumption of MDF has been increasing for several years and has been satisfied completely by imports, which have been increasing

with demand. Consumption of OSB is also increasing, with about 60 percent of imports coming from Romania. Domestic plywood production cannot meet domestic demands resulting from an accelerated apartment building construction. Furniture industry in Serbia is characterized by many companies producing a wide assortment of products. Bedroom furniture is the most important category as a result of demand from the hotel industry. Other important categories are chairs as well as furniture for dining rooms, halls, and kitchens. In 2013, Serbia had 697 companies, 992 entrepreneurs, and 3,900 independent manufacturers in the furniture sector. The sector is export oriented, with a foreign trade surplus. Chairs are the main export product, with a 54.2 percent share by value. Other furniture categories of lesser importance are dining room and living room (9.2%), bedroom (4.9%), and kitchen (1.9%). In 2013, of all furniture exported, 55.4 percent went to Serbia's neighboring countries (Montenegro, Slovenia, Bosnia and Herzegovina and Macedonia). Although many companies export furniture, three companies (Simpo, Forma Ideale, and Gesim Industry) accounted for 45.5 percent of total furniture export value from Serbia in 2013. Imports of wooden furniture have increased dramatically. The most important import categories are dining room and living room, bedroom, and kitchen furniture. Furniture is imported primarily from Italy, followed by Poland, Slovenia, and Bosnia and Herzegovina (Yearbook of Serbia 2014).

#### **4. CONCLUSIONS**

This research was undertaken to gain an understanding of the current situation of Albanian wood products and furniture manufacturing industries as compared to the Western Balkans. During the last decade these industries have been greatly affected by economic cycles, rising production and transportation costs, and changing buyer habits. There is a strong need for the Western Balkans SMEs to improve on their financial management practices so that loans to these SMEs, due to default in payment, are no longer categorized as delinquent loans by commercial banks. Brigham and Ehrhardt (2002) advocate that managerial conservatism or aggressiveness by some managers of organizations enabled some firms to boost their profit levels, and go on to realize economic growth and development. However, such opportunities can only be enhanced only if organizations have effective financial control measures in place.

As the demand for housing and infrastructure projects increases because of the further development of western Balkan countries, there will be an increased demand for OSB and structural plywood. Efforts to increase competitiveness are occurring through government reforms that are helping to transition economies in the region to fully market driven. In addition, foreign investment hopefully will improve management technology, increase production efficiency, and create new supply chains from the region to current and new export markets.

Modern technologies are not yet part of the Western Balkans wood industry. The region is quite behind the EU in application of modern technology. Our region's economy, equipped mainly with this outdated technology, is not competitive with EU countries' economies with respect to the production type and products' quality, design and modernity. More technological solutions will have to be generated and adapted. These challenges have profound implications and indeed the way research is organized and conducted. One thing is, however, clear – the new generation of technologies will have to be based on high quality science and a heightened opportunity for end user participation in identification of targets.

In terms of employment structure, SMEs prevail. Assuming that global economy returns to a more normal level of performance after the recent recession, domestic companies that operate in wood products and furniture manufacturing industries can expect further improvements in their profitability. Furniture production is important to most countries in the western Balkan region, dominated by Croatia and B&H, which also dominate in exports for sawn-wood, wood-based panels and furniture. Serbia has become an emerging participant in production and exports of wood products. With regard to total industry size, Serbia dominates with more than 7,000 firms, followed by Croatia with 3,700 companies.

In Albania SMEs report for difficult access to capital for investment in improving technology and information technology, or the lack of operational capital. More capital, and information technology will allow for utilization and purchase the "sales on the stump" and for providing raw materials from forests. The most serious problems of wood industry enterprises and entrepreneurs are partially of

technical nature associated with outdated equipment and machinery, but what is more disturbing is the unfavorable financial situation with expensive commercial loans and the lack of incentives for modernization and development of SME funds and poor infrastructure.

The companies are mainly producing to fill local demand and occasionally for the foreign markets. The industry has ultimately positive growth rates in domestic and export markets, and increasing number of employees. It seems that these rates risk being in the short-run only, since design and innovation is missing. Also, stronger connections between the respective factors are required in order to enhance quality and productivity.

In Kosovo, the largest impediments to exporting were noted to be poor efficiency of customs in transit and importing countries, high costs of bank guarantees and political relations with importing countries. Although wood sector companies regard the lack of skilled employees a greater concern than the labor costs of such qualified workers, only one-fifth of them provide training to their employees.

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