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THE IMPACT OF A TAKEOVER BID ON THE CAPITAL MARKET EFFICIENCY

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Abstract
The impact of the announcement of a takeover bid has been widely tested in foreign literature. Therefore, the main goal of this paper is to research the impact of the announcement of a takeover bid on the share price movements in the Croatian capital market and whether the results are consistent to the results achieved in foreign markets. A survey was carried out in the period from 2008 to 2017. Previously, there was no consistent compliance of the target firms with the obligation to disclose information about takeovers to the public.

It has been shown that disclosure of the intent to announce a takeover bid affects the share prices of the target company, which is consistent with the results of previous research. Interestingly, most of the price increases occurred before the event day, which directly implies inside trading. However, the purpose of this paper was not a research of use of inside information for trading, which is certainly a recommendation for some of the following research.

Considering that was researching impact of the share prices on disclosure of information related to a takeover bid, capital market efficiency was indirectly tested.

Keywords: event study, abnormal returns, corporate control.

Jel Classification: G34; G41

INTRODUCTION

Takeover bid, according to the Act on the Takeover of Joint-Share Companies (hereinafter: Takeover Act), is defined as a public offer, whether mandatory or voluntary, made to all shareholders of the offeree company to acquire all voting shares under the terms and conditions determined by the Takeover Act. So far, numerous researches have been carried out on the impact of the takeover bid on the share price of the target company and / or the acquirer company. Research was primarily carried out on the companies from the US equity market. Andrade and Stafford (2004, 29) conclude that

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mergers on average increase value, and lead to improved profitability in subsequent years. Based on the cross-section of the previous empirical evidence on mergers and acquisitions, Andrade, Mitchell, and Stafford (2001) stated that mergers create value for shareholders primarily of the target company. Previously, MacKinlay (1997, 36–37) cited that "the abnormal returns of the targets are large and positive and the abnormal returns of the acquirer are close to zero". Jensen and Ruback (1983, 47) summarized the empirical work about corporate control which demonstrated that "corporate takeovers generate positive gains", target firm shareholders realize benefit and bidding firm shareholders do not lose. They also state that "the gains created by corporate takeovers do not appear to come from the creation of market power".

Considering that the impact of disclosure of the intention to announce a takeover bid has not yet been investigated on the Croatian capital market, in this paper a survey was carried out on a sample of disclosed takeover bids on the Zagreb Stock Exchange in the period from 2008 to 2017. The method for data analysis used was the event study. MacKinlay (1997, 36) assert event study as dominant empirical research method in corporate finance, "important examples include the wealth effects of mergers and acquisitions and the price effects of financing decisions by firms."

The aim of the research is to measure how much disclosure of the intention to announce a takeover bid affects the share price movement. This is also the indirect test of the "efficient market", "market that adjusts rapidly to new information" (Fama et al. 1969).

When analyzing the results, one should bear in mind the specificity of the Croatian market and the most pronounced low liquidity of the shares. Therefore, a large number of shares dropped from the initial sample, whether there was no trading at all during the event window or there were not enough trading days during the estimation window.

The legal regulation of the Croatian capital market should also be taken into account particularly concerning the takeover bids and the overall legislation regulating the functioning of the regulated market in the Republic of Croatia. The application of the EU regulations and directives in this area are as essential as are their relevant changes. The most significant change is the introduction of only one control threshold in relation to the previously defined three thresholds. Namely, under the new Law on Takeover, which entered into force on the 15th of December 2013, which applies the current EU directive in this area, "natural or legal persons shall be obliged to announce a takeover bid, where they have, directly or indirectly, independently or acting in concert, acquired voting shares of the offeree company, which, together with the shares they already possess, exceed a threshold of 25% of voting shares of the offeree company (control threshold)" (Article 9, Takeover Act). Previously there were three thresholds prescribed: 25%, 50% and 75%.

1. AN OVERVIEW OF CURRENT RESEARCH

So far, numerous researches in this area have been conducted, which vary depending on the research market, the largest number of research was conducted on a sample of companies from the United States (here in after: US) capital market; the subjects of the research: the impact on the target company and/or on the acquirer is investigated; and various types of takeovers: merger, tender offer, proxy contest (Jensen and Ruback 1983, 6). The research has so far been seeking the reasons for the takeovers; the impact of the takeovers on the target company's price and / or on the acquirer company's price; and the

impact of takeovers on the voting rights of the shareholder of the target company or on the corporate control of the target company.

As a possible reason for mergers Andrade et al. (2001, 103) cite “efficiency-related reasons that often involve economies of scale or other “synergies”; attempts to create market power, perhaps by forming monopolies or oligopolies; market discipline, as in the case of the removal of incompetent target management; self-serving attempts by acquirer management to “over-expand” and other agency costs; and to take advantage of opportunities for diversification, like by exploiting internal capital markets and managing risk for undiversified managers“. Andrade et al. (2001, 104) address deregulation, a special kind of industry shock, as the main cause of mergers and acquisitions in the 1990s. They were researching mergers over a period of 26 years beginning in 1973 where both the acquirer and the target publicly traded USA based firms (4,300 completed deals).

Gaughan (2015, 41) cites “that a pattern of flawed mergers and acquisitions (M&As) tends to re-occur“ in the US capital market. He defines merger waves as “high levels of mergers followed by periods of relatively fewer deals”. The last wave was between 2003 and 2007. The previous significant waves in the recent American history were in the 1990s, 1980s and 1960s. The causes of merger waves emerge are a combination of economic, regulatory, and technological (industrial) shocks. Harford (2005, 530) confirms that “merger waves occur in response to specific industry shocks that require large scale reallocation of assets“ and the prerequisite for resource allocation is sufficient capital liquidity that accompanies an economic expansion. He analyzed takeover waves from neoclassical and behavioural aspects. Andrade and Stafford (2004, 29) find strong evidence that merger activity clusters through time by industry and concluded that “the clustering of mergers by industry suggests that mergers are often a response to industry shocks “. Previously, Mitchell and Mulherin (1996) concluded that mergers occur in waves and that mergers cluster to industries, during the wave based on study of “industry-level patterns in 51 takeover and restructuring activity during the 1982–1989 period“. Shleifer and Vishny (1991, 59) analyzed takeover waves in 1960s and 1980s and concluded “that the takeover wave of the '80s served largely to reverse unrelated diversification of the '60s“.

The scientific research in the field of decision making has so far shown a lot of “empirical evidence that individuals do not always make rational decision under uncertainty“ (Roll 1986, 199). The biggest contributions to this area of research were provided by psychologists, first Tversky and Kahneman and later many others. They recognized different patterns of behaviour of individual deciding which were not in line with rational behaviour. Tversky and Kahneman (1974, 1131) explain different biases from rational behaviour with heuristics that are employed in making judgment under uncertainty: representativeness, availability, adjustment and anchoring. “People rely on the limited number of heuristic principles which reduce the complex task of assessing probabilities and predicting values to simpler judgement operation“ (Tversky and Kahneman (1974, 1124). This biases from rational behaviour are often called rules-of-thumb. Shleifer (2000, 11–12) has brought the notion of investment sentiment for the “beliefs based on heuristic rather than Bayesian rationality“. Roll (1986, 212) found possible explanation of a takeover phenomenon of mergers and tender offers in the behaviour of the management of the bidder firm in the hubris hypothesis: “decision makers in acquiring firms pay too much for their targets on average“. Considering the results of

the previous research showing that price of the bidding firm around the takeover announcement decreases, he thinks hubris is the only explanation why managers do not give up of the bids founded on the mistaken estimates of target firm value.

Orsag and Mikerevic (2015) also wrote about anomalies in financial markets. They highlighted that capital market is not always efficient and that investors are not always rational. As a cause of the market anomalies they cited fundamental, technical, calendar and index inclusion anomalies. The result of irrational behaviour of investors who do not decide completely rationally but under the influence of emotion being that people usually buy expensively and sell cheap, concluded Orsag and Mikerevic (2015, 226).

When analyzing takeovers of target companies, it is important to recognize what is happening with the ownership (rights of the shareholders) and control (board of directors) of the target company. Shleifer and Vishny (1991, 57) define agency theory as "the idea that managers pursue their own objectives that need not to serve the interest of shareholders". Jarrel et al. (1988) conducted the research on market for corporate control. They argue that deregulation is one of the reasons for takeovers. Later, Ovtchinnikov (2013, 51) confirmed that "merger waves are following industry deregulation". Fama and Jensen (1983) were dealing with the agency problem which they defined as separation of "ownership" and "control", the separation of decision and risk-bearing functions, respectively. This problem is relevant for the large corporations in which decisions are made by members of the board of directors regardless of the will of the shareholder. They find the solution to this problem in large open corporations in decision hierarchies to divide wealth effects of decisions. Decision control systems of organizations perform board of directors. Their role is to intermediate between decision making and risk bearing. "Boards always have the power to hire, fire, and compensate the top-level decision managers and to ratify and monitor important decisions" (Fama and Jensen 1983, 311).

Jensen and Ruback (1983, 6) defined market for corporate control, often referred to as the takeover market, as a market in which alternative managerial teams compete for the rights to manage corporate resources. On the Croatian capital market, this subject was researched by Filipovic, Cingula, and Tipuric (2011). They examined the impact of the market for corporate control on the performance of target companies after the takeover. The results confirmed the hypothesis that firms with ineffective management and poor performance will be taken over. Filipovic, Cingula, and Tipuric (2011, 394) concluded that "managers are aware that the market for corporate control will punish bad investment decisions and that the market for corporate control is a permanent threat to managers which forces them to work in the interest of the company".

Previous researches about market reaction to the takeover announcement and to disclosure of the intention to announce a takeover bid on foreign capital markets, in especially in the US capital market have shown that the market reacts to the announcement of takeover bid with the increase of the target company's prices. However, the market has seen a rise in the share price of the target company before the merger & acquisition announcement. Many researchers studied the causes of the target share price run-up before M&A announcements. Inside trading is mentioned as one of the reasons. Tang and Xu (2016, 118–119) find that the price run-up before M&A announcements is caused by "variables that are associated with unreported insider trading". They concluded that "the pre-announcement run-up could add significant costs to mergers and acquisitions, which may have a negative effect on corporate governance". Previously,

Keown and Pinkerton (1981) investigated insider trading activity related to merger announcements. They provided evidence for excess returns earned by investors in acquired firms prior to the first public announcement of planned mergers are leakage of inside information.

Roll (1986, 198) believes that "at least part of the large price increase observed in target firm shares might represent a simple transfer from the bidding firm, that is, that the observed takeover premium (tender offer or merger price less preannouncement market price of the target firm) overstates the increase in economic value of the corporate combination". Dod (1980, 105) has previously proved that "there is a swift and large positive market reaction to the first public announcement of the merger proposal. Subsequently, there is a positive reaction to the approval of completed proposals and a negative reaction to cancelled proposals". Other researchers have tried to prove some other reasons.

2. IMPLEMENTATION OF THE RESEARCH

The main aim of this research is to verify the impact of disclosure of the intention to announce a takeover bid on the share prices movements of the target companies on the Croatian capital market. The research is conducted in R programming language.

When conducting the research, one should take into consideration the specificities of the Croatian capital market. One of the main characteristics of this market is a small number of issuers in relation to the large US capital market and especially reduced liquidity of shares after the emergence of the financial crisis at 2008. Furthermore, it is also a young market that is developing a culture of transparency of issuers, the application of European Union regulation, which is transferred to national legislation. The significant application of the obligations of disclosure of the intention to announce a takeover bid may only be observed from 2008. Namely, in previous periods the intent to announce a takeover bid was disclosed sporadically by individual target companies.

Therefore, the subject of analysis is the movement of share prices of the target companies in the takeover offers in the Croatian capital market in the period from 2008 until 2017. The list of the announced takeover bids was taken from the Croatian Financial Services Supervisory Agency. The dates of disclosure of the intention to announce a takeover bid are taken from the Zagreb Stock Exchange (www.zse.hr). For the analysis, the event study was used, the most common research method of behavioural finance. This method considers the effect of disclosure of the intent to announce a takeover bid on the share price movement of the target company. The criterion for inclusion of a certain target company in the analysis were all publicly disclosed voluntary and mandatory takeover bids provided there was enough data of the last share price within the estimation window as well as in the event window. The event is the day of disclosure of the intention to announce a takeover bid for the acquisition of the target company on the website of the Zagreb Stock Exchange. The length of the event window used was 10 days before and 10 days after the event day and the event day. So, the length of the event window is a total of 21 days. The estimation window is 120 days before the start of the event window.

The share price movement of the acquirer was not analyzed because very few of them were companies whose shares were included in the Zagreb Stock Exchange regulated

market and most of the acquirers were either a natural person or a foreign company. The following describes the methodology used, the sample definition and the results of the research. In the end, a discussion was conducted with respect to the previous research and the results obtained in this study, which led to the conclusion.

2.1. Definition of the sample

This paper presents the results of the event study for the period from 2008 to 2017. At the beginning of the analysis in the observed period the sample consisted of 80 announced takeovers. However, one of the main characteristics of the Croatian capital market is low liquidity and reduced trading volume especially after the emergence of the financial crisis in 2008. Therefore, during the observed interval in this study, some shares of the target companies were not traded during the event window and others during the estimation period and could not be incorporated into analysis. Due to lack of trading in some days during the estimation window, a total number of companies decreased to 35 and due to lack of trading in some days during the event window the number of shares observed has decreased from 35 to 25 companies. In the period from 2008 to 2013 out of the 27 targeted companies, 21 were analyzed at the end. In the interval from 2014 to 2017 out of the 8 targeted companies, 4 were included in the final analysis.

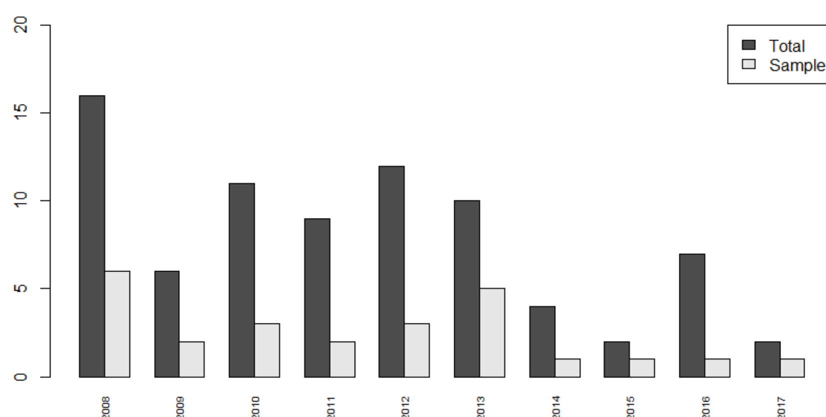

Figure 1. Plot of sample size relative to number of a disclosure of the intent to announce a takeover bid
Source: Croatian Financial Services Supervisory Agency

2.2. Methodology

The conducting research method is the event study. Study focuses on the abnormal average return around the date of the first disclosure of the intention to announce a takeover bid. “A security's price performance can only be considered “abnormal” relative

to a particular benchmark“ (Brown and Warner 1980, 207). This implies that it is necessary to define a measure for normal average return in order to estimate the deviations measured by abnormal average return.

For the calculation of a normal return, the method of a market model was used. According to MacKinlay (1997, 18) “the market model is a statistical model which relates the return of any given security to the return of the market portfolio“:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \quad (1)$$
$$E(\varepsilon_{it} = 0) \qquad Var(\varepsilon_{it}) = \sigma^2 \varepsilon_i$$

where R_{it} and R_{mt} are the period t returns on security i and the market portfolio, respectively, and ε_{it} is the zero mean disturbance term, α_i, β_i, and σ^2 ε_t are the parameters of the market model.

Therefore, the initial regression parameters during the estimation period are calculated, which represent the ratio of the market price to the respective shares as dependent and the market index movement as an independent variable in the regression. Normal returns during the event window are obtained by placing specific returns on a certain day during the event window in the market model. The abnormal average returns represent a difference between the actual and normal return of the share concerned on a certain day during the event window. After the abnormal average return, the cumulative abnormal average returns are calculated. The abnormal average returns are interpreted during the event window as a measure of impact of events on the value of the company (or its share). A t-test of the average value of the abnormal returns for all events in the sample was conducted. Hypothesis that is being tested:

Hypothesis H_0: Disclosure of the intention to announce a takeover bid does not affect the movement of share price of the target company

The test conclusions were adopted at the significance level $\alpha = 0.05$. If the p-value of the t-test was greater than 0.05 then the event did not have a statistically significant effect on the share price movement. If the p-value is less than or equal to 0.05 then the event affected the price of the share, and thereby proved the market's inefficiency in relation to disclosure of the intention to announce a takeover bid as the share price had statistically a significant increase or decrease.

The analyzed data of share prices of the target company and of the market index Crobex was downloaded from the Zagreb Stock Exchange. The research used daily returns of the latest trading share prices of the target company during the estimation window and event window and of the market index during the estimation window.

2.3. Measuring abnormal performance

The research was carried out from 2008 to 2017. The average abnormal returns (AAR) and the cumulative average abnormal returns (CAAR) tests were performed during the event window. The results include t-statistic values and alternative p-values for each day in the observed period.

The results of the research in analyzed period from 2008 to 2017 are presented in Tables 1 and 2. The results of the test indicate whether any residuals were statistically significantly different from 0.

Table 1. Test of significance of the average abnormal return (AAR) for disclosure of the intention to announce a takeover bid, in the period from 2008 to 2017

Day	μ	δ	*t*	*p*
-10	0.002	0.028	0.290	0.775
-9	-0.008	0.030	-1.415	0.170
-8	-0.001	0.025	-0.282	0.781
-7	0.001	0.020	0.216	0.831
-6	-0.007	0.015	-2.386	0.025
-5	0.001	0.040	0.185	0.855
-4	0.005	0.047	0.507	0.617
-3	0.008	0.053	0.728	0.473
-2	0.014	0.037	1.862	0.075
-1	0.007	0.042	0.842	0.408
0	0.042	0.069	3.023	0.006
1	-0.003	0.045	-0.281	0.781
2	0.008	0.070	0.556	0.583
3	0.005	0.025	1.108	0.279
4	-0.001	0.013	-0.239	0.813
5	-0.011	0.032	-1.703	0.101
6	0.000	0.026	0.086	0.933
7	-0.002	0.013	-0.690	0.497
8	0.006	0.031	0.994	0.330
9	-0.005	0.020	-1.280	0.213
10	-0.003	0.020	-0.729	0.473

According to the data in Table 1, which tested the significance of abnormal average daily return, on the day - 6 and on the event day (day 0), the abnormal average return was statistically significantly different from 0, with a level of significance of 5%. Other days the abnormal average daily return has not been statistically significantly different from zero. And there was no significant impact on the movement of share prices on these days.

The cumulative average abnormal return (CAAR), shown in Table 2, indicates whether there is a significant cumulative impact of a certain event during the observed period on the movement of share prices. Such an impact can be expected if the market reactions are slow and accumulate over time, indicating market inefficiency.

Table 2. Test of significance of the cumulative average abnormal return (CAAR) for disclosure of the intention to announce a takeover bid, in the period from 2008 to 2017

Day	μ	δ	*t*	*p*
-10	0.002	0.028	0.290	0.775
-9	-0.007	0.029	-1.192	0.245
-8	-0.008	0.030	-1.360	0.187
-7	-0.007	0.035	-1.057	0.301
-6	-0.015	0.041	-1.801	0.084
-5	-0.013	0.059	-1.115	0.276
-4	-0.008	0.065	-0.644	0.526
-3	-0.001	0.072	-0.051	0.960
-2	0.013	0.071	0.914	0.370
-1	0.020	0.088	1.139	0.266
0	0.062	0.085	3.665	0.001
1	0.060	0.101	2.942	0.007

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Table 2. (*continued*)

Day	μ	δ	*t*	*p*
2	0.067	0.096	3.503	0.002
3	0.073	0.104	3.495	0.002
4	0.072	0.108	3.337	0.003
5	0.061	0.102	3.007	0.006
6	0.062	0.117	2.645	0.014
7	0.060	0.119	2.515	0.019
8	0.066	0.131	2.513	0.019
9	0.061	0.129	2.356	0.027
10	0.058	0.123	2.365	0.026

According to the data in Table 2, on the event day and on all the days following the events during the event window, the cumulative average share returns were statistically significantly different from 0 indicating that the event affected the movement of share prices. These results indirectly prove the inefficiency of the Croatian capital market.

The results of the event study are also shown graphically in Figure 2. The x-axis shows the time before the disclosure of the intention to announce a takeover bid and the time after disclosure of the intention. Time 0 stands for the day of disclosure of intent to announce a takeover bid. The y-axis shows the cumulative average abnormal returns (CAAR).

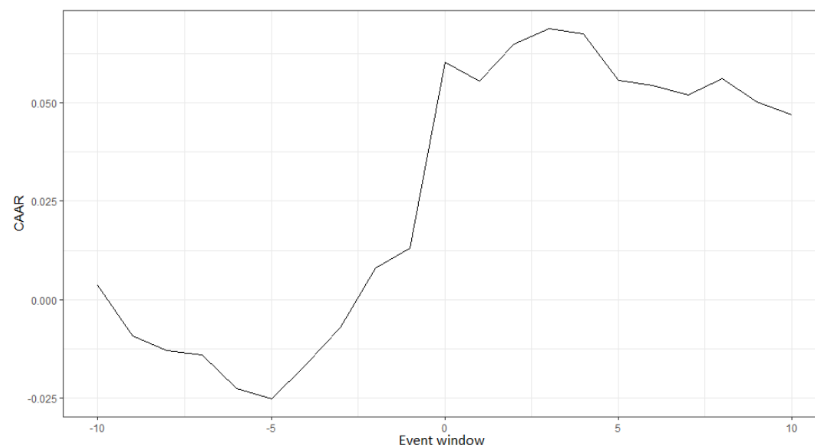

Figure 2. Plot of the cumulative average abnormal returns (CAAR) for disclosure of the intention to announce a takeover bid from event day -10 to event day 10, in the period from 2008 to 2017
Source: Zagreb Stock Exchange

In Figure 2. it is easy to spot the cumulative growth of daily returns just before and after the event day. It is also easy to see that the share price after the day of disclosure in certain days increased and in certain days decreased. Further, on the first day after the event and on the tenth day it had the same value (as can be seen in Table 1). It is not difficult to notice that significant share price increase in fact occurred before the day of disclosure. Prior to the event day the share prices decreased in three days and increased in seven, and after the event day the share prices dropped to 6 days and grew to only four. On the day of publication, the price has increased statistically significant.

3. INTERPRETATION OF THE RESULTS AND DISCUSSION

The results obtained exclusively for the Croatian capital market are partially consistent with the results of previous research in this area, although the sample was far larger (eg. Andrade, Mitchell and Stafford analyzed about 4300 mergers in the US capital market, over a period of 26 years, starting in 1973).

As already mentioned in the introduction, the aim of this paper was to investigate the impact of disclosure the intention to announce a takeover bid to the share price movements on the Croatian capital market. According to the results of the research conducted, the disclosure has generally affected the share price movements of shares. According to the results obtained it is noticeable that the significant increase in the share price was realized before the day of disclosure. After the event day the share price oscillated and on the tenth day after the publication it had a similar value as on the day of the disclosure. Such a result at first implies inside trading prior to the announcement of the intent of a takeover bid because the total effect on the stock price after the announcement annulled. However, this paper did not investigate trading based on inside information.

So far, many studies have been carried out on the causes of the increase in the share prices of the target companies. One of the causes are certainly the expectations of the investor. The reasons for the increase in the prices of the target company can also be found in the increase in investors' expectations about the future performance of the target company after the takeover. Investor expectations form the basis for assessing the fundamental value of the company in the future. Market participants feel that target companies are more valuable if someone shows interest in taking over. Results of the research on changes in the share prices of the target company prior to the takeover announcement implies inside trading. However, it is very difficult to prove and investigate any form of insider trading so that everything remains solely the researcher's guesswork.

Testing the impact of announcing the information on takeover bid on the share price movements in fact is testing the efficiency of the capital market. As is well-known, Fame has introduced three forms of market efficiency, depending on the types of information: past, announcement and inside information. However, if disclosure of the intention to announce a takeover bid affects the share price of the acquirer and the target company then the market is not efficient according to the definition. The causes of market inefficiency can certainly be found in the behaviour of market participants: on one side the managers of the offeror who announce takeover bid and on the other, investors who make decisions about buying or selling shares of the target company and potential buyer anticipating information about the ability to takeover a target company. The reasons for the bias of individual investors can be found in their irrationality, to which contribute the previous experience of trading on the capital market and different expectations of mergers. The fact that someone wants to take over the target company leads to the belief that this company is valuable because it implies that the estimated value of the company is higher than the market value. In fact, nobody is thinking of the irrational reasons of the announcement of the takeover bid such as the hubris hypothesis. Roll (1986, 212) considered that "the hubris hypothesis can serve as null hypothesis of corporate takeovers because it asserts that all markets are strong-form-efficiency".

4. RESTRICTIONS OF THE RESEARCH AND RECOMMENDATIONS FOR FUTURE RESEARCH

The main disadvantage of the conducted research is a relatively small sample. The most important reasons are the size of the Croatian capital market and the constantly decreasing number of issuers in the market due to the delisting of the issuer from the regulated market of the Zagreb Share Exchange. An additional reason is the low trade liquidity and volume, especially after the recent financial crisis, from 2008 onwards.

The main recommendation for research in the following papers is to focus on inside trading since the obtained results in this paper imply trading using inside information about the intent to takeover.

One of the recommendations for future research is to investigate the impact of disclosure of the takeover bid on the share price movements (this paper explores the impact of announcing the intention to publish a takeover bid). It would also be possible to explore the impact of the takeover bid on the share price of the acquirer, if there were more acquirers whose shares are admitted to trading on a regulated market.

Also, the recommendation is to explore the main reasons and motives for takeovers of target companies on the Croatian capital market: are the reasons for takeovers economically justified (e.g. economics of scale, increase of market share etc.) or are the reasons subjective and relate primarily to the management of the acquirer: among other things, does the capital market have a confirmation of the hubris hypothesis? Furthermore, one of the recommendations for future research is certainly to investigate the behaviour of the investors when deciding on buying and selling the shares of the target company in order to conclude whether the impact of irrational factors exists and if there is any such impact on the market price of the shares.

CONCLUSION

So far, many papers have explored the impact of disclosure of the intention to announce a takeover bid and of the announcement of a takeover bid on the target company's share price, mainly in the large capital market such as US capital market. The conducted research in the Croatian capital market confirmed the results of previous research on foreign capital markets that disclosure of the information related to takeover bid have impact on rise of the share price of the target company. But in the Croatian capital market most of the share price increase is realized before disclosure of the intend to announce a takeover bid. This kind of result implies potential inside trading. However, it was not an aim of this paper to research trading based on inside information. Therefore, it is surely recommendation for research in the following papers.

Regarding market efficiency, which assumed that all relevant information about the target company is publicly available, these results are in favour of market inefficiency. They show that information on takeover bids affects the share price. Since most of the share price increase has been realized prior to disclosure of the intent to announce a takeover bid, it is a strong form of market inefficiency.

When interpreting the obtained results, the specificities of the Croatian capital market should be taken into consideration, primarily illiquidity and reduced volume of trading from 2008 onwards. This has affected the size of the sample. In addition,

recommendation for the future research in this field is to further investigate the movement of share prices in the Croatian capital market in connection with takeovers in the context of investment psychology and irrationality of market participants.

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