

# Strategic analysis of wood industry in Croatia based on Porter's five forces

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**UNIVERSITY OF ZAGREB**  
**FACULTY OF ECONOMICS AND BUSINESS**  
**Bachelor Degree in Business**

**STRATEGIC ANALYSIS OF WOOD INDUSTRY IN  
CROATIA BASED ON PORTER'S FIVE FORCES**

**Undergraduate thesis**

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**Zagreb, September 2019**

## SUMMARY

With this undergraduate thesis I would like to point out the vast possibilities and growth potential of the wood industry, mostly of Croatian, but European markets as well. I have chosen this type of industry because it has enormous potential to spread and compete on both markets.

Wood industry in almost all countries in the world has important role in total national economy. Such economy is reflected through contribution from number of employees, number of firms and other economic effects that are directly connected to the industry. Wider social contributions that are aimed to develop rural areas, and enlarge harmonization of the overall country development processes are of important role as well.

Wood industry is divided on several key activities such as wood processing and wood products, furniture and paper production, etc. It is general classification in all European countries, and in Croatia as well. Accordingly, all work and paperwork analysis will be processed in such way. Globalization, accelerated market changes, technology developments and increasingly demanding customers are all consequences of numerous trends happening constantly within these industries.

However, with this undergraduate thesis, I want to highlight the position of the wood industry of the Republic of Croatia within the European union and its success in monitoring European and global trends. Also, under my survey about this topic that is based on Porter's five forces can be perceived some of the important strengths that can be improved, weaknesses that must be eliminated, opportunities that should be exploited, and threats that should be avoided.

**Keywords:** Porter's five forces, wood industry, wood processing sector of the Republic of Croatia

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# 1. Introduction

As an introduction to my seminar, I would like to start with the basic explanation of the topic I have chosen for my undergraduate thesis. Strategic analysis of wood industry in Croatia is my original title, and I have chosen to do research that will be based on Porter's five forces. Wood industry in Croatia is of my interest for a longer period of time, and now I have the opportunity to show what I know and what I have examined.

To initiate I will say something about who Michael Porter is, and what his five forces actually represent. A helpful, widely used framework for classifying and analyzing the factors that determine the intensity of competition and levels of competition in different industries was developed by Michael Porter of Harvard Business School.<sup>1</sup> Structure of Porter's five forces in general representing the profitability and competitiveness of any industry.

## 1.1. Research goal

Research goal of this undergraduate thesis is to give the answers on question about whether Croatian wood industry is strong and profitable enough for companies (or other players on the market) so they can operate normally and compete with each other's. In other words, main purpose is to determine competitive intensity, or how intense is a competition of producers and sellers (or firms in general) within a Croatian wood industry.

Also, this undergraduate thesis is part of my research about how Croatian wood industry is viewed by people who are involved directly or indirectly in this type of an industry. Or in other words, to examine what Croatian experts from wood industry think about fundamental questions of an industry. All questions and given answers are strongly connected to the Porter's five forces framework.

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<sup>1</sup> 'The third industrial revolution', *The Economist*, 21st April 2012.

## 1.2. Data sources

Data within this undergraduate thesis is used from books and internet sites that are as much closely related to the topic as possible. All Graphical representations and questions it contains are made by myself, and are based on a survey of the Porter's five forces framework explained in detail later in the text. Some of the figures are taken from one book-based source, while others are from internet questionnaire created by myself for this undergraduate thesis purpose. Questions in the survey are of an online type and are sent via email directly to the selected industry experts. All answers on the survey are as original and accurate as possible.

## 1.3. The Structure of Undergraduate thesis

This undergraduate paper is separated into ten parts. Introduction is included and placed as first of them.

In the second part we can find the general descriptions of Porter's five forces and how they are used. Also, in this part I pointed on a Competitive intensity, which is one of the forces as well, but is the most important for any industry and industry's competitors. Competitive intensity counts eight forces that are in detail explained later in the text.

Furthermore, here is marked off part about finding a strategic group that is of the same importance as competitive intensity. Lastly, I included figure and explanation of usage of Porter's five forces, how competition framework looks like and what can be seen from it.

Under the third part can be found general explanation of wood and wood processing industry in Croatia and other European countries. Abstracted are some parts about positive and negative facts from the past, and present as well, that circulating within wood industry in Croatia and abroad.

Fourth part is assigned to the survey itself. Here can be found how and why I started to do the survey, how survey looked like, who have been respondents and why I chose specifically them. Moreover, under fourth subtitle are listed figures that showing how the survey questions looked like, and below each figure can be found text that hold the explanation of the figure to which it refers.

Fifth part of the undergraduate thesis is about very first Porter's force – Industry rivalry. Here can be found description of basic five forces within industry rivalry. After that, there are first six questions from the survey directly connected to the industry rivalry, the results of the questions, and all explanations of the results. Also, can be found some additional quotes connected to this topic. The same is for all of the following forces.

Sixth part is allocated to the second Porter's force – Threat of new entrants. Under sixth part can be found listed and explained seven principal sources related to the second Porter's force. Moreover, questions from seven to ten belong to this section.

Seventh part of the undergraduate thesis is about third Porter's force - bargaining power of buyers. Here are represented and defined two important strengths of bargaining power, and are followed by four questions connected to it.

Under eight part can be found very similar Porter' force, but opposite as well – bargaining power of suppliers. It is very last force in the Porter's framework that I used for my questionnaire. Four questions (from sixteenth to seventeenth) are assigned to this section.

Almost the last subtitle is about questions not so related to Porter's five forces, but to views of Croatian experts about wood industry in general. Actually, this section answers the questions whether is worthy to invest into wood industry in Croatia, or not. Very last three questions from my survey are assigned to this section.

Tenth part, or last section, is represented by my personal conclusion about this undergraduate thesis topic. At the end you can find lists of references, graphs and figures used within undergraduate thesis.

## 2. Porter's five forces

### 2.1. Competitive Intensity

Porter's five forces is essentially a comprehensive framework for competitive analysis. It is more of resource view and it does take into account what is out and what is in an industry, the costs and how people deal with them. Main purpose is to determine competitive intensity, or how intense is a competition in any industry. Competitive intensity can be high or low, and according to Porter it is determined by eight factors.

First of them is simply Number of competitors, or what is important if there are a lot of people opening the same type of a business. And if so, competitive intensity will increase. Industry growth is another factor, it includes the main question: is it quickly growing industry or a slower growing industry? It is important because if it is a slower growing industry with a many competitors, firm can see how their competitive intensity may increase, and vice versa. Third, if there are high or low fixed and storage costs. If high, the firms that are in the industry will continue to fight to stay in the industry. The next one is Lack of differentiation. Although a lot of money is spent on marketing and branding, there is really not that much differentiation between businesses. That means that within the same industry, firms can differentiate in some parts or sectors, but not in all of them. Capacity added in a large increments is a fifth factor. Typically, when firm add volume in an industry, they have a lot of capacity. If so, again, the competition for the number of consumers that can fill empty spots is intense. Are those businesses using a wide range of competitive strategies is one of main questions and numbered as a next factor. If so, it is very difficult to forecast or understand what steps may be around firm, so they can count their contingency plan, or preplan to navigate best direction that firm will follow. Last two factors are high strategic plans for CEO's or for the industry itself and high exit barriers. Once firm is in the industry is difficult to get out. It also accounts are there highly specialized products or capital that firm have been used for the creation of goods and services that are difficult to liquidate. If so, firm is going to be much-less likely to exit the industry.

All of these factors above can create surroundings that can decrease organization's ability to make profit, or vice versa. In other words, huge number of competitors, products and services which are to compete creates high competitive intensity. Lastly, the focus firms should have is on finding a strategic group, or category of a competitors that allow to focus less on what firm provides, and more on what customers want.

## 2.2. Using Porter's five forces

**Figure 1 Porter's five forces of competition framework**



*Source: Undergraduate thesis author, Ana Jelčić*

When we want to understand how competitively intense some industry is, we firstly use eight factors (explained earlier) and then assess industry based on these eight factors. Each of factors may pose threat or the opportunity. In a case some firm starts a brand new, firm can make some decisions based on a market on which they play. Also, firm must then make some other types of decisions and the first step in making those decisions is understanding how the industry is currently structured. Since each industry brings its own requirements, Porter established five most important forces that can be seen from the figure 1.

There are 2 types of five forces of Porter's competition framework: horizontal and vertical. Horizontal competition include competition from entrants, competition from established rivals, and competition from substitutes. The other type of competition, vertical competition, include power of buyers and power of suppliers. For each of these competitive forces there is a number of key structural variables that briefly determines each of the forces.

### **3. Importance of the Wood Industry for Croatia**

The importance of wood industry in Croatia is multiplied by effects such as use of homegrown natural resources and crafting skill. This is further benefited by exporting finalized products to foreign markets and all the proceeding elements. The use of Croatian oak wood which is of high quality and is FSC certified is complemented by innovative design, which is crucial if the company is to follow world furniture trends and gaining market share for the company.

With a constant efforts, both in local and worldwide fairs, Croatian manufacturers and sellers have built successfully a brand names for themselves. Furthermore, they are recognized on the European market by their quality, use of cutting edge tools and the most important of all; the use of Croatian high quality oak. Wood manufacturing sector has enormous potential for expansion and exports increase, but with expected and much needed help and support from Croatian government.

Important to know is that in the past decade EU member states have strongly invested. In other words with industrial and fiscal policies they were encouraging public and private investments in forestry sector and wood processing industry. Respectively, recent researches suggest that investments in this sector and industry have a high multiplier effect on a value creation and employment. The interesting fact is that every 100 jobs in forestry sector and wood processing industry creates new 70 to 90 jobs in related sectors.

## 4. The Survey

Since my research is based on Porter's five forces in this chapter I will explain what is unique for each of forces, what have been my questions and what are the answers regarding each of the forces. Also, I will try to explain why each question is set up the way they are and what is individual connection between my specific question, Porter's specific force, and wood industry that I took as a part of my research.

Furthermore, I tried to make this survey as real and serious as possible so I sent more than hundred surveys and I got back more than seventy five answers from Croatian experts that are directly or indirectly included in an wood industry. They are mostly the owners or directors, or CEO's of a companies within wood industry in Croatia and abroad. The survey is completely anonymous and private. All questions are made by myself and are as closely related to the topic as possible. Also, all questions were asked in Croatian language, but I translated them for undergraduate thesis.

There are twenty-two questions and most of them are multiple choices. For some of a questions respondents have been able to choose more than one answer, for others it was limited only on one choice of the answer. Besides, most of the questions have been obligatory to answer, while some of them were able to not be answered or skipped. Three out of the all of the questions are of free-answer choice, and are basically short or long answer texts. Each question is unique and provides important information that helped me make my survey as accurate as possible. How questions looked like, you can find in next figures shown below in figures 2,3,4, and 5.

### 4.1. Examples of questions asked

*Sources: Ana Jelčić, Survey on Strategic analysis of wood industry in Croatia based on Porter's five forces. Available at <https://forms.gle/vtmFNVgMAHWUJgVo9> (English), and <https://forms.gle/9rp2R5hYxwt5jxmm9> (Croatian)*

***Figure 2 Multiple choice questions***

What are biggest threats for new entrants in Croatian market? \*

- Capital requirements
- Economies of scale
- Absolute cost advantages
- Product differentiation
- Access to channels of distribution
- Governmental and legal barriers
- Retaliation
- The effectiveness of barriers to entry

Questions like this one shown in figure 2 have been of multiple choice, meaning there have been possibility to choose more than one answer. This type of answered questions are shown as a column charts. Additionally, some of questions had sign for necessary to answer (can be seen as a red star in upper right corner) which means that respondents have not been able to continue with a questionnaire if they do not answer.

***Figure 3 Checkbox questions***

If the price of some furniture you want to buy goes up, you would:

- Try to find substitute for the same product In Croatia
- Try to find substitute for the same product abroad
- You would buy it regardless of price increase

Checkbox questions are type of the question where respondents were able to choose only one of all given possible answers. This type of answered questions are shown as a pie charts in different colors. I used this type of question when I wanted to check on hundred percent base respondent's affirmative opinion about corresponding facts asked. Moreover, this type of the question example does not include red star in the upper right corner, meaning that there have been possibility to continue with the questionnaire if respondents have not been willing to answer.

***Figure 4 Questions with possible answer added***

Do you know which European countries are the biggest rivals to the Croatian wood products market?

- Italy
- Germany
- France
- Netherlands
- Ostalo...

As can be seen from above in figure 4, this type of question had possibility to choose more than one answer, and add possible opinion as well if respondents had one (can be seen under last point added as "ostalo").

***Figure 5 Short and long answer text***

Can you give an example of firms or companies that currently representing Croatia's biggest competitors within wood industry?

Tekst kratkog odgovora

---

In your opinion, what are the best Croatian companies that are currently situated in a wood industry?

Tekst dugog odgovora

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This types of questions (like in figure 5) were asked to check some facts regarding the overall survey, to see how much information respondents have about an industry, and to make questionnaire as interesting as possible. First question is the example of short answer text, while second one is the example of long answer text.

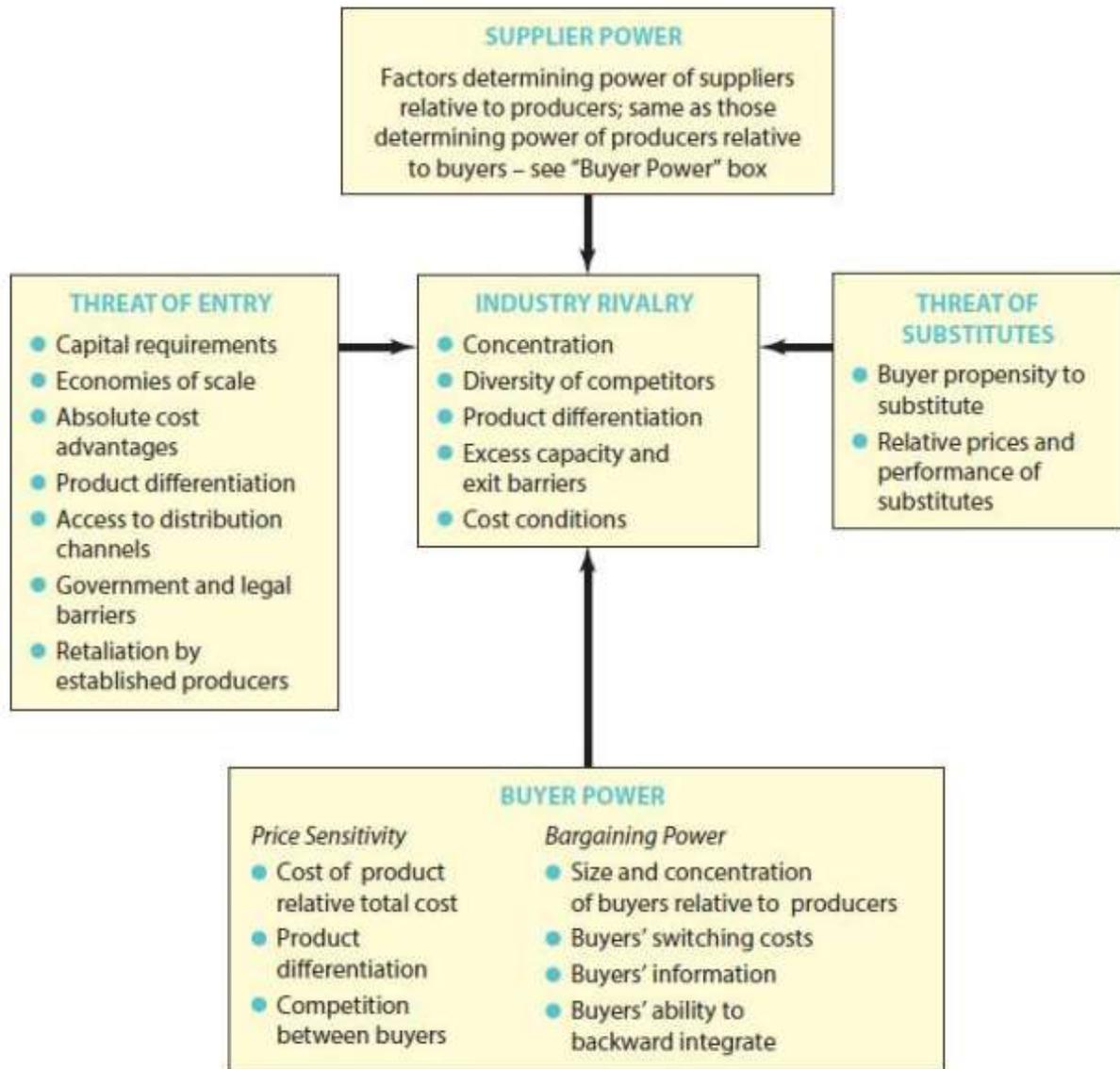
Over and above that, graphical representations of the results are all made by myself as well. The results on the answers are shown in percentages, and to make my survey as legible as possible, I circulated them into whole percentages (i.e. instead of 17.6% I put 18%). But, in my explanations you can find original percentages.

#### 4.2. The Structural determinants

Within next pages you can find overall presentation of the survey. Each of the Porter's forces will be presented as one of the subtitle under which can be found all necessary information connected to it, the survey and all the answers on the survey.

How I started to make questions is based on the structural determinants of the five forces of the competition that can be found in the figure 6. It is short design (or scheme) that helped me make my research as most professional as possible. Also, all of the forces are briefly explained later in the text. Let us look at each of them (figure 6 below)

*Figure 6 The structural determinants of the five forces of competition*



Source: Robert M. Grant & Judith Jordan, *Foundations of Strategy*, Second edition. Also available at [Foundations\\_of\\_Strategy\\_2nd\\_Edition](#)

## 5. Industry rivalry

First and most important force, Industry rivalry, is in general between already established competitors. The major determinant of the overall state of competition and the general level of profitability is competition among the firms within the industry, and is featured for the most industries. There are some industries where exist aggressive competition between firms, while in other industries competition is soften and rivalry focuses on innovation, advertising, and other similarities not connected to the price.

Within an industries where aggressive competition is present, prices can be pushed on a level below the costs. In that case industry-wide losses are incurred. Regarding current situation in Croatia, there is more-less like medium competition – not so intense, neither soft nor stable. The intensity of competition between established firms is the result of interactions between each of a five factors listed below.

### 5.1. Industry rivalry – five factors

5.1.1. **Seller Concentration** is connected to the size and number distribution of competitors within the market. In Croatian market product prices are very similar and focus of a competition is mostly on advertising, promotions and product development. But, since there are many firms included in market it is difficult for firms to coordinate the prices. In general, important to know is that price competition is not reduced by exit of a competitor, or increased by the entry of a new competitor. However, it is a proof that there is little or no evidence that seller concentration causes profitability increase. Richard Schmalensee concludes that: “The relation, if any, between seller concentration and profitability is weak statistically and the estimated effect is usually small.”<sup>2</sup>

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<sup>2</sup> “*Foundations of Strategy*”, *Second edition*. Book by Robert M. Grant & Judith Jordan.

5.1.2. **Diversity of Competitors** shows how similar firms are in their objectives, costs and strategies and is an extent to which a firm or group of a firms can avoid competition in a pricing. If we take a look just on Croatian wood industry, we can find there are no many differences between firms. But, if we include other European countries that are potential new competitors within Croatian market, we can distinguish many dissimilarities in terms of objectives, politics, religion, and production costs.

5.1.3. **Product Differentiation** is the third important factor of an Industry rivalry. If firm decides to cut prices in order to boost sales, it is mostly because of very similar offerings from rival firms. When there are similar product offerings, customers are more and more willing to switch between them. Croatia's case price competition tends to be weak because products are differentiated. Products made of natural material (such as oak or beech) or made of artificial material (like plywood), or many different ending processes with natural or without natural material, etc., makes competition not so strong. Although, there are probably many smaller firms competing.

5.1.4. **Excess capacity and exit barriers** is in general difference or equilibrium between demand and capacity. In some situations firms are forced to cut prices in order to attract new businesses (it is also called unused capacity). In other situations firms are forced to either excess capacity becomes circular and regular, or it becomes part of overinvestment and declining demand problem, and the end result is that excess capacity leaving the industry.

**Barriers to exit** are costs associated with capacity leaving an industry. Where resources are durable and specialized and where employees are entitled to job protection, barriers to exit may be substantial.<sup>3</sup>

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<sup>3</sup> "Foundations of Strategy", Second edition. Book by Robert M. Grant & Judith Jordan.

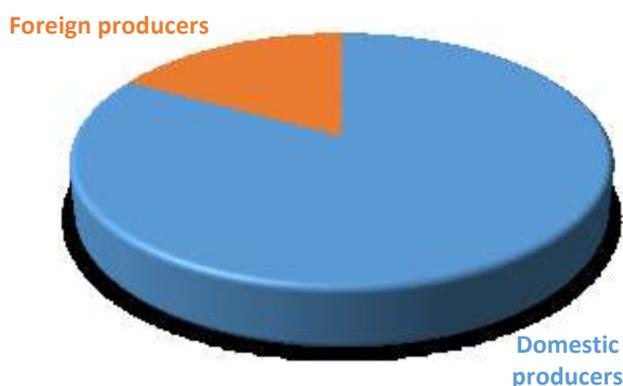
5.1.5. Cost conditions: Scale economies and the ratio of fixed to variable costs. Where fixed costs are high relative to variable costs, firms will take on marginal business at any price that covers variable costs.<sup>4</sup> In Croatia it is mostly the case that fixed costs are relatively high and firms cannot influence them (like interest, fiscal costs like tax, and utility costs). Firms then are forced to accept additional business at any price to cover variable costs.

The next step here is to show what I did about Industry rivalry in my survey. For Industry rivalry I set off first six questions. Here is brief description why I chose to set the question the way I did and participant's thinking and answers.

## 5.2. First question – The company rivals

When I started to do the survey, I wanted to start with something common from wood industry in Croatia. My first question: “Which of the two are stronger company rivals against Croatian firms within wood industry” is connected to a central Porter's force (Industry rivalry). This question included two possible answers of the possibility to choose only one of a given: “Domestic producers” or “foreign producers” and included red star. The results can be seen in a graphical representation 1, as shown below.

**WHICH OF THE TWO ARE STRONGER COMPANY RIVALS AGAINST CROATIAN FIRMS WITHIN WOOD INDUSTRY?**



*Graphical representation 1 – The answers of a respondents on the first question from the Survey - The company rivals*

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<sup>4</sup> “Foundations of Strategy”, Second edition, Robert M. Grant & Judith Jordan

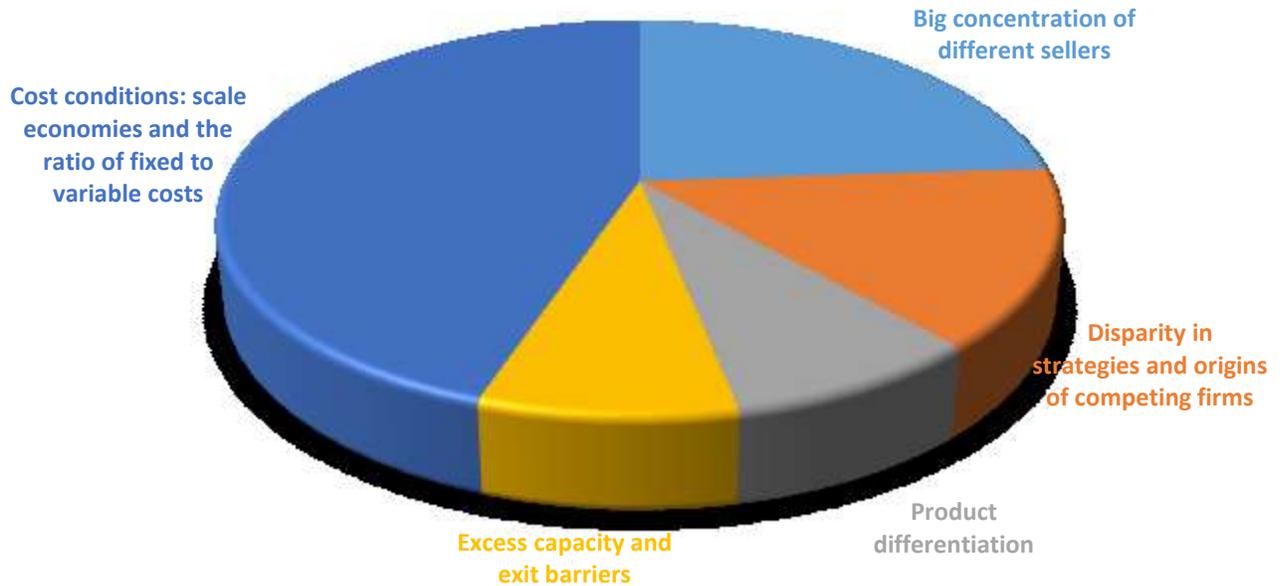
The results connected to the question number one are more or less expected. The bigger, blue part representing the answers of Croatian firms are stronger company rivals against other Croatian firms within wood industry in Croatia. It means that 81.4% of examined Croatian experts from wood industry in a bigger part agree that Croatian firms are good enough to be a strong competitors to each other's. In other hand, smaller, orange part shows that only 18.4% of respondents hold an opinion that strong rivals to Croatian firms are foreign firms that circulate within wood industry in Croatia).

### 5.3. Second question – Setting the right price

The next question included in the Porter's central force (industry rivalry) is tightly connected to a product prices. The question was: "Which of the following represents biggest issues in setting the right price for a products to firms that compete on the Croatian market" and there have been given five possible answers. The participants have been able to choose more than one answer based on their opinion. The given answers are basically the five forces from Industry rivalry and thus representing the intensity of competition between established firms. Possible answers were given in the following order: "Big concentration of different sellers", "Disparity in strategies and origins of competing firms", "Product differentiation", "Excess capacity and exit barriers", and lastly "Cost conditions: scale economies and the ratio of fixed to variable costs".

Each of these factors (or answers in this case) are briefly explained above in the industry rivalry section. This question include sign for necessary to answer (can be seen as a red star in upper right corner) which means that respondents have not been able to continue with a questionnaire if they do not answer this question as well. Below is graphical representation 2 which showing the results.

WHICH OF THE FOLLOWING REPRESENTING BIGGEST ISSUES IN SETTING THE RIGHT PRICE FOR PRODUCTS TO A FIRMS THAT COMPETE ON THE CROATIAN MARKET?



Graphical representation 2 – The answers of a respondents on the second question from the Survey-Setting the right price

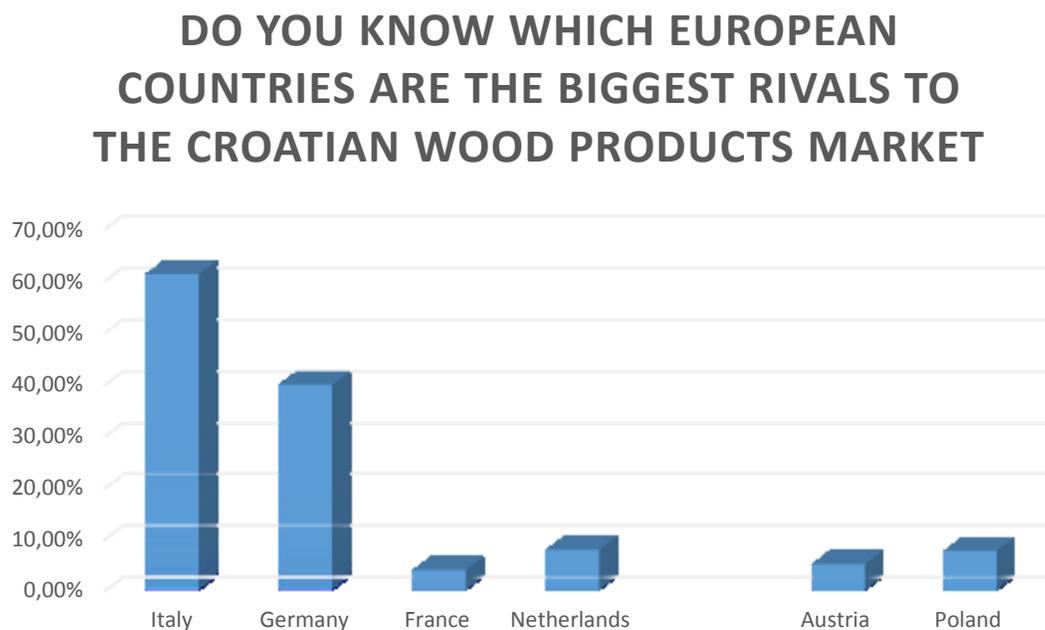
Answers of a respondents on a second question are pretty interesting. If we take a look, we can find that last industry rivalry force is the one that respondents have choose as biggest issue in setting the right price for products to firms that compete on the Croatian market. The same answer is given as cost conditions: scale economies and the ratio of fixed to variable costs (dark-blue part) and is one that holds the highest percentage of responses 60.5%. That means that most of the respondents think that high taxes, interest costs, utility costs, depreciation costs (and other fixed costs) are too high in relation to variable costs, and is the main threat for firms which circulate within wood industry in Croatia. Since it is the lowest ranked as important force within Porter’s Industry rivalry, it seems Croatia has much different and difficult situation compared to other countries worldwide. The next voted as important to pay attention on is big concentration of different sellers (light blue part) with 31.6% of answers. Meaning that the size and number distribution of competitors within the market is big issue as well, and competitors must be very careful and wise when setting the best price for products to attract customers.

Disparity in strategies and origins of competing firms holds for 19.7% (orange part), while product differentiation (grey part) and excess capacity and exit barriers (yellow part) is on fourth and fifth place with 11.3% respectively.

#### 5.4. Third question – Seller concentration

Question number three in the survey is the first question that appears without sign for necessary to answer. It means that respondents were able to either answer or skip this question. The question was: “Do you know which European countries are the biggest rivals to the Croatian wood products market” and is strongly connected to the first industry rivalry force - Seller concentration. It included five possible answers, four of them were given Countries that are ranked as biggest European rivals “Italy”, “Germany”, “France”, “Netherlands”, while one of them was given as the answer of free-choice opinion. In other words, they have been able to write the name of a country or countries they think are the biggest rivals to the Croatian wood products on a current market.

Also, respondents were able to choose more than one answer. Results are shown below in graphical representation 3.



*Graphical representation 3 – The answers of a respondents on the third question from the Survey - Seller concentration*

On the left column of the graph are shown percentages of responses, and on the bottom row Countries that have been offered as answers. Also, the results are shown in a way I left one free space (between offered answers and answers that respondents additionally wrote) to make graph more readable. However, results showing that respondents think Italy is the biggest rival to the Croatian wood products market since most of the votes 61.3% are given for Italy. It is actually not so big novelty because it is known Italy has one of the strongest wood industry in Europe, and is well known for its furniture. It is confirmed by the fact that one of the most successful global companies is Italian “Natuzzi”. The next one ranged is Germany with 40.5% of votes. The truth is that Germany is actually placed as the leading country within wood industry in Europe by Eurostat. Next on the list with 8% is Netherland, while France is positioned as the last one with 4%. On the opposite end, interesting is that on the additional offered free-choice answer respondents mostly mentioned Poland (which is indeed one of the biggest competitors in this industry in Europe) and Austria, but are mentioned some other European countries as well.

Europe plays a key role in the global furniture industry and this is evident not only in terms of production, but also in terms of market and international trade values.<sup>5</sup>

In general, the European Union market is the leading furniture market in the world with estimated value of approximately 90 billion euros in 2017 and representing 0.67% of total world gross domestic product. The European Union’s wood industry accounts for one fourth of the world’s total production. Exactly these countries (Germany, Italy, France, Poland) representing 66% of the total Europe’s production, and 15% of the world’s production. There is the estimation that 81 out of the top 200 furniture manufacturers worldwide are located in Europe.

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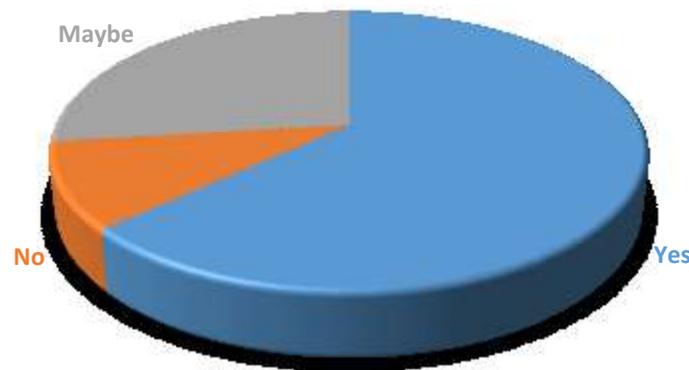
<sup>5</sup> *Markets insider, PRNewswire 2018, The Furniture Industry in Europe.*

*Available at <https://markets.businessinsider.com>*

### 5.5. Fourth question – Croatia as competitor

Question number four is queried to understand experts' opinions about how Croatia is actually seen as a Competitor. Question was: "Do you think Croatia has potential to compete against such Countries?" and was about Countries previously mentioned (i.e. Germany, Italy, France, Netherlands and Poland). There have been offered three possible basic answers as "yes", "no", and "maybe". Also, respondents were able to choose only one answer. For this question there have been no red star (sign for necessary to answer), so respondents were able to skip this question, but everyone answered. The Results are shown in graphical representation 4.

#### DO YOU THINK CROATIA HAS POTENTIAL TO COMPETE AGAINST SUCH COUNTRIES?



*Graphical representation 4 – The answers of a respondents on the fourth question from the Survey - Croatia as competitor*

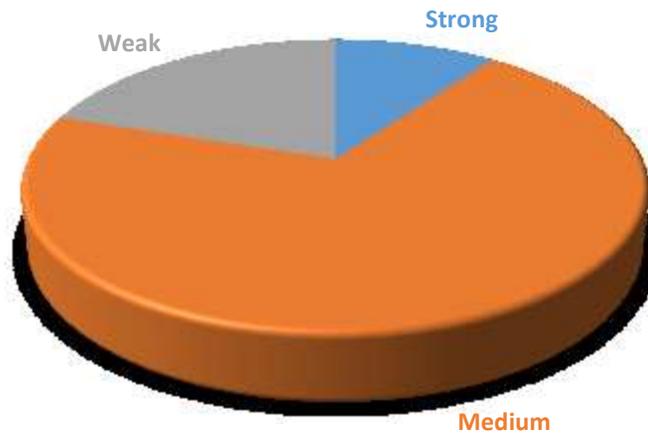
The answers are pretty clean. There is 65.8% (blue part) and 25% (grey part) for yes and maybe respectively, meaning that 90% of respondents hold an opinion Croatia has potential to be rival to other European countries. However, 9.2% of respondents disagree with that opinion.

Over and above that, there are huge chances for Croatia to be a strong competitor on European market. High quality and easily available raw materials are one of the biggest strengths Croatia has to be competitive enough. However, better cooperation among producers and more integrated approach would help Croatian producers to export more and to be recognized as strong rivals.

### 5.6. Fifth question – Diversity of competitors

Fifth question is about how intensive competition between or Croatian companies actually is, and basically is about force of diversity of competitors within Croatia. Question was: “What is the level of competitive intensity between Croatian companies in a wood industry?” and there have been three one-choice offered answers: “Strong”, “Medium”, or “Weak. This question was required to be answered in order to continue with questionnaire. The Results are shown in graphical representation 5.

#### WHAT IS THE LEVEL OF COMPETITIVE INTENSITY BETWEEN CROATIAN COMPANIES IN A WOOD INDUSTRY?



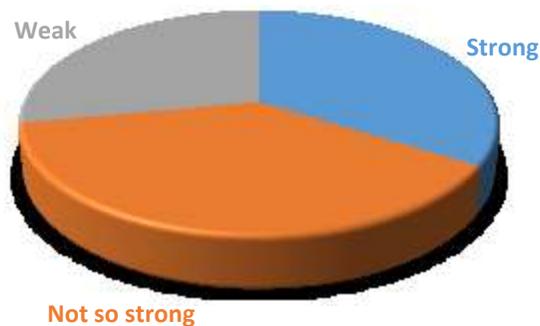
*Graphical representation 5 – The answers of a respondents on the fifth question from the Survey - Diversity of competitors*

Based on opinions of respondents, it seems Croatia’s firms doesn’t represent big rivals to each other. In fact, it is voted for 69.7 % (orange part) they are moderate competitors or about halfway between two extremes. If not moderate, than very friendly competitors since there is 18.4% of votes, or grey part showing the results that competitive intensity is weak among them. Still, 11.8% of respondents thinks there is strong competition between Croatian firms (blue part). Since the next question is very similar to this one, I have put short comparison between them below in the text.

### 5.7. Sixth question – Competitive intensity

Questions five and six are very similar. The difference is that question six refers on the firms outside of Croatia (i.e. in other European countries) that are rivals to Croatian firms within the same wood industry. The question is based on the same scheme as previous one, and is positioned as: “What is the level of competitive intensity of Croatian firms compared to foreign firms within the wood industry?” while the answers were given as: “Strong”, “Not so strong”, and “Weak”, and were obligated to be answered (can be seen from red star in upper right corner). The Results are shown in graphical representation 6.

#### WHAT IS THE LEVEL OF COMPETITIVE INTENSITY OF CROATIAN FIRMS COMPARED TO FOREIGN FIRMS WITHIN THE WOOD INDUSTRY?



*Graphical representation 6 – The answers of a respondents on the sixth question from the Survey – Competitive intensity*

As shown in graphical representation 5, when it comes to introduction of foreign firms against Croatian firms, people start to believe less in Croatian potential. On this question, answer “Not so strong” took the biggest (orange part) or 40.8%, “Strong” is placed as second one with 31.6% of votes (blue part), and “Weak” got 27.6% of votes (grey part). The biggest difference between answers from fifth and sixth question is that respondents think Croatian firms are not strong rivals, while foreign firms are strong rivals to other Croatian firms circulating within Croatian market. Is it really so?

The strongest companies will survive, but no one can survive isolated from others. It is the natural law in any industry, business or a country, and is called competitive intensity or more often competitive advantage. Competitive advantage is *punctum saliens* of the strategic activity of a company, and presence or absence of a competitive advantage is what makes a difference between successful and unsuccessful companies. It is achieved by having or building a specific quality that is required and accepted by buyers and which makes a company different from their competitors.<sup>6</sup>

## 6. Threat of new entrants

What attracts foreign firms to enter the Industry? Probably the fact that industry earns return on capital in excess of its cost of capital. Also, the rate of profit falls towards its competitive level if the entry of new firms is unrestricted. However, established firms constrain their prices to the competitive level if there is threat of entry rather than actual entry. An industry where no barriers to entry or exit exist is contestable: prices and profits tend towards the competitive level, regardless of the number of firms within the industry.<sup>7</sup> Here are important sunk costs as well which investments that cannot be recovered on exit. If there is no sunk costs and if established firms raise the prices above the competitive level, industry becomes powerless and unattractive.

Furthermore, a barriers to entry is the biggest advantage that established firms have over new entrants which means newcomers cannot enter on equal terms with those of established firms. Industries protected by high entry barriers tend to earn above-average rates of profit.<sup>8</sup> Capital requirements and advertising appear to be particularly effective impediments to entry.<sup>9</sup> The principal sources of barriers to entry are Capital requirements, Economies of scale, Absolute cost advantages, Product differentiation, Access to channels of distribution, Government and legal barriers, and Retaliation. All of these principal sources are discussed below.

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<sup>6</sup> Tipurić D., *Competitive ability of firms*. Synergy, Zagreb. Available at <https://semanticscholar.org>

<sup>7</sup> "Foundations of Strategy", Second edition. Book by Robert M. Grant & Judith Jordan.

<sup>8</sup> "Foundations of Strategy", Second edition. Book by Robert M. Grant & Judith Jordan.

<sup>9</sup> "Foundations of Strategy", Second edition. Book by Robert M. Grant & Judith Jordan.

## 6.1. Principal sources of barriers to entry

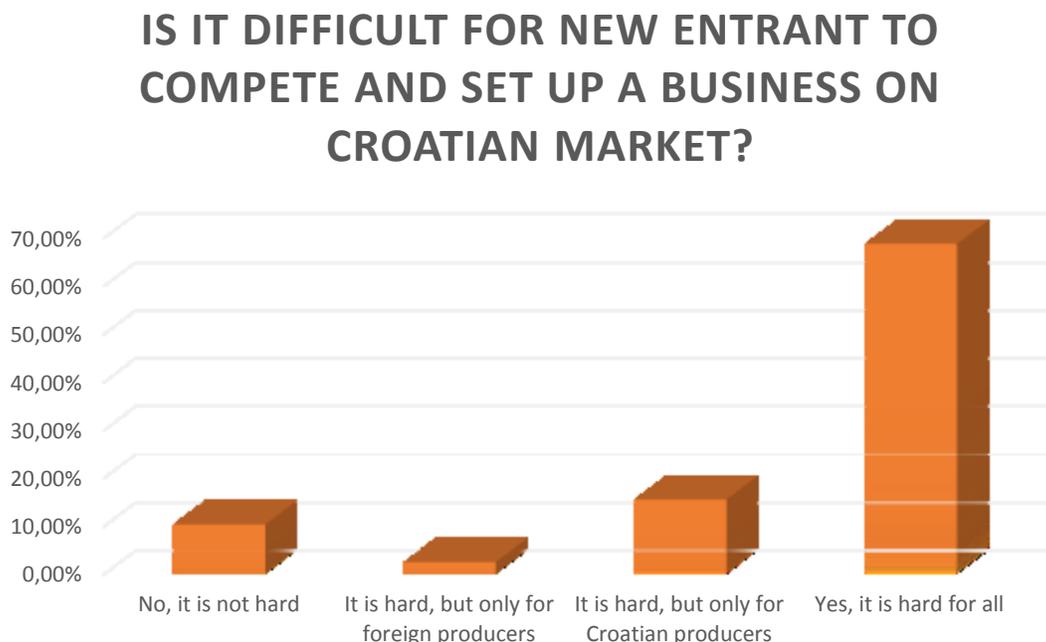
- 6.1.1. **Capital requirements** takes over a big portion in barriers to entry. If capital requirements are huge when getting established in an industry, it can cause problem for all except largest companies. On other hand, small capital requirements can encourage small companies to become new entrants in an industry.
- 6.1.2. **Economies of scale** for newcomers in an industry means either bearing low unit costs by entering large scale operations, or accepting high unit costs if entering a small scale operations. In Croatia's wood industry of capital, research and advertising intensity it is required large scale operations.
- 6.1.3. In the other hand, there is **Absolute cost advantages**. It is unit cost advantage over entrants for already established firms, and very often happens if established firm acquire low cost sources of raw materials.
- 6.1.4. If **Product differentiation** exist in an industry, established firms have the dominance in means of brand awareness and goodwill, and customer loyalty as well. However, newcomers have to spend a lot of money on promotions and advertising to be in the same or similar brand recognition line as established firms already are.
- 6.1.5. **Access to channels of distribution** is the fifth largest barrier to entry for manufacturers, retailers and suppliers. For suppliers it is about gaining distribution, for retailers about being unwilling to carry a new manufacturer's product. In other words, the biggest threat for new entrants is limited capacity within distribution channels, risk aversion by retailers, and fixed costs from carrying an additional product.
- 6.1.6. **Governmental and legal barriers** is more likely the only effective barrier to entry in Croatia because entry requires a license from a public authority. Intellectual property such as patents, copyrights and other legally protected forms are major barriers to entry. For new entrants it is big obstacle compared to established firms due to compliance costs.

6.1.7. **Retaliation** like aggressive price-cutting, increased advertising, sales promotion or litigation by established firms is possible, and new entrants should expect that. To avoid retaliation, new entrants may seek small-scale entry into less visible market segments.

The next step here is to show what I did about second Porter's force, the threat of entry, in my survey. For this force, threat of new entrants, I set off next few questions.

## 6.2. Seventh question – Issues while setting up a business

Seventh question from the survey was about respondent's opinions about new entrants in a wood industry in Croatia. The question was: "Is it difficult for new entrant to compete and set up a business on Croatian market?" while four offered possible answers were: "No, it is not hard", "It is hard, but only for foreign producers", "It is hard, but only for Croatian producers", "Yes, it is hard for all". There have been also offered space for respondent's additional thoughts about this question. This one was obligated to be answered, and respondents have been able to choose more than one answer offered. The results are shown below in graphical representation 7.



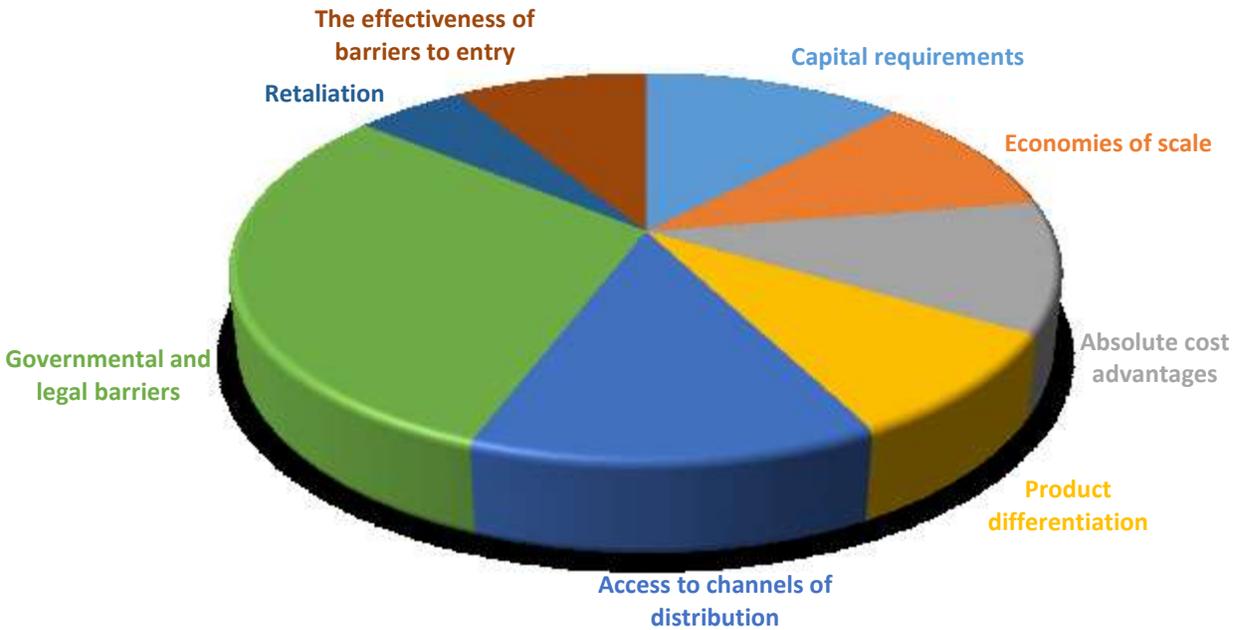
*Graphical representation 7 – The answers of a respondents on the seventh question from the Survey - Issues while setting up a business*

The largest number of respondents (68.8%) answered with “Yes, it is hard for all”. Second place with 15.6% of answers took “It is hard, but only for Croatian producers”, Next was “No, it is not hard” with 10.4% of answers, while the answer “It is hard, but only for foreign producers” took last place with 2.6% of answers. Also, some respondents actively participated with comments such as “It depends on what is offered”, “It is hard as much as on the other markets”. However, It is important to notice that Croatian market is really complicated and barriers to entry affect both established firms and newcomers.

### 6.3. Eight question - The biggest threats

The eight question includes all principal sources of barriers to entry. Respondents have been able to choose more than one threat of entry. There have been no possibility to continue with the questionnaire without answering on this question which was set as: “What are biggest threats for new entrants in Croatian market? “. Answers were given in next order: “Capital requirements”, “Economies of scale”, “Absolute cost advantages”, “Product differentiation”, “Access to channels of distribution”, “Governmental and legal barriers”, “Retaliation”, and finally “The effectiveness of barriers to entry”. This question is the most demanding within the survey. Answers are shown in graphical representation 8 below.

## WHAT ARE BIGGEST THREATS FOR NEW ENTRANTS IN CROATIAN MARKET?



*Graphical representation 8 – The answers of a respondents on the eight question from the Survey - The biggest threats*

It seems respondents blame mostly Governmental and legal barriers (green part) which took for 61.8% of the answers for difficult entrance in the Croatian market. Next positions voted as difficult are as follows: Second place went to Access to channels of distribution with 27.6% (medium light blue part), then Capital requirements with 25.3% (light blue part) , fourth placed is Absolute cost advantages with 22.4% (grey part), next one is Economies of scale with 21.1% (orange part), then Product differentiation with 18.4% (yellow part), seventh placed is The effectiveness of barriers to entry in general with 17.4% (red part), and last positioned is Retaliation with 10.7% (dark blue part) of votes. It seems respondents thinking is that intellectual property causing largest barrier to entry, while in contrast retaliation is case for which entrants should not be worried about.

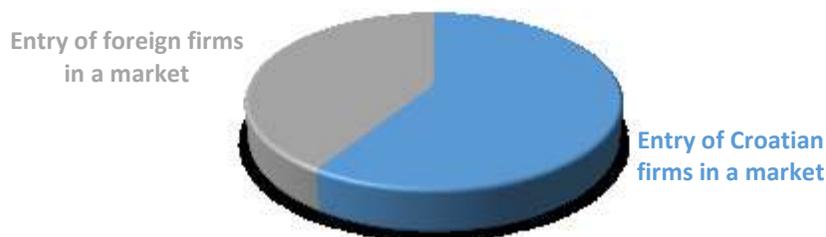
While the Croatian market is relatively free of over trade barriers, several realities of the market pose challenges to exporters to Croatia. It includes judiciary plagued by case backlogs and a lack

of expertise in commercial affairs, an overly complex and sometimes non-transparent bureaucracy, the country's relatively high costs, and both real and perceived issues of corruption. Employment taxes are high and there is a lack of good real estate title records. Companies that face court disputes in Croatia often need many years to reach a final resolution. They also complain about a lack of enforcement and dubious court rulings.<sup>10</sup>

#### 6.4. Ninth question – The impact of threats

This one was general question I did for every Porter's force. It was: "Threats of entry into the Croatian market (such as those listed in previous question) have a greater impact on:" and the given answers were: "Entry of Croatian firms in a market", or "Entry of foreign firms in a market". Respondents have not been able to move on the next question without solving this one, and there was possibility to choose only one of these two answers. The Results are shown below in graphical representation 9.

### THREATS OF ENTRY INTO THE CROATIAN MARKET (SUCH AS THOSE LISTED IN PREVIOUS QUESTION) HAVE A GREATER IMPACT ON:



*Graphical representation 9 – The answers of a respondents on the ninth question from the Survey - The impact of threats*

As can be seen from above graph, it is voted for 59% (blue part) that when there is entrance of Croatian firms into a market they are facing greater impact of threats. It is mostly because threats of entry are much more expensive and hard to balance for Croatian newcomers compared to

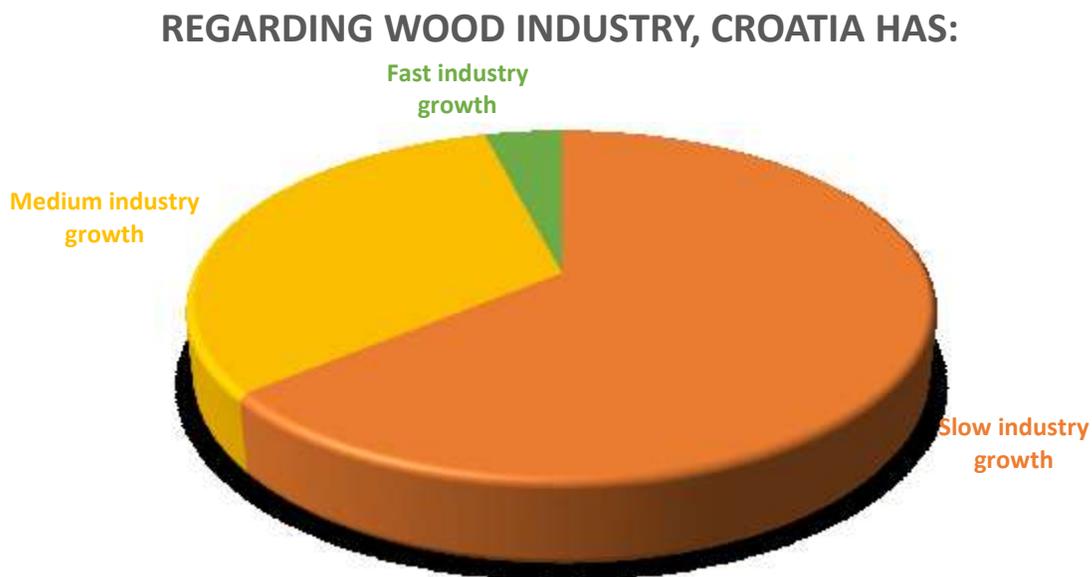
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<sup>10</sup> Article about Croatia-trade barriers. Available at <https://www.stopfakes.gov> and <https://www.export.gov>

foreign ones. For entrance of foreign firms in a market is voted for 41% (grey part) and seems respondents think that for them entrance is not much easier.

#### 6.4. Tenth question – Intensity of industry growth

Very last question connected to the threats of entry is about how Croatian experts actually perceived the strength of industry growth. Question is pretty short and answers as well: “Regarding wood industry, Croatia has:” and given short answers were “Slow industry growth”, “Medium industry growth” or “Fast industry growth”. There have been possibility to answer on only one of all given answers, and was obliged to be answered (red star). The Results are shown below in graphical representation 10.



*Graphical representation 10 – The answers of a respondents on the tenth question from the Survey - Intensity of industry growth*

Respondent’s opinions are like they have agreed in advance what would be the answer, or it is just experience. 64% of respondent’s opinions is that Croatia has slow industry growth (orange part), 32% of them thinks Croatia maybe has medium industry growth (yellow part), while only 4% hoping Croatia is fast growing industry country (green part). The truth is that Croatia has medium industry growth and thus competitive intensity is of medium strength.

The effectiveness of barriers to entry depends on the resources and capabilities that potential entrants possess. Barriers that are effective against new companies may be ineffective against established firms that are diversifying from other industries.<sup>11</sup>

## 7. Bargaining power of buyers

There are two types of markets in which firms in an industry can compete: input and output markets. When there is purchase of good and services (such as raw materials, components, financial and labor services, etc) it is input market. If there is sale of good and services to customers then output market is present. Moreover, the transactions creates value for both buyers and sellers in both markets. How this value circulating between them in terms of profitability depends on their economic power. The strength of buying power that firms face from their customers depends on two sets of factors: buyers' price sensitivity and relative bargaining power.

### 7.1. Bargaining power factors

7.1.1. **Buyers' price sensitivity** is the dimension to which buyers are sensitive to the prices charged by the firms in an industry depends on three main factors: Cost of product relative total cost, Product differentiation, and competition between buyers.

7.1.2. **Relative bargaining power** rests, ultimately, on refusal to deal with the other party. The balance of power between the two parties to a transaction depends on the credibility and effectiveness with which each makes this threat. The key issue is the relative cost that each party sustains as a result of the transaction not being consummated. A second issue is each party's expertise in managing its position.<sup>12</sup> There are four factors influencing the bargaining power of buyers relative to that of sellers: Size and concentration of buyers relative to producers, buyer's switching costs, buyer's information, buyer's ability to backward integrate.

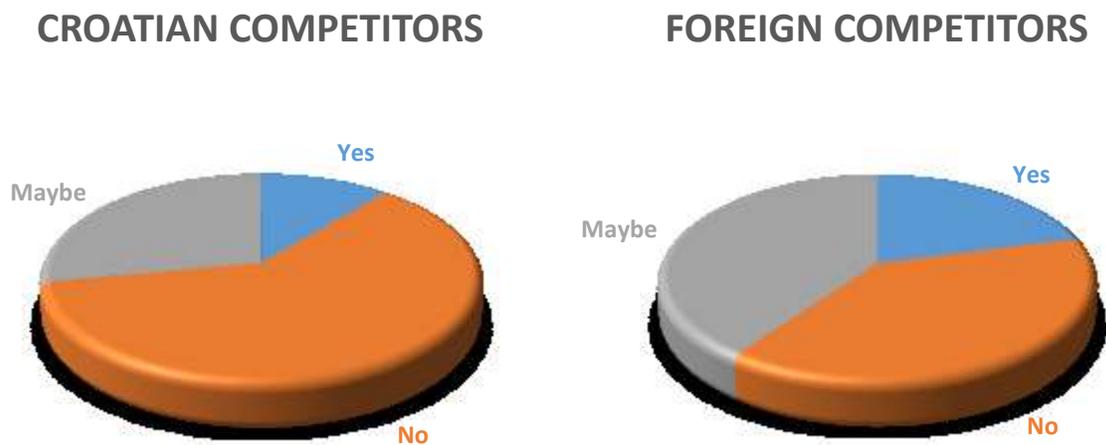
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<sup>11</sup> "Foundations of Strategy", Second edition. Book by Robert M. Grant & Judith Jordan.

<sup>12</sup> "Foundations of Strategy", Second edition. Book by Robert M. Grant & Judith Jordan.

## 7.2. Eleventh and twelfth question - Relative bargaining power

Questions eleven and twelve are pretty the same, but the difference is in the origin of the competitors. The questions were: “Is buyer propensity of domestic buyers strong enough to easily substitute purchased products with products from Croatian competitors?” Or in the second question it refers on foreign competitors. Corresponding possible answers were “yes”, “no”, and “maybe”, and were obligated to be answered. Also, there have been no possibility to continue with questionnaire if these questions are not answered. The answers of both questions eleventh and twelfth are shown below in graphical representation 11.



*Graphical representation 11 – The answers of a respondents on the eleventh and twelfth question from the Survey - Relative bargaining power*

Blue part represents answer “yes”, grey part represents “maybe”, while orange part represents “no” for both of the answers. As can be seen from orange part, respondent’s opinions are that buyer propensity is not strong enough to easily substitute purchased products with products from Croatian competitors (61%), while for foreign competitors it is “maybe” or grey part for 40% and “no” or orange part for 39% respectively. It means respondents hesitated more when it comes foreign in question. However they believe it is much easier to substitute some bought product for product that is made abroad (i.e. outside Croatian borders).

Over and above that, blue part in both graphs showing that 11% of respondents think it is easy to substitute Croatian products, or 21% of them think it is easier to substitute for foreign products.

### 7.3. Thirteenth question - Buyers' price sensitivity

Question number thirteen have not been obligated to be answered (doesn't have red star in upper right corner). It was made up so there can be spontaneously checked people's price sensitivity. Question was: "If the price of some furniture you want to buy goes up, you would:" and then had three possible answers: "Try to find substitute for the same product in Croatia", "Try to find substitute for the same product abroad", and "You would buy it regardless of price sensitivity". Respondents have been able to choose only one question. The Results are shown below in graphical representation 12.



*Graphical representation 12 – The answers of a respondents on the thirteenth question from the Survey - Buyers' price sensitivity*

I took furniture as an example because it is easiest to imagine, but it could have been any other product made of wood. Blue part represent the official confirmation respondents believe in Croatian products.

In other words, if the price of some furniture goes up than 66.7% (green part) of respondents would try to find substitute for the same product in Croatia. For some of them price is not that important, so 18.7% of them would buy furniture regardless of increase in the price (yellow part). However, there is 14.7% (blue part) of respondents who think foreign products would be better substitute than Croatian ones are. It is maybe because in Croatia products are less differentiated so buyers are more willing to switch suppliers on the basis of the price.

#### 7.4. Fourteenth question - Buyer's price and quality sensitivity

Fourteenth question is quite similar to the previous one, except I added quality as important factor when there is purchase of products. The question was: "If you want to buy product made of wood (such as furniture), your decision will depend on:" and there were four multiple choice answers: "Price you have to pay for a product, regardless what is the quality.", "Quality of the product, regardless of what is the price you have to pay.", "Price is important to you as much as the quality.", "You don't have specific conditions when choosing furniture.". This question is under free choice answers where responders have been able to skip question if they don't want to answer, but each of them answered.

### IF YOU WANT TO BUY PRODUCT MADE OF WOOD (SUCH AS FURNITURE), YOUR DECISION WILL DEPEND ON:



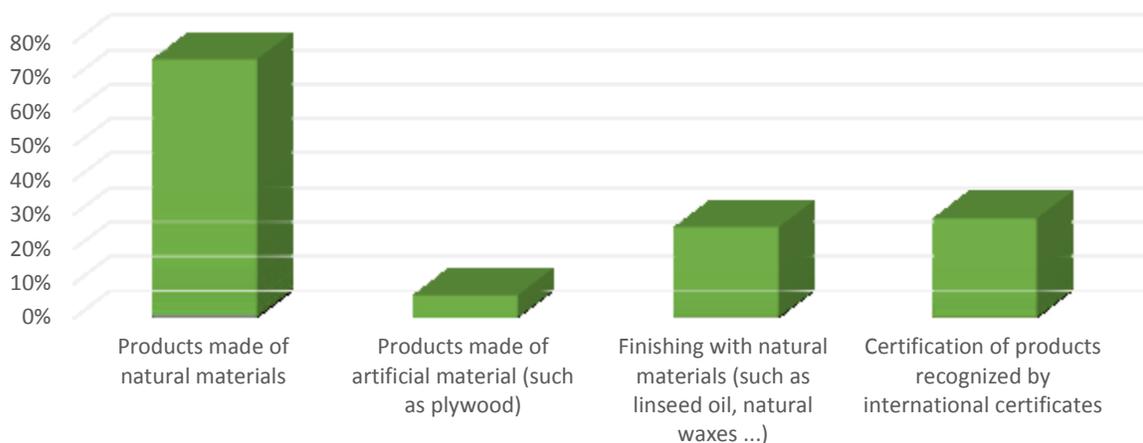
*Graphical representation 13 – The answers of a respondents on the fourteenth question from the Survey - Buyer's price and quality sensitivity*

On the left column of the graphical representation 13 can be seen percentages of the answers, while the bottom row showing offered answers. The results are as follows: 86.8% of respondents answered that price is important to them as much as quality is, 14.5% hold an opinion that quality is more important than price is, 4.1% think in opposite direction (that price is more important than quality is), while only 2.6% or 2 respondents does not have specific conditions when choosing the furniture. In general, the more critical an industry’s product to the quality of the buyer’s product or service, the less sensitive are buyers to the prices they are charged.

### 7.5. Fifteenth question - Buyer’s quality sensitivity

The next question was set to check how much quality is actually appreciated. Fifteenth question was: “In your opinion, what is the most important environmental segment of wood products?” and included for possible multiple choice answers. Answers were given as: “Products made of natural materials”, then “Products made of artificial material (such as plywood)”, then “Finishing with natural materials (such as linseed oil, natural waxes ...)”, and lastly “Certification of products recognized by international certificates”. There was ability to skip this question if respondents did not want to give the answer, but everyone left their opinions.

## IN YOUR OPINION, WHAT IS THE MOST IMPORTANT ENVIRONMENTAL SEGMENT OF WOOD PRODUCTS?



*Graphical representation 14 – The answers of a respondents on the fifteenth question from the Survey - Buyer’s quality sensitivity*

The answers of a respondents on the fifteenth question from the survey are shown above in graphical representation 14. Left column showing answers in percentages, while bottom row showing the answers that have been offered. The results showing that 75% of respondents appreciate mostly products made of natural material (such as plywood). It is not so big novelty because if someone wants to buy product made of wood, he/she probably wants it to be made of natural material even though many people cannot actually recognize natural materials because of almost perfect or fake imitations. However, it can be found that finishing with natural materials (such as linseed oil, natural waxes ...) and the certification of products recognized by international certificates took for 26.3% and 28.9% of votes respectively. It confirms the fact that people respect quality of the products more than it was expected, while in opposite end for the products made of artificial material (such as plywood) voted only 6.8% of respondents.

## 8. Bargaining power of Suppliers

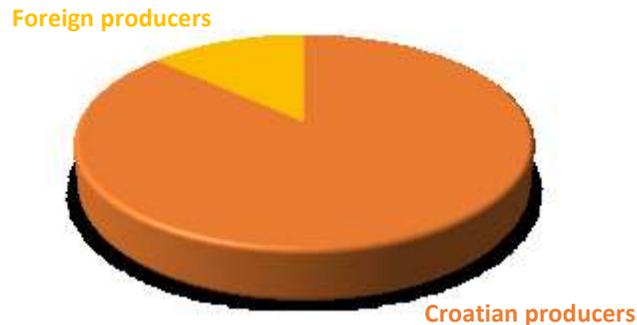
In general, bargaining power of suppliers is basically established on factors that determining power of suppliers relative to producers are the same as those determining power of producers relative to buyers. Moreover, relationships between the producers and their buyers can be compared to relative power determination between the producers in an industry and their suppliers. But, now buyers are represented by firms in an industry while suppliers are presented as producers of inputs. How firms in the industry can switch between different input suppliers and the relative bargaining power of each party is the key issue in this chapter. In Croatia small companies usually lack bargaining power because they supply large manufacturing companies (they supply them with raw materials, semi-finished products and components). Conversely, the suppliers of complex, technically sophisticated components may be able to exert considerable bargaining power.

### 8.1. Sixteenth question - Preferring to buy

Next question was set up for producers, and since I sent all of these questions mostly to owners and CEO's these questions are the most appropriate ones. Question number sixteen was: "You prefer purchasing of wood products from:" and had two possible answers: "Croatian producers"

and “foreign producers”. This question had red star, and was of one-choice answer. The Results are shown in graphical representation 15.

### YOU PREFER PURCHASING OF WOOD PRODUCTS FROM:



*Graphical representation 15 – The answers of a respondents on the sixteenth question from the Survey - Preferring to buy*

Since this question is basic one, answers are pretty much expected. Respondents voted in 86.7% (orange part) they would purchase from Croatian producers, while 13.3% (yellow part) of them voted for foreign producers. It is pretty much obvious Croatian producers and sellers would like to support each other's. However, there is obviously small amount of them who would rather buy from somewhere abroad.

#### 8.2. Seventeenth question - Croatia's biggest competitors

Question number seventeen was: “Can you give an example of firms or companies that currently representing Croatia's biggest competitors within wood industry?” It was short answer text and was set up in a way respondents can skip it if they want. From 77 respondents, 47 of them answered. It seems they think Ikea is Croatia's largest competitor. On one hand it is the truth, since they are so large they are offering products on very small or discounted prices. It is something that will attract most of the people. But, if people wants to buy high-quality products, they would probably never enter the Ikea store. In reality many firms cannot afford such treatments as offering good products at discounted prices because producing high quality products requires offerings at high prices. The other companies respondents have mostly

mentioned are “Bjelin”, “Florian group” and “Jysk” companies which are very strong and actually real and acceptable rivals.

### 8.3. Eighteenth question - Best Croatian companies

When I set up this question, I wanted to check what the perception of producers about their competition is. The question was: “In your opinion, what are the best Croatian companies that are currently situated within a wood industry?” From more than 75 respondents, 51 of them answered. Since it were long answer texts, the results are pretty much sorted in a way graph doesn’t show in percentages some specific company is the best or worst one, but showing all the results in the order of how respondents answered. The same was with previous question. However, it seems most of them hold an opinion that “Spin Valis d.d.”, a company from Požega town (in Slavonia) , is the strongest competitor within wood industry in Croatia. There are mentioned “Spačva” and “Bjelin” companies mostly as well.

Since “Spin Valis” is voted as strongest one, here are few words about the company. “Spin Valis” is the largest timber company in the republic of Croatia with an about 500 employees. They are the strongest in industry regarding segment of furniture production from Slavonian oak and beech massifs. Moreover, they are the largest in the Europe in terms of production program of rustic-type seating sets. Exports are made in about thirty countries, and the highest percentage of sales is made with foreign buyers (80%). A company owns a sign “Croatian quality” which guarantees the customer that their products and services are reliably the top of the world offer in their class. They also received numerous awards and recognitions.

Spin Valis continuously invests efforts in production of healthy and environmentally friendly furniture, using materials in accordance with the EU’s health regulations. Spin Valis uses only the highest quality wood from Slavonian forests with FSC® certificate, which means that forests are managed in accordance with strict European and world ecological, social and economic standards.<sup>13</sup>

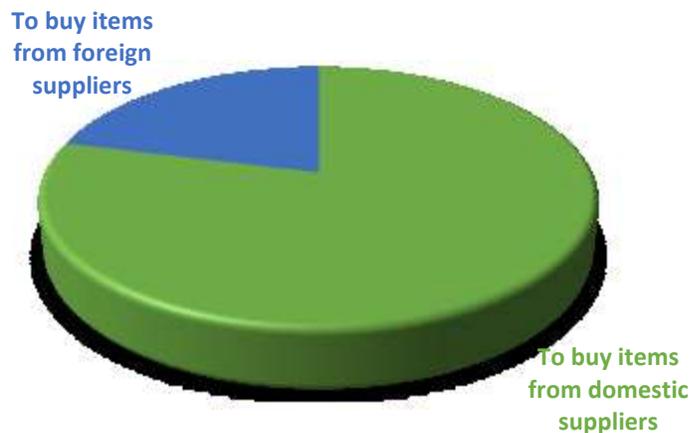
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<sup>13</sup> *Spinvalis d.d., website available at: <http://www.spinvalis.hr>*

#### 8.4. Nineteenth question - Profitability

Since producers in an industry depending on their suppliers, my next question was: “In your opinion, what is the most profitable for Croatian manufacturers:” with two given one-choice answers: “To buy items from domestic suppliers” or “To buy items from foreign suppliers”. Respondents have been able to choose only one of two given answers, and this question was obligated to be answered. The Results are shown below in graphical representation 16.

### IN YOUR OPINION, WHAT IS THE MOST PROFITABLE FOR CROATIAN MANUFACTURERS:



*Graphical representation 16 – The answers of a respondents on the nineteenth question from the Survey - Profitability*

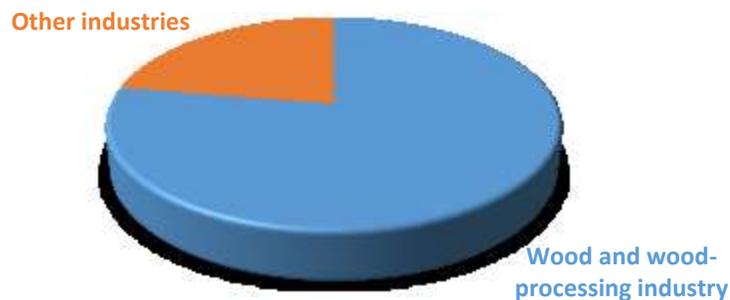
Green part holds bigger percentage 77.9% and represents the opinions that Croatian manufacturers should mostly buy items from domestic suppliers. The fact is that it should be the case, but reality is domestic suppliers probably cannot supply all manufacturers with necessary items because of lack of natural resources or lack of wanted supplies, so they purchase items or parts from somewhere abroad. However, I believe it is the same reason why 22.1% of respondents answered Croatian producers should buy items from foreign suppliers (blue part).

## 9. Is the wood industry worthy to invest in?

As the last point of my questionnaire, I have chosen investment into the wood industry. There are three more questions that are not directly connected to Porter's five forces, but are narrowly connected to wood industry in Croatia. With those question I wanted to check overall people's thinking about wood industry in Croatia, and actually conclude my undergraduate thesis. All three questions basically represent one question separated into three parts. Respondents had to answer this question because it was of big importance for me to conclude my overall work.

First question was: "In your opinion, Croatia should invest more into:" and had two possible one-choice answers: "wood and wood-processing industry" or "other industries".

### IN YOUR OPINION, CROATIA SHOULD INVEST MORE INTO:

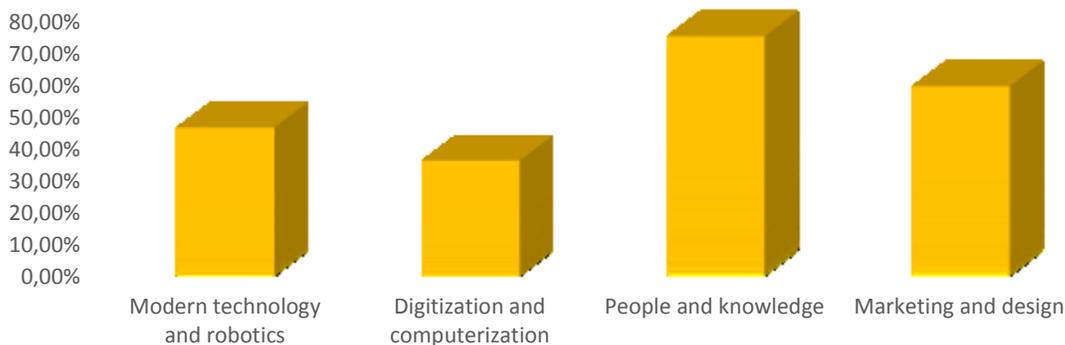


*Graphical representation 17 – The answers of a respondents on the twentieth question from the Survey - Investments*

As can be seen from graphical representation 17 the results showing that 22.4% (orange part) of respondents think Croatia should invest more into other industries. Since I hoped there will be certain percentage of such responses, my next question was: "If answer on previous question is "other industries", what industries would these be?" This question have been of long answer text type and was opened for those on which it refers. However most of the answers were: "Information tehnology (IT)" and "Car industry".

Furthermore, since there is 77.6% of the answers refers to wood and wood-processing industry, my very last question was: “If you think that the wood industry in Croatia is promising, in which segment is it most profitable to invest in: “There was four possible multiple choice answers given in the following order: “Modern technology and robotics”, then “Digitization and computerization”, then “People and knowledge”, and lastly “Marketing and design”. Results are shown below in graphical representation 18.

### IF YOU THINK THAT THE WOOD INDUSTRY IN CROATIA IS PROMISING, IN WHICH SEGMENT IS IT MOST PROFITABLE TO INVEST IN:



*Graphical representation 18: The answers of a respondents on the twenty second question from the Survey - Investments*

The left column represents responses in percentages, while bottom row represents offered answers. Since respondents were able to choose more than one answer, they agreed all of given is important in some part. However, 75.3% of votes is for “people and knowledge” or 58 respondents answered this is the best segment within wood industry to invest in. Marketing and design are positioned as second important with 59.7%, Modern technology and robotics as third one with 46.8%, and lastly Digitization and computerization with 36.4% is positioned as the least important segment to invest in. From all of these results I can conclude people feel unhappy and there is huge capacity in population that Croatia does not know how to use. All technology, marketing, and other possible investments are important but not as much as people and knowledge. At the end, I would say: “there is no good business without good people to run it”.

## 10. Conclusion

Wood industry in the EU and Croatia is experienced a decrease in production, trade and employment within past years, but now situation is changing. Recovery is very slow but there are huge chances for achieving the desired level of production and employment. The solution for Croatian broken wood industry should be a more integrated approach and better cooperation among producers.

Regarding the fact that Croatia is a country with so many natural, economic and ecological wealth, I can say there can be very good and positive future for wood industry. Oak, beech, and fir forests are one of many other within Croatian borders that together with high quality of threes, meeting the highest economic, ecological and social standards. Moreover, Croatia can benefit due to rich raw materials that are the base for future industry constructions, growth and development. However, there is the basic circle within any industry or economy that showing things should be arranged the way they contribute to all – more investments into domestic production leading to more government spending that leading to more consumption, and finally more export. At the end, it will have implications on development and growth of manufacturing industry.

At the end, Croatia faced a very deep fall in consumption, import and export, and it resulted there have been no real profits in a while. It resulted that replacements of wood products on a domestic market and loss of many workplaces happened. The fact is that Croatia should invest more in wood and wood processing industry, so it can keep people satisfied and happy with their workplaces and jobs in general. The fact is that so many people leaving their bad jobs in Croatia and trying to find better and safer life somewhere abroad. If Croatia doesn't know how to use all positivity, creativity and capacity within its borders, some other country or just foreign company will. My survey is official proof Croatian citizens think positively and optimistically about future. Also, as soon as Croatian government recognize all strengths country is offering, the faster will start to happen positive changes.

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