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Abstract of the doctoral dissertation entitled
“Relationship between impairment of assets and the market valuation of
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The provision by stock exchange issuers of reliable information, including accounting data, is a value for those making investment decisions on the capital market. Appropriate quality of the information made available allows to set the market price of the entity's securities at the level as close as possible to their internal value. That is why the investors even demand from the persons managing the entity to present in a comprehensive and clear way the situation of the company with prospects for its development. They rate the unit much higher if it shares with them information allowing for a reliable determination of its economic situation.

Providing useful information in an immediate manner is of great importance. Those who invest in the capital market should allocate funds to such companies that will be able to generate the highest profits in the future. The capital should be delivered to such issuers who, by ensuring high quality of their operations, will guarantee a positive impact on the development of the entire economy. This seems to be impossible in a situation where the investors will not have reliable, reaching them on time information about the entity. Basing on the information coming to the market, they make decisions resulting in buying or selling the securities. A resultant behaviour of the investors is the formation of the price of particular financial instruments, which on the effective capital market will be a result of available information about the issuer.

The information about the impairment of assets coming to the capital market (from the accounting system) may also have a price-forming character. It is the information, which appears more and more often in reports of listed companies, that has led the author to undertake research in this area.

The subject of the dissertation is the information made available in the form of ongoing reports by issuers listed on the WSE main market regarding write-offs. In the paper, their influence on the short-term shaping of the share prices of the above listed companies was verified. Information regarding the impairment of assets covered the period from 2013 to 2018.

After their chronological ordering, the stock quotes of the companies informing about the event were collected. Importantly, in order to isolate the impact of updating for the impairment of assets on the market valuation in the short term, only those companies for which no other news that could be price-forming was recorded in the adjacent days were qualified to the research sample. This was to isolate the significance of the impairment of assets for the market valuation of issuers on the Polish capital market.

The main aim of the dissertation is to determine the impact of current reports submitted to the Electronic Information Processing System (Polish ESPI) informing about the write-off on the market valuation of companies listed on the main market of the Warsaw Stock Exchange. The research undertaken is to help identify the correctness of the share price behavior in the event of the issuer's disclosure of the above information. The obtained research results will allow us to indicate another of the short-term determinants of the prices of securities listed on the stock exchange.

In addition to the main purpose of this study, specific objectives were also indicated, which were to present the exact intentions of the author in terms of the research results obtained in the work. They relate to the determination of the presence of the WSE's semi-strong information efficiency or the acquisition of knowledge on the diversification of the market response to the occurrence of the impairment of various groups of assets made by issuers grouped in separate stock exchange macrosectors or its relation to the issuer's balance sheet total.

The main goal of the work together with the specific goals was to be achieved by formulating appropriate research hypotheses. The main hypothesis of this dissertation indicates the occurrence of statistically significant negative abnormal returns on the issuer's shares on the days immediately following the date on which it publishes its current report on the impairment of assets. 5 detailed hypotheses were also formulated to indicate more precise relationships between write-offs and the market valuation of WSE companies. Their empirical verification made it possible to obtain research results that had not been the subject of observation of Polish capital market researchers in the previous years. They read as follows:

- H1: The WSE is an information-efficient market in a semi-strong form. Therefore, the price-forming information such as the information about the impairment of assets will result in significant negative abnormal returns. Moreover, there is no prior disclosure of information on the impairment of assets to stakeholders, which could result in the presence of statistically abnormal returns in the days preceding its official announcement in ESPI.

- H2: A statistically significant change in the market valuation of stock exchange issuers caused by the information on the impairment of assets does not occur for all companies grouped due to their affiliation to the WSE macro sectors.
- H3: The value of the write-off affects the scale of the market reaction. Higher-value write-offs will be more strongly discounted by investors, which will be reflected in the presence of statistically significant negative abnormal returns on the days accompanying the release of the report on the write-off. A similar market reaction will not take place in the case of reporting write-offs of a lower value.
- H4: The averaged abnormal returns accompanying the date of disclosure of the write-off will vary depending on the group of assets under review.
- H5: Lower market capitalization of WSE listed issuers results in a weaker market reaction to information about the impairment of assets of a listed company.

The verification of research hypotheses was carried out using the event study methodology. It allows to determine the price-forming nature of the information provided and to determine the presence of a semi-strong information efficiency of the capital market. The calculation of the abnormal returns constituting the core of the applied methodology was carried out thanks to the tools included in the MS Office Excel 2016 package. Their significance was tested on the basis of PQStatSoftware.

The layout of the dissertation allows to distinguish the introduction, four chapters (three theoretical and one empirical) and the summary. The first chapter covers the theoretical and legal aspects of assets value estimation. Existing for over five centuries, accounting based on double entry shaped the balance sheet theories presented in this part of the chapter and the valuation process occurring in them. It was extremely important to present the issue of assets in contemporary regulations, the revision of which was the subject of this dissertation. The author also presented a number of internal and external factors that provide the issuer with the basis for the impairment of assets. Review of current laws and standards (national and international) describing the analyzed issue, followed by the presentation of research covering the area of the impairment of assets from various perspectives, give the reader an understanding of the essence of the issue, the impact of which on the market valuation of WSE companies was verified later in the paper.

The second chapter focuses on the methodology of event study, without which the research contained in this dissertation would not have been possible. However, before the author devoted his attention to the description of this method, he has explained what the effective market

hypothesis formulated for the first time by Eugen Fama in 1965 really is. The "archaic" times of the first foundations for the creation of this hypothesis, which took place in the second half of the 19th century, were clarified. The forms of market efficiency and methods of their research were presented, indicating that the semi-strong form, which was verified in the case of the WSE, is the most common of the capital markets efficiency. The consequences of the existence of efficient markets for the accounting system were also addressed. Among them, it is possible to point to the importance for entities dealing with establishing the rules and principles of modern accounting or the correctness of interpretation of accounting data by the majority of investors in order to bring the valuation of securities as close as possible to their internal value. The last part of this chapter introduces the methodological core of this dissertation, i.e. it focuses on a detailed description of the event study. The most popular method of confirming the semi-strong information effectiveness of capital markets was considered by the author to be the most appropriate to assess the impact of write-offs on the short-term market valuation of WSE companies. By describing the stages of the proceedings, the author wanted to allow the reader to grasp the individual steps that he had to take when creating his own research conducted as part of the dissertation.

The third, and at the same time the last of the theoretical chapters of the paper, defines the principles of operation of the stock exchange in the context of relations between the capital market and financial reporting. These areas are equivalent in dissertation, which makes it difficult to qualify it unequivocally to any of them. Therefore, the author's intention was to indicate the connections that take place between these areas.

Analyzing the rules of communication between issuers and stakeholders, the necessity of providing the so-called confidential information, which may be of a price-forming nature, was distinguished. Examples of such information include, without a doubt, information about the occurrence of the impairment of assets in the entity. Examples of this information being made public to issuers on the WSE's main market show how and in what form companies share information about the impairment of assets. The final part of the chapter includes cross-sectional studies, conducted for more than thirty years on foreign markets, on the significance of the impairment of assets for the market valuation of stock exchange issuers. They mainly reveal the negative nature of this event for the shaping of the prices of the securities of the company providing the report containing the write-off information. These research results became the basis for the main hypothesis of the doctoral dissertation that recognizes the short-term negative impact of write-offs on the market valuation of issuers from the WSE. This hypothesis was supported by the five detailed hypotheses mentioned above.

The hypotheses described in the last paragraph of chapter three were verified in the empirical chapter four. On the basis of 129 cases of the impairment of assets on the basic WSE market in the years 2013-2018 qualified for the sample, the author stated, like most researchers exploring this area on foreign capital markets, that reporting the write-off has a negative impact on the market valuation of issuers. This impact is mainly due to its short-term downward correction. Moreover, the detailed hypotheses put forward allowed the author to clarify the relationships existing on the WSE in terms of the impact of write-offs on share prices in the short term. First of all, it is necessary to distinguish the facts of a stronger market reaction in the case of publishing a report on the write-off of companies from the industrial and construction-assembly production sector, as well as a slightly weaker, but statistically significant one from the macro-sectors of consumer goods and trade and services. These results constitute a significant contribution to the science of accounting, as the sectoral differentiation of the impact of write-offs on the market valuation of listed companies was not previously the subject of research. The value of the write-off weighted by the issuer's balance sheet total is also important for investors' reaction. The fact that a write-off in excess of 10% of the value of the assets of the WSE listed company was also reflected much stronger in share prices, which is a kind of development of some research undertaken in previous years. The level of market capitalization of the issuer writing off the assets is also important. The relationship is inversely proportional. This indicates a stronger reflection of the write-off in the market valuation of issuers with lower market capitalization, which is in contrast to the results of research from foreign markets.

The research carried out in chapter four also provides a certain argument for the existence of semi-strong information efficiency of the Polish capital market. The evidence is provided by the absence of information leak for a privileged group of investors, which would be manifested by the existence of statistically significant abnormal returns in the days preceding the date of submission of the current report on the write-off and unidirectionality and the immediacy of the market response once it is available. Of course, this is just one from the arguments for the existence of this form of information efficiency of the WSE. The dispute that has existed for years regarding the validity of the effective market hypothesis will remain difficult to resolve in the coming years.

Among the significant limitations that were encountered during the course of the research procedure, consistent with the methodology of event study, we should first of all point out the need to reject a large number of cases originally qualified for the research sample. This was mainly due to the occurrence of events coexisting in the window of event, which could have

disturbed the impact of write-offs on the market valuation of WSE companies. The author chose a significant reduction of the sample in favor of its isolated character, which allowed to determine the relations obtained in the empirical part more accurately.

This problem in the era of developed capital markets, which receive a lot of information every day, is a significant complication for researchers based on the methodology of event study. It is difficult to determine the significance of a certain event when an investor has to consider several of them at the same time and only then make a decision concerning the purchase or sale of securities, which will be a resultant of the information obtained.

This dissertation also defines the proposed research direction, which is strongly related to the current economic situation. The main reason for undertaking new directions of research in the area of capital market in accounting seems to be the spreading coronavirus pandemic. The author suggests that the effect of the pandemic on the impact of the impairment of assets on the market valuation of listed companies should be considered. It is difficult to predict whether, in a situation of general weak sentiment in the stock markets, another negative information about the issuer's impairment of assets will cause a reaction of investors identical to that observed in "normal" conditions of the economy.

Of course, this is just one of the proposed research areas. In the conditions of the unstable situation on the capital markets, however, it seems to be a very interesting issue to be examined by authors writing in the field of capital markets research in accounting. These authors may also consider verifying the impact of reporting other accounting data on market valuation in the conditions of the economic crisis caused by the coronavirus.