Faculty of Economics, University of Niš
11-12 October 2017

International Scientific Conference
CONTEMPORARY APPROACHES
IN THE ANALYSIS OF ECONOMIC PERFORMANCES

HOW TO DEVELOP THE EXPORT VALUE CHAIN FOR THE SECTOR OF METALWORKING AND AUTOMOBILE PARTS IN TEŠANJ'S MUNICIPALITY?

Ismar Alagić [*]

Alaudin Brkić [•]

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 Tešanj Municipality as identification of gap analysis for that sector. The article is intended to

[*] TRA Tešanj Development Agency / University of Zenica, Bosnia and Herzegovina ✉ ismar.alagic@gmail.com

[•] University of Zenica, Faculty of Economics Bosnia and Herzegovina

UDC 669.01:339.137.2(497.6)

provide a detailed model of production and export chains in BiH from metal made products stressed on automotive industry.

***Keywords**: Export value chain, metalworking, automobile parts, Municipality of Tešanj.*

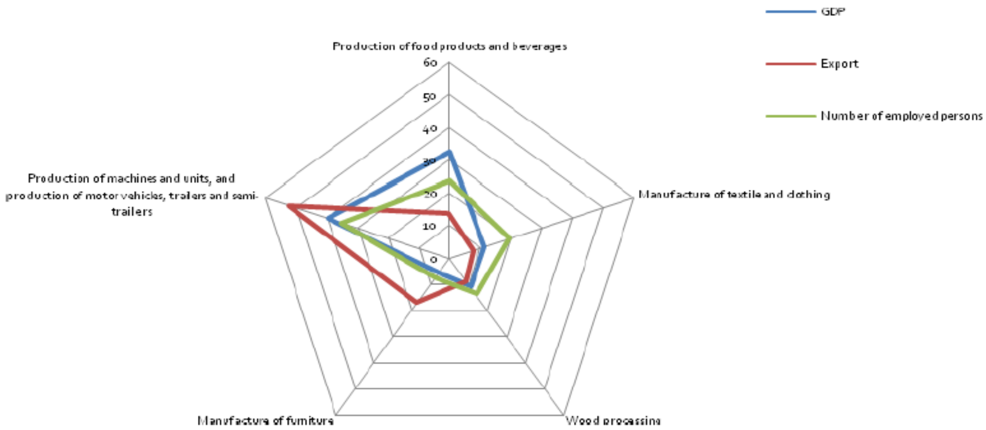
1. Introduction

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 in BiH

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 [1]

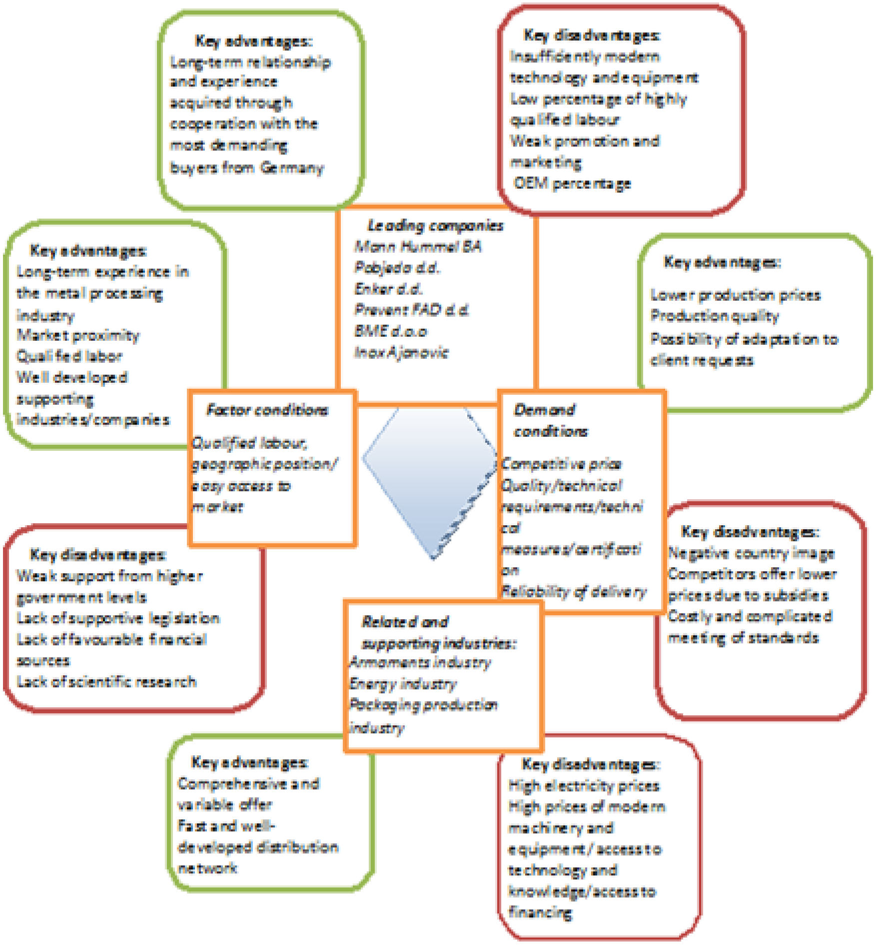


Taking into account the constant growth of the importance of manufacturing industry and mentioned branches within the manufacturing industry in terms of formation of GDP of BiH, export and employment in the analyzed period, it can be concluded that they are very important export-oriented businesses in 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. The profile of metalworking and automotive sector in Tešanj municipality

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.

Figure 2. The diamond model of competitiveness in case of metalworking sector in Tešanj Municipality [1]



4. 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.

Figure 3. The general overview of market segments and sub segments within the scope of metal working and automobile parts sector.

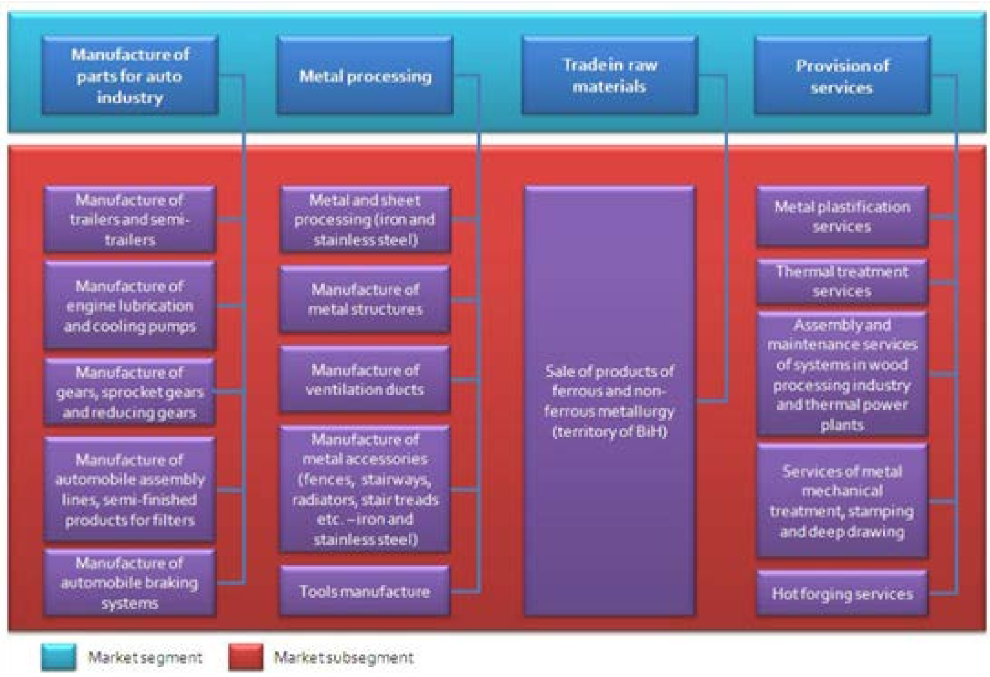


Figure 3. provides general overview of market segments and sub segments within the scope of metal working and automobile parts sector

The Figure 3. provides general overview of market segments and sub segments within the scope of metal working and automobile parts sector.

Considering the fact that some companies offer their products and services to the domestic market, and that most of them export them, competitors are both of domestic and foreign origin. Domestic competitors are mostly companies from the immediate surrounding that process several types of metals, produce spare parts for the automobile industry and produce metal structures. Companies operating in this industry are competitors when it comes to both domestic and foreign market. Foreign companies that need services from this industry have recognised the competitiveness of services provided by companies from Bosnia and Herzegovina and they are trying to do business with them. The advantage of companies from Tešanj as compared to competitors in Bosnia and Herzegovina is the experience in this industry exceeding 40 years. The experience is based on the long-standing industrial tradition of Tešanj in the metal processing industry, where large companies had been operating, which resulted in smaller companies established by persons that had worked and gained experience in the large companies. As a result, the quality of services provided by these companies has been recognised, which is a reason why companies from Tešanj mostly provide their products and services to foreign markets and the most demanding buyers. A competitive advantage is the qualified labour, quality and service guarantee, as well as security and trust of buyers.

A problem in the domestic market is unfair competition and companies operating as part of grey economy. However, an advantage over such companies is a better marketing position, which enables the companies to operate in a larger market. The cooperation with competitors is present only at the local level, since companies from Tešanj rely one on the other and they particularly cooperate when a company receives a large order that needs to be met in a short period of time. There is also cooperation in terms of exchange of services and knowledge, especially when it comes to the use of specific technologies.

When it comes to companies exporting abroad, competitors are mostly companies outside Bosnia and Herzegovina. These are companies engaging in special metal processing, production of metal structures and companies producing parts for the automobile industry. The companies Pobjeda and Prevent FAD produce parts used for OEM, which is a very demanding task. As a result, there are fewer competitors. In this industry, the competitors are mostly companies from EU Member States, such as Germany, Italy, the Netherlands, Spain, but also companies from Turkey and China.

As in case of companies active in the local market, the advantage of these companies is the long-standing tradition and experience in this industry. The very fact that the company Pobjeda started operating in 1953, which resulted in the establishment of two large companies and several smaller ones that are largely export-oriented, illustrates the strength of these companies. In addition to the vast experience, qualified and expert labour in this industry, another competitive advantage is the market proximity as compared to competitors from Turkey and China. As regards competitors from the EU, their advantage lies in more modern technology, better financial opportunities, logistics, market proximity and no trade barriers. The advantage of competitors from non-EU countries, such as Turkey and China is also a lower price as a result of cheaper labour and favourable import subsidies from their governments. Companies that are export-oriented do not cooperate with competitors due to distance and relationship that is more competitive. So far, only one company in the automobile industry had such cooperation in relation to the delivery of a certain quantity of parts as assistance to a competitive company in order for it to meet the deadline set by the buyer.

When it comes to suppliers of raw material, they may be classified as domestic and foreign suppliers. The most important domestic suppliers are companies engaging in the sale of different types of metal, metal sheets, metal structures, cutting tools and other products needed by companies in the metal processing industry. In the domestic market, there is a certain number of authorised dealers of foreign suppliers such as Bogner, SKF and Ferhem. Foreign suppliers are mostly iron plants and foundries from European countries such as Serbia, Croatia, Italy, the Czech Republic and Bulgaria. Suppliers of equipment and machinery are mostly foreign companies from abroad or their authorised dealers in Bosnia and Herzegovina.

The negotiating position of companies as compared to suppliers is based on agreement and trust. Suppliers act in a fair manner towards companies and do not give competitive companies from other countries a preferential treatment. The conditions and price sometimes depend on the quantity and this is applicable to all buyers. The quantities are supplied based on orders that sometimes include several months or are even annual orders. Considering the fact that there is a large number of suppliers that the companies cooperate with, there are no threats regarding the supply of sufficient quantities of raw materials. Suppliers of machinery and equipment also ensure transfer of knowledge regarding the use, servicing and provision of information on new and more modern equipment that is being produced. The possibility of improving the position of companies as compared to suppliers mostly depends on the quantity of requested raw material and more competitive requirements offered by other suppliers.

Companies included in this analysis have not developed their own products. Some of them have been producing less complex parts for the automobile industry. The companies Pobjeda d.d. and Prevent FAD d.d. produce OEM automobile parts for German companies such as Mercedes AG, GPM, Volkswagen AG and the Turkish company Turktractor. In addition to the production for the automobile industry, they also produce products for other industries, such as the armaments, wood and machinery industry. Companies producing for the automobile industry mostly do business with spare parts traders in the automobile industry in more than 50 countries of the world. Smaller companies producing for the domestic market also do not have their own products, but rather produce parts based on orders from companies from several industries.

The position of exporting companies as compared to buyers is unfavourable due to the fact that the competition and requests of buyers are becoming more and more complex and larger. Any change in the market results in a more complex operating environment, so that companies have to adapt themselves to the requests of buyers, or else they lose them. Since these companies do not have their own products, and work for dealers, they can hardly strengthen their negotiating position with buyers. Some companies see an opportunity in a better marketing approach and research of so far untapped markets.

The companies do not have any problems with collection of payments for their services. Large companies do business with known and long-term buyers. The accumulation of capital over the short term is sufficient for maintaining the relevant level of production and new investments for the purpose of production expansion. Small companies expressed their aversion towards unfavourable borrowing and they decide to invest only once they have accumulated the largest part of the funds they need. Some of the agreed orders are also paid in advance, and smaller companies have a good cooperation with suppliers of raw materials that enable them to pay for the raw material once they also get paid for their services.

Most of the companies do not think that there is a risk of new companies entering the market. Only three companies mentioned the possibility of new companies taking over part of the market they have been covering. These companies export more than 90% of their products and services and they perceive threats as being related to companies from the EU, Turkey and China, which engage in the production of the same or similar products for markets of these target countries. New companies are trying to take over clients based on price and better conditions. What keeps the companies from Tešanj competitive is the quality, long standing cooperation and trust gained in their relation with buyers. New companies sometimes do manage to take over part of the market, but companies from Tešanj manage to compensate for the loss by attracting new buyers.

None of the companies expressed concern in relation to the threat posed by the entry of substitute products replacing the products made by them. There had been attempts to produce some parts in the automobile industry from non-metals, such as ceramics and plastic, but it soon turned out that these materials were too expensive or insufficiently strong, so that they were abandoned or are present to a very small extent in the production. There is still use of substitute products and technology in the metal processing industry, but raw materials and production technology are not widely used due to several reasons, so that at this moment there is no risk of a radical transition to the use of substitute raw materials and use of new products and technologies in the metal processing and automobile industry.

5. Conclusion

Tešanj is leading in terms of presence and competitiveness in the metal processing industry as compared to other comparable locations in Bosnia and Herzegovina, but also in the Western Balkans region. It is an industry with long-term development tradition, which started developing in the 1950s and key development impulse in the 1970s as a result of automobile parts manufacture for the German automobile industry.

The experience acquired at large pre-war companies served as a generator for establishing a series of small and medium enterprises after the 1990s, so that there are more than 30 successful SMEs in the industry. These are mostly family businesses, and the industry is also characterised by the presence of large international companies.

The companies of the industry are pronouncedly export-oriented, so that five most important companies in the industry export 97% of their products, most of them to the most demanding German market.

If we were to identify a factor that has had the greatest impact on the development of competitiveness of companies in the sector, most arguments are included in the conclusion that the cooperation with the extraordinarily demanding German economy has had the greatest impact on the intensive industry development and significant level of competitiveness of companies. On the other hand, it may be concluded that supporting institutions, especially at the cantonal, Federation and state-level, have had a negligible or insufficient impact in terms of competitiveness of companies in the sector.

References

1. Alagić I.: The Situation analysis for metal working sector in Tešanj Municipality, GIZ Prolocal, 2015.
2. Porter, M.E.: The Five Competitive Forces That Shape Strategy, Harvard Business Review, January 2008.
3. Development of industrial policy in FBiH,Faculty of Mechanical Engineering of Sarajevo University,2009.
4. Alagić I.: Quality Management:Lean Production-Six Sigma, ŠtamparijaS, Tešanj, 2017.
5. Alagić I: Export Book-Customer Specific Requirements, TRA Tešanj Development Agency, Tešanj, 2015.
6. xxx: Strategy of Development of Tešanj Municipality 2013-2018, Municipality of Tešanj, 2013.
7. xxx: Strategy of export growth in BiH – Draft 2012-2015., B&H Export Council, 2011.

KAKO RAZVITI IZVOZNI LANAC VREDNOSTI ZA SEKTORE METALOPRERAĐIVAČKIH I AUTO-DELOVA U OPŠTINI TEŠANJ?

Apstrakt: Prerađivačka industrija u Bosni i Hercegovini (BiH) predstavlja osnovu ekonomskog razvoja zemlje. Međutim, ovaj sektor u našoj zemlji funkcioniše pod veoma teškim uslovima, bez adekvatno dizajniranih sistema koji podržavaju njegov razvoj od strane javnog sektora. Bez jake podrške javnog sektora, razvoj preduzetničkih ekosistema značajno se usporava. Nedostatkom adekvatne podrške, sektor mikro, malih i srednjih preduzeća (MSME) je doveden u nejednak položaj u odnosu na konkurenciju iz drugih zemalja koje imaju sistemski regulisanu podršku i podsticaje za razvoj i izvoz kroz uspostavljene strukture podrške . Uprkos svim poteškoćama, danas se identifikuju mogućnosti za uspostavljanje uslova za dinamičku podršku razvoju industrijske industrije, putem državnih i administrativnih mera za podsticanje, te razvoja preduzetničkog ekosistema u BiH.

Tokom ekonomske tranzicije, veliki deo proizvodnih kapaciteta prestao je da radi. Međutim, u nekim područjima koja imaju tradiciju proizvodnje, zanata i malih rukotvornih delatnosti, proizvodnja danas cveta. Jedna od takvih područja u BiH je Opština Tešanj. Proizvodni sektor u ovoj oblasti karakterišu izvozno orijentisani MMSP-i, među kojima postoji značajan stepen saradnje na lokalnom i regionalnom nivou. Proizvodnja značajnog broja preduzeća u Opštini Tešanj zasnovana je na korišćenju novih tehnologija koje omogućavaju kvalitet, fleksibilnost i inovativnost u proizvodnji.

U ovom članku dat je rezime ključnih faktora koji se odnose na konkurentnost sektora obrade metala u Opštini Tešanj kao identifikaciju analize jazova za taj sektor. Cilj ovog članka je da obezbedi detaljan model proizvodnih i izvoznih lanaca u BiH od proizvoda izrađenih od metala koji su naglašeni u automobilskoj industriji..

Ključne reči: izvozni lanac vrednosti, obrada metala, auto-delovi, Opština Tešanj.