

## MODEL OF PRODUCTION AND EXPORT VALUE CHAIN FOR THE SECTOR OF METALWORKING AND AUTOMOBILE PARTS IN TEŠANJ'S MUNICIPALITY

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### ABSTRACT

*Manufacturing industry in Bosnia and Herzegovina (BiH) represents the basis of economic development of the country. However, this sector in our country operates under very difficult conditions, without adequately designed systems to support its development by the public sector. Without strong support by the public sector, development of entrepreneurial ecosystems advances considerably slower. Lacking an adequate support, the Sector of micro, small and medium-sized enterprises (MSME) has been brought into an unequal position as compared to the competition from other countries that have systemically regulated support and incentive for development and export through the established support structures. Despite all the difficulties, the opportunities to establish the conditions for dynamic support to development of manufacturing industry are being identified today, through state and administrative incentive measures, and development of entrepreneurial ecosystem in BiH, too. During economic transition, major part of manufacturing capacities has stopped working; however, in some areas having the tradition of manufacturing, trades and small handicraft business, the production is flourishing today. One of such areas in BiH is Municipality of Tešanj. Production sector in this area is characterized by export-oriented MSMEs, amongst which there is a significant degree of cooperation at both local and regional levels. The production of a considerable number of companies in Municipality of Tešanj is based on the use of new technologies that enable the quality, flexibility and innovation in production. This article provided a summary of the key factors related to the competitiveness of the metalworking sector in Municipality of Tešanj as identification of gap analysis for that sector. The article is intended to provide a detailed model of production and export chains in BiH from metal made products stressed on automotive industry. During survey, it has been decided that Porter's 5 forces approach as well as Porter's Diamond model will be used for conducting the Analysis of competitiveness above mentioned sector in Municipality of Tešanj.*

**Key words:** Model, production, export value chain, metalworking, automobile parts, Municipality of Tešanj.

### 1. INTRODUCTION

This document addresses in detail the situation in the most significant part of real economy sector in Municipality of Tešanj through the analysis of competitive advantage of sectors of metal working and automobile parts [1]. Findings of analysis of this sector identify key obstacles in business operations and growth of companies within each individual sector, and provide recommendations for the

required actions to eliminate the identified obstacles. The analysis of competitive advantage of the mentioned sector was made on the basis of information gathered from 19 MSMEs from the mentioned sector and in accordance with the methodology of Porter's diamond, considering the structure and characteristics of production chain in mentioned sector [2].

## 2. BASIC FACTS ABOUT METAL WORKING AND AUTOMOTIVE SECTOR

Bosnia and Herzegovina (BiH) was one of the least developed Republics of former Yugoslavia whose gross domestic product (GDP) in 1987 accounted for 68% of the average GDP of Yugoslavia and almost 70% lower than in Slovenia, the most developed Republic in former Yugoslavia. Industry, led by metal working industry, manufacture of parts for automobiles and automobile industry, wood processing and manufacture of furniture, chemical industry, electric power generation, mining and metallurgy, textile industry and leather production, generated around 39% of GDP, employed around 44% of labor force and participated with 99% in the country's export [3]. Metal working industry in the period until 1990 had the key position in the structure of BiH industry and economy. Out of the total share of industrial production in the formation of GDP of BiH in 1989, metal sector (metal working, mechanical engineering and metallurgy) participated with 30.1%. Metal sector in that period was at medium level of technological development with a number of products that were recognizable and competitive on world market. Holders of the overall technological development in this period were the largest production systems such as „Energoinvest“, „Soko“, „Unis“, „RMK“, „ZRAK“, „Jelšingad“, „Rudi Čajevac“, „Famos“, „BNT“, „IAT“ and others. These large systems were holders of their own growth but of technological development of small companies, too, that had subcontracting relationship with these large systems. The figure No.1 presents individual importance of leading industrial sectors in percentages of total share of manufacturing industry in terms of formation of GDP of BiH, export and employment in 2015.

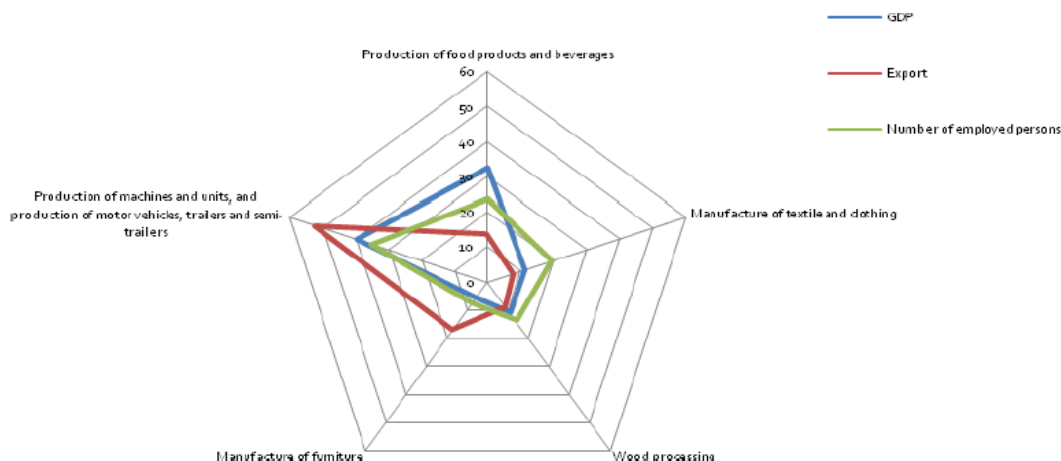


Figure 1. Presentation of percentage share of manufacturing branches in total share of manufacturing industry in terms of formation of GDP of BiH, export and employment in 2015.

Taking into account the constant growth of the importance of manufacturing industry and mentioned branches within the manufacturing industry in terms of formation of GDP of BiH, export and employment in the analyzed period, it can be concluded that they are very important export-oriented businesses in BiH and generators of general economic development of BiH in spite of numerous problems they are faced with [5]. Therefore, it is very important to implement a set of measures at both macro and micro levels to result in the creation of a cluster of interconnected stimulating conditions for accelerated and unimpeded development of the said branches. At micro level, an analysis of competitive advantage and production and export value chains for the above mentioned branches is very important and, in accordance with it, realization of various activities and programs and support projects for companies operating in the said sectors, aimed at increasing their competitive advantage and accelerating their development.

### 3. MODEL OF PRODUCTION AND EXPORT VALUE CHAIN

Based on business activities carried out by the analyzed companies in the sector of metal working and automobile parts in Tešanj, the following basic market segments have been identified:

- Manufacture of parts for automobile industry;
- Metal processing;
- Trade in raw materials, and;
- Services.

The Figure 2. provides general overview of market segments and sub segments within the scope of metal processing and automobile parts sector.

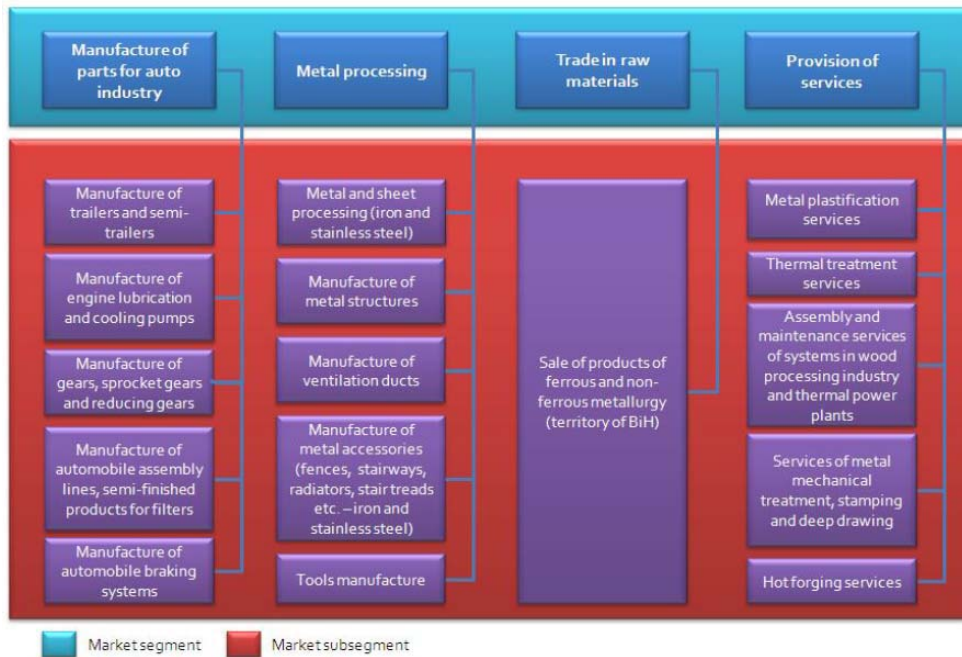


Figure 2. The general overview of market segments and sub segments within the scope of metal processing and automobile parts sector.

### 4. CONCLUSION

Companies in the territory of Tešanj Municipality have a tradition of more than 40 years in the segment of metal processing and manufacture of parts for automobile industry, which supply products to major European and world manufacturers in automobile industry (passenger and freight program). Major companies that operate in the segment of metal processing and manufacture of parts for automobile industry are Pobjeda d.d., Medena Commerce d.o.o., Enker d.d., Prevent FAD d.d., BME d.o.o., Mann+Hummel BA, Zupčanik d.o.o., Metalsklop d.o.o., Asval d.o.o., Kalim d.o.o., KPMBH d.o.o. and many other companies. After the war ended in 1995, companies from the territory of Tešanj Municipality initiated also stainless steel processing where company Inox Ajanović d.o.o. Tešanj can be singled out as one of the market leaders in the field of stainless steel processing in the territory of BiH. Besides Inox Ajanović d.o.o. Company, the company Es-Stahl d.o.o. Tešanj is also significant in the segment of stainless steel processing. Bearing in mind the needs for large quantities of metal raw materials with a view to manufacturing final products, the company Saračević d.o.o. Tešanj has gained the status of one of the major distributors of products and semi-finished products of non-ferrous and ferrous metallurgy in the territory of BiH.

The findings of competitive advantage analysis of the sector of metal processing and automobile parts according to Porter's diamond in case of SME's from Tešanj Municipality are as follows:

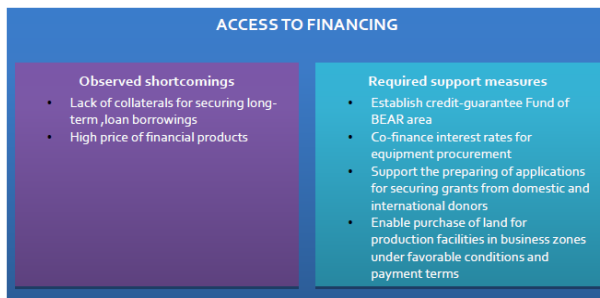


Figure 3. Findings of Access to Financing.

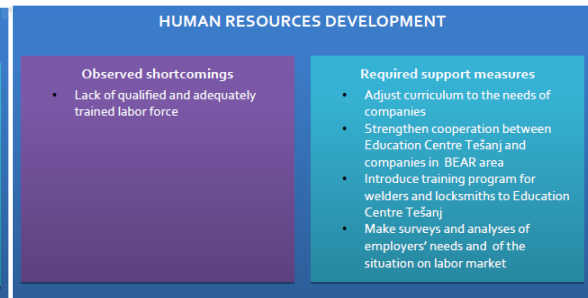


Figure 4. Findings of Human Resources Development.



Figure 5. Findings of Access to Market.

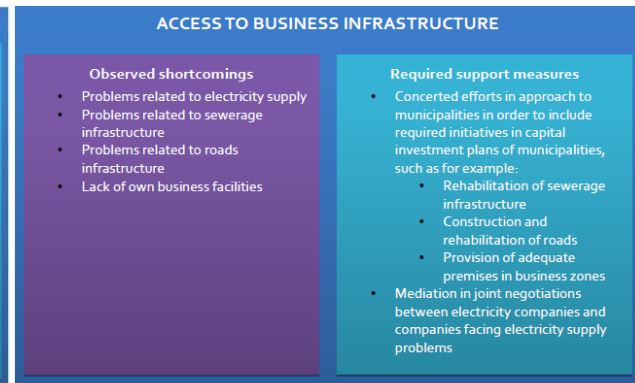


Figure 6. Findings of Access to Business Infrastructure.

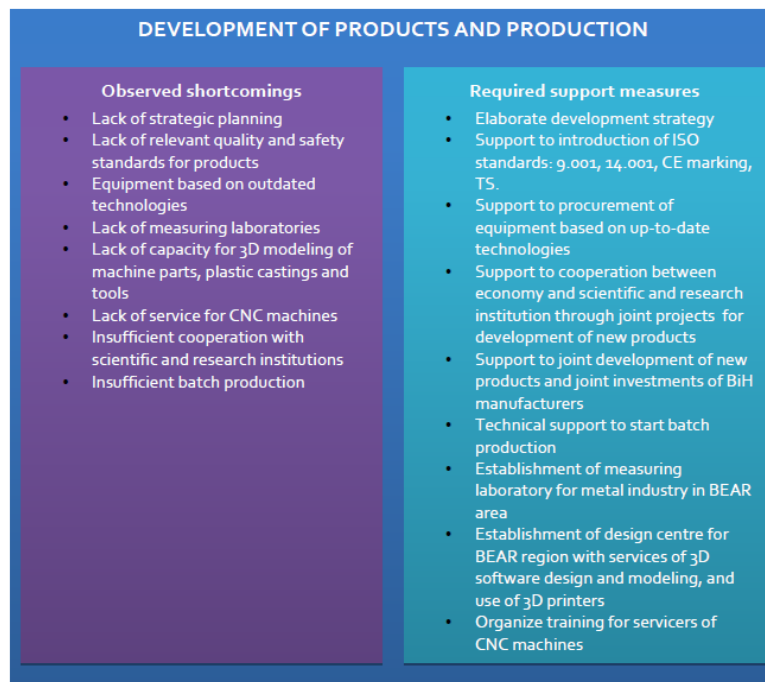


Figure 7. Findings of Products and Production.

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