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FIRMS' CHARACTERISTICS, STRATEGIC FACTORS AND FIRMS' PERFORMANCE IN THE CROATIAN MANUFACTURING INDUSTRY

The paper aims to identify factors that are behind superior performance of manufacturing firms. It compares the similarities and differences in ten selected firms' characteristics and strategic factors between high performers and low performers operating in the Croatian manufacturing industry. The hypotheses were tested with data obtained from company survey. The data was analyzed using one-way analysis of variance (ANOVA). The research results indicate that high performers were smaller and younger companies with higher level of capital intensity. They invested significantly more in marketing. As compared to low performers, high performers had lower total labor expenses, but paid out higher gross wages per employee. Lower debt ratio was associated with higher level of performance. The findings further show that high performers exhibited higher productivity level than low performers. Finally, the paper discusses implications of findings for industrial policy and manufacturing strategy.

Key words: Firm's performance, firm's characteristics, strategic factors, manufacturing strategy, Croatia

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1. Introduction

Manufacturing industry in Croatia is still one of the largest sectors measured by value added and employment. Under the growing pressure of the intensified global competition it faces a number of challenges, which require the understanding of strategies that drive performance of the companies. A number of studies emphasize the relative importance of a distinctive strategy in determining the firm's economic performance in various environments and examine the relationship between industry- and firm-level strategy and firms' performance (Hitt, Hoskisson and Hicheon, 1997; Lee and Giorgis, 2004; Ural and Acaravci, 2006). Various determinants of firms' performance have been identified in several industries, but those factors seem to differ across different countries and industries (Amoako-Gyampah and Acquaah, 2008; Barney, 1991; Capon, Farley and Hoenig, 1990; Hall, 1980; Porter, 1980; 1985; Day and Wensley, 1988). Despite a number of studies that explored strategy-performance relationship, very little is known about the impacts of various strategic factors on the performance of firms operating in the Croatian manufacturing industry, although there are some studies that examine various aspects of the Croatian manufacturing industry (Anic, Rajh and Teodorovic, 2008).

This paper empirically examines the relationships between firms' characteristics, strategic factors and firms' performance. The main question addressed in this paper relates to how the firms' characteristics and key strategic factors are linked to firms' performance. The paper aims to identify factors that are behind superior firms' performance by comparing the characteristics of high performers and low performers operating in manufacturing industry. According to available data, performance is measured as return on assets (ROA). In this paper we examine ten factors that may affect firms' performance, including firm size, age of the firm, capital intensity, export intensity, marketing intensity, innovation intensity, labor expenses, debt ratio, current ratio and labor productivity.

The data for this study was obtained from the company survey carried out in 2007 in Croatia. Data was analyzed using one-way analysis of variance (ANOVA). This study builds on previous studies involving strategy-performance relationship (Capon, Farley and Hoenig, 1990). The present paper seeks to contribute to the literature with a better understanding of the associations between ten selected variables and firms' performance in the Croatian manufacturing environment. It provides insights into the factors associated with superior performance and the activities to be undertaken in order to improve the performance of manufacturing firms. The findings of this study might provide policy makers and executives with guidelines and benchmarks for developing successful policy measures and business strategies.

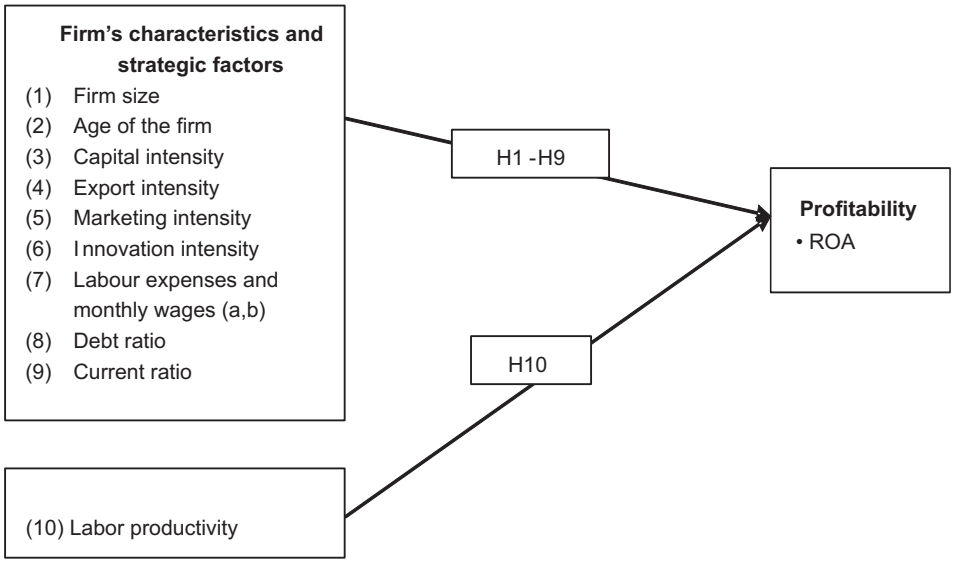
The paper's structure is as follows. After this introduction, section two presents theoretical background. The methodology used in this research is presented in section three, followed by research results in section four. Section five includes conclusions with theoretical and managerial implications, limitations of research, and future research directions.

2. Theoretical background

The conceptual framework for this research is shown in figure 1. Past research has examined various determinants of firms' performance, including elements of environments, firm strategy and organizational characteristics. Financial performance variables include widely-used measures, embracing levels, growth and variability in profit, typically related to assets, investment or owner's equity (Capon, Farley and Hoenig, 1990). A number of studies used return on total assets (ROA – the ratio of net income to total assets) as the measure of firms' profitability. ROA determines how much profit can be generated from the company's investments in assets.

Figure 1:

CONCEPTUAL MODEL



Profitability is the net result of a large number of policies, decisions and their implementations. This paper examines the relationship among ten firms' characteristics and strategic factors and firms' performance as presented in our conceptual model.

Firm size is one of the most acknowledged determinants of a firm's profits (Beard & Dess, 1981). The causal relationships between size and profitability have been widely tested with ambiguous results. Although some studies did not find significant relationship between size (measured as the number of employees) and performance (Capon, Farley and Hoenig, 1990), several studies suggest that a positive relationship exists between company size and profitability (Lee and Giorgis, 2004; Ravenscraft, 1983; Samiee & Peters, 1990; Ural and Acaravcı, 2006). Bigger firms are presumed to be more efficient than smaller ones. The market power and access to capital markets of large firms may give them access to investment opportunities that are not available to smaller ones (Amato and Wilder, 1985). Firm size helps in achieving economies of scale and thanks to increasing production volumes the firm might reduce average unit costs. Therefore we expect the following:

H1: High performers are more likely to be larger companies, while low performers would be small companies.

Firm age (measured as the number of years a company is operating in the market since it was founded) is an important determinant of firm dynamics. Past research shows that the probability of firm growth, firm failure, and the variability of firm growth decrease as firms age (Evans, 1987; Yasuda, 2005).

According to the life cycle effect, younger companies are more dynamic and more volatile in their growth experience than older companies (Evans, 1987). Very often the emergence of those companies is based on some innovations. Maturity brings stability in growth as firms learn more precisely their market positioning, cost structures and efficiency levels, are less frequently surprised by profit outcomes, and consequently are less likely to revise their investment plans. The following hypothesis is proposed:

H2: High performers are more likely to be younger companies, while low performers would be older companies.

Capital intensity represents a firm's long-term commitment to building its technological and upgrading its productive capacity. A number of studies indicate that capital intensity is an important determinant of profitability (Lee and Blevins, 1990; Ravenscraft, 1983). Capital investment intensity shows a positive

relationship to financial performance at the industry level, but at the firm/business level, higher investment might be related to lower performance (Capon, Farley and Hoenig, 1990). It's argued that companies are required to make capital investments to remain competitive and to maintain their company's growth (Balakrishman and Fox, 1993; Ohmae, 1990). The use of capital equipment makes labor more productive, while higher productivity contributes to higher profitability (Ahrend, 2006; Ghosal and Nair-Reichert, 2009; Smith and Reece, 1999). Therefore, the following hypothesis is proposed:

H3: High performers should exhibit higher capital intensity than low performers.

Past research indicates that the relationship between exports and financial performance is ambiguous (Capon, Farley and Hoenig, 1990; Ural and Acaravcı, 2006). However, some evidence suggests that export intensity (defined as the ratio of exports to sales) is an important driver of corporate growth, financial strength and firms' performance (Cooper and Kleinschmidt, 1985; Lee and Giorgis, 2004). Exporting offers numerous benefits to an individual firm. Exporting may help firms to improve the utilization of production capacity, to develop superior management capabilities, to enhance innovation in product and processes, and to strengthen financial performance (Piercy, Kaleka and Katsikeas, 1988). Therefore, the following hypothesis is proposed:

H4: High performers should exhibit higher export intensity than low performers.

The ratio of marketing expenditures to sales (marketing intensity) is often used to describe firms' marketing efforts (Ural and Acaravcı, 2006). Marketing expenditures are expenses associated with marketing management and resources needed to support this function. Although some studies suggest that marketing expenses have little directional relation to financial performance (Capon, Farley and Hoenig, 1990), there is some evidence to believe that this relationship exists. Marketing efforts enable the firm to promote, advertise, sell and distribute its goods to final consumers. Marketing expenditures are aimed at growing market penetration increasing the usage of current customers and attracting new customers in order to increase the volume of sales and achieve greater market share. Those expenses seek to increase customer value, customer satisfaction and build brand loyalty. Companies that manage to increase customer satisfaction and customer retention would improve their business profitability (Best, 2004). Marketing activities and advertising have been shown to have an important impact on profit rates (Comanor and Wilson, 1967). The following hypothesis is proposed:

H 5: High performers should exhibit higher marketing intensity than low performers.

The term innovation intensity refers to a company's expenditure in new product development. In new product development process, identifying needs and translating them into technical specifications requires coordination of marketing and product development efforts. The foundation of the new product development process is innovation. Past research suggests that firms that invest a large portion of their sales on R&D tend to experience more growth than those that do not (Capon, Farley and Hoenig, 1990; Lee and Giorgis, 2004). R&D intensity is important for creating the knowledge flows necessary for product and process innovation. New product development process affects the quality of a product. Improvements in product development process enhance the firm's reputation, corporate image, and the perceived value of the product. Thus, the firm can offer the product at a higher price, achieve greater market share, and, thereby, maximize its sales revenues accelerating product development and "developing and launching a new product within the proper time frame", and have a positive impact on a firm's performance. Therefore, the following hypothesis is proposed:

H 6: High performers should exhibit higher innovation intensity than low performers.

From accounting point of view, wages are costs, and higher the costs, lower the profitability, if sales revenues are hold equal. However, wages and profits cannot be considered as costs of production, as they both depend on value of net product (Sheynin, 1965). As several studies indicate the rise in wages is accompanied with the increase in profitability and productivity (Knight and Shi, 2005). However, the relationship between wages and profitability is highly ambiguous. In the sectors and countries where profits grow faster, wages lag behind, and vice versa, indicating the negative relationship between profitability and wages (Pianta and Tancioni, 2008). Based on past research the following hypothesis is proposed:

H7a: High performers should exhibit lower share of labour expenses in sales than low performers.

H7b: High performers should pay out higher monthly gross wages per employee than low performers.

The debt ratio (total debt/total assets) is an indication of a company's solvency and measures the percentage of total funds provided by creditors (Brigham and

Gapenski, 1988). Past research suggests that debt is negatively related to performance at the firm level (Capon, Farley and Hoenig, 1990). The higher the ratio, the greater risk is associated with the firm's operation. High debt to assets ratio indicates low borrowing capacity of a firm, which in turn lowers the firm's financial flexibility and its profitability. If the ratio is less than one, most of the company's assets are financed through equity. If the ratio is greater than one, most of the company's assets are financed through debt. Companies with high debt/asset ratios are said to be "highly leveraged," and could be in danger if creditors start to demand repayment of debt, which is the case in economic crisis. The following hypothesis is proposed:

H 8: High performers should have lower debt ratio than low performers.

The current ratio is the most commonly used measure of liquidity and is an indication of a company's ability to meet its short-term debt obligations (Brigham and Gapenski, 1988). It is computed by dividing current assets by current liabilities. The higher the ratio, the more liquid the company is. If current liabilities exceed current assets (the current ratio is below 1), then the company may have problems meeting its short-term obligations. If a company is getting into financial difficulty, it begins paying its bills more slowly, building up bank loans. The following hypothesis is proposed:

H 9: High performers should have higher current ratio than low performers.

Many manufacturing firms seek to gain competitive edge in the market through productivity gains (Skinner, 1986). Classical economics discusses productivity improvements in terms of capital and labour, where increases in productivity are generally considered the major source of economic growth. Productivity may depend on numerous factors. Common types of investments that increase productivity include substituting capital for labour - automation of processes, improvements in existing technology, or developing new training programs for employees. Reallocation of resources via changes in strategy can increase productivity too (Anderson, Fornell and Rust, 1997). Labour productivity (mostly measured as output per unit of labour) has been often used as a predictor of firms' performance. Several studies have found a positive relationship between labor productivity and firm's performance (Smith and Reece, 1999; Ural and Acaravcı, 2006). Thus an increase in labour productivity may enhance economic performance. Therefore, the following hypothesis is proposed:

H10: High performers should exhibit higher labour productivity than low performers.

A summary of the hypotheses is presented in Table 1.

Table 1:

SUMMARY OF HYPOTHESES

Variable	Hypotheses: Relationship with ROA (high vs. low performers)
1. Firm size	H1: Positive
2. Age of the firm	H2: Negative
3. Capital intensity	H3: Positive
4. Export intensity	H4: Positive
5. Marketing intensity	H5: Positive
6. Innovation intensity	H6: Positive
7a. Labor expenses	H7a: Negative
7b. Monthly wages	H7b: Positive
8. Debt ratio	H8: Negative
9. Current ratio	H9: Positive
10. Labor productivity	H10: Positive

3. Methodology

3.1. Survey and sample profile

The data for this study was obtained from the company survey carried out in 2007 in Croatia. The questionnaire was sent by mail to 644 leading manufacturers in the manufacturing industry - sector D following the NACE classification (NKD, 2002). The manufacturing firms were identified using the database of the Croatian Chamber of Economy. A total of 210 completed questionnaires were obtained, producing a response rate of 33%. The questionnaire included basic information about the companies, firms' financials taken from balance sheet and income statements, information on technologies, R&D, innovation activities, business organization and market-related data as well. Summary statistics on sampled manufacturing firms is presented in table 2 and table 3.

Table 2:

SAMPLE CHARACTERISTICS, N = 210

Company profile	Total group
1. Company size (% of manufacturing firms)	
1.1. Small companies (less than 50 employees)	11.9
1.2. Medium-sized companies (from 50 do 250 employees)	43.3
1.3. Large companies (more than 250 employees)	44.8
2. Average revenues per company in 2006 (HRK)	341,261,461
3. Average export revenues per company in 2006 (HRK)	131,652,196
4. Average capital intensity in 2006 (HRK)	297,500
5. Average value added per employee in 2006 (HRK)	129,563
6. Sample share in total manufacturing revenues (%)	43.0
7. Sample share in total manufacturing employment (%)	34.5
8. Sample share in total manufacturing fixed assets (%)	38.7
9. Labor productivity (sales per employee), HRK	552,607

Table 3:

MAIN BUSINESS ACTIVITY, N = 210

Main manufacturing industries	n	%
Manufacture of food products and beverages	17	8.1
Manufacture of tobacco products	3	1.4
Manufacture of textiles	16	7.6
Manufacture of wearing apparel, dressing and dyeing of fur	15	7.1
Tanning and dressing of leather, manufacture of luggage, handbags, saddlery, harness and footwear	18	8.6
Manufacture of wood and of products of wood and cork, except furniture, manufacture of articles of straw and plaiting materials	17	8.1
Manufacture of pulp, paper and paper products	10	4.8
Publishing, printing and reproduction of recorded media	7	3.3
Manufacture of coke, refined petroleum products and nuclear fuel	4	1.9
Manufacture of chemicals and chemical products	15	7.1
Manufacture of rubber and plastic products	13	6.2
Manufacture of other non-metallic mineral products	8	3.8
Manufacture of basic metals	11	5.2
Manufacture of fabricated metal products, except machinery and equipment	11	5.2
Manufacture of machinery and equipment	6	2.9
Manufacture of electrical machinery and apparatus	10	4.8
Manufacture of radio, television and communication equipment and apparatus	1	0.5

Main manufacturing industries	n	%
Manufacture of medical, precision and optical instruments, watches and clocks	5	2.4
Manufacture of motor vehicles, trailers and semi-trailers	3	1.4
Manufacture of other transport equipment	9	4.3
Manufacture of furniture	10	4.8
Recycling	1	0.5
Total manufacturing industry	210	100.0

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. Variables used and their measures are presented in table 4.

Table 4:

VARIABLE DESCRIPTION AND MEASURES

Variable name	Variable description
Firms' characteristics	1) Firm size is measured by the total number of employees. 2) Age of the firm was measured in years since original corporate founding. 3) Capital intensity is measured by the amount of fixed assets per employee. 4) Export intensity was measured as the ratio of exports to total sales in %. 5) Marketing intensity was measured as the ratio of marketing expenses to total sales in %. 6) Innovation intensity as the share of new product development expenditures in total sales, in %. 7 a) Labor expenses were measured as the ratio of gross wages in total volume of sales. b) As the measure of monthly gross wages per employee, total gross wages were divided by the number of employees. 8) Debt ratio was expressed by the ratio of total debt to total assets. 9) Current ratio was measured as the ratio of current assets to current liabilities.
Productivity	10) Productivity was measured in HRK using the volume of sales per employee.
Profitability	11) Profitability was measured in HRK using return on assets (ROA). ROA was calculated as ratio of profits before taxes over total assets.

Data was analyzed using one-way analysis of variance (ANOVA). To identify high and low performing firms, the respondents were divided into two groups according to ROA generated. The first group consisted of 134 companies scoring below average on ROA, while the second group included 69 companies that generated above average on ROA. Table 5 shows the performance differences between the high and low performers operating in the manufacturing industry.

Table 5:

ANOVA RESULTS: DIFFERENCES IN ROA GENERATED BY LOW AND HIGH PERFORMERS

	Total group	Low Performers	High Performers	p-value
ROA, %	4.60	1.19	11.22	0.00

The differences in performance are statistically significant. The high performers are superior to lower performance companies on ROA criteria used.

5. Results

The results are presented in terms of the impacts of firms' characteristics, strategic factors and labor productivity on firms' performance. ANOVA results are presented in table 6.

The findings of ANOVA show that significant differences between low and high performing firms ($p<0.05$) existed in firm size, age of firms, capital intensity, marketing intensity, labour expenses, monthly gross wages, debt ratio and current ratio.

Table 6:

ANOVA RESULTS: THE RELATIONSHIPS BETWEEN FIRMS' CHARACTERISTICS, STRATEGIC FACTORS AND FIRMS' PERFORMANCE

Variables/Hypotheses	Total group	Low Performers	High Performers	p-value
1. Firm size (H1)	449.76	548.69	244.03	0.03
2. Age of firm (H2)	39.42	44.24	28.97	0.01
3. Capital intensity (H3)	297,280.30	266,076.90	362,163.40	0.09
4. Export intensity (H4)	41.54	43.15	38.55	0.34
5. Marketing intensity (H5)	1.79	1.18	3.01	0.06
6. Innovation intensity (H6)	1.09	0.82	1.42	0.16
7a. Labor expenses (H7a)	23,08	25,24	18,96	0.01
7b. Monthly wages (H7b)	6,599.86	5,712.99	8415.84	0.00
8. Debt ratio (H8)	0.63	0.68	0.54	0.04
9. Current ratio (H9)	1.92	1.65	2.45	0.00

High performers were found to be companies that employ fewer workers than low performing companies (244 vs. 548 on average). Therefore, hypothesis H1 is rejected. This result is in line with the studies suggesting that smaller firms grow more rapidly than larger firms (Dunne and Hughes, 1994; Evans, 1987). The size-performance relationship might be explained by the existence of threshold sizes above which the law of proportionate effect holds but below which small firms grow faster. According to the law of proportionate effect, growth is unrelated to firm size, and large and small firms therefore have equal probabilities of attaining a particular growth rate within any given period (Gribrat, 1931). Factors that affect growth may include managerial talent, innovation, changes in demand or taste, organisational structure and luck as well. The theory further suggests that the relationship between firm size and profit might be non-linear. The relationship between firm size and profit rates may be positive over some firm size ranges and negative for others. Furthermore, negative relationship between firm size and profitability might be explained by the alternative theory of firms' motivation. Large firms might be more vulnerable to managerial utility maximization than smaller firms (Amato and Wilder, 1985).

Consistent with past research, high performers appeared to be younger companies (operating on average 29 years in the market), while older companies (operating on average 44 years in the market) were found to be low performers. Therefore, hypothesis H2 is supported. The age results are consistent with the

life cycle and evolutionary models (Dunne and Hughes, 1994). In our sample of Croatian manufacturing firms high performers are younger firms and smaller firms, while older and larger firms belong to the group of low performers. Younger companies have some advantages. As newcomers to the market, they do not carry heavy burdens from the past (like excessive number of employees, high production costs, obsolete technology, inefficiency in use of production capacity) and are thus more flexible in adjusting to dynamic market trends than already established manufacturing firms. Old manufacturing firms have been late in the restructuring of their business and new young companies have taken advantage of it.

Capital intensity was found to be marginally significant variable at 0.09 levels. High performers had higher capital intensity than low performers (362,163 kunas vs. 266,077 kunas per employee). In other words, high performing companies produce higher profitability with more fixed assets per employee than low performers. Therefore, the hypothesis H3 is supported.

As expected, high performers had higher marketing intensity. They invested significantly more in marketing as percentage of total sales than low performers (3.01% vs. 1.18%). This supports the hypotheses H5. Marketing intensity is an indicator of market-oriented business and appeared to be an important profit driver for firms operating in the manufacturing industry. As the theory suggests, market-oriented businesses produce higher customer satisfaction and retention which leads to higher business profitability (Best, 2004).

Consistent with the theory, high performers exhibited lower labour expenses as percentage of sales volume than low performers, which supports the hypothesis H7a. From accounting point of view total wages are costs, and companies that have higher costs and higher total labour expenses may count on lower profitability, and vice versa. However, on average high performers pay out higher monthly gross wages per employee than low performers (8,415 kunas vs. 5,713 kunas, p=0.00), which supports the hypothesis H7b. Companies that have higher gross wages per employee have higher labour productivity too (r=0.71), indicating that higher average gross wages per employee increase labour productivity (sales per employee) and improve profitability. In Croatia companies with fewer employees have lower burden of labour expenses and might pay out higher average wages per employee, and thus increase labour productivity and profitability.

As expected, high performers had significantly better debt ratio and current ratio than low performers. Therefore the hypotheses H8 and H9 are supported. Consistent with the past research lower level of debt increases firms' performance (Capon, Farley and Hoenig, 1990). High performers have more company's assets financed through their equity. Low performers are thus more vulnerable to today's global financial crisis when creditors impose more severe terms of debt repayment.

The findings of one-way ANOVA show that no significant differences existed among the two groups of companies in export intensity (p=0.34) and innovation intensity (p=0.16). Therefore, hypotheses H4 and H6 are rejected. Surprisingly, low performing companies had higher share of exports in total sales than high performing companies. However, this relationship was not found to be statistically significant. As the theory suggests, the relationship between export intensity and performance depends on the structure and value of exports and the level of income of importing country (Crinò and Epifani, 2008). Taking into consideration the fact that low value added products dominate in the structure of exports of Croatian companies, this finding might not be so surprising (Buturac, 2008).

Although high performers invest more in new product development than low performers, this relationship was not found to be statistically significant. Consistent with the literature (Aydin, Cetin and Ozer, 2007), one possible explanation may be that firms' R&D and innovation budgets are insufficient in Croatian manufacturing industry in comparison to the firms in other developed countries. Since Croatian manufacturing firms do not invest enough in R&D and innovation activities, the main competitive advantage seem to arise from meeting customer needs satisfactorily, rather than offering new products and services faster than rivals.

The hypothesis H10 deals with the relationships between labour productivity and firms' performance. Consistent with the past research, the findings of one-way ANOVA presented in table 7 suggest that significant differences existed between high and low performers in productivity (p=0.00), indicating that high performers had higher labour productivity than low performers.

Table 7:

ANOVA RESULTS: THE RELATIONSHIP BETWEEN LABOR PRODUCTIVITY AND FIRMS' PERFORMANCE

Variable	Total group	Low Performers	High Performers	p-value
10. Labor productivity, HRK	547,827.00	457,323.40	731,753.60	0.00

Labour productivity is an important driver of firm's performance. If the company wants to improve its profitability, it has to increase labour productivity too. Therefore hypothesis H10 is supported.

6. Conclusion

The results of the analysis have interesting theoretical and managerial implications. From a theoretical perspective, this research builds on and adds to prior work examining strategy-performance relationship. The identification of factors that are behind superior performance in the Croatian manufacturing industry is the key contribution of this paper. This paper shows that high performers are smaller and younger companies. Small and young companies are highly motivated to succeed. They do not carry heavy burdens from the past and are thus more flexible in adjusting to dynamic market trends.

High performing firms have higher capital intensity than low performers. Consistent with the theory, the use of capital equipment makes labor more productive, leading to higher firm's profitability. Marketing expenses are also beneficial to manufacturing companies, helping them to grow market demand and improve their brand loyalty.

Our results further show that high costs of gross wages decrease firms' profitability. Firms that employ more workers have higher costs of total gross wages at the same, which decreases their profitability. However, high performers employ fewer workers and thus have lower total costs of employees, which allow them to pay out higher average wages per employee. Higher average wages increase labor productivity, and consequently lead to higher profitability.

As expected, lower debt ratio is associated with higher levels of performance. Consistent with the past research lower level of debt improves firms' performance. ANOVA results, however, indicate that there was no significant difference between high and low performers in export intensity and innovation intensity. This can be explained by low levels of investments in R&D and innovation in the Croatian manufacturing industry.

The findings of this paper have implications for the design of development strategy of the manufacturing industry and the formulation of the policy measures targeted towards enhancing the competitiveness of the manufacturing industry. Policy measures should focus on creating more favorable investment and business environments in which manufacturing firms would invest more in innovation activities. To keep the economy vital and to create new employment opportunities, it is necessary for new and small companies to be able to enter into the economy fast and successively.

Several managerial implications might be derived from the research results. Manufacturing firms should invest more in marketing in order to grow market demand and improve their brand loyalty. Inefficient large companies should follow the restructuring plan and reduce the burden of high labor expenses. Firms should

finance their business more carefully and should rely to a large extent on equity financing. All these activities would lead to higher profitability, if other costs are kept manageable.

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 behavior changes. Despite these limitations, the results of this study offer useful insights into the productivity and sources of competitive advantage in the Croatian manufacturing firms.

There are several areas in need for further research. In order to understand the sources of firm's competitive advantage, scholars should carry out longitudinal studies to capture how sources of competitive advantage and firms' behavior evolve over time. More accurate measures of performance and firm's strategic behavior should be conceived and tested.

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UTJECAJ KARAKTERISTIKA PODUZEĆA I STRATEŠKIH ČIMBENIKA NA USPJEŠNOST PODUZEĆA U PRERAĐIVAČKOJ INDUSTRIJI U HRVATSKOJ

Sažetak

U ovome radu autori analiziraju čimbenike uspješnosti poduzeća. Uspoređuju se profitabilna i neprofitabilna poduzeća u prerađivačkoj industriji u Hrvatskoj u odnosu na deset odabranih karakteristika poduzeća i strategijskih čimbenika. Hipoteze su testirane s podacima koji su prikupljeni anketnim istraživanjem poduzeća. Prikupljeni podaci analizirani su metodom analize varijance (ANOVA). Rezultati istraživanja pokazuju da su profitabilna poduzeća ona poduzeća koja su manja po veličini, mlađa po godinama poslovanja, jednako kao i ona poduzeća koja imaju višu razinu kapitalne intenzivnosti. Profitabilna poduzeća ulažu više u marketing. Ona imaju manji ukupan trošak radne snage, ali ujedno i isplaćuju veće bruto plaće po zaposlenom u usporedbi s neprofitabilnim poduzećima. Niža razina zaduženosti poduzeća također je važan čimbenik profitabilnosti poduzeća. Rezultati istraživanja dalje pokazuju da profitabilna poduzeća imaju višu razinu proizvodnosti rada u usporedbi s neprofitabilnim poduzećima. U radu se predlažu koristi rezultata istraživanja za industrijsku politiku i strategiju poduzeća u prerađivačkoj industriji.

Ključne riječi: Uspješnost poduzeća, karakteristike poduzeća, strategijski čimbenici, strategija poduzeća u prerađivačkoj industriji, Hrvatska