IMPACT OF CRISIS ON RECOGNITION AND MEASUREMENT OF PROVISIONS IN FINANCIAL STATEMENTS

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CONTENTS

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ABSTRACT

Provisions, as a separate item in the financial statements, have an effect on the balance sheet and the profit and loss account and are also published in the notes to the financial statements. The special and significant characteristic of provisions is that they are determined by the company's management, which means that they are subject to assessment. In this sense, there is a great risk and the possibility of manipulation with this position of financial statements in order to achieve the desired financial result. The aim of this work is to determine the practices of reporting provisions on a sample of Croatian companies with a special emphasis on determining and identifying practices in the recognition and measurement of provisions in financial statements in the period before the COVID pandemic and during the pandemic period. Research was conducted on a sample of 53 companies listed on Zagreb Stock Exchange in period 2016-2021. The main goal of the research is to determine whether companies increase or decrease provisions in periods of crisis as well as to analyze impact of provisions on financial result in period before crisis and in crisis period.

Keywords: *crisis, financial manipulations, provisions*

1. INTRODUCTION

Provisions are liabilities that are reported in the financial statements of companies and present important and significant item of financial statements due to fact that they are based on judgements. More precisely, this position of the financial statements is subject to management's assessments and in that sense is vulnerable to management's manipulations. Suer (2014, 392) points out that "provisions are a vehicle of earnings management and one of the most discretionary accruals". Provisions and disclosure of provisions in financial statements is often used by managers to meet different earnings targets. A provision is a present obligation of an unspecified time or amount, resulting from past events, the settlement of which is expected to result in an outflow of resources that generate economic benefits (IAS 37, item 10). Long-term provisions can be defined as the amount of cost charged to the current profit and loss account due to an event that will cause expenses in future periods and whose amount cannot be determined with complete accuracy, but must be estimated (Belak, 2006, 416). Provisions, therefore, represent long-term liabilities of the company and as such have a direct effect on the balance sheet and profit and loss account of the company. Namely, at the same time as the liabilities based on provisions are recognized in the company's balance sheet, expenses based on provisions are presented in the profit and loss account. One of the fundamental features of provisions is that they are determined by the company's management, which means that they are based on subjective assessment of the management. In this sense, there is a great risk and the possibility of manipulation of this position in order to achieve the desired financial result. Namely, the position of provisions is one of the positions often used for manipulating with income or expenses depending on the goals that the management of the company wants to achieve. It is a common situation that company's management creates reserves in good business years by using aggressive or false provisions and in poor business years uses these reserves to improve business results (Belak, 2017, 541). Management can be motivated for adjusting financial statements using different forms of creative accounting techniques in good years but also in bad years such as past few years when financial crisis was caused by COVID pandemic. COVID 19 pandemic which "has shocked the entire global economy" (Sun et al, 2021, in Aljawaheri et al 2021, 707) causing crisis and "the markets responded to the CORONA pandemic with sharp declines, and investor uncertainty rose to record levels which was not seen since the global financial crisis of 2007-2009" (Aljawaheri et al, 2021, 708). In the context of the crisis caused by the COVID-19 pandemic, which was reflected on the entire business world, it is interesting to analyze provisions as specific item in financial statements whose basic attribute is that they are based on judgements of expected future events. So it was interesting to determine how managers reacted to the crisis and financial instability caused by the COVID-19 pandemic in the context of the assessment and reporting the provisions in the financial statements. The aim of this paper is to determine the practice of reporting provisions on a sample of Croatian companies with a special emphasis on determining and identifying practices in the recognition and measurement of provisions in financial statements in the period before the COVID pandemic and during the pandemic period. The research was conducted on a sample of 53 companies that were listed on the regulated capital market in the Republic of Croatia from 2016 to 2021. Paper contributes to existing literature in the area of provision measurement and disclosure due to the fact that authors analyze impact of crisis caused by COVID 19 on provision disclosure in financial statements. It is interesting to analyze whether companies increase or decrease provisions in times of crisis as well as connection between provisions and financial result. Paper is structured as follows. After introductory part, some theoretical aspects of provisions and literature review are presented. Third chapter brings description of the sample and research results while in the last part of the paper concluding remarks are presented.

2. THEORETICAL ASPECTS OF PROVISIONS AND LITERATURE REVIEW

Provisions present specific part of financial statements due to fact that they are based on management judgments and intent. In order to recognize and disclose provisions management is required to define probabilities, key assumptions and uncertainties related to this items. Recognition and measurement of the provision is defined in IAS 37: Provisions, Contingent Liabilities and Contingent Assets. Provisions can be defined as "the amount of cost charged to the current profit and loss account due to an event that will cause expenses in future periods and the amount of which cannot be determined with complete accuracy but must be estimated" (Belak, 2017, 628). Moreover, Belak (2017) states how the assessment of long-term provisions should be realistic and objective and based on real data that can be verified and based on experience from previous years. Provisions are recorded as cost in the profit and loss account and as long-term liability in the balance sheet. This position of financial statements should be reviewed and adjusted on each balance sheet date in order to reflect the best current estimate. If it is no longer probable that the settlement of the liability will require an outflow of the resources provision is reversed. Using estimates and assumptions in recognizing and reporting provisions opens space for manipulating financial statements. Suer (2014, 392) points out how provisions are "vulnerable to manipulation". Similar is emphasized by Sevin & Schroeder (2005) who point out that using estimations in recognizing provisions opens the door to earnings manipulation.

Moreover, they state how "cookie jar reserves" present one of the main earnings management techniques and it refers to overstating sales returns or warranty costs in good years and using them in bad years to reduce similar changes (Sevin and Schroeder, 2005, in Suer, 2014, 393).
Peek (2004) examined use of position of provisions for the purposes of earnings management. Research was performed on a sample of listed Dutch companies between 1989 and 2000 and research results have shown how Dutch firms "use their discretion in recognizing these provisions under two circumstances. First, firms report unexpectedly large provisions to smooth current earnings increases. Second, when earnings are low relative to the previous year's earnings, firms report unexpectedly large provisions if they expect that current earnings are relatively transitory" (Peek, 2004, 27). Suer (2014) examined recognition and disclosure of provisions at the sample of 100 non-financial companies listed on Istanbul stock Exchange. Research results revealed that BIST 100 non-financial companies report provisions in 39 different types. Position of provisions was analyzed in two years and according to results companies disclose high amounts for provisions based on lawsuits and no differences in reporting provisions in two observed years were noted. Acar & Ozkan (2017) performed research on the relation between provisions and corporate governance on a sample of 1.078 firm-year observations in period 2005-2010. Sample was comprised of companies listed on Borsa Istanbul. According to results 62% of observed companies recognize provisions in their financial statements. Moreover, companies that disclose provisions are characterized by larger board of directors, concentrated ownership and institutional owners. Impact of COVID-19 on provisions measurement was examined by Abdelkader (2022). Author relied on descriptive approach and presented the requirements for recognitions and measurement of provisions in accordance with IAS 37.

3. RESEARCH RESULTS

In this part of the paper research sample and research results are presented.

3.1. Research sample and data

The research sample is comprised of nonfinancial companies listed on the Zagreb stock exchange in period 2016 (first year of analysis) to 2021. Companies were included in the sample randomly with the exception of financial companies. Total of 53 yearly observations were included meaning that a total of 318 firm-year observations in period 2016-2021 were included in analysis. For the purpose of this research we focused on following accounting variables: provisions, total liabilities and financial result. Data on accounting variables were collected from financial statements of observed companies. Based on data on provisions and liabilities provision to liabilities ratio (further in text: PLR ratio) was calculated. Descriptive statistics for PLR ratio is presented in Table 1.

	2016	2017	2018	2019	2020	2021
N	53	53	53	53	53	53
Mean	0.0557	0.0426	0.0375	0.0415	0.0502	0.0487
St. deviation	0.1538	0.0864	0.0708	0.0856	0.0936	0.0834
Min	0	0	0	0	0	0
Max	0.80	0.40	0.39	0.42	0.43	0.37

Table 1: Descriptive statistics for PLR ratio
(Source: author's calculation)

Minimum value of PLR ratio in all years of analysis was 0 meaning that there were companies that did not report provisions in their financial statements. Maximum value is achieved in 2016 where it amounted 0.80 but in all following years maximum values were around 0.40 meaning that maximum proportion of provisions in total liabilities amounted 40%. Mean value for the observed variable ranges from 0.0375 in 2018. to 0.0557 in 2016. Standard deviation as a measure of dispersion shows that there is a large dispersion among companies due to fact that in all years of analysis standard deviation is greater than the arithmetic mean. Furthermore, for the purposes of this paper financial result is proxied by net profit margin (further in text: NPM ratio) which was calculated as ratio between financial result and total income. Descriptive statistics for NPM ratio is presented in Table 2.

	2016	2017	2018	2019	2020	2021
N	53	53	53	53	53	53
Mean	-0.0709	-0.0738	0.0617	-0.1325	-0.7242	0.0766
St. Deviation	0.6905	0.7439	0.1706	0.7814	0.5711	0.3949
Min	-4.77	-4.84	-0.61	-4.31	-30.27	-0.76
Max	0.39	0.62	0.67	0.37	0.76	1.87

Table 2: Descriptive statistics for NPM ratio
(Source: author's calculation)

Mean value of NPM ratio was negative in all the observed years except 2018 when in amounted 0.0617. Minimum values of NPM ratio ranged from -30.27 in 2020 to -0.76 in 2021. According to data it can be noted that NPM ratio increased in 2021 and that financial results of the observed companies improved. Trend in PLR ratio and NPM ratio in period 2016-2021 in shown in figure 1.

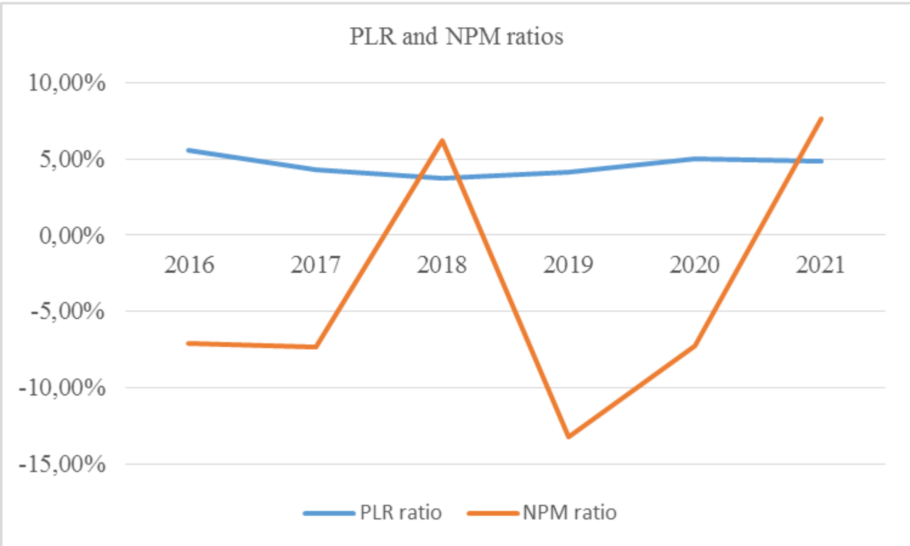

Figure 1: PLR and NPM ratios in period 2016-2021
(Source: author's calculation)

3.2. Research results

Main goal of our research was to determine the practices of Croatian companies in reporting provisions. With this purpose we focused on 53 companies randomly selected on Zagreb stock exchange. In the first year of analysis, which was 2016., out of total number of analyzed companies 21 of them or 39% of observed companies did not report provisions in financial statements. In order to test impact of crisis caused by COVID 19 pandemic on reporting provisions we first focused on PLR ratio in the observed period. Figure 2 shows the movement of the coefficient in the observed period. It can be noted that PLR ratio achieved the highest score in the first year of analysis where the mean value of the ratio was 0.0557.

In two following years, that are preceding crisis we can observe a slight decrease in the PLR ratio which amounts 0.0426 in 2017 and 0.0375 in 2018. This trend of reporting lower provisions was turned in 2019 where increase of PLR ratio was noted. This shift in trend could be caused by crisis due to fact that COVID pandemic was declared on 11th March 2020 and impact of upcoming financial crisis could be reflected already in financial statements presented for year 2019 due to the fact that in the Republic of Croatia new financial reporting deadlines were introduced because of COVID-19 pandemic. Financial statements for the year 2019 should have been submitted for public announcement by the end of August 2020. In terms of recognizing provisions in financial statements it is interesting to analyze how management responded to first signs of COVID caused crises due to fact that in challenging, crisis time, management is under pressure to manipulate accounting information and smooth financial results over years and provisions are one of the items often used for these purposes. The main goal of this paper was to examine how did companies react on crisis caused by COVID-19 in terms of recognizing and reporting provisions in financial statements.

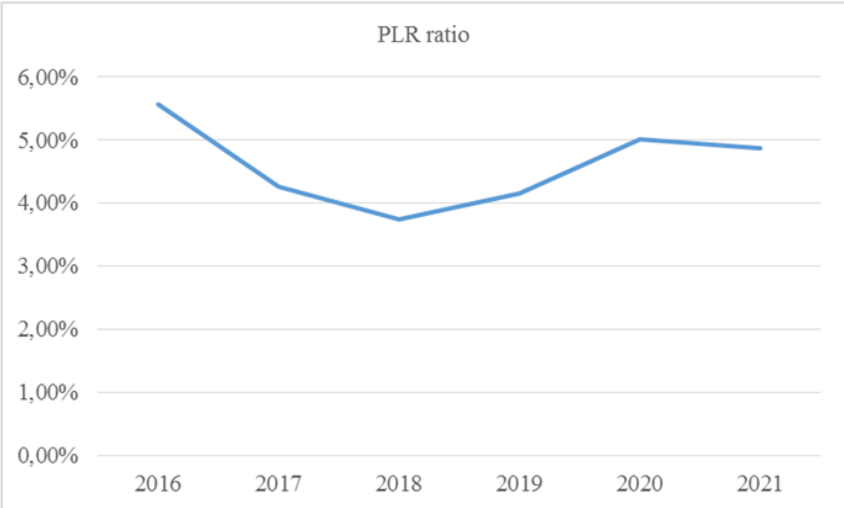

Figure 2: PLR ratio in period 2016-2021
(Source: author's calculation)

Goal of this research was to determine whether differences exist in reporting provision in the year preceding crisis and in the year of crisis. In order to obtain answer to our research question we performed paired sample t-test. Results of the conducted analysis are presented in table 3.

t-test			
Mean difference	0.00396	95% conf	(-0.00722 0.01515)
t	-0.71068	p (same mean)	0.48046

Table 3: Results of paired sample t-test
(Source: author's calculation)

When performing paired samples t-test if the p-value is less or equal to the significance level (which is 5%) the decision is to reject the null hypothesis. If the p-value is higher than 5% then null hypothesis should be accepted. According to results, obtained p-value amounts 0.48046 which means how null hypothesis is accepted which shows that there are no differences in reporting provisions in the year before pandemic and the year of pandemic. In the further step of the analysis authors focused on examining the correlation between provisions and financial result in the year before crisis and year of crisis. Results of conducted analysis are presented in the following table.

	2016	2017	2018	2019	2020	2021
Correlation	-0.0169	-0.0717	0.0509	0.0691	-0.0152	-0.0216

Table 4: Correlation results in period 2016-2021
(Source: author's calculation)

From data presented in table 4 it can be observed how correlation among provisions measured by PLR ratio and financial result measured by NPM ratio fluctuates from negative to positive values. In all the observed period correlation among observed variables is weak considering the fact that the correlation between the observed variables is stronger if the coefficient is closer to 1. For example, in 2016 correlation among variables is negative meaning that increase in variable PLR ratio causes decrease in NPM ratio. But this connection is quite weak (coefficient amounts -0.0169) so we cannot draw strong conclusions about influence of provisions on financial result. The sign of the correlation coefficient was changed in 2018 and 2019 and it turned positive which is not in line with expectations. However, these positive values are also quite low and we cannot draw conclusions about connection of the observed variables and impact of provisions on financial result in the observed period. Due to such findings further efforts should be undertaken with the aim of clarifying the relationship among these variables.

4. CONCLUSION

Measuring and disclosing provisions in financial statements is an important and challenging issue in the process of financial reporting. Since provisions are based on estimates they allow management challenging space for using techniques of creative accounting and managing earnings on this position of financial statements. The aim of this paper was to determine practice of Croatian companies in reporting provisions and analyze differences in reporting provisions in the period before the COVID pandemic and during the pandemic period. Research was conducted on a sample of 53 non-financial companies that were listed on Zagreb stock exchange in period 2016-2021. According to results in the first year of analysis 61% of observed companies reported provisions in financial statements. PLR ratio which was used as proxy for provisions was highest in the first year of analysis when it amounted 0.0557. In the following two years a slight decrease in the PLR was observed and this trend was again turned in 2019 where increase in PLR ratio was noted. Results of paired sample t-test showed that, despite increase in PLR ratio in 2019, there were no differences in reporting provisions in the year before pandemic and the year of pandemic. This can be explained by the fact that at that time it could not have been predicted that the pandemic would take such hold on a global scale and ultimately have such an impact on business events and whole global economy. Moreover, the relation between provisions and financial result was examined. Research result revealed how correlation among these variables in two observed years is quite low and further efforts should be undertaken in order to examine this relationship more detail. However, this research contributed to better understanding of provisions and reporting provisions on a sample of Croatian companies and it contributes to rather scarce literature in the area of provision reporting. As significant contribution of this paper, an attempt of clarifying the impact of crisis on provisions should also be pointed out since this creates the foundations for future research on the impact of unexpected crisis events on the effect of manipulations with provisions. As a limitation of this study lack of literature in the area should be pointed out. Generally, there is a lack of literature about provisions and even more when research area is focused on analysis of crisis on provision disclosure. Future research should focus on clarifying impact of crisis on provisions recognition using sample from other countries and maybe observing even longer time periods.

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