

COMPETITIVENESS INDICATORS IN THE MANUFACTURING INDUSTRY IN THE REPUBLIC OF CROATIA

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Abstract

Competitive advantage is what each enterprise stands out from the rest of the competitors in the market. It is the reason why the enterprise operates maintains and achieves growth. For the majority of enterprise competitive advantage is rarely unique and changes over a longer time period. Successful enterprises are therefore constantly looking for new competitive advantages and spend a lot of time for market research. When calculating the index of competitiveness it should calculate indicators such as: allocation of public funds, trust in politicians, judicial independence, ethical corporate behavior, GDP, the nature of competitive advantage, control of international trade, capacity for innovation, procurement of advanced technology products, the rate of inflation etc.

The aim of this paper is to research financial indicators of 20 small enterprises in Croatian manufacturing industry and compare their results from 2011, 2012 and 2013. Indicators are base that shows success and development of enterprise. The research is conducted through a survey. The goal is to present a current state of the competitiveness of enterprises in manufacturing industry, and to determine the indicators which improve the competitive position of enterprises.

Keywords: competitiveness, indicator, manufacturing, enterprise, advantage

JEL Classification: L16, L20, L52, L6

1. INTRODUCTION

The industry consists of a group of companies that produce very similar products. Industries differ in economic characteristics, competitive characteristics and profit prospects. Under the economic characteristics that should be considered in identifying the dominant characteristics of the industry are considered: size and growth rate of the market, the geographic boundaries of the market, the number and size of competitors, production capacity, customer needs, technological changes, differentiation, product innovation, economies of scale etc. All industries have different characteristics and for them specific competitive forces. Competitive advantage is unimaginable to reach without successful business strategy. Competitive strategy enables the creation of better competitiveness of enterprises, determines objectives that should be achieved, and what elements should be satisfied in order to achieve the intended goals.

2. COMPETITIVE ADVANTAGE

Competitive advantage is what the company stands out from the rest of the competitors in the market. "The biggest threat for entrepreneur or manager is to lose customers. Competitive advantage is the reason why the customer decides to purchase in a particular company. In the case of a reduction of profits companies decide for lower prices, in order to compete in the market" (Porter, M.E., 2004., p.25). In such conflict survive can only financially powerful enterprises. Companies to its customers have to offer more than low prices. It needs to promote its competitive advantage or develop and implement new to achieve the best possible position for the defense of competition. Key success factors are the factors that affect every member of the industry. They include certain strategic elements, characteristics of products, resources, expertise, etc.

There are two types of competitive advantage, which is divided into external and internal. For external competitive advantage for company is the most important reputation perceived by customers. Under external competitive advantages are considered: patented products or special services which the competition cannot be measured, better product quality, quick delivery, etc. "Internal competitive advantages have influence on customers, but customers may not see it. These are: purchasing power, substitute products or services, market position, experience, production advantages, distribution advantages, links with the authorities" (Smith, J.L., 2007., p. 163). In case the company does not have a

competitive advantage, then as soon as possible it should be created. Creating competitive advantage not only helps the company, but redirects the way of doing business and focus on new goals.

2.1.1. PORTER'S FIVE GENERIC COMPETITIVE FORCES

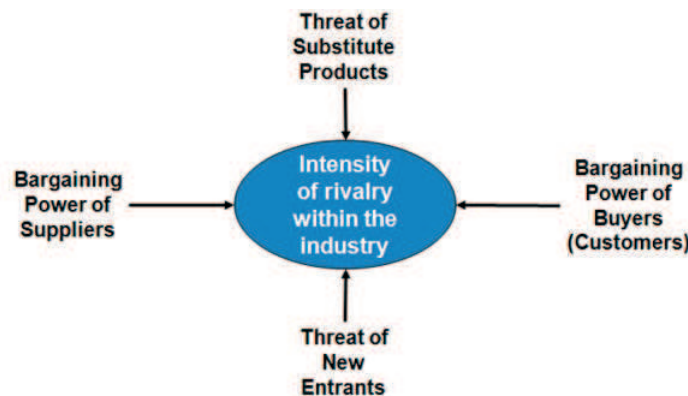
Five competitive forces affects more or less on all companies in the industry. All five competitive forces have influence on intensity of the competitiveness and profitability of the industry, and a major power or force becomes the most important point for the determination of the company's strategy. "The company with a strong market position in the industry, where is a small possibility of entry of new competitors into the market, will reduce the prices of their products if there are substitution product with low price. The structure of the industry that affects the strength of the force should be visibly different from the many short-term factors affecting the competitiveness and profitability. Fluctuations in economic conditions in a business cycle influence the level of short-term profitability of almost all companies in various industries" (Porter, M.E., 2004., p.3).

Fine competitive forces are shown in picture 1:

-*The threat of new entrants.* New companies that entering in the market create new market capacity. Such companies often have substitution products that cause lower price levels and reduce profitability. The threat of entry into the industry depends on the existing barriers to entry, and the reaction of already existing companies.

-*The rivalry within industry.* The rivalry among existing competitors means balancing between tender prices, advertising, introduction of products, construction of commercial networks, the development of knowledge and skills. The rivalry occurs when one or more competitors insights opportunity to improve their position.

Picture 1. Five porter's competitive forces



Source: <http://www.tutor2u.net>

-*Threat of substitute products.* Companies that compete in an industry are under pressure from competing companies that offer substitutes. If substitutes are cheaper than the product of an industry, then industry tries to reduce prices of their products.

-*Bargaining power of buyers.* Customers in the industry require a reduction of price of products, higher quality products or services. Power to influence customers of the industry depends on the number and characteristics of the market situation. If a large portion of sales purchased by one customer, it increases the importance of the customer to achieve business results to sellers.

-*Bargaining power of suppliers.* Suppliers can show their power over the prices of products in ways that threat: an increase in price or reduction in quality of goods or services.

2.2. INDICATORS OF COMPETITIVENESS IN REPUBLIC OF CROATIA

Competitiveness of the country is characterized by numerous elements that constitute a lack of Croatian competitiveness, such as: costs of agricultural policy, the ability to attract talented people, incentives to investment, cooperation of employers and employees, employee education, sophistication of customers, protecting investors, development cluster, to protect the interests of minority shareholders, technology transfer, bias decisions of government officials, the impact on the market, the independence of the system, strengthening of local competition, the effectiveness of management boards, transparency of government policies, the availability of credit, the representation of foreign ownership, willingness to delegate responsibilities, balance the government budget.

Table 1. Problems of national competitiveness

	2012.	2013.	Change
Innovation capacity	72	110	-38
Manufacturing technology	104	103	1
Development of clusters	94	114	-20
Marketing	83	94	-11
Control of international distribution	96	97	-1
Credit availability	94	105	-11

Source: Izvješće o globalnoj konkurentnosti 2014-2015

Table 1. presents biggest problems are innovation, which has negative change -38 in comparison form 2012 to 2013 year, other problems are development of clusters with negative change of -20, marketing and credit availability with -20, and only technology development doesn't have negative change, it is almost the same in 2012. and 2013.

Table 2. shows positive indicators for business competitiveness in Republic of Croatia. Contrary to negative indicators positive indicators are development of research and development (R&D), comparison of wages and labor productivity, customer orientation, business ethics and its implementation, efficiency of CEO and supervisory boards.

Table 2. Positive indicators of business competitiveness in Republic of Croatia

	2012.	2013.	Change
Investments in R & D	76	65	11
Wages and productivity	101	82	19
Customers orientation	107	84	23
Business ethics	94	76	18
Efficiency of CEO boards	127	106	21

Source: Nacionalno vijeće za konkurentnost, 2014

Positive indicators have growth form 2012 to 2013. The biggest positive change is customer orientation, than growth of efficiency of CEO boards. Croatia should support development of indicators shown in table, and create new indicators which would be leaders of national competitiveness. Technology should be one of most important indicators that should become strong positive indicator.

3. COMPETITIVENESS OF REPUBLIC OF CROATIA

Comparing competitiveness on global level, it is clear that Republic Croatia is not competitive. Croatia is one of lowest ranging competitive country in European Union, and not very well positioned in the world. Indicators as rate of unemployment, rate of growth of GDP is low, ratio of export and import is unfavorable, there are not enough investments, and profits are low and so on.

Table 3. shows data on the competitiveness ranking list and competitiveness index, between top fifteen most competitive countries in the world and Republic Croatia in 2013/2014. Table shows that Croatia is currently on 75th place in terms of competitiveness in the world with an index of competitiveness of 4.13. Before the global economic crisis 2006-2007 was the 56th place. Very similar are rated countries in region Bosna and Herzegovina and Slovenia.

Table 3. Range of competitiveness in period from 2008-2013

	2013-2014	Index 2013-2014	2012-2013	Index 2013-2014	2011-2012	Index 2011-2012	2008-2009	Index 2008-2009
Switzerland	1	5,67	1	5,72	1	5,74	2	5,61
Singapur	2	5,61	2	5,67	2	63	5	5,53
Finland	3	5,54	3	5,55	4	5,47	6	5,50
Germany	4	5,51	6	5,48	6	5,41	7	5,46
USA	5	5,48	7	5,47	5	5,43	1	5,74
Sweedeen	6	5,48	4	5,53	3	5,61	4	5,53
Hong Kong	7	5,47	9	5,41	11	5,36	11	5,33
Netherland	8	5,42	5	5,50	7	5,41	8	5,41
Japan	9	5,40	10	5,40	9	5,40	9	5,38
UK	10	5,37	8	5,45	10	5,39	12	5,30
Norway	11	5,33	15	5,27	16	5,18	15	5,22
Taiwan	12	5,29	13	5,28	13	5,26	17	5,22
Qatar	13	5,24	11	5,38	14	5,24	26	4,83
Canada	14	5,20	14	5,27	12	5,33	10	5,37
Denmark	15	5,18	12	5,29	8	5,40	3	5,58
Slovenia	62	4,25	39	5,05	39	5,12	42	4,50
Croatia	75	4,13	81	4,04	52	4,76	61	4,22
BiH	87	4,02	88	3,93	92	4,25	107	3,56
Serbia	101	3,77	95	3,87	88	4,28	85	3,90

Source: made by author according to World Economic Forum

Compared to previous period for example 2008 or 2011 Croatia had better rank, it was on 52nd and 61st position. Croatia is far away from average of most developed countries. It should make effort to improve Croatian position in future period and to improve its indicators that effect on it. Republic of Croatia as a member of EU should reach similar position as a developed western countries.

One of most important factor shown in table that presents competitiveness is GDP (GDP in HRK, GDP in EUR, GDP per capita, GDP rate of growth, % of GDP in foreign debt). Table 4. shows data form 2007 to 2013.year.

Table 4. Value of GDP in Republic of Croatia on period form 2007-2013. godine

	2007.	2008.	2009.	2010.	2011.	2012.	2013.
GDP (mil.HRK,)	322.310	347.685	330.966	328.041	332.587	330.456	330.135
GDP (Mil. EUR,)	49.935	48.135	45.093	45.022	44.737	43.959	43.591
GDP per capita(EUR)	9.904	10.856	10.181	10.191	10.453	10.300	10.213
GDP (real rate of growth (%))	5,2	2,1	-7,4	-1,7	-0,3	-2,2	-0,9
Foreign debt (% of GDP)	76,8	84,3	100,4	103,3	102,6	102,1	104,7

Source: made by author according to HNB (www.hnb.hr)

Sum of GDP is becoming every year less and less. It is not good trend and it lasts for very long period of time. Expectations for future are not optimistic. Real rate of growth is negative since 2009. with negative value of -7,4. It is time of beginning of global economic crisis, which lasts in Croatia till now.

4. MANUFACTURING INDUSTRY

“Industrial production in Croatia is occupied by a recession has significant place in the overall production. Some companies off are in transition or died during the war. Above all this applies to textile, leather, metal and wood industry. The value of sales of industrial products in 2011 amounted to 17.4 billion euros. To the total income of the leading industries are food processing, beverages and tobacco, followed by the chemical and oil industries. The exports were the most common processing of petroleum products (11.8%), motor vehicles (11.2%), chemical products (8.3%), food products (8.1%), electrical equipment (7.8%), machines (6.3%), fabricated metal products (6.1%), pharmaceutical products (4.8%), clothing (2.9%), wood and wood products (3.4%)” (<http://>

www.croatia.eu). Manufacturing industry was developed at the end of 18th century after the invention of steam engine in Britain. Manufacturing accounts for a relatively large part of the total world production of goods and services. In Croatia it was about “223.000 employed in manufacturing industry” (<http://www.poslovni.hr>)

5. RESEARCH

In this paper, the primary research by survey was conducted on 20 enterprises: 16 small, 3 medium and 1 big manufacturing enterprises in Republic of Croatia. The analysis was conducted on one enterprise from Varaždinska County, Koprivničko-križevačka County, Sisačko-moslavačka County, two from Zagreb and 15 companies with headquarters in Brodsko-posavska County. The results are based on business activity in 2014. Table 5. show number of employees in enterprises from research.

Table 5. Number of employees in each enterprise

Number of employees	Number of enterprises
0-10	0
10-20	4
20-30	9
30-50	5
50-100	2
100 <	1

Source: made by author

Table 5. shows that most enterprises are small: 4 have 10-20 employees, 9 with 20-30, 5 with 35-50; two medium sized enterprises with 50-100 and 1 big with more than 100. The most enterprises in manufacturing industry are small. Table 6. shows total revenues and total expenses of researched enterprises. Many enterprises have acceptable and high revenues, but problem is because they also have high expenses. Revenues should be higher than expenses as much as it can. Low expenses and high revenues show that enterprise is competitive. Enterprise should know how to manage with expenses and costs and how to make reduction of costs especially in production process.

Table 6. Total revenue and total expenses of enterprises

Total revenue in HRK	Number of enterprises	Total expenses in HRK	Number of enterprises
0-100.000 kn	0	0-100.000	2
100.000-500.000	2	100.000-500.000	4
500.000-1.000.000	4	500.000-1.000.000	2
1.000.0000 <	14	1.000.0000 <	12

Source: made by author

In table 6. are presented revenues, 2 enterprises have revenues in interval form 100.000 till 500.000 HRK, 4 have in interval from 500.000 to 1 million HRK, and 14 have profit higher than 1 million. Expenses are not significantly lower than revenues. Many enterprises, 12 of 20 have expenses higher than 1 million. The revenue-expenses ration is not satisfied. Enterprises have very high total expenses in comparison with revenue. Total result of their business is shown in table 7 that presents profit or loss in 2014.

Table 7. Profit/loss

Total profit/loss in HRK	Number of enterprises
Loss	2
0-50.000	0
50.000-100.000	9
100.000-1.000.000	5
1.000.000 <	4

Source: made by author

Table 7. shows that even enterprises have high total revenues, they don't achieve profit. Two enterprises don't have positive business and they had loss at the end of 2014. The most of them, 9 enterprises have profits in interval from 50- 100.000 HRK, and only 4 enterprises have profit higher than 1.000.000 HRK. In table 8. below are presented data about amount of import and export of enterprises.

Table 8. Value of import and export

Amount of import	Number of enterprises	Amount of export	Number of enterprises
0-100.000	1	0-100.000	9
100.000-1.000.000	3	100.000-1.000.000	9
1.000.000 <	16	1.000.000 <	2

Source: made by author

Value of export and import has reciprocal results. Most enterprises import products and inputs, but doesn't export any. The result is lack of competitiveness of domestic enterprises, and un-development of manufacturing industry. Enterprises are not competitive with their product, methodology of production, technology and so on. One of result is lack of investments, just 11 enterprises had investments in 2014 till 100.000 HRK, and only two enterprises have investments higher than 1 million HRK. It is important to invest in technology, new production methods, in IT technology, in robots in production and marketing activities. Most technology is out of date and can't produce products which are competitive on European market. According to research enterprises mostly don't have or have few high educated employees. Without educated human resource it is impossible to develop competitive advantage. "Competitiveness is the basis that determines the success or failure of the company. It also determines the suitability of the company's activities that contribute to its performance, such as innovation, cohesion organizational culture or good implementation" (Porter, M.E., 2008, p.20)

6. CONCLUSION

In order to achieve competitiveness of manufacturing industry, it is necessary to achieve the strategic goals of growth. One of the goals is to increase GDP, reduction of unemployment in the industry, increasing the quality of life and increase the investment climate. Manufacturing industry should be a pillar of the economy, but the production is very low quoted. It is necessary to encourage the development and investments to modernize production suited, procure new technology which makes it possible to produce products that will be at the price and quality will be able to compete on the international market. It is important to invest in the development of human resources and employee education. All these changes will allow companies tempt not only high operating income, but to reduce expenses and that is earned higher profits. Research has shown that a small number of companies were able to realize significant profits that would enable further development and not just their survival in the market, but also the achievement of sustainable competitive advantage.

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