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Anić, Ivan-Damir; Rajh, Edo; Teodorović, Ivan

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*Ivan-Damir Anić**
*Edo Rajh***
*Ivan Teodorović****

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FULL MANUFACTURING VERSUS SUBCONTRACTING BUSINESS MODELS IN THE CROATIAN TEXTILE AND CLOTHING INDUSTRY

The purpose of this study was to compare the strategic behavior and performance of two groups of companies: manufacturers and subcontractors operating in the Croatian textile and clothing industry. The hypotheses were tested with data collected from company survey carried out during the period of December 2006 to February 2007 in Croatia. The data was analyzed using one-way analysis of variance and chi-square test. The results indicate that manufacturers have higher total expenses and higher capital intensity. They pay higher than average wages and are more inclined to conduct R&D, design and development and carry out market research. Manufacturers tend to emphasize their own brands and invest in marketing and promotion significantly more than subcontractors. The findings show that manufacturers exhibited higher productivity level than subcontractors, which was not the case with profitability. The framework provided helps manufacturers evaluate their current position better and improve their market positioning accordingly.

Key words: textile and clothing industry, subcontracting, full manufacturing, strategy, productivity, profitability, market re-positioning

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* I.-D. Anić, Ph.D., Senior Research Associate, The Institute of Economics, Zagreb (E-mail: danic@eizg.hr)

** E. Rajh, Ph.D., Research Associate, The Institute of Economics, Zagreb (E-mail: erajh@eizg.hr)

*** I. Teodorovic, Ph.D., Senior Research Fellow, The Institute of Economics, Zagreb (E-mail: iteodorovic@eizg.hr)

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1. Introduction

The textile and clothing industry is seen as a declining industry.[1] The industry has underwent profound and rapid restructuring in the high-wage economies, as the firms attempted to cope with intensified competition from enterprises in low-wage economies (Taplin and Winterton, 2004). The Croatian textile and clothing industry has been gone through the similar process of restructuring and many companies face a dilemma of market re-positioning. Market re-positioning involves changing the identity of a product, relative to the identity of competing products, in the collective minds of the target market. The business model choice has a great impact on firm's market positioning, as it implies differences in strategic behaviour of manufacturers and their outputs (Cagliano and Spina, 2002, Taymaz and Kilicaslan, 2002). Although several typologies of manufacturing companies exist, there are two main business models, subcontractors and manufacturers (Cagliano and Spina, 2002, GTZ, 2001). Manufacturing model includes the production of products designed and engineered in-house on the basis of own concepts or customer specifications (Cagliano and Spina, 2002), while subcontracting might be defined as specific form of cooperation between firms by which a subcontractor performs all or part of the manufacture of the principal's product to a customised specifications provided by the parent company (Webster, Muhlemann and Alder, 2000). Subcontracting is widespread and still intensive in the Croatian textile and clothing manufacturing, although more and more companies employ full manufacturing model.[2] In the 1970s and early 1980s, it was considered as a tool for industrialisation, modernization and employment generation (Watanabe, 1971, Taymaz and Kilicaslan, 2002). Nowadays there has been a shift in the locus of studies and policy proposals. As companies face relocation to low-wage countries (European Commission, 1996), subcontracting faces a very uncertain future. Some empirical research indicates that both manufacturers and subcontractors may obtain growing market share and greater profitability (Cagliano and Spina, 2002). The major issue here is the question of whether it is a more effective approach to emphasize the strategic manufacturing or to continue with subcontracting, as well as the question of what makes such model effective.

A number of studies have examined the strategic behaviour of textile and clothing manufacturers (Taplin and Winterton, 2004, Guercini, Simone, 2004,

[1] Following the NACE rev. 1 classification, the textile and clothing industry (DB) comprises the textile sector (NACE division 17) and the clothing manufacturing (NACE division 18).

[2] In the European Union small subcontracting firms working for parent companies make up a large proportion of the textile and clothing industry varying from 10 % to 60 % depending on the Member State (European Commission, 1996). According to GTZ study (2001), subcontracting still dominates the textile and clothing sector in East European countries (GTZ, 2001).

Taplin, 2006). An area of growing interest seeks to examine the issues in subcontracted manufacturing as the special form of co-operation among companies (Watanabe, 1971, European Commission, 1996, Da Villa and Panizzolo, 1996; Webster, Muhlemann and Alder, 2000; Furlan, Grandinetti and Camuffo 2007, Subrahmanya, 2008). The study of Cagliano and Spina (2002) examined differences in performance and general management practices across two types of SMEs operating in the Italian manufacturing industry. Similarly, Taymaz and Kilicaslan (2002) compared strategic behaviour of subcontractors in the textile industry in Turkey as compared to subcontract offering firms (classified according to the share of subcontracted input/output in total input/output), by using the following variables: advertising intensity, communication intensity, ownership, technology, wages, employment structure, capital intensity, output growth rate. Despite a number of studies, very little is known about the implications of different bussiness models employed in the Croatian textile and clothing industry.

The purpose of this study is to empirically evaluate the business models employed by the Croatian textile and clothing manufacturers. The analysis deals with the strategic behaviour and opportunities for market re-positioning of Croatian manufacturers. Specifically, the study focuses on the following research questions: RQ1: How is business model related to firms' strategic behaviour? RQ2: What is the relationship between business model and firms' performance? Business model examined include full manufacturing and subcontracting.

To address the issues described above we conduct an empirical study. In order to collect data for this study the company survey was carried out in Croatia during the period of December 2006 to February 2007. Eighty questionnaires were obtained for the analysis. Additional data was obtained from the interviews with the practitioners, managers and owners of the leading Croatian textile and clothing manufacturers and through the plant visits of 5 manufacturers. Data was analyzed using one-way analysis of variance (ANOVA) and cross tabulation analysis (chi-square test).

The present study builds on previous research dealing with business models and strategic behaviour of companies operating in the manufacturing industry. The study seeks to contribute to the literature with a better understanding of the associations between two main business models employed (i.e. manufacturing vs. subcontracting) and firms' strategic behaviour, and with the examination of linkages between business model and firm's performance. Furthermore, the study expands the scope of strategic and performance variables. As we test the hypotheses proposed we may refine the theory by findings from the Croatian setting.

Several managerial implications may be derived from the study. The framework provided helps textile and clothing manufacturers evaluate their strategies and improve their market positioning. The findings indicate the objectives and

tasks that need to be fulfilled in order to market repositioning towards the full manufacturing model would be successful.

The reminder of the paper is organized as follows: conceptual framework, methodology, results, conclusions with managerial implications and future research directions.

2. Conceptual framework

The present paper builds on the empirical research and practical industrial investigation of business models and strategic behaviour of textile and clothing manufacturers. The conceptual framework for this research is shown in figure 1. The framework posits that the choice of business model does have an impact on strategic behaviour of manufacturers and their performance.

The business model includes two groups of companies: (1) companies employing the full manufacturing model and (2) companies employing the subcontracting model. The models examined represent an aggreate view of business models that exist in the textile and clothing industry (see figure 2), in such way that full manufacturering model include companies who employ ready to sell model and the model involving the development of collections, while subcontracting model include companies who employ CM business, cutting, making and trimming model and ready to use model.

Figure 1:

CONCEPTUAL FRAMEWORK FOR COMPARING BUSINESS MODEL BEHAVIOR

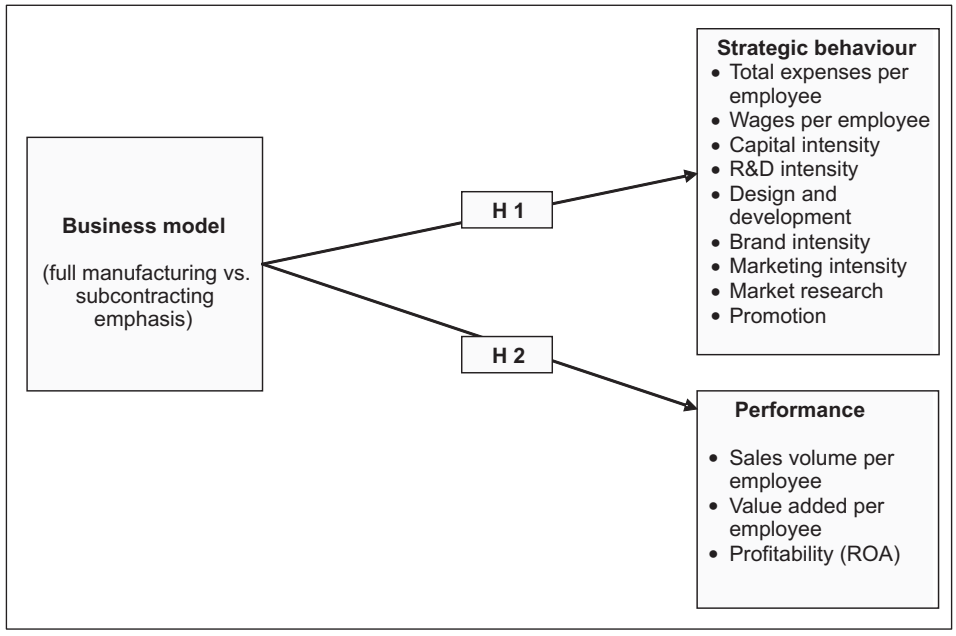

Figure 2:

TYPES OF BUSINESS MODELS IN THE TEXTILE AND CLOTHING INDUSTRY

Business model	Description
1. Simple subcontracting: CM Business	• Production: cutting, sewing, knitting,smoothing, assembling, chemical treatment, finishing
2. Expanded subcontracting: Cutting, making and trimming	• Production • Purchases of raw materials
3. Expanded subcontracting: Ready to use	• Production • Purchases of raw materials • Purchases of fabrics, threads, etc.
4. Full manufacturing: Ready to sell	• Production • Purchases of raw materials • Purchases of fabrics, threads, etc. • Technical research and product development
5. Full manufacturing: Collection	• Production • Purchases of raw materials • Purchases of fabrics, threads, etc. • Technical research and product development • Collection development • Product - marketing and selling activities.

Source: GTZ, 2001

There is no simple definition of full manufacturing and subcontracting. The term full manufacturing is used to define the production of products designed and engineered in-house on the basis of own concepts or customer specifications. The companies belonging to this group are independent and are actively engaged in the development, production and the marketing of their own textile and clothing products, including purchasing, production planning, technical research, product development, acquisition and exploitation of patents and rights, cutting by computer, dyeing, product innovation and design. Companies retain the control over the distribution network, the tranfer of technology and coordinate and conduct their advertising and promotion activities. In order to reduce the production costs, some of the labor intensive activities might be subcontracted

Subcontracting might be defined as a specific form of cooperation between firms by which a subcontractor performs all or part of the manufacture of the principal's product to a customised specifications provided by the parent company (Webster, Muhlemann and Alder, 2000).[3] Parent company (industrial buyer) might give external subconstractors the exact amount of raw materials, technical documents, specify the time needed to perform each single production activity, and advice them about the required equipment and production process. The main idea behind advocating the development of subcontracting was based on the "benefits" a small subcontractor derives from a large parent firm in the form of guaranteed markets, secured raw materials, and technical assistance. Large firms that adopt modern technology would diffuse to subcontractors modern production techniques, including the control of production processes and quality control (Watanabe, 1971, Taymaz and Kilicaslan, 2002). Subcontractors can produce multiple items in small quantities effectively taking advantage of the small size of the organization. They let their parent enterprise develop products, cultivate markets and sell products. This allows them to concentrate on manufacturing activities alone and specialize in specific engineering fields. Subcontracting enterprises can ask their parent enterprise to instruct or advise on technologies and production management, lend facilities, train human resources, and provide with information (Subrahmanya, 2008). Parent firm, on the other hand, seek to subcontract part of their work for the following purposes: (1) to economize capital and labor, (2) to take advantage of lower wages in smaller firms, (3) to take advantage of the subcontractor's specialised technology, (4) to serve as a buffer agains business fluctuations (Watanabe, 1971).

However, there are some disadvantages of employing subcontracting business model as well. Subcontractor would be released if it does not meet the exact predefined standards. As subcontractors are particularly vulnerable to the competition from low-wage countries, this type of business model has become a less attractive option for many European textile and clothing manufacturers. Furthermore, most subcontractors work almost exclusively for either one or a few customers, with little or no possibility to differentiate their offer except through geographical proximity and/or lower prices. Therefore, such a position within the supply chain is not particularly attractive for small companies, and is thus perceived as either a transition state or an unavoidable condition for those companies that do not have the resources a competenices to grow towards the full manufacturer model. In this view, subcontractors face great barriers to the introduction of advanced practies

[3] The parent firm can be either a manufacturer (industrial substracting cooperation), a wholesaler or a retailer (Watanabe, 1971). Subcontracting is undertaken under the commission by bigger company which has a larger market share and larger capital, larger number of employees than the subcontractor (Subrahmanya, 2008).

due to the lack of resources and the greater importance of operational flexibility and responsiveness compared to their ability to innovate. As the role of subcontractor changes, so they receive an increasing number of activities which increase their value added. In this light, the role of the subcontractor is completely different from the mere supply of production capacity (Cagliano and Spina, 2002).

Past research has identified different types of subcontractors, producing different outcome results. Furlan, Grandinetti and Camuffo (2007) identified four types of subcontractors, based on the design and marketing capabilities, ranging from developed to traditional relationships. While developed subcontractors show the highest percentage of export in total sales and had a diversified customers' portfolio and use advanced production technologies, other types of subcontractors had lower propensity to export and limited customer portfolio and limited technological capabilities. The adoption of advanced production technologies is positively correlated with the development of marketing and design capabilities. And the usage of advanced technologies along with the patents, proprieteriy technologies and quality certification signal the presence of innovation capabilities.

The subcontracting relationship in the textile and clothing industry is usually established between large/high wage parent firms and small/low wage subcontractors (Taymaz and Kilicaslan, 2002). The parent firm pay their workers more than small subcontractors do (Watanabe, 1971), and subcontract a part of production to small firms that pay lower wages in order to reduce production costs. Low costs are very important factor in subontracting decision. Subcontractors derive their competitive advantage from superior cost, quality and delivery, which depends largely on the efficiency of the production system and production management practices (Cagliano and Spina, 2002).

The general trend has been for textile manufacturing to become more and more capital intensive. By contrast, the clothing industry remains far more fragmented organisationally (sub-contracting is especially prominent) and is less sophisticated technologically (Keenan, Saritas and Kroener, 2004). Capital intensive firms are more likely to offer subcontracts, and labor intensive firms, especially in the textile industry, tend to operate as subcontractors (Taymaz and Kilicaslan, 2002).

Subcontract offering firms that produce final products were shown to have higher advertisement intensity and communication intensity than subcontractors (Taymaz and Kilicaslan, 2002). This is because, firms that produce final products would try to inform a large group of customers about their products and they need to exchange information intensively with suppliers and customers.

Based upon the previous research we suggest the following hypotheses:

H 1a: Manufacturers should have higher expenses per employee than subcontractors.

H 1b: Manufacturers should pay their workers more than subcontractors.

H 1c: Manufacturers should be more capital intensive than subcontractors.

H 1d: Manufacturers should exhibit higher R&D intensity than subcontractors.

H 1e: Manufacturers should exhibit higher design and development intensity than subcontractors.

H 1f: Manufacturers should exhibit higher brand intensity than subcontractors.

H 1g: Manufacturers should have higher marketing intensity than subcontractors.

H 1h: Manufacturers should conduct market research significantly more than subcontractors.

H 1i: Manufacturers shuold have higher promotion intensity than subcontractors.

Although the conventional wisdom is that subcontracting is less appealing and profitable than manufacturing, some empirical evidence shows that subontractors might be more effective in implementing advanced practices of production management, whilst most small manufacturers experience difficulties in exploiting the potential of good product innovation practice. The study of Cagliano and Spina (2002) did not find any significant differences between manufacturers and subcontractors in customer satisfaction, market share increase and ROA, while subcontractors exhibited higher efficicency level than manufacturers. Subcontracting is considered to be an important source of competitiveness (Subrahmanya, 2008). The value added of subcontractors might increase thanks to a higher differentiation ability related to the dominance of specialised technologies and/or the flexibility and speed to react to changing requirements (Cagliano and Spina, 2002). However, manufacturers sell their own brands and products, and the price of those products is usually higher than the price of products received from subcontracting activity. Therefore, the revenues of manufacturers should be higher than the revenues of subcontractors, if the market accepts their products. Therefore, the following hypotheses are proposed:

H2 a-c: There should not be any significant statistical differences between manufacturers and subcontractors in (a) sales volume per employee, (b) value added per employee and (c) profitability.

3. Methodology

3.1. Survey and sample profile

The data for this study was obtained from the company questionnaire carried out during the period of December 2006 to February 2007 in Croatia. The company questionnaire was sent to 153 leading manufacturers in the textile and cloth-

ing industry (sectors DB 17 and DB 18, following the NACE rev. 1 classification). The manufacturers were identified using the database of the Croatian Chamber of Economy. Eighty questionnaires were completed and returned, producing a return rate of 52%. Summary statistics on sampled manufacturers is presented in table 1. The questionnaire included basic information about the companies, firms' financials taken from balance sheet and income statements, information on subcontract and own manufacturing output and market-related data as well.

Table 1:

SAMPLE CHARACTERISTICS, N = 80

Company profile	
1. Main business activity (% of manufacturers)	100.0
1.1. DB 17	36.3
1.2. DB 18	63.7
2. Company experience (% of manufacturers)	100.0
2.1. established before 1990	35.1
2.2. established during the period of 1990 – 1999	51.9
2.3. established after 1999	13.0
4. Company size (% of manufacturers)	100.0
4.1. Small companies (less than 50 zaposlenih)	37.5
4.2. Medium-sized companies (from 50 do 250 employees)	35.0
4.3. Large companies (more than 250 employees)	27.5
5. Average number of employed persons for the 2003 – 2005 period	233
6. Sales volume per company in country for the 2003 – 2005 period (HRK)	13,395,686.00
7. Average export revenues for the 2003 – 2005 period (HRK)	15,846,361.00
8. Material costs (share in sales volume for the 2003 – 2005 period in %)	0.47
9. Marketing expenses (share in sales volume for the 2003 – 2005 period in %)	0.98
10. Expenses per employee per company for the 2003 – 2005 period (HRK)	173,276.50
11. Brand intensity (share of brand revenues in sales volume for the 2003 – 2005 period in %)	11 – 30%
12. Average capital intensity for the 2003 – 2005 period (HRK)	94,974.68
13. Average value added per employee for the 2003 – 2005 period (HRK)	57,061.00
14. Percentage of companies emphasizing strategic manufacturing approach (%)	52.5
15. Percentage of companies emphasizing subcontracting strategy (%)	47.5
16. Percentage of companies with R&D departments (%)	10.5
17. Sample share in Croatian manufacturing in 2005 (%)	
17.1. in employment	52.1
17.2. in home sales revenues	52.9
17.3. in export revenues	31.5
17.4. in profits after taxes	23.7
17.5. in loss after taxes	27.9

According to the share in the Croatian manufacturing, the sample might be regarded as the representative one. Additional data was obtained from the interviews with the practitioners, managers and owners of the leading Croatian textile and clothing manufacturers and through the plant visits of 5 manufacturers.

3.2. Measurement and data analysis

A review of relevant literature was used to develop measures for variables applied in this study, which was then adapted to the study context. Variable definitions and measurements are presented in table 2.

Table 2:

VARIABLE DEFINITIONS AND MEASUREMENTS

Variable name	Variable description
Business model	• Business model includes manufacturers that emphasize full manufacturing and companies that employ predominantely subcontracting. • Companies were distinguished according to the percentage of in-house production made by using their own design and customer specifications. Companies with more than 50 % of own production in total output are categorised as full manufacturers, while companies with less than 50 % of own production are categorised as subcontractors. The companies performing exactly 50 % of own production in total output were included in the group of subcontractors.
Strategic behaviour variables	• Measures of costs include total expenses, wages and marketing expenses. Companies were asked to indicate their total expenses, wages and marketing expenses for the 2003-2005 periods. The average values were calculated and used in the analysis. • Total expenses were measured as expenses per employee. • Companies were grouped into two groups according to the wage per employee as follows: (1) companies with higher than average wages per employee, (2) companies with lower than average wages per employee. Wages per employee averaged HRK 42563.96. • We calculated capital intensity as the amount of fixed assets in relation to number of employees. • R&D intensity represents the percentage of companies that have established in-house R&D departments. • Design and development variable was expressed as the number of companies that invested in design and development in 2005, as follows: (1) company did invest in design and development; (2) company did not invest in the design and development. • Brand intensity was measured as the proportion of brand sales in total sales. • Marketing intensity was measured as the percentage of companies that invested in marketing during the period of 2003-2005, as follows: (1) company did invest in marketing; (2) company did not invest in marketing. • Market research variable was measured as the percentage of companies that conducted market research in 2005, as follows: (1) company did conduct market research; (2) company did not conduct market research. • Promotion variable was measured as the percentage of companies that invested in promotion in 2005, as follows: (1) company did invest in promotion; (2) company did not invest in promotion.
Performance	• Performance was measured in HRK using sales volume per employee, value added per employee and profitability (ROA). Value added was cacluated by summing up wages, depreciation and profit before taxes.

Data was analyzed using one-way analysis of variance (ANOVA) and cross tabulation analysis (chi-square test).

4. Results

The results are presented in terms of the impacts of busines model choice on firms' strategic behaviour and performance.

4.1. The relationship between business model and firms' strategic behaviour (H1)

The relationships between business model and firms' strategic behaviour are presented in table 3.

Table 3:

THE RELATIONSHIP BETWEEN BUSINESS MODEL AND FIRMS' STRATEGIC BEHAVIOUR

Strategic behaviour variables	Business model		p-value
	Manufacturers	Subcontractors	
1. Total expenses per employee (HRK)	225,038.40	84,730.50	0.000
2. Wages per employee 2.1. Percentage of companies paying above average wages (%) 2.2. Percentage of companies paying below average wages (%)	 53.57 46.43	 27.27 72.73	0.061
3. Capital intensity (HRK)	139,068.10	49,005.1	0.038
4. R&D intensity 4.1. Percentage of firms having in-house R&D departments (%) 4.2. Percentage of firms which do not have in-house R&D departments (%)	 19.35 80.65	 0.00 100.00	0.016
5. Design and product development 5.1. Percentage of companies that conduct design and development (%) 5.2. Percentage of companies that do not conduct design and development (%)	 56.25 43.75	 17.24 82.76	0.001
6. Brand intensity*	2.46	1.51	0.005
7. Marketing intensity 7.1. Percentage of companies that invest in marketing (%) 7.2. Percentage of companies that do not invest in marketing (%)	 68.75 31.25	 48.28 51.72	0.104
8. Market research 8.1. Percentage of companies that do market research (%) 8.2. Percentage of companies that do not do market research (%)	 46.88 53.13	 13.79 86.21	0.005
9. Promotion 9.1. Percentage of companies that promote their products (%) 9.2. Percentage of companies that do not do promotion (%)	 68.75 31.25	 41.38 58.62	0.032

Notes: Brand intensity: Manufacturers indicated the share of brand sales in sales volume for the period of 2003-2005 on the scale as follows: (1) 0-10 %, (2) 11-30 %, (3) 31-60 %, (4) 61-90 %, (5) 91-100 %.

As the findings suggest, significant differences existed in all observed variables between firms that tend to produce their own products and subcontractors. As compared to subcontractors, manufacturers appeared to have higher total expenses per employee ($p = 0.000$) and capital intensity ($p = 0.038$). This supports the hypotheses H 1a and H 1c.

In the sample of manufacturers there are more companies that pay out higher than average wages than companies with below average wages. At the same time, subcontractors tend to pay out lower than average wages. Hypothesis H 1b is supported at 0.10 levels.

As compared to subcontractors, manufacturers are more inclined to conduct R&D ($p = 0.016$), design and development ($p = 0.001$) and carry out market research ($p = 0.005$). They tend to emphasize their own brands ($p = 0.005$), and invest in marketing and promotion significantly more than subcontractors ($p = 0.104$ and $p = 0.032$ respectively). All those activities increase total expenses. Hypotheses H1d-i is supported.

4.2. The relationship between business model and firms' performance (H2)

The H2 hypothesis deals with the relationships between business model and firms' performance. As the findings of one-way ANOVA presented in table 4 suggest that significant differences existed between manufacturers and subcontractors in productivity - sales volume per employee ($p = 0.005$) and value added per employee (at 0.10 levels), but not in profitability ($p = 0.936$).

Table 4:

THE RELATIONSHIP BETWEEN BUSINESS MODEL AND FIRMS' PERFORMANCE

Performance	Business model		p-value
	Manufacturers	Subcontractors	
1. Sales volume per employee	218,251.4	84,697.2	0.005
2. Value added per employee	66,794.5	45,552.7	0.088
3. Profitability (ROA)	0.020	0.024	0.936

Accordingly, manufacturers exhibited higher productivity level (sales volume per employee and value added per employee), which rejects the hypotheses H 2a and H 2b. Furthermore, no significant differences existed in business model in profitability, which supports the hypothesis H 2c. If the company decides strategically to emphasize the production of their own products, it can expect to increase productivity. However, profitability might not increase statistically due to raising costs that need to be occured for supporting all accompanying activities (R&D, design and development, brand development, marketing, market research and promotion as well). Furthermore, some research indicates that manufacturers that employ advanced practices reach higher levels of operational and business performance (Cagliano and Spina, 2002). Since not all Croatian manufacturers employ advanced technology and manufacturing practices (i.e. full manufacturing), their profitability is somewhat lower than expected. The limited ability of manufacturers to exploiting fully the advantages coming from advanced practices in the production and product development areas might be furter explained by the implementation problems, the time needed to translate practices into actual performance in the new product development process and fierce market competition. On the other hand, the competitive success of subcontractors might be derived from superior cost position, quality and delivery which depend on the efficiency of the production system.

5. Conclusion

This paper explored the impacts of business model by the Croatian manufacturers on their strategic behaviour and peformance. Our first contribution is the comparison of strategic behaviour of manufacturers and subcontractors. The results indicate that manufacturers have higher total expenses and higher capital intensity. They pay higher than average wages and are more inclined to conduct R&D, design and development and carry out market research. Manufacturers tend to emphasize their own brands and invest in marketing and promotion significantly more than subcontractors. Our second contribution is the identification of the relationship between business model and firms' performance. The findings show that manufacturers exhibited higher level of sales per employee and value added per employee than subcontractors. However, there was no significant difference in ROA between two business models examined. High costs diminish the profitability of full manufacturers.

Several managerial implications might be derived from the findings of this study. The implications of the study are far-reaching, and include new opportunities for textile and clothing companies. The results are indicative for the strategy

in the textile and clohting industry. For the Croatian textile and clothing industry, the problem is not less developed full manufacturing model and high proportion of subcontracting relationship per se, but the development of the industry as a whole, that is, the development of the industry towards generating high wage employment of skilled workers who produce high quality/high value added products. This is the only strategy that will improve the performance of this industry in the long run. The results indicate that manufacturing business model yields higher producitivity than subcontracting and the profitability might increase if costs are properly managed. Therefore, many companies have to move away from subcontracting towards manufacturing model. The results clearly indicate the ways of how the Croatian manufacturers might move towards full manufacturing business model. Furthermore, as the literature suggests, subcontracting as a specific form of networking, might be effectively used if due attention is paid to more complex forms of subcontracting that yield higher value added. Subcontractors, in order to survive, need to avoid strategies based on mere cost competition, and should enlarge their customer base, offer unique, higher quality products, serve their customers with ever higher degrees of flexibility and engage them in durable relationships (Furlan, Grandinetti, Camuffo, 2007)

Although this study produced some interesting and meaningful findings, there are some limitations as well. First, although the data employed in this research were better than previously available ones, more abundant and richer data would have enlarged the scope of analysis. Like most survey studies, this study took a "snapshot" of a sample of the industry at a single point in time. Several years of data would have provided further information as to how strategic behaviour changes. Despite these limitations, the results of this study offer useful insights into the strategic behaviour of the Croatian firms in the textile and clothing industry.

There are several areas in need for further research. In order to understand firm's competitive advantage, scholars should carry out longitudinal studies to capture how subcontracting and manufacturing models evolve over time. More accurate measures of subcontractors' and manufacturers' capabilities should be conceived and tested. Future research may refine the classification of manufacturing srategies employed in the textile and clothing industry.

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USPOREDBA PUNOG I DORADNOG POSLA U INDUSTRIJI TEKSTILA I ODJEĆE U HRVATSKOJ

Sažetak

Svrha je ovoga istraživanja istražiti strategijsko poslovanje i uspješnost dviju grupa proizvođača u industriji tekstila i odjeće u Hrvatskoj: proizvođača u punome poslu i proizvođača u doradnome poslu (lohn). Hipoteze su testirane na podacima koji su prikupljeni anketom provedenom u razdoblju od prosinca 2006. do veljače godine 2007. Podaci su analizirani primjenom statističke metode ANOVA i dvosmjerne tabulacije. Rezultati istraživanja pokazuju da proizvođači u punome poslu imaju veće troškove i veću opremljenost rada. Oni također isplaćuju i veće plaće i skloniji su provoditi istraživanje i razvoj, dizajn i istraživanje tržišta. Proizvođači u punome poslu investiraju u razvijanje vlastitih robnih marki, marketing i u promociju, statistički značajnije više nego proizvođači u doradnome poslu. Analiza pokazuje i to da proizvođači u punome poslu ostvaruju veću proizvodnost, ali ne i veću profitabilnost. Predstavljeni model omogućuje proizvođačima da bolje ocijene svoju postojeću tržišnu poziciju i sukladno strateškim smjernicama repozicioniraju se na tržištu.

Ključne riječi: industrija tekstila i odjeće, doradni posao (lohn), puni posao, strategija, proizvodnost, profitabilnost, tržišno repozicioniranje