The Determinants of Voluntary Disclosure in Croatia

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Abstract-Study investigates the level and extent of voluntary disclosure practice in Croatia. The research was conducted on the sample of 130 medium and large companies. Findings indicate that two thirds of the companies analyzed disclose below-average number of additional information. The explanatory analyses has shown that firm size, listing status and industrial sector significantly and positively affect the level and extent of voluntary disclosure in the annual report of Croatian companies. On the other hand, profitability and ownership structure were found statistically insignificant. Unlike previous studies, this paper deals with level of voluntary disclosure of medium and large companies, as well as companies whose shares are not listed on the organized capital market, which can be found as our contribution. Also, the research makes contribution by providing the insights into voluntary disclosure practices in Croatia, as a case of macro-oriented accounting system economy, i.e. bank oriented economy with an emerging capital market.

Keywords—Annual report, Croatian companies, Disclosure index, Voluntary disclosure.

I. INTRODUCTION

TOLUNTARY disclosure in the annual report indicates "information primarily outside of the financial statements that are not explicitly required by accounting rules or standards" [1]. But, accounting function and financial statements as its products, are service function that operates within a socioeconomic framework, so socioeconomic environment has a strong effect on accounting [2]. Furthermore, the corporate management theory assumes that lower transparency which is typical for emerging markets leads to higher levels of asymmetric information and consequently decreases company's value [3]. Moreover, according to [4], countries which have gone through transitional process from traditional planed economy to a market economy by carrying out large scale privatization and financial market reforms, like Croatia, should be explored separately. Thus, findings from developed, developing and emerging economies should not be identified.

The purpose of this paper is to show willingness of Croatian companies to publically announce different financial and nonfinancial, quantitative and qualitative information about entity, measured by disclosure index. Additionally, the relation between company specific characteristics and level of voluntary disclosure is examined.

Voluntary financial reporting practices as well as the usefulness of accounting information have been the subject of many researches. First studies date from the mid-1970s, but the intensification of research has been noticed since the mid-1990s. There are papers that provide insights into voluntary financial reporting practices in different countries, i.e. in different institutional environment, but most of them are focused on certain country. However, differences exist in disclosure practices across countries due to a legal, economic and political trajectories and institutional differences [5]. Moreover, first researches were usually related to developed western countries, while little attention is given other than developed western countries [6]. One of the exemptions is extensive research [7] on the sample of 300 companies from 15 EU countries which showed that country of origin, industrial sector and size are statistically significantly related with the extent of voluntary disclosure.

Furthermore, previous researches mostly concentrate on listed companies and explore the impact of different company's qualitative and quantitative features on voluntary disclosure level. Thus, ownership structure (e.g. [8], [9]) and cost of capital (e.g. [10], [11]) were the most common factors examined with regard to their impact on transparency. Most of the previous studies found that firm size affect the level of disclosure (e.g. [12], [13]) as well as profitability [14]. With regard to relation between industry type and level of disclosure, previous research show mixed results: some of them show the presence of significant relation (e.g. [6], [12]), while others report no relation (e.g. [15], [16]). From this point of view, there are papers that analyzed voluntary disclosure practices amongst listed companies in developing countries, e.g. [17] in Nigeria, [15] and [18] in Qatar, [19] in Iran, [20] in Jordan, [21] in Egypt, [22] in Bangladesh, [23] in Romania, etc. Previous research on level of financial reporting disclosure in Croatia was focused on listed companies only [24].

According to our best knowledge, similar research that takes into account specificities of developing countries on the sample of both listing and non listing countries has not been done yet. Therefore, this paper can play an important part in recognizing the described process and providing certain contribution on the topic.

II. RESEARCH DESIGN

Based on theoretical background discussed above, the aim of our research is to determine the level and the extent of voluntary disclosure in the annual reports of companies in Croatia. Furthermore, the impact of several companies' characteristics (e.g. size of the company, listing status, profitability, ownership structure and type of industry) on the

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level of voluntary disclosure measured by disclosure index (DIGI) is investigated.

The data was analyzed using the PASW v. 18.0. software and above mentioned relations were tested by using multiple regression analysis method.

A. Sample Selection

This research is conducted on the sample of 130 Croatian medium and large companies, randomly selected. Their annual financial reports for the year 2012 were analyzed. The data set necessary for the research has been extracted from annual financial reports database of Croatian Financial Services Supervisory Agency available at [25].

Descriptive analysis of sample structure regarding company's characteristic can be summarized as follows. With regard to the size, 65% of surveyed companies are medium sized, whereas the other 35% are classified as large enterprises. Previously stated is in line with expectations, considering that in Croatian economy medium enterprises prevails over large. According to the legal form, the 61% of observed companies are organized as limited liability companies (Ltd). The remaining of 39% are companies organized as joint stock companies. These results are not surprising due to the fact that "Ltd." is the most common legal form of business in Croatia. Considering the fact of *listing* on the stock exchange, 28% of surveyed companies are issuers of securities that were listed on the Zagreb Stock Exchange during the year 2012. Due to the ownership structure, a significantly higher proportion of companies, even 74% of them are privately held companies (more than 50% private ownership). It should be noted that reported percentage should be even higher, considering that private ownership is the base of an efficient market economy. However, we should consider that the process of privatization in Croatia was relatively slow compared with other transition countries, and the fact that privatization is still ongoing, so this ratio of private and public ownership is according to the expectations. As for the origin of ownership, 65% of surveyed companies are domestic (more than 50% domestic ownership). However, due to the current economic circumstances, it can be expected that proportion of foreign entrepreneurs in ownership structure will increase over the time. In support of stated may be added Croatian membership in the EU, which is certainly a stimulating environment for foreign investors. Finally, regarding to the types of industry, or company's main activity, the largest number of businesses are operating the in processing/manufacturing industry (27%), followed by wholesale and retail trade companies with a share of 19%, and utilities sector with 11%. The lowest share relates to mining, only 2%, followed by banking, insurance and business consulting with a share of 5%.

B. Variables Description

Based on theoretical background, several factors that could affect the level of voluntary disclosure are considered.

Firm size is identified as a significant variable in explaining variation in the level and extent of voluntary disclosure in

previous studies. There are a number of theoretical explanations for expecting a positive relationship between company size and level of voluntary disclosure. For instance, agency theory [3] suggested that larger companies have higher information asymmetry between managers and owners and, therefore, higher agency costs arising from such asymmetry. In order to reduce these agency costs, larger companies disclose more information than smaller companies. Moreover, "nondisclosure of large firms may be interpreted as bad news that could have a negative effect on the company's stock price. Large firms also attract the attention of governmental institutions and increased disclosure may reduce government intervention" [26; 18]. Additionally, total revenue and asset were used as measures of company size in the study considering that Law on Accounting in Croatia is using same criteria when classifying companies. However, to achieve greater objectivity and comparability of data, instead of total revenue as criteria, in this study was used revenue per employee. Also, due to the ease of calculation, the variable "asset" was log transformed. Therefore, as a final variable that entered the regression model was natural logarithm of total asset.

Listing on the stock exchange variable implies whether the company is issuing securities that are traded on the organized capital market or not. When talking about listing on the stock market, we should take into consideration assumption that companies whose securities are listed on the stock market have a greater incentive for voluntary disclosure than the companies that have not issued their securities or their securities are no longer traded on the stock exchange. It is well known that the external market is the main source of financing when it comes to listed companies. Thereby, potential investors, before making investment decisions, will require the large amount of information in order to gain greater benefits at acceptable level of risk. On the other hand, listed companies will publish a greater amount of information in order to reduce the cost of financing, regarding to the fact that greater transparency means less risk for investors, and consequently lower expected return. Accordingly, it is logically to expect that listed companies will have a higher value of DIGI index compared with non-listing companies in the sample.

With regard to *profitability*, "there are indications that companies with higher profits are more vulnerable to regulatory intervention, and hence, they could be more interested in disclosing detailed information in their annual reports in order to justify their financial performance and to reduce political costs" [18; 260]. Additionally, "signaling theory is based on the assumption that more profitable companies are trying to stand out from those that are less profitable by enhancing financial reporting" [24; 18]. In accordance with the aforementioned, it is reasonable to expect a positive relationship between the level of voluntary disclosure and profitability.

Ownership structure as a determinant of voluntary disclosure in terms of private or public ownership can be explained in the way that "state-owned companies might not disclose extensively due to the following reasons: their access

to government funding sources, and, hence, reduced need to raise funds externally; the fact that returns in such companies are guaranteed by the state. Moreover, in developing countries, government-controlled companies are strongly politically associated, and such companies tend to disclose less information to protect their political linkages or even their beneficial owners" [27], [28]. Therefore, it is likely to expect the higher value of DIGI index for privately held companies.

With regard to the *origin of ownership*, "in the case of Croatia, foreign ownership may also be an important factor influencing the level of voluntary reporting, considering that foreign owners mostly come from countries with developed capital markets and better corporate governance, and accordingly, a higher level of awareness of the importance of

transparency" [24]. Thereby, we expect that the foreign ownership would lead to a higher value of DIGI index.

Finally, variable *industry sector* covariates categorical in regression model and they are based on [9] research results, who found that variations in activities of enterprise influence on financial reporting and information disclosure practices. All companies from the sample are assigned to industrial sector according to the intermediate aggregation according to the National Statistical Classification of Economic Activities.

All described variables are set as independents in multivariate regression analysis. Review of independent variables, labels, descriptions and expected signs in the study is given by the following table:

DESCRIPTION OF INDEPENDENT VARIABLES				
Variable	Symbol ^a	Description	Exp.sig	
Firm size (revenue)	RpE	Total revenue/Number of employees ^b	+	
Firm size (assets)	LnA	Total assets ^c	+	
Listing on the stock exchange	ZSE ^d	Dummy $(1 - yes, 0 - no)$	+	
Profitability of assets	ROA	Net Income/Total Assets		
Profitability of equity	ROE	Net Income/Shareholder's Equity	+	
Profitability of sales	ROS	Net Income/Total revenue	+	
Ownership structure	POWN ^e	Dummy $(1 - yes, 0 - no)$	+	
Origin of ownership	FOWN ^f	Dummy $(1 - yes, 0 - no)$		
Type of industry	BNK	Dummy $(1 - yes, 0 - no)$	+/-	
	CNST	Dummy $(1 - yes, 0 - no)$		
	ITT	Dummy $(1 - yes, 0 - no)$		
	UTL	Dummy $(1 - yes, 0 - no)$		
	EGW	Dummy $(1 - yes, 0 - no)$		
	MNF	Dummy $(1 - yes, 0 - no)$		
	MIN	Dummy $(1 - yes, 0 - no)$		
	TRS	Dummy $(1 - \text{yes}, 0 - \text{no})$		
	TRD	Dummy $(1 - \text{ves}, 0 - \text{no})$		
	TaH	Dummy $(1 - \text{ves}, 0 - \text{no})$		

TABLE I

^a Where: RpE - Revenue per employee; LnA - Natural logarithm of total assets; ZSE - Company's shares listed on Zagreb Stock Exchange; ROA - Return on Assets; ROE - Return on Equity; ROS - Return on Sales; POWN - Private ownership (more than 50%); FOWN - Foreign ownership (more than 50%); BNK - banking and insurance; CNST - construction; ITT - IT and telecommunications; UTL - utilities sector; EGW - Electricity, gas and water supply; MNF - manufacture; MIN - mining; TRS - transport; TRD - wholesale and retail trade; TaH - Tourism and Hospitality

^b Information on the total income was taken from the P/L account for the year ended December 31, 2012, and number of employees on 31.12.2012

^c Information on the total assets was taken from balance sheet as at 31 December 2012

^d Period of observation: Year 2012, according to the annual report of the ZSE available at [29]

^e According to the classification of Croatian companies based on ownership structure by RGFI available at [30]

^fAccording to the available information in the annual reports of surveyed companies published in RGFI available at [30]

In order to explore the levels and the extent of voluntary disclosure in the annual reports of Croatian companies, voluntary disclosure index (DIGI index) was developed as a measure of disclosure levels in the annual reports. DIGI index consisted of 38 elements, classified into seven categories that were primarily based on the model of voluntary disclosure created by the Steering Committee [28], with certain modifications related to the specific structure of the annual reports of Croatian companies. Additionally, previous similar studies [18] and [24] were also used as guidelines when selecting elements of index. The total list of the 38 voluntary items constructing disclosure index DIGI is presented in Table II.

The unweighted method of calculation in disclosure index was used because of the subjectivity associated with allocating weights to disclosure when weight method is applied [17]. This means if a company disclosed an item included in DIGI index, it received a score of one, and zero if it is not disclosed. Total disclosure score of the company was calculated by summing the scores of the items. Furthermore, in order to ensure the objectivity of the conclusions on the level and extent of voluntary disclosure in the annual report, measurement scale was defined as follows:

Category	Name of the element			
Business data	Review of a company's financial position			
	Financial ratio analysis			
	Segment reporting			
Management	The most important achievement in the reporting year			
Analysis	Assessment of the future development of the company			
Risk	Business environmental risk			
management	Risk of industry			
	Competition risk			
	Business risk			
	Financial risk			
Information	Ownership structure			
about	List with the names of members of management/board of			
Management	directors/owners			
and Owners	A short biography of members of management/board of			
	directors/owners			
	Powers of members of management/board of			
	directors/owners			
	Information about managerial compensation			
Background	General data			
about the	A brief historical overview			
company	General description of business activities			
	Organizational structure			
	Vision and Mission			
	Strategies and objectives			
	Organizational culture and values			
	Number of employees			
	Structure of employees by organizational units			
	Qualification structure of employees			
	Age distribution of employees			
	Social Responsibility			
	Ecology and Sustainable Development			
Intangible asset	Description of R&D activities			
	Employee relations			
	Investor relations			
	Customer relations			
	Supplier relations			
	Quality Management			
Other useful	Independent auditor's report			
information	Statement of management's responsibility for financial			
	statements			

TABLE II

ELEMENTS OF DIGI INDEX

C. Methodology

In order to test set hypotheses, descriptive statistic is used and OLS regression data analysis as multivariate analysis is used as the most appropriate method of modelling an impact of dependent variable on multiple explanatory variables.

In the first part of the research, DIGI index was analysed using descriptive statistics with the aim to get insights into level and extent of voluntary disclosure of Croatian companies.

In the second part of the research, multiple regression analysis method was applied to test the impact of selected characteristics of Croatian companies on the level of voluntary disclosure, as well as relations between those characteristics and DIGI index. The purpose of regression model is to find an analytical and mathematical connection between one dependent variable and $k \ge 2$ independent variables. The general form of a multiple regression model can be represented by the following equation:

$$\hat{y} = \hat{\beta}_0 + \hat{\beta}_1 \cdot X_1 + \hat{\beta}_2 \cdot X_2 + \dots + \hat{\beta}_k \cdot X_k \tag{1}$$

In this model, \hat{y} is dependent variable, $\hat{\beta}_0$ is the constant and it is defined as the expected value of the dependent variable when all independent variables are equal to zero. Regression coefficient $\hat{\beta}_k$ shows the average change in the dependent variable when the independent variable X_k increases by one unit, assuming that all other independent variables remain unchanged. Furthermore, STEPWISE method was used as method of selecting variables in regression model, regarding the fact that it is appropriate in cases when there are a large number of independent variables.

TABLE III			
MEASUREMENT SCALE FOR THE EVALUATION OF THE LEVEL AND EXTENT OF VOLUNTARY DISCLOSU			
Value of DIGI index ^a	Description of rating scale		
$DIGI_{min} \leq x < \overline{x}_{mm}$	The level and extent of voluntary disclosure in the annual report is below average		
$x = \overline{x}_{mm}$	The level and extent of voluntary disclosure in the annual report is average		
$\overline{x}_{mm} < x \leq DIGI_{max}$	The level and extent of voluntary disclosure in the annual report is above average		

^a Where: DIGI_{min} – the lowest realized value of DIGI index; DIGI_{max}– the highest realized value of DIGI index; x – value of DIGI index; \bar{x}_{mm} – the average value of the highest and the lowest realized DIGI index, calculated as (DIGI_{min}+ DIGI_{max})/2

III. RESEARCH RESULTS AND DISCUSSION

Company accounting policies Events after the balance sheet date

Descriptive statistics highlight the main characteristics of DIGI index obtained on the sample of 130 Croatian medium and large companies:

TABLE IV				
DIGI INDEX – DESCRIPTIVE STATISTICS				
Number of observations	130			
Mean	11.09			
Maximum	28			
Minimum	1			
Standard Deviation	5.85			
Median	10			
Mode	9			

According to the results presented in the table above, the average value of the voluntary disclosure in the annual report of Croatian companies is 11 elements of 38 possible. The maximum level of voluntary disclosure is 28 elements, and the minimum is 1 element. The standard deviation of the sample is 5.85, and it shows that the values of DIGI index, on average, are approximately 6 elements away from the mean. Median of DIGI index is 10, and it can be concluded that half of the companies in the sample published in the annual report 10 elements and less, whereas the other half published more than 10 elements. Mode or the most frequent value of DIGI index in the sample is 9 elements.

A. Testing the Hypothesis on the Level and Extent of Voluntary Disclosure in the Annual Reports of Croatian Companies

Based on the initial arguments, the statistical hypothesis that the level and extent of voluntary disclosure in the annual reports of companies in Croatia is below average (H1) is tested.

The conclusion on the level and extent of voluntary disclosure in the annual reports of Croatian companies is based on pre-defined measuring scale (see Table III). Thereby, it is necessary to calculate the average value of DIGI index. As already stated, the highest value of DIGI index is 28 elements, whereas the lowest value is 1. Thus, the \bar{x}_{mm} is 14,5, and scores of DIGI index amounting to 14 and 15 elements imply "average" level and extent of voluntary disclosure in the annual report, while all scores less than 14 mean the level of disclosed information for each company is "below average" comparing to the rest of companies in the

sample. The scores greater than 15 elements mean that level of voluntary disclosure in the annual report is "above average". Furthermore, the median was used to find the central value of DIGI index of Croatian companies, considering that it has the advantage over the other measures of central tendency in the way of not being affected by any single value being too high or too low compared to the rest of the sample. Considering the results, and comparing the mean value of approx. 14 elements and median of 10 elements, it can be concluded that the level and extent of voluntary disclosure in the annual reports of Croatian companies for the year 2012 is below average and the hypothesis H1 is supported.

However, in order to get a better picture as well as to make appropriate conclusions, it is necessary to make a more detailed insight into the results of research. Therefore, the following table presents results structure for each category of companies according to the descriptive rating scale.

TABLE V

RESULTS OF DIGI INDEX ACCORDING TO THE DESCRIPTIVE RATING SCALE				
Descriptive rating scale	Number of companies	%		
The level and extent of voluntary disclosure in the annual report is rated as "below average"	93	72		
The level and extent of voluntary disclosure in the annual report is rated as "average"	12	9		
The level and extent of voluntary disclosure in the annual report is rated as "above average"	25	19		
TOTAL	130	100		

Based on the data from the table above, the following conclusions can be derived: the study found that more than two thirds of the observed companies are not inclined to voluntary publish information about the business, considering that 72% of analyzed annual reports are rated as below average. In this case, the purpose of the annual report, which includes a source of relevant, timely and reliable information, has not been accomplished, since the users can find very little information contained in the annual report, and thus, they cannot make effective business decisions. Also, it should be added that the lack of relevant information can have a major impact on the competitiveness of the companies and, ultimately, it could pose a threat to the entire economy as it may cause an additional risk in term of creating stimulating environment for developing different types of corporate malfeasance. In line with this, the lack of awareness of the importance of transparency as a problem in Croatia has already come to the fore, and in the near future, it will certainly be a huge economic burden. On the other hand, only 19% of the observed annual reports are rated as above average. It should be noted that only these companies are somewhat prepared to compete in global markets, considering that their annual reports contain a sufficient amount of voluntary disclosed information, and the volume and structure of these are in accordance with the standards and transparency levels of the developed economies.

B. Testing the Hypothesis about the Relations between DIGI Index and Selected Characteristics of Companies in Croatia

In this part of the research it is hypothesized that the level and extent of voluntary disclosure in the annual reports measured by DIGI index depends on certain characteristics of Croatian companies (H2).

OLS regression analysis with STEPWISE selection method was applied and optimal regression model includes three independent variables: LnA – Natural log of total asset, ZSE – Company listed on Zagreb Stock Exchange, and industrial sector UTL – Utilities sector. The regression results are presented below.

IABLE VI					
MODEL SUMMARY ^d					
Madal	D	D Cauara	Adjusted R	Std. Error of the	Durbin-
Widdei	ĸ	K Square	Square	Estimate	Watson
1	0.582^{a}	0.338	0.333	4.773	
2	0.630^{b}	0.397	0.387	4.576	
3	0.647 ^c	0.419	0.405	4.509	1.939
D 1'					

a. Predictors: (Constant), LnA

b. Predictors: (Constant), LnA, ZSE

c. Predictors: (Constant), LnA, ZSE, UTL

d. Dependent Variable: DIGI index

As can be seen from the table above, the value of the correlation coefficient (r_3) is 0.647 and it shows a moderate uphill relationship between the variables in the model. The coefficient of multiple determination (r_3^2) is 0.419, which means that the model explains 41.9% of the variability of the dependent variable around its mean. The adjusted coefficient of determination (\bar{r}_3^2) is 0.405, and standard error of the estimate $(\hat{\sigma}_{\hat{y}3})$ is 4.509. The Durbin-Watson test is used to detect the presence of autocorrelation in the residuals from the regression analysis. Considering the calculated value of 1.939, autocorrelation is not a problem for this model.

TABLE VII OLS REGRESSION COEFFICIENTS ^a							
	Model	В	Std. Error	Beta	t	Sig.	Collinearity Statistics(VIF)
1	(Constant)	-27.245	4.756		-5.729	0.000	
	LnA	1.999	0.247	0.582	8.091	0.000	1.000
2	(Constant)	-20.250	4.976		-4.069	0.000	
	LnA	1.582	0.265	0.460	5.972	0.000	1.252
	ZSE	3.489	0.995	0.270	3.506	0.001	1.252
	(Constant)	-19.649	4.911		-4.001	0.000	
2	LnA	1.529	0.262	0.445	5.831	0.000	1.263
3	ZSE	3.900	0.998	0.302	3.907	0.000	1.297
	UTL	2.849	1.299	0.152	2.193	0.030	1.037
	a Danandan	t Variabla: I	DIGI ind	ov			

a. Dependent Variable: DIGI index

Analytical expression of the final model from the above table is presented below:

$$\hat{y}_i = -19.649 + 1.529 \cdot X_1 + 3.9 \cdot X_2 + 2.849 \cdot X_3$$
 (2)

The parameter $\hat{\beta}_0 = -19.649$ presents the expected value of disclosure index (DIGI) when all independent variables are equal to zero. The unstandardized coefficient $\hat{\beta}_1$ for independent variable total asset (LnA) is equal to 1.529 and shows that the level of voluntary disclosure in the annual report is significantly and positively associated with the size of the company measured by total assets. This means that if the variable LnA increases by 1 unit, we can expect an increase in DIGI index of 1.529, ceteris paribus. It is necessary to note that the other size proxy revenue per employee (RpE) is eliminated from the model as insignificant.

The hypothesis about the relationship between the listing status (ZSE) and DIGI index is also supported given that the parameter $\hat{\beta}_2 = 3.9$ for independent variable ZSE is positive and statistically significant.

The assumption about the relationship between profitability and DIGI index in this study is not supported because all profitability proxies (i.e. ROA - return on assets, ROE - return on equity and ROS - return on sales) are evaluated as statistically not significant, and therefore, eliminated from the model.

Variables related to the ownership structure (POWN) and ownership origin (FOWN) are also eliminated from the model as statistically insignificant, so the hypothesis about the relations between ownership structure and origin with DIGI index is rejected.

Regarding the dummy variables of industrial sectors, only one is evaluated as statistically significant and positive. To be more specific, the regression results have shown that companies from the utilities sector (UTL) have a higher level of voluntary disclosure in the annual report compared to the other observed industries.

To summarize, the hypothesis H2 is accepted, so it can be concluded that the level and extent of voluntary disclosure in the annual reports of Croatian companies measured by DIGI index depends on the size of a company, listing status, and industrial sector in which the company operates.

IV. CONCLUSION

The primary goal of this paper is to analyze characteristics of companies that provide extensive financial reporting disclosure. However, the paper provides insights in financial reporting and information disclosure practices of Croatian companies as a case of bank oriented economy with emerging capital market. Financial reporting and information disclosure practices of these countries differ in relation to capital market oriented economies, because they are influenced by a variety of economic, social and political factors, like the legal system, stage of economic growth and development, enterprise ownership, activities of enterprises, etc. Obtained results indicate that despite the desire of the regulatory authorities that financial statements users receive all relevant information, voluntary disclosure is not apparent in Croatia and companies voluntarily disclose additional information very rarely. Findings indicate that company voluntary publish 11 items in average of 38 possible. Moreover, two thirds of the companies analyzed are categorized as "below the average". The explanatory analyses has shown that firm size, listing status and utility industrial sector significantly and positively affect the level and extent of voluntary disclosure in the annual report of Croatian companies. On the other hand, profitability and ownership structure were not found statistically significantly related to voluntary disclosure level. However, current economic situation in Croatia imposes that it is time for the companies to adopt good practices and requirements of the global market, and thereby make a contribution to the improvement of the overall transparency system. The same is expected from the relevant regulatory authorities who should encourage full disclosure.

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