Suzana Keglević Kozjak, PhD
University of Zagreb, Faculty of organization and informatics, Varaždin, Croatia
skozjak@foi.unizg.hr

Vladimir Kovšca, PhD
University of Zagreb, Faculty of organization and informatics, Varaždin, Croatia,
vkovsca@foi.unizg.hr

Tanja Šestanj-Perić, Msc
University of Zagreb, Faculty of organization and informatics, Varaždin, Croatia,
tperic@foi.unizg.hr

THE IMPACT OF SELECTED FINANCIAL RATIOS AND GROSS DOMESTIC PRODUCT ON THE PERFORMANCE OF ADVERTISING INDUSTRY – A CASE STUDY FROM CROATIA

Preliminary communication

Abstract

In our study, we explore the financial performance of companies in advertising industry in Croatia, depending on internal factors and overall economic conditions. Internal factors are represented by financial ratios of liquidity, leverage and activity, and economic conditions by the selected macroeconomic variable. Financial ratios used in this research are Current ratio (CR), Debt ratio (DR) and Total Asset Turnover (AT), and macroeconomic variable is Gross Domestic Product (GDP). The performance of the companies is measured by Net Profit Margin (NPM). The idea behind this research is based on the fact documented in the literature that some companies see marketing costs as an investment, and not only do not cut their spending on marketing in times of economic downturn, but even increase it. If many companies behave this way, this should reflect on the profitability of companies in advertising industry, with a negative relationship between GDP and their profitability.

The population of this study is comprised of all the companies operating in Croatia whose main activity is promotion. According to National Classification of Activities (NACE Provisions 2007) the mentioned activity is classified in the section M 73 - Advertising and market research, and this section includes advertising agencies (M 7311), media advertising companies (M 7312) and market research companies (M 7320). The financial ratios for those companies were measured from 2009 to 2018. A multiple regression model was used and secondary data were analyzed.

Among the four independent variables, only AT does not show the significance on NPM. The results of multiple regression analysis show that DR, CR and GDP have significant correlation with the financial performance of promotion companies in Croatia; DR and GDP are negatively correlated, while CR is positively correlated to the industry performance measured with NPM.

The contribution of this paper is twofold: on one side, it contributes to the literature dealing with the impact of financial ratios and macroeconomic variables on financial performance, on the other side it contributes to the literature that studies the relationship between marketing costs and economic activity.

Keywords*: Financial performance, Financial ratios, Current ratio, Debt ratio, Total Asset Turnover, Gross Domestic Product*

JEL: M15, M20, M31

1. INTRODUCTION

Firm performance is the ability of an entity to gain profits in relation to sales, total assets and own capital. "Financial performance principally reflects business sector outcomes and results that shows overall financial health of the sector over a specific period of time." (Naz et al. 2016, p. 81). Some of the ratios for measuring financial performance are: Gross Profit Margin, Operating Profit Margin, Net Profit Margin, Return on Assets, Return on Equity. In this paper, such as in research of Goddard et al. (2005), Artikis et al. (2009), Vijayakumar (2011), Lazăr (2016) and Widyastuti (2019), firm performance is measured by profitability ratio. To boost sales and profitability, companies spend on marketing activities, which involves hiring specialized advertising companies/agencies. In times of economic downturn, firms are forced to cut costs, which may include cutting marketing budgets. However, many studies show that this is not always the best strategy. On the contrary, investing in marketing during recession has in many cases proven to contribute to long-term profits. In the light of these findings,

many companies are changing their behavior and taking marketing costs as an investment that helps overcome crisis periods. The aim of our paper is to investigate whether this is the case in Croatia, by analyzing not directly firms and their marketing spending, but indirectly by analyzing the profitability of marketing agencies, depending on the economic situation as measured by gross domestic product (GDP).

We analyze the fundamental firm performance in the sector of Promotion and Market Research in Croatia in the context of financial ratios and macro-economic variable. The observed period is from 2009 until 2018. The study's major proposition is that net profit margin (NPM) of a firm is a function of a firm's internal performance and overall performance of the country (measured by Gross Domestic Product). In this study internal performance is measured with selected financial ratios which represent liquidity, leverage and activity of a firm. Efficient measure to value the liquidity of a company is Current Ratio (CR) and this variable was also used in research of Goddard et al. (2005); Artikis, et al. (2009); Borhan et al. (2014); Widyastuti (2019). In this paper level of company leverage is measured by Debt Ratio (DR). Artikis et al. (2009); Vijayakumar (2011); Borhan et al. (2014); Lazăr (2016); Widyastuti (2019) also used this variable in their research. The level of company's activity is measured by Total Assets Turnover and this variable was also used by Widyastuti (2019).

The macroeconomic variables play an important role in the economy of a nation. "There are more than 30 macroeconomic variables that influence firm performance, some of them directly impact firms and some indirectly influence the performance" (Haider et al., 2018, p. 202). According to McNamara, & Duncan (1995); Alifiah (2014); Ishak et al. (2017); Pacini et al. (2017); Alifiah & Tahir (2018); Haider et al. (2018) and Khan et al. (2018) the most important and the crucial variable is the Gross Domestic Product (GDP) which represents the market value of all the goods and services produced within the boundaries of a country in a specified period of time. According to Khan „when the real economic activity of the economy increases, it leads to the increase of corporate earnings of different companies, which ultimately leads to increase of the dividend payout ratio" (Khan et al., 2018, p. 112). In our study overall performance of the country is measured with GDP. The paper is organized as follows. In the second section there is a literature review, the third section contains the statistics about advertising companies in Croatia, the fourth section includes the results of our research, and the final section concludes.

2. LITERATURE REVIEW

Spending on marketing activities is reflected on GDP. According to Deloitte's study "The economic contribution of advertising in Europe" (2017), 1 Euro spent in advertising generated 7 Euros for the Economy. „This means that the EUR 92 billion spent on advertising in 2014 in the EU is estimated to have contributed EUR 643 billion to GDP, representing 4.6% of the overall EU GDP." (Deloitte, 2017, p.1). In times of economic downturn, firms are forced to cut costs, which includes cutting marketing budgets. However, many studies show that this is not always the best strategy.

Srinivasan et al. (2005) found that marketing efforts during a recession have not only long-term positive effects on profits, but also immediate. Graham and Frankenberger (2011) explore the effect of changes in advertising and promotion spending on current and future earnings in different industries. They found that increase in spending is more strongly linked to future earnings during recessions and varies by industry. The effect is the strongest for consumer goods firms. Their results contribute to the claim by marketing specialists that marketing spending should be considered as the investment that has the effect on future earnings.

O'Malley et al. (2011) made literature review and concluded that literature reveals how compared to no recession conditions marketing can be significantly more important in a recession and that cutting marketing budgets during recessions likely negatively influences future profits. The results of the literature cited above suggest that if many firms take the view of marketing costs as an investment, the profitability of specialized marketing agencies should actually improve in times of economic slowdown.

The analysis of firm performance has been a productive area of research. In related literature there is a huge heterogeneity with respect both to firm performance measurement (dependent variable) and its factors (independent variables). In most cases, firm performance is measured as a profitability ratio, namely net profit margin (NPM), return on assets or return on equity (Goddard et al., 2005; Artikis et al., 2009; Vijayakumar, 2011; Lazăr, 2016; Widyastuti, 2019). Due to the Van Horne & Wachowicz, manager is interested in all financial ratios, but particular emphasis is on profitability ratios, since „profitability ratios can provide some assurance of the long-run viability of the firm" (Van Horne & Wachowicz, 2005, p. 72). Profitability ratios measure the ability of companies to generate profit relative to revenues, assets, operating costs or shareholders' equity during a specific period of time. "Profitability ratios indicate the magnitude of the net return (profit) generated by the enterprise relative to the size of the engaged assets, that is, to the size of the total revenue generated by the enterprise. " (Ježovita &

Žager, 2014, p. 3). According to Widyastuti (2019) long-term investors have an interest in the company's profitability, because they can see the amount of profits that can really be received in the form of dividends. Widyastuti (2019) examines the effect of liquidity, activity and leverage on company performance. The results show that liquidity has a positive and significant effect on financial performance (measured by net profit margin and return on assets), and financial performance has a significant positive effect on firm value (measured by Price Earnings Ratio, Price to Book Value and Tobin's q). On the other side activity and leverage did not significantly influence financial performance and firm value. Naz et al. (2016) measured financial performance of the cement sector in Pakistan. The financial ratios used for this measurement were profitability ratios, asset utilization ratios, leverage ratios, liquidity ratios and cash conversion cycle from the period 2006-2014. They found that all parameters have positive relationship with the dependent variable ROI except the leverage ratios which has insignificant negative relationship.

Vanitha & Selvam (2011) study financial performance of Indian Manufacturing Companies during Pre and Post Merger and test the validity of the null hypothesis "The merged manufacturing companies did not expand business activities after merger". They use Liquidity (Current ratio, Quick ratio, Net working capital and Diversion of short-term funds), Leverage (Total debt and equity to total assets, Total borrowings and equity to EBITDA) and Profitability parameters (Operating profit, Net profit, ROI and Net worth). Borhan et al. (2013) examine the impact of financial ratios on the financial performance of a chemical company: Lyondell-Basell Industries. In this study some selected ratios: current ratio and quick ratio represent the liquidity ratios, debt ratio and debt equity ratio represent the leverage ratios, while operating profit margin and net profit margin represent the profitability ratios. The results show that current ratio, quick ratio, debt ratio and net profit margin have a positive relationship while debt equity ratio and operating profit margin have a negative relationship with the company's financial performance. Among the six ratios, current ratio, debt ratio and net profit margin show the highest significant impact on the company's performance. Glancey (1998), Martínez-Sola et al. (2014), Prawirodipoero et al. (2019) examine the financial performance of micro, small, and medium enterprises. Due to Prawirodipoero et al. (2019) there are five main components involved in the maximization of financial performance using financial ratios analysis: liquidity measurement ratios, debt ratios, profitability indicator ratios, cash flow indicator ratios, and operating performance ratios. Higher liquidity ratios show that the company is in good financial condition, while higher leverage is a sign that the company is at risk. However, "the rule of thumb is that the higher the risk, the higher the expected return" (Borhan et al., 2014, p. 157).

McNamara & Duncan (1995), Ishak et al. (2017), Pacini et al. (2017), Haider et al. (2018), Khan et al. (2018) emphasize the influence of macroeconomic variables on financial performance of enterprises. Also, Alifiah et al. (2013,2014,2018) show in their studies the effectiveness of macroeconomic variables for predicting financial distress companies in the manufacturing, trade and service sector. Pacini et al (2017) study the impact of chosen macroeconomic factors on the firm performance in the United Kingdom. They used panel data with instrumental variables in the period of 2000 to 2014 for top 100 firms. As a result of the analysis, gross domestic product, inflation rate, and the rate of domestic debt interest payments to total income tax have a direct positive impact on firm performance. On the other hand, exchange rate, interest rate and the rate of short term foreign debts to central bank international reserves have an inverse impact. Ishak et al. (2017) evaluate the effects of financial ratios and GDP towards company performance in trading and service sector in Malaysia. In their study company performance is indicated by Net Profit Margin, while independent variables are Liquidity Ratio, Leverage Ratio and GDP. According to their findings all financial ratios influence the company performance, but GDP shows lower impact on net profit margin. In our study, independent variables are selected financial ratios which measure level of liquidity, leverage and activity of a firm. Also, in our study we include macroeconomic variable GDP.

3. METHODS

3.1. The sample analysis

According to the Financial Agency data, in 2017 there were 1,943 active companies in Croatia whose main activity is the promotion and market research, and they employed a total of 5,683 employees. National Classification of Activities (NACE Provisions 2007) classifies the mentioned activity in the section M 73 - Advertising and market research, and this section includes advertising agencies (M 7311), media advertising companies (M 7312) and market research companies (M 7320). The companies observed in our study are exclusively small or medium-sized enterprises, since there are no large companies registered in this sector. Figure 1 shows the number of companies registered in sector M 73 from year 2009 to 2018. All this companies were included in our research.

Figure 1. Number of companies in sector M 73 in the period of 2009 to 2018
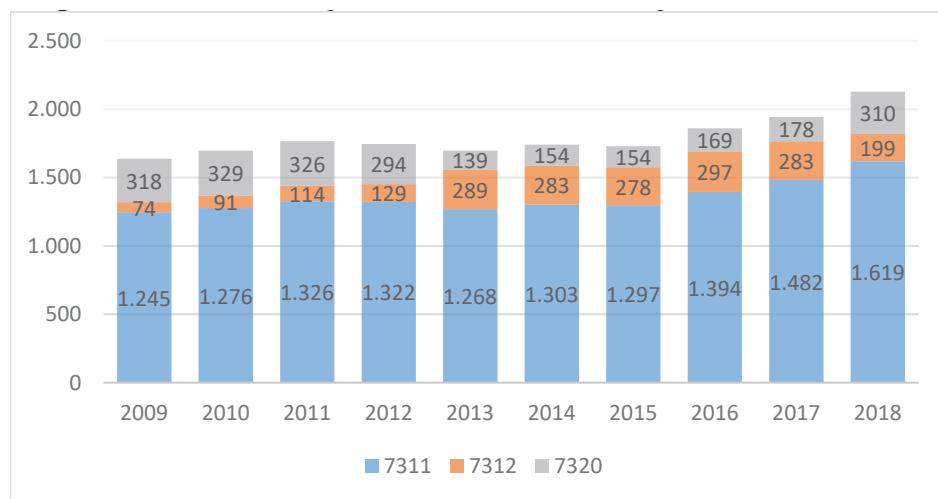
Source: Authors, according to Financial Agency database

Figure 1 shows that in the period from 2015 to 2018, there was a continuous increase in the number of advertising agencies (M 7311) and market research companies (M 7320), while the number of media advertising companies decreased after 2016. In 2009, there were 1.245 advertising agencies active, while in 2018, there were 1.619 agencies. In the observed period the number of advertising companies varied from 74 in 2009 to 199 in 2018. Also, the number of companies whose main activity is market research significantly varied through the decennial time and in 2018 their number is 310.

Apart from the positive trend in the number of companies whose main activity is promotion and market research, a positive trend is also observed in the generated revenues. Figure 2 shows the total revenues generated by companies in sector M73 for the period 2009-2018.

Figure 2. Total revenues of companies in sector M 73 from 2009 to 2018
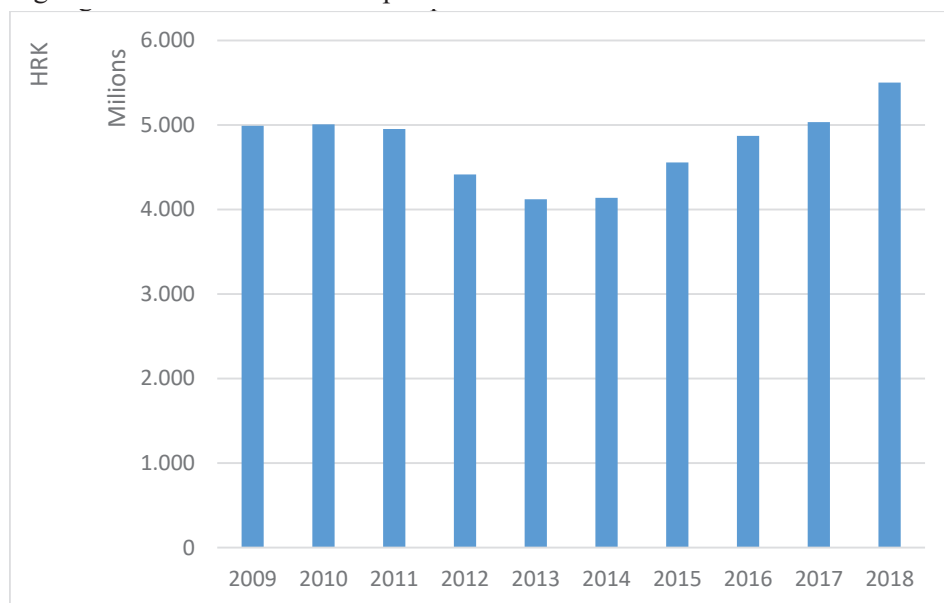
Source: Authors, according to Financial Agency database

In the period from 2009 to 2011 their revenues were constant and moved in the range of 4,9 to 5 billion HRK. After decrease in 2012, from 2013 to 2018 their total revenues grow. In the observed period, the highest revenue was generated in 2018 when it amounted to 5,5 billion HRK.

3.2. Research methodology

The aim of this research is to evaluate the effects of selected financial ratios and macroeconomic variable GDP on firm performance in the sector of Promotion and Market Research in Croatia. In our study we explore the performance of advertising companies in Croatia depending on economic conditions. If companies saw marketing costs as investment especially important in bad times, it would lead to a negative relationship between GDP and the profitability of marketing agencies – in better economic conditions, i.e. when GDP grows, the profitability of marketing agencies would actually fall.

The data on financial ratios and GDP in the period from 2009 until 2018 are obtained from the Croatian Bureau of Statistics and Financial Agency. Financial ratios are calculated based on the industry averages.

In this research, Average Industry Financial ratios used are Current Ratio (CR), Debt Ratio (DR) and Total Asset Turnover Ratio (AT). Net Profit Margin (NPM) is used as an indicator of the company performance. In previous research the same variable also used:

♦ Current Ratio (CR) - Goddard et al. (2005); Artikis, et al. (2009); Borhan et al. (2014); Widyastuti (2019).

♦ Debt Ratio (DR) - Artikis et al. (2009); Vijayakumar (2011); Borhan et al. (2014); Lazăr (2016); Widyastuti (2019)

♦ Total Assets Turnover (AT) - Widyastuti (2019)

♦ Gross Domestic Product (GDP) - McNamara, & Duncan (1995); Alifiah (2014); Ishak et al. (2017); Pacini et al. (2017); Alifiah & Tahir (2018); Haider et al. (2018) and Khan et al. (2018)

Variables of the research are presented in Table 1.

Table 1. Research variables

| Financial Ratio /Macroeconomics	Variables	Measurement
Liquidity ratio	Current Ratio	CR = Current Assets/Current Liabilities
Leverage ratio	Debt Ratio	DR = Total Debt/Total Assets
Activity ratio	Asset Turnover	AT= Sales/Total Assets
Macroeconomics	Gross Domestic Product	GDP = Consumer Spending + Investment + Government spending + (Export - Import)
Company performance	Net Profit Margin	NPM = Net Income/Sales

Source: Authors, according to Žager et al. (2017)

The method used for the evaluation of the relationship between dependent and independent variables is Multiple Regression Analysis. Multiple Regression Analysis assesses the relationship between a dependent variable and several predictor variables. The estimates generated by multiple regression are called *coefficients*. Using Multiple Regression Analysis, we can calculate the amount of variance in the dependent variable that is accounted for or explained by the variation in each of the independent variables. This calculation shows the relative importance of each independent variable to the relationship.

4. RESULTS

First, Multiple linear Regression requires the relationship between the independent and dependent variables to be linear. The linearity assumption can best be tested with scatter plots. Figure 3 shows scatterplots of dependent versus independent variables.

Figure 3. Scatter plot diagrams
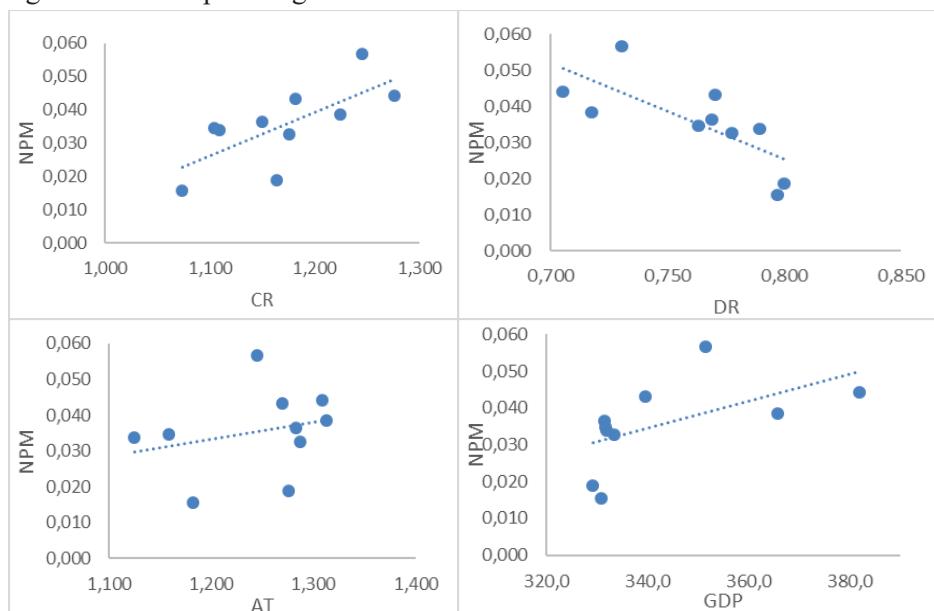
Source: Authors

Because each plot has approximately straight-line appearance it is reasonable to relate NPM to CR; DR, AT and GDP by using the Multiple Linear Regression model:

Table 2. Correlation matrix

	NPM	CR	DR	AT	GDP
NPM	1				
CR	0,705	1			
DR	-0,740	-0,831	1		
AT	0,263	0,753	-0,501	1	
GDP	0,554	0,839	-0,827	0,535	1

Source: Authors

Table 2 presents the output of correlation matrix for the data model. Examining first column of this matrix we can see that simple correlation coefficients between dependent variable NMP and other 4 independent variable range from -0,740 and 0,705. While simple correlation coefficient (and scatter plots) gives us preliminary understanding of the data, they cannot be relied upon alone to tell us which independent variable is significantly related to the dependent variable. One reason for this is a condition called multicollinearity. One way to investigate the presence of multicollinearity is to measure simple correlation coefficients between the independent variables. Since none of the correlation coefficients between independent variables is ±0,9 or higher, there is no evidence that multicollinearity in this data set is severe.

The hypotheses of research are formulated as follows:

H1: *There is a significant impact of selected financial ratios (Current Ratio, Debt Ratio and Total Asset Turnover) and GDP on industry performance measured by Net Profit Margin.*

H2: *Since many firms take the view of marketing costs as an investment, the profitability of specialized marketing agencies improves in times of economic slowdown.*

The multiple regression results are generated by Microsoft Excel.

Table 3. Regression Statistics

Regression Statistics						
Multiple R	0,934141436					
R Square	0,872620223					
Adjusted R Square	0,770716402					
Standard Error	0,005718498					
Observations	10					
ANOVA						
	df	SS	MS	F	Significance F	
Regression	4	0,001120105	0,000280026	8,563174681	0,018424259	
Residual	5	0,000163506	3,27012E-05			
Total	9	0,001283611				
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	*Upper 95%*
Intercept	0,51025252	0,219751748	2,321949772	0,067888465	-0,05463733	1,075142371
CR	0,214822466	0,076644904	2,802827789	0,037867085	0,017800469	0,411844464
DR	-0,424806947	0,161639119	-2,62811967	0,046638838	-0,84031353	-0,009300365
AT	-0,099845216	0,046785914	-2,13408713	0,085958188	-0,220112236	0,020421804
GDP	-0,000811766	0,000298289	-2,721404191	0,041705097	-0,001578544	-4,49887E-05

Source: Authors

According to the Regression statistics, the result for Multiple Coefficient of Determination (R^2) is 93.41%.[1] It indicates that Debt Ratio (DR), Current Ratio (CR), Asset Turnover Ratio (AT) and Gross Domestic Product (GDP) explain 93,41 % of total variation in 10 observed yearly Net Profit Margins.

To test the overall significance of the regression model at the level of significance 0.05, we used the critical value $F_{0.05}$ based on 4 numerator and 5 denominator degrees of freedom ($F_{0.05}$ = 5.19). Because F(model) = 8.56 > $F_{0.05}$=5.19 we can reject null Hypothesis H_0: β_1 = β2= …. β_k=0 in favor of H_a: At least one of β_1, β_2= …. β_k does not equal 0 at the level of significance 0.05. Alternatively, because the F-value is smaller than 0.05 we can reject H_0 at the level of significance 0.05, and we have strong evidence that the model is significant.

---

[1]   The results of the regression model without GDP as an independent variable show worse results related to the Multiple Coefficient of Determination (R^2).

In order to gain information about which independent variables has significant effect on the Net Profit Margin, we have tested the significance of a single variable using t statistics and related p-value for testing the significance of the intercept and each of the independent variables. At the 0.05 level of significance, we have used the critical value $t_{0.05/2} = t_{0.025} = 2.571$ based on 5 degrees of freedom. Looking at Regression Statistics output we see that:

For the intercept $|t| = 2.321 < 2.571$,

For CR $|t| = 2.802 > 2.571$,

For DR $|t| = 2,628 > 2.571$,

For AT $|t| = 2,134 < 2.571$,

For GDP $|t| = 2.721 > 2.571$.

Because value of $|t|$ related to variables CR, DR and GDP is greater than $t_{0.025}$, we can reject null hypotheses at the 0.05 level of significance. Furthermore, because the p-value related to CR, DR, GDP is less than 0.05 we can reject $H_0: \beta_1 = 0$ at the 0.05 level of significance. Based on these results, we have strong evidence that in formulated model CR, DR and GDP are significantly related to the NPM and we can see that for AT there is no significant relation to the NPM. Therefore, our Hypothesis 1 is confirmed for the most part, with the exception of AT.

Debt Ratio, Total Asset Turnover Ratio and GDP are negatively correlated to the NPM, while Current ratio is positively correlated to the industry performance. The estimated regression model is:

The negative relationship between NPM and GDP confirms our Hypothesis 2.

6. DISCUSSION

Considerable number of studies have looked at the relationship between firm performance and some macroeconomic variable (McNamara, & Duncan (1995); Alifiah (2014); Ishak et al. (2017); Pacini et al. (2017); Alifiah & Tahir (2018); Haider et al. (2018) and Khan et al. (2018)); however, majority of the studies did not look at the effect of macroeconomic variables on specific industries and most of these studies use different profitability ratios to measure performance. In our study, we explore the financial performance of companies in advertising industry, depending on financial ratios of liquidity, leverage and activity and macroeconomic variable - Gross Domestic Product. After reviewing the literature and

conducting empirical study, we concluded that Debt Ratio (DR), Current Ratio (CR) and Gross Domestic Product (GDP) have significant correlation with the financial performance of advertising companies in Croatia; DR and GDP are negatively correlated, while CR is positively correlated to the industry performance measured with Net Profit Margin (NPM).

Our results show that CR has a strong positive relationship with industry performance. This variable is the most influential factor regarding the company's financial performance. The next most influential variables are DR and GDP. These results are almost in line with those of Borhan et al. (2013). In their study among the six ratios, CR and DR show the highest significant impact on the company's performance. Also, results of this paper support research results implemented by Heider et. al (2018) and Khan (2018). which states that GDP has a negative influence on firm performance.

7.   CONCLUSION

In this paper, we analyze the profitability of companies in advertising industry in Croatia, depending on internal factors measured by the selected financial ratios, and the economic situation as measured by Gross Domestic Product (GDP). The idea behind this research is based on the fact documented in the literature that some companies see marketing costs as an investment, and not only do not cut their spending on marketing in times of economic downturn, but even increase it. If many companies behave this way, this should reflect on the profitability of companies in advertising industry, with a negative relationship between GDP and their profitability.

We used multiple regression analysis and examined the impact of financial ratios representing liquidity, leverage and activity, and especially the impact of macro-economic variable Gross Domestic Product on their financial performance. The population of this study was comprised of all the companies operating in Croatia whose main activity is promotion. The financial ratios for those companies were measured from 2009 to 2018.

The results of multiple regression analysis show that Debt Ratio (DR), Current Ratio (CR) and GDP have significant correlation with the financial performance of promotion companies in Croatia; DR and GDP are negatively correlated, while CR is positively correlated to the industry performance measured with NPM. The results confirmed Hypothesis 1 for the most part, with the exception of Asset Turnover Ratio which does now show significance to NPM. The negative relationship between NPM and GDP confirms our Hypothesis 2.

This study is limited to the financial performance measured through the Net Profit Margin, covers the short-run period of ten years and limited number of firms. Future research might cover longer period and consider the use of other macroeconomic determinants, and some other appropriate financial performance ratio.

The contribution of this paper is twofold: on one side, it contributes to the literature dealing with the impact of financial ratios and macroeconomic variables on financial performance, on the other side it contributes to the literature that studies the relationship between marketing costs and economic activity.

REFERENCES

1. Alifiah, M., and M. Tahir. (2018). Predicting financial distress companies in the manufacturing and non-manufacturing sectors in Malaysia using macro-economic variables. Management Science Letters 8.6: 593-604.

    https://doi.org/10.5267/j.msl.2018.4.031

2. Alifiah, M. N., Salamudin, N., & Ahmad, I. (2013). Prediction of financial distress companies in the consumer products sector in Malaysia. Sains Humanika, https://doi.org/10.11113/jt.v64.1181

3. Alifiah, M. N. (2014). Prediction of financial distress companies in the trading and services sector in Malaysia using macroeconomic variables. Procedia-Social and Behavioral Sciences, 129, 90-98.

    https://doi.org/10.1016/j.sbspro.2014.03.652

4. Artikis, G. P., Asimakopoulos, I., Samitas, A., & Papadogonas, T. (2009). Firm-specific and economy wide determinants of firm profitability. Managerial Finance.

    https://doi.org/10.1108/03074350910993818

5. Borhan, H., Mohamed, R. N., & Azmi, N. (2014). The impact of financial ratios on the financial performance of a chemical company. World Journal of Entrepreneurship, Management and Sustainable Development.

    https://doi.org/10.1108/WJEMSD-07-2013-0041

6. Delloite, (2017). The economic contribution of advertising in Europe. A report for the World Federation of Advertisers. https://www.owm.de/fileadmin/

Archiv/public/downloads/publikationen/Value_of_Advertising_Executive_
Summary_EU___D.pdf (3.12.2019)

7. Glancey, K. (1998). Determinants of growth and profitability in small entre-
   preneurial firms. International Journal of Entrepreneurial Behavior & Re-
   search, 4(1), 18-27.

   https://doi.org/10.1108/13552559810203948

8. Goddard, J., Tavakoli, M., & Wilson, J. O. (2005). Determinants of profit-
   ability in European manufacturing and services: evidence from a dynamic
   panel model. Applied Financial Economics, 15(18), 1269-1282.

   https://doi.org/10.1080/09603100500387139

9. Gombola, M. J., & Ketz, J. E. (1983). Financial ratio patterns in retail and
   manufacturing organizations. Financial Management, 45-56.

   https://doi.org/10.2307/3665210

10. Graham, R. C., & Frankenberger, K. D. (2011). The earnings effects of mar-
    keting communication expenditures during recessions. Journal of Advertis-
    ing, 40(2), 5-24.

    https://doi.org/10.2753/JOA0091-3367400201

11. Guruswamy, D., & Hedo, A. (2014). Impact of Macroeconomic Variables
    on Financial Performance of Banks: A Case of Selected Private Commercial
    Banks in Ethiopia. Anvesha, 7(4), 19.

12. Halkos, G. E., & Tzeremes, N. G. (2012). Industry performance evaluation
    with the use of financial ratios: An application of bootstrapped DEA. Expert
    Systems with Applications, 39(5), 5872-5880.

    https://doi.org/10.1016/j.eswa.2011.11.080

13. Haider, S., Anjum, N., Sufyan, M., Khan, F., & Ullah, A. (2018). Impact of
    macroeconomic variables on financial performance: evidence of automobile
    assembling sector of Pakistan stock exchange. Sarhad Journal of Manage-
    ment Sciences, 4(2), 202-213.

    https://doi.org/10.31529/sjms.2018.4.2.6

14. Ishak, I., Nasir, S. N. M. A., Ismail, N., & Hashim, S. L. M. (2017). The effects of financial ratio and gdp towards company performance in trading and services sector. Journal of Humanities, Language, Culture and Business (HLCB) Vol. 1: No. 4, 163-169.

15. Ježovita, A., & Žager, L. (2014). Ocjena zaduženosti poduzeća pokazateljima profitabilnosti. Zbornik Ekonomskog fakulteta u Zagrebu, 12(1), 1-22.

16. Khan, F., Ullah, A., Ali, M. A., & Khan, M. I. (2018). The relationship between macroeconomic variables and the dividend payout ratio of the textile sector listed onPakistan stock market. Sarhad Journal of Management Sciences, 4(1), 111-121.

    https://doi.org/10.31529/sjms.2018.4.1.9

17. Lazăr, S. (2016). Determinants of firm performance: evidence from Romanian listed companies. Review of Economic and Business Studies, 9(1), 53-69.

    https://doi.org/10.1515/rebs-2016-0025

18. Martínez-Sola, C., García-Teruel, P. J., & Martínez-Solano, P. (2014). Trade credit and SME profitability. Small Business Economics, 42(3), 561-577.

    https://doi.org/10.1007/s11187-013-9491-y

19. McNamara, R., & Duncan, K. (1995). Firm performance and macro-economic variables. Bond University, School of Business.

20. Naz, F., Ijaz, F., & Naqvi, F. (2016). Financial performance of firms: Evidence from Pakistan cement industry. Journal of Teaching and Education, 5(01), 81-94.

21. O'Malley, L., Story, V., & O'Sullivan, V. (2011). Marketing in a recession: retrench or invest?. Journal of Strategic Marketing, 19(3), 285-310.

    https://doi.org/10.1080/0965254X.2011.581386

22. Pacini, K., Berg, D., Tischer, T., & Johnson, J. (2017). An empirical investigation of macroeconomic factors on firm performance in the United Kingdom. Available at SSRN 3013944.

    https://doi.org/10.2139/ssrn.3013944

23. Prawirodipoero, G. M., Rahadi, R. A., & Hidayat, A. (2019). The Influence of Financial Ratios Analysis on the Financial Performance of Micro Small Medium Enterprises in Indonesia. Review of Integrative Business and Economics Research, 8, 393-400.

24. Srinivasan, R., Rangaswamy, A., & Lilien, G. L. (2005). Turning adversity into advantage: does proactive marketing during a recession pay off?. International Journal of Research in Marketing, 22(2), 109-125.

   https://doi.org/10.1016/j.ijresmar.2004.05.002

25. Van Horne, J. C., & Wachowicz, J. M. (2005). Fundamentals of financial management. Pearson Education.

26. Vanitha, S., & Selvam, M. (2011). Financial performance of Indian manufacturing companies during pre and post merger. International Research Journal of Finance and Economics, 12, 7-35.

27. Vijayakumar, A. (2011). Management of corporate liquidity and profitability: an empirical study. Indira Management Review, 5(2), 19-29.

28. Widyastuti, M. (2019). Analysis Of Liquidity, Activity, Leverage, Financial Performance And Company Value In Food And Beverage Companies Listed On The Indonesia Stock Exchange. SSRG International Journal of Economics and Management Studies (SSRG-IJEMS), 6(5), 52-58.

   https://doi.org/10.14445/23939125/IJEMS-V6I5P109

29. Žager, K., Mamić Sačer I., Sever Mališ S., Ježovita A., Žager L.,(2017). Analiza financijskih izvještaja načela – postupci – slučajevi, Zagreb, Hrvatska zajednica računovođa i financijskih djelatnika

dr. sc. Suzana Keglević Kozjak
Sveučilište u Zagrebu, Fakultet organizacije i informatike, Varaždin, Hrvatska.
skozjak@foi.unizg.hr

izv. prof. dr. sc. Vladimir Kovšca
Sveučilište u Zagrebu, Fakultet organizacije i informatike, Varaždin, Hrvatska.
vkovsca@foi.unizg.hr

Tanja Šestanj-Perić
Sveučilište u Zagrebu, Fakultet organizacije i informatike, Varaždin, Hrvatska.
tperic@foi.unizg.hr

UTJECAJ ODABRANIH FINANCIJSKIH POKAZATELJA I BRUTO DOMAĆEG PROIZVODA NA USPJEŠNOST REKLAMNIH PODUZEĆA - STUDIJA SLUČAJA IZ REPUBLIKE HRVATSKE

Prethodno priopćenje

Sažetak

U našem radu istražujemo financijsku uspješnost reklamnih poduzeća u Republici Hrvatskoj, u ovisnosti o unutarnjim čimbenicima i ukupnim ekonomskim uvjetima. Unutarnji čimbenici odnose se na odabrane financijske pokazatelje, a ekonomski uvjeti određeni su makroekonomskom varijablom – Bruto domaćim proizvodom (GDP). Financijski pokazatelji korišteni u ovom istraživanju su: Koeficijent tekuće likvidnosti (CR), Koeficijent zaduženosti (DR) i Koeficijent obrta ukupne imovine (AT). Uspješnost poduzeća mjeri se neto profitnom maržom (NPM). Zamisao ovog istraživanja temelji se na činjenici da određena poduzeća marketinške troškove smatraju investicijom te čak u vrijeme gospodarske krize ne samo da ne smanjuju već povećavaju svoju potrošnju vezanu uz marketinške aktivnosti. Stoga, ako se većina poduzeća ponaša na ovaj način, pretpostavka je da postoji negativna korelacija između Bruto domaćeg proizvoda i profitabilnosti promotivnih poduzeća.

Populaciju ove studije čine sva poduzeća koja posluju u Republici Hrvatskoj, a čija je glavna djelatnost promidžba. Prema Nacionalnoj klasifikaciji djelatnosti (Odredbe NKD-a 2007) spomenuta djelatnost razvrstana je u odjeljak M 73 – Promidžba (reklama i propaganda) i istraživanje tržišta, a ovaj odjeljak uključuje agencije za oglašavanje (M 7311), poduzeća za medijsko oglašavanje (M 7312) i poduzeća za istraživanje tržišta (M 7320). Financijski pokazatelji za navedena poduzeća mjereni su od 2009. do 2018. Korišten je višestruki regresijski model i analizirani su sekundarni podaci.

Rezultati višestruke regresijske analize pokazuju da DR, CR i BDP imaju zna-čajnu korelaciju s financijskom uspješnošću promotivnih poduzeća; DR i BDP su negativno korelirani, dok je CR pozitivno koreliran s uspješnošću industrije mjerenom NPM -om.

Doprinos ovog rada je dvojak: s jedne strane doprinosi literaturi koja se bavi utjecajem financijskih pokazatelja i makroekonomskih varijabli na financijsku uspješnost, s druge strane doprinosi literaturi koja proučava odnos između troš-kova marketinga i gospodarske aktivnosti.

Ključne riječi*: financijska uspješnost, koeficijent tekuće likvidnosti, koeficijent zaduženosti, koeficijent obrta ukupne imovine, Bruto domaći proizvod*

JEL: M15, M20, M31